



CONSUMER GOODS SECTOR

E-COMMERCE

Sustainability Accounting Standard

Sustainable Industry Classification System® (SICS®) CG-EC

Prepared by the
Sustainability Accounting Standards Board

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E-COMMERCE

Sustainability Accounting Standard

About SASB

The SASB Foundation was founded in 2011 as a not-for-profit, independent standards-setting organization. The SASB Foundation's mission is to establish and maintain industry-specific standards that assist companies in disclosing financially material, decision-useful sustainability information to investors.

The SASB Foundation operates in a governance structure similar to the structure adopted by other internationally recognized bodies that set standards for disclosure to investors, including the Financial Accounting Standards Board (FASB) and the International Accounting Standards Board (IASB). This structure includes a board of directors ("the Foundation Board") and a standards-setting board ("the Standards Board" or "the SASB"). The Standards Board develops, issues, and maintains the SASB standards. The Foundation Board oversees the strategy, finances and operations of the entire organization, and appoints the members of the Standards Board.

The Foundation Board is not involved in setting standards, but is responsible for overseeing the Standards Board's compliance with the organization's due process requirements. As set out in the *SASB Rules of Procedure*, the SASB's standards-setting activities are transparent and follow careful due process, including extensive consultation with companies, investors, and relevant experts.

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INTRODUCTION

Purpose of SASB Standards

The SASB’s use of the term “sustainability” refers to corporate activities that maintain or enhance the ability of the company to create value over the long term. Sustainability accounting reflects the governance and management of a company’s environmental and social impacts arising from production of goods and services, as well as its governance and management of the environmental and social capitals necessary to create long-term value. The SASB also refers to sustainability as “ESG” (environmental, social, and governance), though traditional corporate governance issues such as board composition are not included within the scope of the SASB’s standards-setting activities.

SASB standards are designed to identify a minimum set of sustainability issues most likely to impact the operating performance or financial condition of the typical company in an industry, regardless of location. SASB standards are designed to enable communications on corporate performance on industry-level sustainability issues in a cost-effective and decision-useful manner using existing disclosure and reporting mechanisms.

Businesses can use the SASB standards to better identify, manage, and communicate to investors sustainability information that is financially material. Use of the standards can benefit businesses by improving transparency, risk management, and performance. SASB standards can help investors by encouraging reporting that is comparable, consistent, and financially material, thereby enabling investors to make better investment and voting decisions.

Overview of SASB Standards

The SASB has developed a set of 77 industry-specific sustainability accounting standards (“SASB standards” or “industry standards”), categorized pursuant to SASB’s [Sustainable Industry Classification System® \(SICS®\)](#). Each SASB standard describes the industry that is the subject of the standard, including any assumptions about the predominant business model and industry segments that are included. SASB standards include:

1. **Disclosure topics** – A minimum set of industry-specific disclosure topics reasonably likely to constitute material information, and a brief description of how management or mismanagement of each topic may affect value creation.
2. **Accounting metrics** – A set of quantitative and/or qualitative accounting metrics intended to measure performance on each topic.
3. **Technical protocols** – Each accounting metric is accompanied by a technical protocol that provides guidance on definitions, scope, implementation, compilation, and presentation, all of which are intended to constitute suitable criteria for third-party assurance.
4. **Activity metrics** – A set of metrics that quantify the scale of a company’s business and are intended for use in conjunction with accounting metrics to normalize data and facilitate comparison.

Furthermore, the *SASB Standards Application Guidance* establishes guidance applicable to the use of all industry standards and is considered part of the standards. Unless otherwise specified in the technical protocols contained in the industry standards, the guidance in the SASB Standards Application Guidance applies to the definitions, scope, implementation, compilation, and presentation of the metrics in the industry standards.

The *SASB Conceptual Framework* sets out the basic concepts, principles, definitions, and objectives that guide the Standards Board in its approach to setting standards for sustainability accounting. The *SASB Rules of Procedure* is focused on the governance processes and practices for standards setting.

Use of the Standards

SASB standards are intended for use in communications to investors regarding sustainability issues that are likely to impact corporate ability to create value over the long term. Use of SASB standards is voluntary. A company determines which standard(s) is relevant to the company, which disclosure topics are financially material to its business, and which associated metrics to report, taking relevant legal requirements into account¹. In general, a company would use the SASB standard specific to its primary industry as identified in *SICS*[®]. However, companies with substantial business in multiple *SICS*[®] industries can consider reporting on these additional SASB industry standards.

It is up to a company to determine the means by which it reports SASB information to investors. One benefit of using SASB standards may be achieving regulatory compliance in some markets. Other investor communications using SASB information could be sustainability reports, integrated reports, websites, or annual reports to shareholders. There is no guarantee that SASB standards address all financially material sustainability risks or opportunities unique to a company's business model.

Industry Description

The E-Commerce industry is composed of firms that provide an online marketplace for other firms or individuals to sell their goods and services, as well as retailers and wholesalers that provide an exclusively web-based platform for consumers to buy goods and services. Firms in this industry sell to consumers as well as to other businesses. Because of the accessibility of e-commerce sites, the industry is a global marketplace for buyers and sellers. Note: The industry scope exclusively applies to "pure-play" e-commerce operations and does not address the manufacturing or brick-and-mortar retail operations of companies. Many consumer goods manufacturers and retailers have incorporated, or are in the process of incorporating, an e-commerce component to their business. SASB has separate standards for the Multiline and Specialty Retailers & Distributors (CG-MR); Apparel, Accessories & Footwear (CG-AA); and Toys & Sporting Goods (CG-TS) industries. Depending on the specific activities and operations of firms in the aforementioned industries, disclosure topics and accounting metrics associated with the E-Commerce industry standard may also be relevant.

¹ **Legal Note:** SASB standards are not intended to, and indeed cannot, replace any legal or regulatory requirements that may be applicable to a reporting entity's operations.

SUSTAINABILITY DISCLOSURE TOPICS & ACCOUNTING METRICS

Table 1. Sustainability Disclosure Topics & Accounting Metrics

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Hardware Infrastructure Energy & Water Management	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Quantitative	Gigajoules (GJ), Percentage (%)	CG-EC-130a.1
	(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 (%)	CG-EC-130a.2
	Discussion of the integration of environmental considerations into strategic planning for data center needs	Discussion and Analysis	n/a	CG-EC-130a.3
Data Privacy & Advertising Standards	Number of users whose information is used for secondary purposes	Quantitative	Number	CG-EC-220a.1
	Description of policies and practices relating to behavioral advertising and user privacy	Discussion and Analysis	n/a	CG-EC-220a.2
Data Security	Description of approach to identifying and addressing data security risks	Discussion and Analysis	n/a	CG-EC-230a.1
	(1) Number of data breaches, (2) percentage involving personally identifiable information (PII), (3) number of users affected ²	Quantitative	Number, Percentage (%)	CG-EC-230a.2
Employee Recruitment, Inclusion & Performance	Employee engagement as a percentage ³	Quantitative	Percentage (%)	CG-EC-330a.1
	(1) Voluntary and (2) involuntary turnover rate for all employees	Quantitative	Rate	CG-EC-330a.2
	Percentage of gender and racial/ethnic group representation for (1) management, (2) technical staff, and (3) all other employees ⁴	Quantitative	Percentage (%)	CG-EC-330a.3
	Percentage of technical employees who are H-1B visa holders	Quantitative	Percentage (%)	CG-EC-330a.4
Product Packaging & Distribution	Total greenhouse gas (GHG) footprint of product shipments	Quantitative	Metric tons (t) CO ₂ -e	CG-EC-410a.1
	Discussion of strategies to reduce the environmental impact of product delivery	Discussion and Analysis	n/a	CG-EC-410a.2

² Note to **CG-EC-230a.2**– Disclosures shall include a description of corrective actions implemented in response to data breaches.

³ Note to **CG-EC-330a.1**– Disclosure shall include a description of the methodology employed.

⁴ Note to **CG-EC-330a.3**– The entity shall discuss its policies and programs for fostering equitable employee representation across its global operations.

Table 2. Activity Metrics

ACTIVITY METRIC	CATEGORY	UNIT OF MEASURE	CODE
Entity-defined measure of user activity ⁵	Quantitative	Number	CG-EC-000.A
Data processing capacity, percentage outsourced ⁶	Quantitative	See note	CG-EC-000.B
Number of shipments	Quantitative	Number	CG-EC-000.C

⁵ Note to **CG-EC-000.A** – The entity shall define and disclose a basic measure of user activity suitable for its business activities. This measure may be sales transactions, purchase transactions, number of searches, monthly active users, page views, and/or unique URLs.

⁶ Note to **CG-EC-000B** – Data processing capacity shall be reported in units of measure typically tracked by the entity or used as the basis for contracting its IT services needs, such as million service units (MSUs), million instructions per second (MIPS), mega floating-point operations per second (MFLOPS), compute cycles, or other units of measure. Alternatively, the entity may disclose owned and outsourced data processing needs in other units of measure, such as rack space or data center square footage. The percentage outsourced shall include co-location facilities and cloud services (e.g., Platform as a Service and Infrastructure as a Service).

Hardware Infrastructure Energy & Water Management

Topic Summary

A large part of the energy consumed by the E-Commerce industry is used to power critical hardware and IT infrastructure in data centers. Data centers need to be powered continuously, and disruptions to the energy supply can have a material impact on operations, depending on the magnitude and timing of the disruption. Companies also face a tradeoff when it comes to energy and water consumption for their data center cooling needs: Cooling data centers with water instead of chillers is a means of improving energy efficiency, but it can lead to dependence on significant local water resources. Companies that effectively manage this issue may benefit from cost savings and minimize reputational risks, as there is growing concern over energy and water use.

Accounting Metrics

CG-EC-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).
- 5 The entity may disclose the trailing twelve-month (TTM) weighted average power usage effectiveness (PUE) for its data centers.
 - 5.1 PUE is defined as the ratio of the total amount of power used by a computer data center facility to the amount of power delivered to computing equipment.
 - 5.2 If disclosing PUE, the entity shall follow the guidance and calculation methodology described in [PUE™: A Comprehensive Examination of the Metric](#) (2014), published by ASHRAE and The Green Grid Association.

CG-EC-130a.2. (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](#) 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;
 - 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.

CG-EC-130a.3. Discussion of the integration of environmental considerations into strategic planning for data center needs

- 1 The entity shall discuss the environmental considerations that it integrates into siting, design, construction, refurbishment, and operational specifications for its data centers, including factors related to energy and water consumption.
 - 1.1 Environmental factors may include, but are not limited to, energy-efficiency standards; layout design, such as “hot aisle/cold aisle” layouts; and location-based factors, such as accounting for regional humidity, average temperature, water availability and groundwater stress, water permits, regional- or state-level carbon legislation or pricing, and the carbon intensity of electricity from the local grid.
- 2 The scope of disclosure shall include data centers currently owned and operated by the entity, data centers that have been planned or are under construction, and outsourced data center services.
- 3 The entity shall discuss how the environmental considerations it identifies were incorporated into decisions related to its data centers that were made during the reporting period, including if they influenced decisions to insource or outsource data center services, improve efficiency of existing data centers, and/or construct new data centers.

Data Privacy & Advertising Standards

Topic Summary

E-commerce companies have access to consumer information, including financial information, purchase history, and basic demographic data. Companies in this industry must carefully manage two separate and often conflicting priorities. On one hand, companies compete on their ability to leverage data to provide users with relevant services and target advertising or product recommendations based on consumers' preferences and behavior patterns. On the other hand, the fact that companies have access to a wide range of user data, such as personal, demographic, and behavioral data, raises privacy concerns among users and the public at large, and is leading to increased regulatory scrutiny from authorities in the U.S., Europe, and other jurisdictions. Failure to manage the issue can result in costs associated with regulatory oversight and reputational risks. Furthermore, effective management in this area can have financial implications through increased user confidence and loyalty, which are particularly important to maintain market share.

Accounting Metrics

CG-EC-220a.1. Number of users whose information is used for secondary purposes

- 1 The entity shall disclose the number of unique users whose information is used for secondary purposes.
 - 1.1 User information includes information that pertains to a user's attributes or actions, including but not limited to, account statements, transaction records, records of communications, content of communications, demographic data, behavioral data, location data, and/or personally identifiable information (PII).
 - 1.1.1 Demographic data are defined as the quantifiable statistics that identify and distinguish a given population. Examples of demographic data include gender, age, race/ethnicity, knowledge of languages, disabilities, mobility, home ownership, and employment status.
 - 1.1.2 Behavioral data are defined as the product of tracking, measuring, and recording individual behaviors such as online browsing patterns, buying habits, brand preferences, and product usage patterns.
 - 1.1.3 Location data are defined as data describing the physical location or movement patterns of an individual, such as Global Positioning System (GPS) coordinates or other related data that would enable identifying and tracking an individual's physical location.
 - 1.1.4 PII is defined as any information about an individual that is maintained by an entity, including: (1) any information that can be used to distinguish or trace an individual's identity, such as name, Social Security Number (SSN), date and place of birth, mother's maiden name, or biometric records; and (2) any other information that is linked or linkable to an individual, such as medical, educational, financial, and employment information. This definition is derived from the U.S. Government Accountability

Office's Report to Congressional Requesters, *Alternatives Exist for Enhancing Protection of Personally Identifiable Information* .

- 1.2 Secondary purpose is defined as the intentional use of data by the entity (i.e., not a breach of security) that is outside the primary purpose for which the data was collected. Examples of secondary purposes include, but are not limited to, selling targeted ads, improving the entity's products or service offerings, and transferring data or information to a third-party through sale, rental, or sharing.
- 1.3 User accounts that the entity cannot verify as belonging to the same individual shall be disclosed separately.
- 2 The scope of disclosure shall include the users whose information is used by the entity itself for secondary purposes as well as the users whose information is provided to affiliates or non-affiliates to use for secondary purposes.
 - 2.1 Affiliate is defined as a third party that directly or indirectly controls, is controlled by, or is under common control with the entity.
 - 2.2 Non-affiliates are all third parties other than the entity and its affiliates.

CG-EC-220a.2. Description of policies and practices relating to behavioral advertising and user privacy

- 1 The entity shall describe the nature, scope, and implementation of its policies and practices related to user privacy, with a specific focus on how it addresses the collection, usage, and retention of user information.
 - 1.1 User information includes information that pertains to a user's attributes or actions, including but not limited to, account statements, transaction records, records of communications, content of communications, demographic data, behavioral data, location data, and/or personally identifiable information (PII).
 - 1.1.1 Demographic data are defined as the quantifiable statistics that identify and distinguish a given population. Examples of demographic data include gender, age, race/ethnicity, knowledge of languages, disabilities, mobility, home ownership, and employment status.
 - 1.1.2 Behavioral data are defined as the product of tracking, measuring, and recording individual behaviors, such as online browsing patterns, buying habits, brand preferences, and product usage patterns.
 - 1.1.3 Location data are defined as data describing the physical location or movement patterns of an individual, such as Global Positioning System (GPS) coordinates or other related data that would enable identifying and tracking an individual's physical location.
 - 1.1.4 PII is defined as any information about an individual that is maintained by an entity, including (1) any information that can be used to distinguish or trace an individual's identity, such as name, Social Security Number (SSN), date and place of birth, mother's maiden name, or biometric records; and (2) any other information that is linked or linkable to an individual, such as medical, educational, financial,

and employment information. This definition is derived from the U.S. Government Accountability Office's Report to Congressional Requesters, *Alternatives Exist for Enhancing Protection of Personally Identifiable Information*.

- 2 The entity shall describe the information "lifecycle" (i.e., collection, usage, retention, processing, disclosure, and destruction of information) and how information-handling practices at each stage may affect individuals' privacy.
 - 2.1 With respect to data collection, it may be relevant for the entity to discuss which data or types of data are collected without the consent of an individual, which require opt-in consent, and which require opt-out action from the individual.
 - 2.2 With respect to usage of data, it may be relevant for the entity to discuss which data or types of data are used by the entity internally, and under which circumstances the entity shares, sells, rents, or otherwise distributes data or information to third parties.
 - 2.3 With respect to retention, it may be relevant for the entity to discuss which data or types of data it retains, the length of time of retention, and practices used to ensure that data is stored securely.
- 3 The entity shall discuss the degree to which its policies and practices address similar issues as those outlined in the U.S. Office of Management and Budget's (OMB) "[Guidance for Implementing the Privacy Provisions of the E-Government Act of 2002 \(M-03-22\)](#)," including use of Privacy Impact Assessments (PIAs).
 - 3.1 A PIA is an analysis of how information is handled that ensures handling conforms to applicable legal, regulatory, and policy requirements regarding privacy; determines the risks and effects of collecting, maintaining, and disseminating information in identifiable form in an electronic information system; and examines and evaluates protections and alternative processes for handling information in order to mitigate potential privacy risks.
 - 3.2 As outlined by OMB M-03-22, PIAs must analyze and describe: (a) what information is to be collected, (b) why the information is being collected, (c) the intended use of the information, (d) with whom the information will be shared, (e) what opportunities individuals have to decline to provide information (i.e., where providing information is voluntary) or to consent to particular uses of the information (other than required or authorized uses), including how individuals can grant consent, and (f) how the information will be secured, among other government-specific requirements.
- 4 The entity shall discuss how its policies and practices related to privacy of user information address children's privacy, which at a minimum includes the provisions of the U.S. Children's Online Privacy Protection Act (COPPA).
- 5 The scope of disclosure includes both first- and third-party advertising.
- 6 With respect to behavioral advertising, the entity may describe how it addresses the following principles, described by the cross-industry Self-Regulatory Principles for Online Behavioral Advertising:

- 6.1 Education - participation in educational efforts for consumers about behavioral online advertising
- 6.2 Transparency - clearly disclosing information about data collection and data use practices
- 6.3 Consumer control - allowing users to choose whether data is collected or transferred to non-affiliates
- 6.4 Data security - providing basic security provisions and having clear policies relating to retention of user information
- 6.5 Material changes - obtaining consent before applying changes to policies that are less restrictive than existing ones
- 6.6 Sensitive data - abiding by COPPA, and handling user data such as financial information, Social Security numbers, and medical information
- 6.7 Accountability - participation in self-regulatory organizations such as the Direct Marketing Association

Data Security

Topic Summary

The business model of companies in the E-Commerce industry depend on a firm's ability to securely process electronic payments. As consumers become more educated about the threats of cybercrime, particularly in the wake of continued high-profile attacks, having a reputation as a secure company will become increasingly important to maintain or gain market share. There is an opportunity for the most trusted brands to position themselves favorably in the eyes of consumers and gain a significant competitive advantage. This makes user loyalty, which is highly influenced by the perception of the safety of the user's valuable financial and personal information, particularly important to maintaining market share.

Accounting Metrics

CG-EC-230a.1. Description of approach to identifying and addressing data security risks

- 1 The entity shall describe its approach to identifying vulnerabilities in its information systems that pose a data security risk.
 - 1.1 Vulnerability is defined as a weakness in an information system, system security procedures, internal controls, and/or implementation that could be exploited.
 - 1.2 Data security risk is defined as any circumstance or event with the potential to adversely impact organizational operations (including mission, functions, image, or reputation), organizational assets, individuals, other organizations, or nations through an information system via unauthorized access, destruction, disclosure, modification of information, and/or denial of service.
- 2 The entity shall describe its approach to addressing data security risks and vulnerabilities it has identified, including, but not limited to, operational procedures, management processes, structure of products, selection of business partners, employee training, and use of technology.
- 3 The entity may discuss trends it has observed in type, frequency, and origination of attacks to its data security and information systems.
- 4 The entity may describe the degree to which its approach is aligned with an external standard or framework and/or legal or regulatory framework for managing data security, such as:
 - 4.1 ISO/IEC 27001:2013—Information technology—Security techniques—Information security management systems—Requirements

- 4.2 [Framework for Improving Critical Infrastructure Cybersecurity, Version 1.1](#) , April 16, 2018, National Institute of Standards and Technology (NIST)
- 5 The U.S. SEC’s [Commission Statement and Guidance on Public Company Cybersecurity Disclosures](#) may provide further guidance on disclosures on the entity’s approach to addressing data security risks and vulnerabilities.
- 6 All disclosure shall be sufficient such that it is specific to the risks the entity faces but disclosure itself would not compromise the entity’s ability to maintain data privacy and security.

CG-EC-230a.2. (1) Number of data breaches, (2) percentage involving personally identifiable information (PII), (3) number of users affected

- 1 The entity shall calculate and disclose (1) the total number of data breaches identified during the reporting period.
- 1.1 Data breach is defined as the unauthorized movement or disclosure of sensitive information to a party, usually outside the organization, that is not authorized to have or see the information. This definition is derived from the U.S. [National Initiative for Cybersecurity Careers and Studies \(NICCS\) glossary](#).
- 1.2 The scope of disclosure is limited to data breaches that resulted in a deviation from the entity’s expected outcomes for confidentiality and/or integrity.
- 2 The entity shall disclose (2) the percentage of data breaches in which personally identifiable information (PII) was subject to the data breach.
- 2.1 PII is defined as any information about an individual that is maintained by an entity, including: (1) any information that can be used to distinguish or trace an individual’s identity, such as name, Social Security Number (SSN), date and place of birth, mother’s maiden name, or biometric records; and (2) any other information that is linked or linkable to an individual, such as medical, educational, financial, and employment information. This definition is derived from the U.S. Government Accountability Office’s Report to Congressional Requesters, [Alternatives Exist for Enhancing Protection of Personally Identifiable Information](#) .
- 2.2 The scope of disclosure shall include incidents in which encrypted data were acquired with an encryption key that was also acquired, as well as if there is a reasonable belief that encrypted data could be readily converted to plaintext.
- 2.2.1 Encryption is defined as the process of transforming plaintext into ciphertext. This definition is derived from the [NICCS glossary](#).
- 2.3 The scope of disclosure is limited to breaches in which users were notified of the breach, either as required by law or voluntarily by the entity.
- 3 The entity shall disclose (3) the total number of unique users who were affected by data breaches, which includes all those whose personal data was compromised in a data breach.

- 3.1 Accounts that the entity cannot verify as belonging to the same user shall be disclosed separately.
- 4 The entity may delay disclosure if a law enforcement agency has determined that notification impedes a criminal investigation or until the law enforcement agency determines that such notification does not compromise the investigation.

Note to **CG-EC-230a.2**

- 1 The entity shall describe the corrective actions taken in response to data breaches, such as changes in operations, management, processes, products, business partners, training, or technology.
 - 1.1 The U.S. SEC's [Commission Statement and Guidance on Public Company Cybersecurity Disclosures](#) may provide further guidance on disclosures on the corrective actions taken in response to data breaches.
- 2 All disclosure shall be sufficient such that it is specific to the risks the entity faces, but disclosure itself will not compromise the entity's ability to maintain data privacy and security.
- 3 The entity may disclose its policy for disclosing data breaches to affected users in a timely manner.

Employee Recruitment, Inclusion & Performance

Topic Summary

Employees are key contributors to value creation in the E-Commerce industry. While the number of job openings in the industry continues to grow, companies are finding it difficult to recruit qualified employees to fill these positions. In key markets, a shortage of technically skilled domestic workers has created intense competition to acquire such employees, contributing to high turnover rates. This competition for talent and the search for innovation opportunities presents several interrelated sustainability challenges regarding human capital that companies must manage. Hiring foreign nationals to compensate for shortages in local talent can create risks related to perceived social implications in the host and home countries of workers. Companies offer significant monetary and nonmonetary benefits to improve employee engagement and, therefore, retention and productivity. Initiatives to improve employee engagement and work-life balance might influence the recruitment and retention of a diverse workforce. As the industry is characterized by relatively low representation from women and minority groups, efforts to recruit from and develop diverse talent pools can serve to address the talent shortage and generally to improve the value of company offerings. Greater workforce diversity is important for innovation, and it helps companies understand the needs of their diverse and global customer base.

Accounting Metrics

CG-EC-330a.1. Employee engagement as a percentage

- 1 The entity shall disclose employee engagement as a percentage.
 - 1.1 Employee engagement levels include, but are not limited to:
 - 1.1.1 Actively engaged
 - 1.1.2 Not engaged
 - 1.1.3 Passive
 - 1.1.4 Actively disengaged
 - 1.2 If employee engagement is measured as an index (e.g., strength of employee agreement with a survey statement), the entity shall convert the index into a percentage for this disclosure.
- 2 The percentage shall be calculated as the number of employees who are actively engaged divided by the total number of employees who completed the survey.
 - 2.1 The percentage shall be calculated based on the results of an employee engagement survey or research study conducted by the entity, by an external party contracted by the entity to perform such a study, or by an independent third party.

Note to **CG-EC-330a.1**

- 1 The entity shall briefly describe:
 - 1.1 The source of its survey (e.g., third-party survey or entity's own)
 - 1.2 The methodology used to calculate the percentage
 - 1.3 A summary of questions or statements included in the survey or study (e.g., those related to goal setting, support to achieve goals, training and development, work processes, and commitment to the organization)
- 2 When the survey methodology has changed compared to previous reporting years, the entity shall indicate results based on both the old and new methods for the year in which the change is made.
- 3 If results are limited to a subset of employees, the entity shall include the percentage of employees included in the study or survey and the representativeness of the sample.
- 4 The entity may disclose results of other survey findings, such as the percentage of employees who are: proud of their work/where they work, inspired by their work/co-workers, and aligned with corporate strategy and goals.

CG-EC-330a.2. (1) Voluntary and (2) involuntary turnover rate for all employees

- 1 The entity shall disclose employee turnover as a percentage.
 - 1.1 Turnover shall be calculated and disclosed separately for voluntary and involuntary departures.
- 2 The entity shall calculate the voluntary turnover rate as the number of employee-initiated voluntary separations (such as resignations or retirement) during the reporting period divided by the total number of employees during the reporting period.
- 3 The entity shall calculate the involuntary turnover rate as the total number of entity-initiated separations (such as dismissal, downsizing, redundancy, or non-renewal of contract) during the reporting period divided by the total number of employees during the reporting period.

CG-EC-330a.3. Percentage of gender and racial/ethnic group representation for (1) management, (2) technical staff, and (3) all other employees

- 1 The entity shall disclose gender representation for all employees and racial/ethnic group representation for its U.S. employees by employee category.
 - 1.1 The following employee categories shall be used: (1) management, (2) technical staff, and (3) all other employees.

- 2 Gender and racial/ethnic group representation shall be disclosed in percentages, where the percentage shall be calculated as the number of employees in each gender or racial/ethnic group in each employee category divided by the total number of employees in the respective employee category.
- 3 For U.S. employees, the entity shall categorize the employees in accordance with the Equal Employment Opportunity Commission's Employer Information EEO-1 report (EEO-1 Survey) [Instruction Booklet](#), where each employee category for disclosure is defined by corresponding job categories and descriptions in the Instruction Booklet.
 - 3.1 Management includes the following:
 - 3.1.1 Executive/Senior Level Officials and Managers: individuals who plan, direct and formulate policies, set strategy and provide the overall direction of enterprises/organizations for the development and delivery of products or services, within the parameters approved by boards of directors or other governing bodies. Residing in the highest levels of organizations, these executives plan, direct or coordinate activities with the support of subordinate executives and staff managers. They include, in larger organizations, those individuals within two reporting levels of the CEO, whose responsibilities require frequent interaction with the CEO. Examples of these kinds of managers are: chief executive officers, chief operating officers, chief financial officers, line of business heads, presidents or executive vice presidents of functional areas or operating groups, chief information officers, chief human resources officers, chief marketing officers, chief legal officers, management directors and managing partners.
 - 3.1.2 Non-executive management includes First/Mid Level Officials and Managers: individuals who serve as managers, other than those who serve as Executive/Senior Level Officials and Managers, including those who oversee and direct the delivery of products, services or functions at group, regional or divisional levels of organizations. These managers receive directions from the Executive/Senior Level management and typically lead major business units. They implement policies, programs and directives of executive/senior management through subordinate managers and within the parameters set by Executive/Senior Level management. Examples of these kinds of managers are vice presidents and directors, group, regional or divisional controllers; treasurers; human resources, information systems, marketing, and operations managers. The First/Mid Level Officials and Managers subcategory also includes those who report directly to middle managers. These individuals serve at functional, line-of-business-segment or branch levels and are responsible for directing and executing the day-to-day operational objectives of enterprises/organizations, conveying the directions of higher level officials and managers to subordinate personnel and, in some instances, directly supervising the activities of exempt and nonexempt personnel. The [EEO-1 Job Classification Guide](#) provides examples of job titles in this category.
 - 3.2 Technical staff includes employees categorized in the 15-0000 group (Computer and Mathematical Occupations) or 17-0000 group (Architecture and Engineering Occupations) of the U.S. Bureau of Labor Statistics' [2018 Standard Occupational Classification System](#).
 - 3.3 All other employees includes those employees who are not classified as management or technical staff.

- 4 For non-U.S. employees, the entity shall categorize the employees in a manner generally consistent with the definitions provided above, though in accordance with, and further facilitated by, any applicable local regulations, guidance, or generally accepted definitions.
- 5 The entity shall categorize the gender of its employees as female, male, or not disclosed/available.
- 6 The entity shall categorize the racial/ethnic group of its U.S. employees in accordance with the EEO-1 Survey Instruction Booklet and use the following categories: Asian, Black or African American, Hispanic or Latino, White, Other (which includes Native American or Alaska Native, Native Hawaiian or Pacific Islander, and "Two or More Races" classifications), or not disclosed/available.
- 7 The entity may provide supplemental disclosures on gender and/or racial/ethnic group representation by country or region.
- 8 The entity may provide supplemental contextual disclosures on factors that significantly influence gender and/or racial/ethnic group representation, such as the country or region where employees are located.
- 9 The entity may disclose gender and/or racial/ethnic group representation by employee category in the following table formats:

Table 3. Gender Representation of Global Employees (%)

	FEMALE	MALE	N/A* *
Management			
Technical Staff			
All Other Employees			

* N/A = not available or not disclosed

Table 4. Racial/Ethnic Group Representation of U.S. Employees (%)

	ASIAN	BLACK OR AFRICAN AMERICAN	HISPANIC OR LATINO	WHITE	OTHER* ^	N/A** *
Management						
Technical Staff						
All Other Employees						

^ Other includes the classifications: Native American or Alaska Native, Native Hawaiian or Pacific Islander, and "Two or More Races"

* N/A** = not available or not disclosed

Note to **CG-EC-330a.3**

- 1 The entity shall describe its policies and programs for fostering equitable employee representation across its global operations.
 - 1.1 Relevant policies may include maintaining transparency of hiring, promotion, and wage practices, ensuring equal employment opportunity, developing and disseminating diversity policies, and ensuring management accountability for equitable representation.
 - 1.2 Relevant programs may include trainings on diversity, mentorship and sponsorship programs, partnership with employee resource and advisory groups, and provision of flexible work schedules to accommodate the varying needs of employees.
 - 1.3 Relevant aspects of employee representation include, at a minimum, gender and race/ethnicity. The entity may disclose on other aspects of its workforce, such as, age, physical abilities/qualities, sexual orientation, and religious beliefs, as relevant to local jurisdiction.

CG-EC-330a.4. Percentage of technical employees who are H-1B visa holders

- 1 The entity shall disclose the percentage of its technical employees that held valid H-1B visas as of the close of the reporting period.
 - 1.1 Technical staff includes employees categorized in the 15-0000 group (Computer and Mathematical Occupations) or 17-0000 group (Architecture and Engineering Occupations) of the Standard Occupation Classification (SOC) system from U.S. Bureau of Labor Statistics (BLS).
 - 1.2 The percentage shall be calculated as the number of technical employees with valid H-1B visas divided by the total number of technical employees.
 - 1.3 The scope of employees includes those directly employed by the entity and excludes contractors and outsourced employees.
 - 1.4 The scope of employees includes both full- and part-time employees.

Product Packaging & Distribution

Topic Summary

A significant part of the E-Commerce industry's added value comes from firms' ability to move a wide array of goods efficiently to consumers who would otherwise have to personally travel to collect the goods from brick-and-mortar stores. As the volume of packaging shipments increases, the industry may become more exposed to environmental externalities, such as carbon pricing and subsequent rising fuel costs that present risks associated with the shipping of products. While firms that outsource shipping and logistics have less control over the specific processes of shipping operations, they can still select suppliers with more energy-efficient business practices. As this is a highly competitive and low-margin industry, the ability to shave off shipping costs through fuel reduction and more efficient routing can allow firms to pass those savings on to their customers. Additionally, e-commerce firms have an incentive to minimize the use of packaging. Efficient packaging can lead to cost savings from reducing the amount of material that needs to be purchased, as well as saving on logistics costs, as more products can fit into a single shipping load.

Accounting Metrics

CG-EC-410a.1. Total greenhouse gas (GHG) footprint of product shipments

- 1 The entity shall disclose the complete tank-to-wheels greenhouse gas (GHG) footprint, in metric tons of CO₂-e, associated with outbound shipment of the entity's products.
 - 1.1 Tank-to-wheels emissions relate to vehicle processes and exclude upstream emissions associated with primary energy production (i.e., well-to-tank emissions).
 - 1.2 The entity shall calculate its disclosure according to EN 16258:2012, Methodology for calculation and declaration of energy consumption and GHG emissions of transport services (freight and passengers).
 - 1.2.1 Calculations shall be consistent with the methodology used to calculate the "tank-to-wheels GHG emissions (Gt)" result that is described in EN 16258:2012.
 - 1.2.2 Determination of transportation system scope, boundaries, and any necessary allocations shall be consistent with the methodology described in EN 16258:2012.
- 2 The scope of disclosure includes emissions from all freight transportation and logistics activities associated with outbound shipment of the entity's products, including those from contract carriers and outsourced freight forwarding services and logistics providers (Scope 3) as well as those from the entity's own assets (Scope 1).
- 3 The scope of disclosure includes emissions from all modes of transportation, such as road freight, air freight, barge transport, marine transport, and rail transport.

- 4 Consistent with EN 16258:2012, disclosure may be based on calculations from a mix of categories of emissions values (i.e., specific measured values, transport operator vehicle-type- or route-type-specific values, transport operator fleet values, and default values).
- 5 Where relevant and necessary for interpretation of disclosure, the entity shall describe its allocation methods, emissions values, boundaries, mix of transport services used, and other information.

CG-EC-410a.2. Discussion of strategies to reduce the environmental impact of product delivery

- 1 The entity shall discuss its strategies to reduce the environmental impact of fulfillment and delivery of its products, including impacts associated with packaging materials and those associated with product transportation.
- 2 Relevant strategies to discuss include, but are not limited to:
 - 2.1 Discussion of logistics selection, mode selection, and management (e.g., rail transport vs. air freight transport) and/or operation for route efficiency
 - 2.2 Discussion of packaging choices, including, but not limited to, decisions to utilize recycled or renewable (e.g., bio-based plastic) packaging material, decisions to optimize the amount of packaging materials used (e.g., source reduction), use of refillable or reusable packaging, and design for efficient shipping and transport
 - 2.3 Discussion of fuel choices and vehicle choices for fleets owned and/or operated by the entity, such as decisions to use renewable and low-emission fuels and low-emission vehicles
 - 2.4 Other relevant strategies, such as efforts to reduce idling of vehicles owned and/or operated by the entity, innovations to improve the efficiency of “last-mile” delivery, and strategies to optimize delivery times to reduce traffic congestion

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