



SUSTAINABILITY ACCOUNTING STANDARD  
CONSUMPTION II SECTOR

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# E-COMMERCE

## Sustainability Accounting Standard

Sustainable Industry Classification System™ (SICS™) #CN0404

Prepared by the  
Sustainability Accounting Standards Board®

September 2015  
Provisional Standard

# E-COMMERCE

## Sustainability Accounting Standard

### About SASB

The Sustainability Accounting Standards Board (SASB) provides sustainability accounting standards for use by publicly-listed corporations in the U.S. in disclosing material sustainability information for the benefit of investors and the public. SASB standards are designed for disclosure in mandatory filings to the Securities and Exchange Commission (SEC), such as the Form 10-K and 20-F. SASB is an independent 501(c)3 non-profit organization. Through 2016, SASB is developing standards for 78 industries in 10 sectors.

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## INTRODUCTION

### Purpose & Structure

This document contains the SASB Sustainability Accounting Standard (SASB Standard) for the E-Commerce industry.

SASB Sustainability Accounting Standards are comprised of **(1) disclosure guidance and (2) accounting standards on sustainability topics** for use by U.S. and foreign public companies in their annual filings (Form 10-K or 20-F) with the U.S. Securities and Exchange Commission (SEC). To the extent relevant, SASB Standards may also be applicable to other periodic mandatory filings with the SEC, such as the Form 10-Q, Form S-1, and Form 8-K.

SASB Standards identify sustainability topics at an industry level, which may constitute material information—depending on a company’s specific operating context—for a company within that industry. SASB Standards are intended to provide guidance to company management, which is ultimately responsible for determining which information is material and should therefore be included in its Form 10-K or 20-F and other periodic SEC filings.

SASB Standards provide companies with standardized sustainability metrics designed to communicate performance on industry level sustainability topics. When making disclosure on sustainability topics, companies can use SASB Standards to help ensure that disclosure is standardized and therefore decision-useful, relevant, comparable, and complete.

SASB Standards are intended to constitute “suitable criteria” as defined by AT 101.23 - 32<sup>1</sup> and referenced in AT 701<sup>2</sup>, as having the following attributes:

- *Objectivity*—Criteria should be free from bias.
- *Measurability*—Criteria should permit reasonably consistent measurements, qualitative or quantitative, of subject matter.
- *Completeness*—Criteria should be sufficiently complete so that those relevant factors that would alter a conclusion about subject matter are not omitted.
- *Relevance*—Criteria should be relevant to the subject matter.

### Industry Description

The E-Commerce industry is composed of firms that provide an online marketplace service 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 standards discussed below are for “pure-play” E-Commerce companies and do not address the manufacturing or brick-and-mortar retail operations of companies. Many consumer goods manufacturers and

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<sup>1</sup> [http://pcaobus.org/Standards/Attestation/Pages/AT101.aspx#at\\_101\\_fn7](http://pcaobus.org/Standards/Attestation/Pages/AT101.aspx#at_101_fn7)

<sup>2</sup> <http://pcaobus.org/Standards/Attestation/Pages/AT701.aspx>

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 (CN0403); Apparel, Accessories & Footwear (CN0501); and Toys & Sporting Goods (CN0604) industries. Depending on the specific activities and operations of firms in the aforementioned industries, disclosure topics and accounting metrics associated with E-Commerce may also be relevant.

## Guidance for Disclosure of Sustainability Topics in SEC Filings

### 1. Industry-Level Sustainability Topics

For the E-Commerce industry, SASB has identified the following sustainability disclosure topics:

- Energy & Water Footprint of Hardware Infrastructure
- Logistics & Packaging Efficiency
- Data Security & Fraud Protection
- Data Privacy
- Employee Recruitment, Inclusion, and Performance

### 2. Company-Level Determination and Disclosure of Material Sustainability Topics

Sustainability disclosures are governed by the same laws and regulations that govern disclosures by securities issuers generally. According to the U.S. Supreme Court, a fact is material if, in the event such fact is omitted from a particular disclosure, there is “a substantial likelihood that the disclosure of the omitted fact would have been viewed by the reasonable investor as having significantly altered the ‘total mix’ of the information made available.”<sup>3,4</sup>

SASB has attempted to identify those sustainability topics that are reasonably likely to have a material effect on the financial condition or operating performance of companies within each SICs industry. SASB recognizes, however, that each company is ultimately responsible for determining what information should be disclosed within the context of Regulation S-K and other guidance.

Regulation S-K, which sets forth certain disclosure requirements associated with Form 10-K and other SEC filings, requires companies, among other things, to describe in the Management’s Discussion and Analysis of Financial Condition and Results of Operations (MD&A) section of Form 10-K “any known trends or uncertainties that have had or that the registrant reasonably expects will have a material favorable or unfavorable impact on net sales or revenues or income from continuing operations. If the registrant knows of events that will cause a material change in the relationship between costs and revenues (such as known future increases in costs of labor or materials or price increases or inventory adjustments), the change in the relationship shall be disclosed.”

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<sup>3</sup> TSC Industries v. Northway, Inc., 426 U.S. 438 (1976).

<sup>4</sup> C.F.R. 229.303(Item 303)(a)(3)(ii).

Furthermore, Instructions to Item 303 state that the MD&A “shall focus specifically on material events and uncertainties known to management that would cause reported financial information not to be necessarily indicative of future operating results or of future financial condition.”<sup>2</sup>

The SEC has provided guidance for companies to use in determining whether a trend or uncertainty should be disclosed. The two-part assessment prescribed by the SEC, based on probability and magnitude, can be applied to the topics included within this standard:

- First, a company is not required to make disclosure about a known trend or uncertainty if its management determines that such trend or uncertainty is not reasonably likely to occur.
- Second, if a company’s management cannot make a reasonable determination of the likelihood of an event or uncertainty, then disclosure is required unless management determines that a material effect on the registrant’s financial condition or results of operation is not reasonably likely to occur.

### 3. Sustainability Accounting Standard Disclosures in Form 10-K

#### a. Management’s Discussion and Analysis

For purposes of comparability and usability, companies should consider making disclosure on sustainability topics in the MD&A, in a sub-section titled “**Sustainability Accounting Standards Disclosures.**”<sup>5</sup>

#### b. Other Relevant Sections of Form 10-K

In addition to the MD&A section, it may be relevant for companies to disclose sustainability information in other sections of Form 10-K, including, but not limited to:

- **Description of business**—Item 101 of Regulation S-K requires a company to provide a description of its business and its subsidiaries. Item 101(c)(1)(xii) expressly requires disclosure regarding certain costs of complying with environmental laws:

*Appropriate disclosure also shall be made as to the material effects that compliance with Federal, State and local provisions which have been enacted or adopted regulating the discharge of materials into the environment, or otherwise relating to the protection of the environment, may have upon the capital expenditures, earnings and competitive position of the registrant and its subsidiaries.*

- **Legal proceedings**—Item 103 of Regulation S-K requires companies to describe briefly any material pending or contemplated legal proceedings. Instructions to Item 103 provide specific disclosure requirements for administrative or judicial proceedings arising from laws and

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<sup>5</sup> [SEC \[Release Nos. 33-8056; 34-45321; FR-61\] Commission Statement about Management’s Discussion and Analysis of Financial Condition and Results of Operations](#): “We also want to remind registrants that disclosure must be both useful and understandable. That is, management should provide the most relevant information and provide it using language and formats that investors can be expected to understand. Registrants should be aware also that investors will often find information relating to a particular matter more meaningful if it is disclosed in a single location, rather than presented in a fragmented manner throughout the filing.”

regulations that target discharge of materials into the environment or that are primarily for the purpose of protecting the environment.

- **Risk factors**—Item 503(c) of Regulation S-K requires filing companies to provide a discussion of the most significant factors that make an investment in the registrant speculative or risky, clearly stating the risk and specifying how a particular risk affects the particular filing company.

### c. Rule 12b-20

Securities Act Rule 408 and Exchange Act Rule 12b-20 require a registrant to disclose, in addition to the information expressly required by law or regulation, “such further material information, if any, as may be necessary to make the required statements, in light of the circumstances under which they are made, not misleading.”

More detailed guidance on disclosure of material sustainability topics can be found in the **SASB Conceptual Framework**, available for download via <http://www.sasb.org/approach/conceptual-framework/>.

## Guidance on Accounting for Sustainability Topics

For each sustainability topic included in the E-Commerce Sustainability Accounting Standard, SASB identifies accounting metrics.

SASB recommends that each company consider using these sustainability accounting metrics when preparing disclosures on the sustainability topics identified herein;

As appropriate—and consistent with Rule 12b-20<sup>6</sup>—when disclosing a sustainability topic identified by this Standard, companies should consider including a narrative description of any material factors necessary to ensure completeness, accuracy, and comparability of the data reported. Where not addressed by the specific accounting metrics, but relevant, the registrant should discuss the following, related to the topic:

- The registrant’s **strategic approach** to managing performance on material sustainability issues;
- The registrant’s **relative performance** with respect to its peers;
- The **degree of control** the registrant has;
- Any **measures the registrant has undertaken** or **plans to undertake** to improve performance; and
- Data for the registrant’s **last three completed fiscal years** (when available).

SASB recommends that registrants use SASB Standards specific to their primary industry as identified in the [Sustainable Industry Classification System \(SICS™\)](#). If a registrant generates significant revenue from multiple

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<sup>6</sup> SEC Rule 12b-20: “In addition to the information expressly required to be included in a statement or report, there shall be added such further material information, if any, as may be necessary to make the required statements, in the light of the circumstances under which they are made, not misleading.”

industries, SASB recommends that it also consider sustainability topics that SASB has identified for those industries and disclose the associated SASB accounting metrics.

In disclosing to SASB Standards, it is expected that registrants disclose with the same level of rigor, accuracy, and responsibility as they apply to all other information contained in their SEC filings.

## Users of the SASB Standards

The SASB Standards are intended to provide guidance for companies that engage in public offerings of securities registered under the Securities Act of 1933 (the Securities Act) and those that issue securities registered under the Securities Exchange Act of 1934 (the Exchange Act),<sup>7</sup> for use in SEC filings, including, without limitation, annual reports on Form 10-K (Form 20-F for foreign issuers), quarterly reports on Form 10-Q, current reports on Form 8-K, and registration statements on Forms S-1 and S-3. Disclosure with respect to the SASB Standards is not required or endorsed by the SEC or other entities governing financial reporting, such as FASB, GASB, or IASB.

## Scope of Disclosure

Unless otherwise specified, SASB recommends:

- That a registrant disclose on sustainability issues and metrics for itself and for entities that are consolidated for financial reporting purposes as defined by accounting principles generally accepted in the United States for consistency with other accompanying information within SEC filings;<sup>8</sup>
- That for consolidated entities, disclosures be made, and accounting metrics calculated, for the whole entity, regardless of the size of the minority interest; and
- That information from unconsolidated entities not be included in the computation of SASB accounting metrics. A registrant should disclose, however, information about unconsolidated entities to the extent that the registrant considers the information necessary for investors to understand the effect of sustainability topics on the company's financial condition or operating performance (typically, this disclosure would be limited to risks and opportunities associated with these entities).

## Reporting Format

### Use of Financial Data

In instances where accounting metrics, activity metrics, and technical protocols in this standard incorporate financial data (e.g., revenues, cost of sales, expenses recorded and disclosed for fines, etc.), such financial data shall be prepared in accordance with the accounting principles generally accepted in the United States of America ("US

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<sup>7</sup> Registration under the Securities Exchange Act of 1934 is required (1) for securities to be listed on a national securities exchange such as the New York Stock Exchange, the NYSE Amex, and the NASDAQ Stock Market or (2) if (A) the securities are equity securities and are held by more than 2,000 persons (or 500 persons who are not accredited investors) and (B) the company has more than \$10 million in assets.

<sup>8</sup> See US GAAP consolidation rules (Section 810).



GAAP”) and be consistent with the corresponding financial data reported within the registrant’s SEC filings. Should accounting metrics, activity metrics and technical protocols in this standard incorporate disclosure of financial data that is not prepared in accordance with US GAAP, the registrant shall disclose such information in accordance with the SEC Regulation G.

## Activity Metrics and Normalization

SASB recognizes that normalizing accounting metrics is important for the analysis of SASB disclosures.

SASB recommends that a registrant disclose any basic business data that may assist in the accurate evaluation and comparability of disclosure, to the extent that they are not already disclosed in the Form 10-K (e.g., revenue, EBITDA, etc.).

Such data—termed “activity metrics”—may include high-level business data such as total number of employees, quantity of products produced or services provided, number of facilities, or number of customers. It may also include industry-specific data such as plant capacity utilization (e.g., for specialty chemical companies), number of transactions (e.g., for Internet media and services companies), hospital bed days (e.g., for health care delivery companies), or proven and probable reserves (e.g., for oil and gas exploration and production companies).

Activity metrics disclosed should:

- Convey contextual information that would not otherwise be apparent from SASB accounting metrics.
- Be deemed generally useful for an investor relying on SASB accounting metrics in performing their own calculations and creating their own ratios.
- Be explained and consistently disclosed from period to period to the extent they continue to be relevant. However, a decision to make a voluntary disclosure in one period does not obligate a continuation of that disclosure if it is no longer relevant or if a better metric becomes available.<sup>9</sup>

Where relevant, SASB recommends specific activity metrics that—at a minimum—should accompany SASB accounting metric disclosures.

ACTIVITY METRIC	CATEGORY	UNIT OF MEASURE	CODE
Registrant-defined measure of customer activity <sup>10</sup>	Quantitative	Number	CN0404-A
Data processing capacity, percentage outsourced <sup>11</sup>	Quantitative	See note	CN0404-B
Number of shipments	Quantitative	Number	CN0404-C

<sup>9</sup> *Improving Business Reporting: Insights into Enhancing Voluntary Disclosures*, FASB Business Reporting Research Project, January 29, 2001.

<sup>10</sup> Note to **CN0404-A**—The registrant shall define and disclose a basic measure of customer activity suitable for its business activities. This measure may be sales transactions, purchase transactions, number of searches, monthly active users, page views, unique URLs, etc.

<sup>11</sup> Note to **CN0404-B**—Data processing capacity shall be reported in units of measure typically tracked by the registrant 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 registrant 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).

## Units of Measure

Unless specified, disclosures should be reported in International System of Units (SI units).

## Uncertainty

SASB recognizes that there may be inherent uncertainty when disclosing certain sustainability data and information. This may be related to variables such as the reliance on data from third-party reporting systems and technologies, or the unpredictable nature of climate events. Where uncertainty around a particular disclosure exists, SASB recommends that the registrant should consider discussing its nature and likelihood.

## Estimates

SASB recognizes that scientifically based estimates, such as the reliance on certain conversion factors or the exclusion of *de minimis* values, may occur for certain quantitative disclosures. Where appropriate, SASB does not discourage the use of such estimates. When using an estimate for a particular disclosure, SASB expects that the registrant discuss its nature and substantiate its basis.

## Timing

Unless otherwise specified, disclosure shall be for the registrant's fiscal year.

## Limitations

There is no guarantee that SASB Standards address all sustainability impacts or opportunities associated with a sector, industry, or company, and therefore, a company must determine for itself the topics—sustainability-related or otherwise—that warrant discussion in its SEC filings.

Disclosure under SASB Standards is voluntary. It is not intended to replace any legal or regulatory requirements that may be applicable to user operations. Where such laws or regulations address legal or regulatory topics, disclosure under SASB Standards is not meant to supersede those requirements. Disclosure according to SASB Standards shall not be construed as demonstration of compliance with any law, regulation, or other requirement.

SASB Standards are intended to be aligned with the principles of materiality enforced by the SEC. However, SASB is not affiliated with or endorsed by the SEC or other entities governing financial reporting, such as FASB, GASB, or IASB.

## Forward-looking Statements

Disclosures on sustainability topics can involve discussion of future trends and uncertainties related to the registrant's operations and financial condition, including those influenced by external variables (e.g., environmental, social, regulatory, and political). Companies making such disclosures should familiarize themselves with the safe harbor provisions of Section 27A of the Securities Act and Section 21E of the Exchange Act, which preclude civil liability for material misstatements or omissions in such statements if the registrant takes certain steps, including, among other things, identifying the disclosure as "forward-looking" and accompanying such disclosure with

“meaningful cautionary statements identifying important factors that could cause actual results to differ materially from those in the forward-looking statements.”

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The following sections contain the disclosure guidance associated with each accounting metric such as guidance on definitions, scope, accounting, compilation, and presentation.

The term “shall” is used throughout this document to indicate those elements that reflect requirements of the Standard. The terms “should” and “may” are used to indicate guidance, which, although not required, provides a recommended means of disclosure.

Table 1. Sustainability Disclosure Topics & Accounting Metrics

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
<b>Energy &amp; Water Footprint of Hardware Infrastructure</b>	Total energy consumed, percentage grid electricity, percentage renewable energy	Quantitative	Gigajoules (GJ), Percentage (%)	CN0404-01
	(1) Total water withdrawn and (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Quantitative	Cubic meters (m <sup>3</sup> ), Percentage (%)	CN0404-02
	Description of the integration of environmental considerations into strategic planning for data center needs	Discussion and Analysis	n/a	CN0404-03
<b>Logistics &amp; Packaging Efficiency</b>	Total greenhouse gas (GHG) footprint of product shipments	Quantitative	Metric tons CO <sub>2</sub> -e	CN0404-04
	Description of strategies to reduce the environmental impact of product delivery	Discussion and Analysis	n/a	CN0404-05
<b>Data Security &amp; Fraud Protection</b>	Discussion of management approach to identifying and addressing data security risks	Discussion and Analysis	n/a	CN0404-06
	Number of data security breaches, percentage involving customers' personally identifiable information (PII), number of customers affected <sup>12</sup>	Quantitative	Number, Percentage (%)	CN0404-07
<b>Data Privacy</b>	Percentage of users whose customer information is collected for secondary purposes, percentage who have opted in	Quantitative	Percentage (%)	CN0404-08
	Discussion of policies and practices relating to behavioral advertising and customer privacy	Discussion and Analysis	n/a	CN0404-09
<b>Employee Recruitment, Inclusion, and Performance</b>	Employee engagement as a percentage <sup>13</sup>	Quantitative	Percentage (%)	CN0404-10
	(1) Voluntary and (2) involuntary employee turnover rate	Quantitative	Rate	CN0404-11
	Percentage of gender and racial/ethnic group representation for (1) executives, (2) technical staff, and (3) all others	Quantitative	Percentage (%)	CN0404-12
	Percentage of technical employees who are H-1B visa holders	Quantitative	Percentage (%)	CN0404-13
	Percentage of successful H-1B visa applications	Quantitative	Percentage (%)	CN0404-14

<sup>12</sup> Note to **CN0404-07**—Disclosure shall include a description of corrective actions implemented in response to data security breaches or threats.

<sup>13</sup> Note to **CN0404-10**—Disclosure shall include a description of the methodology employed.

# Energy & Water Footprint of Hardware Infrastructure

## Description

A large part of the energy consumed by the 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 well manage this issue may benefit from cost savings and minimize reputational risks, as there is growing concern over energy and water use.

## Accounting Metrics

### CN0404-01. Total energy consumed, percentage grid electricity, percentage renewable energy

- .01 The registrant shall disclose total energy consumption from all sources as an aggregate figure in gigajoules or their multiples.
  - The scope includes energy purchased from sources external to the organization or produced by the organization itself (self-generated).
  - The scope includes only energy consumed by entities owned or controlled by the organization.
  - The scope includes energy from all sources including direct fuel usage, purchased electricity, and heating, cooling, and steam energy.
- .02 In calculating energy consumption from fuels and biofuels, the registrant 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).
- .03 The registrant shall disclose purchased grid electricity consumption as a percentage of its total energy consumption.
- .04 The registrant shall disclose renewable energy consumption as a percentage of its total energy consumption.
- .05 The scope of renewable energy includes renewable fuel the registrant consumes and renewable energy the registrant directly produces, purchases through a renewable power purchase agreement (PPA) that explicitly includes renewable energy certificates (RECs), or for which Green-e Energy Certified RECs are paired with grid electricity.
  - For any renewable electricity generated on-site, any RECs must be retained (i.e., not sold) and retired on behalf of the registrant in order for the registrant to claim them as renewable energy.

- For renewable PPAs, the agreement must explicitly include and convey that RECs be retained and retired on behalf of the registrant in order for the registrant to claim them as renewable energy.
  - The renewable portion of the electricity grid mix that is outside of the control or influence of the registrant is excluded from disclosure.<sup>14</sup>
  - Renewable energy is defined as energy from sources that are replenished at a rate greater than or equal to their rate of depletion, consistent with U.S. Environmental Protection Agency (EPA) definitions, such as geothermal, wind, solar, hydro, and biomass.
- .06 For the purposes of this disclosure, the scope of renewable energy from hydro and biomass sources is limited to the following:
- Energy from hydro sources that are certified by the Low Impact Hydropower Institute or that are eligible for a state Renewable Portfolio Standard.
  - 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 renewables” according to the Green-e Energy National Standard Version 2.5 (2014), and materials that are eligible for a state Renewable Portfolio Standard.
- .07 The registrant 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 kWh to gigajoules (for energy data including electricity from solar or wind energy).
- .08 The registrant may choose to disclose the trailing twelve-month (TTM) weighted average power usage effectiveness (PUE) for its data centers, where 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.
- If disclosing PUE, the registrant shall follow the guidance and calculation methodology described in The Green Grid’s [White Paper #49-PUE: A Comprehensive Examination of the Metric](#).

**CN0404-02. (1) Total water withdrawn and (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress**

- .09 The registrant shall disclose the amount of water (in thousands of cubic meters) that was withdrawn from all sources, where:
- Water sources include surface water (including water from wetlands, rivers, lakes, and oceans), groundwater, rainwater collected directly and stored by the registrant, wastewater obtained from other entities, municipal water supplies, or supply from other water utilities.

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<sup>14</sup>SASB recognizes that RECs reflect the environmental attributes of renewable energy that have been introduced to the grid.

- .10 The registrant may choose to disclose the portion of its supply by source if, for example, significant portions of withdrawals are from non-fresh water sources, where:
- Fresh water may be defined according to the local statutes and regulations where the registrant operates. Where there is no regulatory definition, fresh water shall be considered to be water that has a solids (TDS) concentration of less than 1000 mg/l per the Water Quality Association definition.
  - 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.
- .11 The registrant shall disclose the amount of water (in thousands of cubic meters) that was consumed in its operations, where water consumption is defined as:
- Water that evaporates during withdrawal, usage, and discharge;
  - Water that is directly or indirectly incorporated into the registrant’s product or service; and
  - 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.
- .12 The registrant shall analyze all of its operations for water risks and identify activities that withdraw and consume water in locations with High (40–80%) or Extremely High (>80%) Baseline Water Stress as classified by the World Resources Institute’s (WRI) Water Risk Atlas tool, Aqueduct (publicly accessible online [here](#)).
- .13 The registrant shall disclose its water withdrawn in locations with High or Extremely High Baseline Water Stress as a percentage of the total water withdrawn.
- .14 The registrant shall disclose its water consumed in locations with High or Extremely High Baseline Water Stress as a percentage of the total water consumed.

**CN0404-03. Description of the integration of environmental considerations into strategic planning for data center needs**

- .15 The registrant 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.
- .16 The scope of disclosure shall include data centers currently owned and operated by the registrant, data centers that have been planned or are under construction, and outsourced data center services, insofar as their selection integrates environmental considerations.
- .17 Examples of 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, regional- or state-level carbon legislation or pricing, and the carbon intensity of electricity from the local grid.

- .18 The registrant shall describe how the environmental considerations it identifies were incorporated into decisions related to its data centers that were made during the fiscal year, including if they influenced decisions to insource or outsource data center services, improve efficiency of existing data centers, and/or construct new data centers.



# Logistics & Packaging Efficiency

## Description

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 its 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

### CN0404-04. Total greenhouse gas (GHG) footprint of product shipments

- .19 The registrant shall disclose the complete tank-to-wheels greenhouse gas (GHG) footprint, in metric tons of CO<sub>2</sub>-e, associated with outbound shipment of the registrant's products, where:
  - Tank-to-wheels emissions relate to vehicle processes and exclude upstream emissions associated with primary energy production (i.e., well-to-tank emissions).
- .20 The scope of disclosure includes emissions from all freight transportation and logistics activities associated with outbound shipment of the registrant's products, including those from contract carriers and outsourced freight forwarding services and logistics providers (Scope 3) as well as those from the registrant's own assets (Scope 1).
- .21 The scope of disclosure includes emissions from all modes of transportation, such as road freight, air freight, barge transport, marine transport, and rail transport.
- .22 The registrant 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)*.
  - 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.
  - Determination of transportation system scope, boundaries, and any necessary allocations shall be consistent with the methodology described in EN 16258:2012.
- .23 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).

.24 Where relevant and necessary for interpretation of disclosure, the registrant shall describe its allocation methods, emissions values, boundaries, mix of transport services used, and other information.

**CN0404-05. Description of strategies to reduce the environmental impact of product delivery**

.25 The registrant 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.

.26 Relevant disclosure may include, but is not limited to:

- Discussion of logistics selection, mode selection, and management (e.g., rail transport vs. air freight transport) and/or operation for route efficiency.
- 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.
- Discussion of fuel choices and vehicle choices for fleets owned and/or operated by the registrant, such as decisions to use renewable and low-emission fuels and low-emission vehicles.
- Other relevant strategies, such as efforts to reduce idling of vehicles owned and/or operated by the registrant, innovations to improve the efficiency of “last-mile” delivery, and strategies to optimize delivery times to reduce traffic congestion.

# Data Security & Fraud Protection

## Description

The general model of e-commerce depends 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 customer loyalty, which is highly influenced by the perception of the safety of the customer's valuable financial and personal information, particularly important to maintaining market share.

## Accounting Metrics

### CN0404-06. Discussion of management approach to identifying and addressing data security risks

- .27 The registrant shall identify vulnerabilities in its information systems that pose a data security threat, where:
- A data security threat 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 the nation through an information system via unauthorized access, destruction, disclosure, modification of information, and/or denial of service.
  - Vulnerability is defined as a weakness in an information system, system security procedures, internal controls, or implementation that could be exploited by a data security threat source.
- .28 The registrant shall describe how it addresses the threats and vulnerabilities it has identified, including, but not limited to, operational procedures, management processes, structure of products and services, selection of business partners, employee training, or use of technology.
- .29 The registrant should discuss trends it has observed in type, frequency, and origination of attacks to its data security and information systems.
- .30 Disclosure shall be additional but complementary to the disclosure of preparation, detection, containment, and post-incident activity according to the [SEC's CF Disclosure Guidance: Topic No. 2, Cybersecurity](#).
- At a minimum, this includes disclosing when the costs or other consequences associated with one or more known incidents—or the risk of potential incidents—represents a material event, trend, or uncertainty that is reasonably likely to have a material effect on the registrant's results of operations, liquidity, or financial condition or would cause reported financial information to not necessarily be indicative of future operating results or financial condition (e.g., reduced revenue, increased cybersecurity protection expenditure, litigation costs, etc.).
- .31 All disclosure shall be sufficient such that it is specific to the risks the registrant faces, but disclosure itself will not compromise the registrant's ability to maintain data privacy and security.

- .32 The registrant may choose to describe the degree to which its management approach is aligned with an external standard or framework for managing data security, such as:
- ISO/IEC 27001:2013—Information technology—Security techniques—Information security management systems—Requirements
  - [“Framework for Improving Critical Infrastructure Cybersecurity, Version 1.0,”](#) February 12, 2014, National Institute of Standards and Technology (NIST)

**CN0404-07. Number of data security breaches, percentage involving customers’ personally identifiable information (PII), number of customers affected**

- .33 The registrant shall calculate and disclose the total number of data security breaches, which are defined as instances of unauthorized acquisition, access, use, or disclosure of protected information.
- .34 The scope of disclosure shall be limited to data security breaches, cybersecurity risks, and incidents that resulted in the registrant’s business processes deviating from its expected outcomes for confidentiality, integrity, and availability.
- The scope of disclosure shall include incidents of unauthorized acquisition or acquisition without valid authorization, resulting from deficiencies or failures of people, processes, or technology.
  - The scope of disclosure shall exclude disruptions of service due to equipment failures.
- .35 Disclosure shall be additional but complementary to the [SEC’s CF Disclosure Guidance: Topic No. 2, Cybersecurity](#).
- At a minimum, this includes instances in which the costs or other consequences associated with one or more known incidents—or the risk of potential incidents—represents a material event, trend, or uncertainty that is reasonably likely to have a material effect on the registrant’s results of operations, liquidity, or financial condition, or would cause reported financial information to not necessarily be indicative of future operating results or financial condition (e.g., theft of intellectual property, reduced revenue, increased cybersecurity protection expenditure, litigation costs, etc.).
- .36 The registrant shall disclose the percentage of data security breaches in which customers’ personally identifiable information (PII) was breached, where:
- 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, 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.<sup>15</sup>

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<sup>15</sup> *Privacy: Alternatives Exist for Enhancing Protection of Personally Identifiable Information*, GAO Report 08-536, May 2008.

- The scope of disclosure is limited to breaches in which customers were notified of the breach, either as required by state law or voluntarily by the registrant.
- Disclosure shall include incidents in which encrypted data were acquired with an encryption key that was also acquired.
- The registrant may delay disclosure if a law enforcement agency has determined that notification impedes a criminal investigation until the law enforcement agency determines that such notification does not compromise the investigation.

.37 The registrant shall disclose the total number of customers who were affected by data breaches, which includes all those whose personal data was compromised in a data breach.

Note to **CN0404-07**

- .38 The registrant shall describe the corrective actions taken in response to specific incidents, such as changes in operations, management, processes, products, business partners, training, or technology.
- .39 All disclosure shall be sufficient such that it is specific to the risks the registrant faces, but disclosure itself will not compromise the registrant's ability to maintain data privacy and security.
- .40 The registrant should disclose its policy for disclosing data breaches to affected customers in a timely manner.

# Data Privacy

## Description

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 customers 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 customer 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 the U.S. Federal Trade Commission as well as authorities in Europe and other jurisdictions. Proper management of the issue will reduce regulatory and reputational risks.

## Accounting Metrics

### **CN0404-08. Percentage of users whose customer information is collected for secondary purposes, percentage who have opted in**

- .41 The registrant shall indicate the percentage of customers whose customer information is collected for its own secondary use or for transfer to a third party, where:
- Customer information includes information that pertains to a user's attributes or actions, including, but not limited to, records of communications, content of communications, demographic data, behavioral data, location data, or PII.
  - Demographic data is defined as the quantifiable statistics that identify and distinguish a given population. Examples of demographic data include gender, age, ethnicity, knowledge of languages, disabilities, mobility, home ownership, and employment status.
  - Behavioral data is defined as the product of tracking, measuring, and recording individual consumers' behaviors, such as online browsing patterns, buying habits, brand preferences, and product usage patterns, among others.
  - Location data is 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 the identification and tracking of an individual's physical location.
  - "Secondary use" is defined as the intentional use of data by the registrant (i.e., not a breach of security) that is outside the primary purpose for which the data was collected. Examples of secondary uses include, but are not limited to, selling targeted ads, selling aggregated behavioral or location data, improving the registrant's own product and service offerings, and transferring data or information to a third party through sale, rental, or sharing.
- .42 Of the users whose customer information is collected for secondary use or transfer to third parties, the registrant shall indicate the percentage that provided opt-in consent, where:

- Opt-in is defined as express affirmative consent required to use or share content.

.43 The registrant may choose to discuss what type of customer information is collected, the scope of data collected from different groups, and/or the types of secondary uses for which demographic data is collected.

#### **CN0404-09. Discussion of policies and practices relating to behavioral advertising and customer privacy**

.44 The registrant shall describe the nature, scope, and implementation of its policies and practices related to customer privacy, with a specific focus on how it addresses the collection, usage, and retention of customer information, demographic data, customer behavioral data, location data from cellphone usage, and PII, where:

- Customer information includes information that pertains to a user’s attributes or actions, including, but not limited to, records of communications, content of communications, demographic data, behavioral data, location data, or PII.
- Demographic data is defined as the quantifiable statistics that identify and distinguish a given population. Examples of demographic data include gender, age, ethnicity, knowledge of languages, disabilities, mobility, home ownership, and employment status.
- Behavioral data is defined as the product of tracking, measuring, and recording consumers’ individual behaviors, such as online browsing patterns, buying habits, brand preferences, and product usage patterns, among others.
- Location data is defined as data describing the physical location or movement patterns of an individual, such as GPS coordinates or other related data that would enable the identification and tracking of an individual’s physical location.
- 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, 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.<sup>16</sup>

.45 The registrant shall describe the information “lifecycle” (i.e., collection, use, retention, processing, disclosure, and destruction of information) and how information-handling practices at each stage may affect individuals’ privacy.

- With respect to data collection, it may be relevant for the registrant 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.

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<sup>16</sup> *Privacy: Alternatives Exist for Enhancing Protection of Personally Identifiable Information*, GAO Report 08-536, May 2008.

- With respect to usage of data, it may be relevant for the registrant to discuss which data or types of data are used by the registrant internally, and under which circumstances the registrant shares, sells, rents, or otherwise distributes data or information to third parties.
  - With respect to retention, it may be relevant for the registrant 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.
- .46 The registrant shall discuss the degree to which its policies and practices address similar issues as those outlined in the [OMB Guidance for Implementing the Privacy Provisions of the E-Government Act of 2002 \(M-03-22\)](#), including use of Privacy Impact Assessments (PIAs), where:
- 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.
  - 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.
- .47 The registrant shall discuss how its policies and practices related to the privacy of customer information address children’s privacy, which at a minimum includes the provisions of the Children’s Online Privacy Protection Act (COPPA).



# Employee Recruitment, Inclusion, and Performance

## Description

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. The shortage in technically skilled domestic workers has created intense competition to acquire highly skilled 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

### CN0404-10. Employee engagement as a percentage

- .48 The registrant shall disclose employee engagement as a percentage (i.e., the percentage of employees deemed “actively engaged” as opposed to “not engaged,” “passive,” or “actively disengaged”). If engagement is measured as an index (e.g., strength of employee agreement with a survey statement), it shall be converted into a percentage for this disclosure.
- .49 The disclosure shall be calculated based on the results of an employee engagement survey or research study conducted by the registrant, an external entity contracted to perform such a study by the registrant, or an independent third party.

#### Note to CN0404-10

- .50 The registrant shall briefly describe:
  - The source of its survey (e.g., third-party survey or registrant’s own);
  - The methodology used to calculate the percentage (e.g., a simple average of individual employee survey responses, with a numerical value assigned to the strength of agreement or disagreement with a survey statement); and
  - 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).

- .51 When the survey methodology has changed compared to previous reporting years, the registrant shall indicate results based on both the old and new methods for the year in which the change is made.
- .52 If results are limited to a subset of employees, the registrant shall include the percentage of employees included in the study or survey and the representativeness of the sample.
- .53 The registrant may choose to 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, aligned with corporate strategy and goals, etc.

**CN0404-11. (1) Voluntary and (2) involuntary employee turnover rate**

- .54 The registrant shall disclose employee turnover as a percentage, where:
  - Turnover shall be calculated and disclosed separately for voluntary and involuntary departures.
- .55 The registrant shall calculate the voluntary turnover percentage as the total number of employee-initiated voluntary separations (such as resignations, retirement, etc.) during the fiscal year, divided by the total number of employees during the fiscal year.
- .56 The registrant shall calculate the involuntary turnover percentage as the total number of registrant-initiated separations (such as dismissal, downsizing, redundancy, non-renewal of contract, etc.) during the fiscal year, divided by the total number of employees during the fiscal year.

**CN0404-12. Percentage of gender and racial/ethnic group representation for (1) executives, (2) technical staff, and (3) all others**

- .57 The registrant shall classify its employees according to the U.S. Equal Employment Opportunity Commission [EEO-1 Job Classification Guide](#) into the following two categories: Executives/Sr. Managers and other employees (i.e., other EEO-1 categories, including mid-level managers, professionals, technicians, sales, admin support, and service workers).
- .58 The registrant shall further classify other employees as (2) technical staff and (3) all others, where:
  - 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).
  - All others include all remaining employees not classified as Executives/Sr. Managers or technical staff.
- .59 The registrant shall categorize the gender of its employees as: male, female, or not disclosed/available.
- .60 The registrant shall classify the racial/ethnic group of its employees in the following categories, using the same definitions employed for the registrant's [EEO-1 Report](#): White, Black or African American, Hispanic or

Latino, Asian, Other (which includes American Indian or Alaska Native, Native Hawaiian or Other Pacific Islander, and “two or more races” classifications), or not disclosed/available.

- .61 Where racial/ethnic group and/or gender representation percentages are significantly influenced by the country or region where the workforce is located, the registrant shall provide contextual disclosure to ensure proper interpretation of results.
- .62 Where relevant, the registrant may provide supplemental breakdown of gender and racial/ethnic group representation by country or region.
- .63 The registrant should summarize and disclose employee representation by employee category in the following table format:

Employee Category	Gender (%)			Race and Ethnicity (%)					
	Male	Female	NA*	White	Black or African American	Hispanic or Latino	Asian	Other^	NA*
Executives									
Technical staff									
All others									

\*NA = not available/not disclosed

^Other includes American Indian or Alaska Native, Native Hawaiian or Other Pacific Islander, and “two or more races” classifications.

**CN0404-13. Percentage of technical employees who are H-1B visa holders**

- .64 The registrant shall disclose the percentage of its technical workforce that held valid H-1B visas as of the close of the fiscal year, where:
  - 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).
- .65 The percentage shall be calculated as the number of computer and mathematical employees with valid H-1B visas divided by the total number of computer and mathematical employees.
- .66 The scope of employees includes those directly employed by the registrant and excludes contractors and outsourced employees.
- .67 The scope of employees includes both full- and part-time employees.

**CN0404-14. Percentage of successful H-1B visa applications**

- .68 The registrant shall disclose the percentage of H-1B visa petitions (Form 1-129) and Labor Condition Applications (LCA) that the registrant filed on behalf of its workforce that were approved by the U.S. Citizenship and Immigration Services (USCIS).
- .69 The percentage shall be calculated as the number of H-1B petitions and LCAs approved by USCIS divided by the total number of H-1B petitions filed on behalf of employees.
- .70 The scope includes new and renewal visa petitions and LCAs, as well as petitions to transfer an LCA.

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