

Challenges and Opportunities in Supply Chain Environmental Sustainability Disclosure

Navigating the Request-Response Process between Stakeholders and Suppliers

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Abstract

Environmental sustainability is growing in importance to organizations in many different sectors. The need to account for suppliers' environmental performance through sustainability surveys is taking up a greater portion of the daily job responsibilities of sustainability professionals. This report incorporates insights from interviews with 15 organizations across multiple industries that address the current challenges and opportunities confronting those in the sustainability supply chain disclosure process. In addition, we analyze 31 collected sustainability surveys based on four survey-level characteristics (survey level, type, purpose and industry) and on four question-level characteristics (question format, nature, topic and subtopic). The resulting data show that, while it would be difficult to establish a single common survey or set of questions, opportunities exist for the standardization of question wording and format, which would constitute a step towards reducing the amount of time that organizations spend on responding to surveys. This report provides a roadmap for taking this project forward based on these results, centering on the creation of a web-based platform containing a repository of standard-worded and formatted questions covering a broad range of environmental topics. Using this platform, organizations could select questions to send to their suppliers based on their own preferences, while suppliers could reduce the amount of time spent on responding to survey requests. This establishes a path forward in supply chain sustainability disclosure, with the potential to reduce systemic inefficiencies and redundancies in this process.

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About ACCO

The Association of Climate Change Officers is a 501(c)(3) non-profit membership organization for executives and officials worldwide in industry, government, academia and the non-profit community. ACCO's mission is to advance the knowledge and skills of those dedicated to developing and directing climate change strategies in the public and private sectors, and to establish a flexible and robust forum for collaboration between climate change officers. For more information about ACCO, please visit www.ACCOonline.org.

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Glossary and List of Abbreviations

Abbreviations

ACCO	The Association of Climate Change Officers
CDP	Carbon Disclosure Project
CEQ	Council on Environmental Quality
CSR	Corporate Social Responsibility
EHS	Environmental Health and Safety
ESG	Environmental, Social, and Governance
GRI	Global Reporting Initiative
KPI	Key Performance Indicators
NGO	Nongovernmental Organization
RFP	Request for Proposals
SEC	Securities and Exchange Commission
XBRL	eXtensible Business Reporting Language

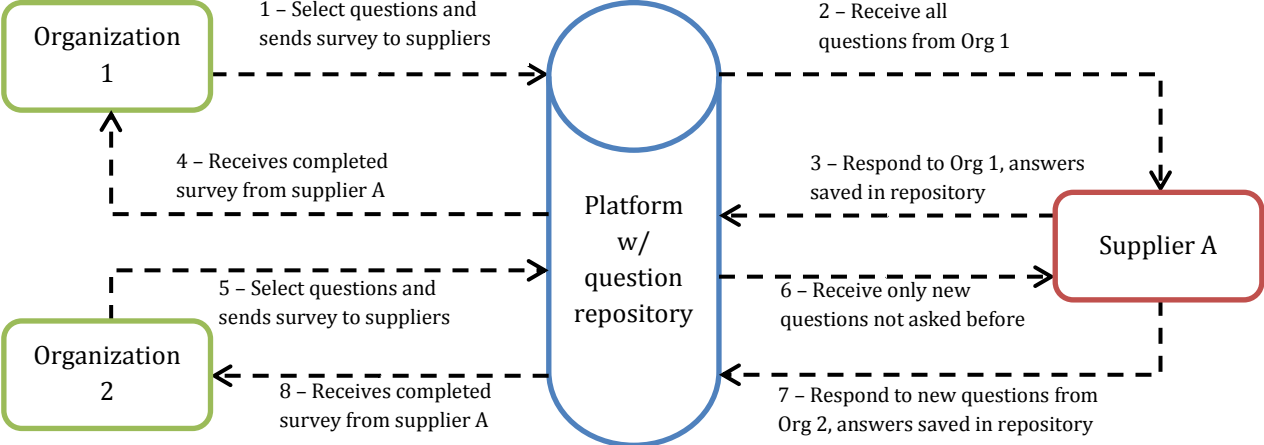
Executive Summary

Environmental sustainability has become an important topic for organizations of all types in recent years. There has been a push not only to evaluate the sustainability performance within an organization's own operations, but also to evaluate the impacts of the organization's supply chain. This push has resulted in a proliferation of sustainability supply chain surveys and organizations have had to dedicate an increasing amount of time to respond to them. However, according to a Carbon Disclosure Project (CDP) survey, 38% of suppliers, whose purchasing companies participate in the CDP Supply Chain program, disclosed what they were doing to address their climate change impacts. Twenty-seven percent of those suppliers who disclosed stated that they were making an effort to lower carbon emissions and energy use, amounting to about 10% of the total suppliers who received the CDP survey. On the other hand, 69% of their purchasing companies indicated they that addressed their carbon emissions and energy use. While the scope of the survey focused on climate-related efforts, such activity typically takes place within a broader environmental sustainability strategy of an organization. This points to a large gap between the sustainability measures taken by large corporations with global supply chains and those of the thousands of suppliers that make up those logistics networks.

The Association of Climate Change Officers (ACCO) has convened a working group of sustainability professionals and engaged a student team from the Nicholas School of the Environment at Duke University to identify opportunities to streamline and harmonize the sustainability supply chain surveying process, with the hope that reducing the amount of time organizations spend on responding to surveys will, in turn, allow them to spend more time on internal sustainability measures and implementation efforts. This project focuses on identifying opportunities related to the request and disclosure of supplier data related to environmental topics; social and governance topics are outside of the scope of this project.

Through this project, we have identified several on-going efforts by various organizations to develop and encourage the wide-spread use of survey templates and platforms (see Appendix A). However these efforts focus on creating a standard set of questions that organizations should ask their suppliers. As an alternative approach, we recommend that a web-based repository of

environmental sustainability questions be created where survey issuers could pick and choose the questions they want to send to their suppliers, and suppliers could respond to each question that they receive from their customers and have the responses saved in the repository, as illustrated in the following process flow diagram:



As suppliers receive surveys from their customers, questions they have already responded to in a prior customer survey will be automatically filled with their saved response and they would only have to enter responses to questions if they are receiving that question for the first time, if there are changes to their business practices, or if the question requires a customer-specific response (e.g. activity-based allocation). This type of repository system would standardize the wording and format of questions, allow survey issuers to maintain the flexibility to customize their surveys to focus on the topics that are most important to their organization, and reduce the burden for survey responders.

From an implementation perspective, we recommend that the development of this platform be broken down into two phases. The first phase should focus on creating and promoting the use of the questions repository itself, while the second phase would focus on creating a database to store survey responses, which would then enable the development of other value-added functionality, such as reporting, data analytics, and performance benchmarking.

This recommendation was developed from insights gained from 15 interviews with sustainability professionals on the current challenges and opportunities they confront in the supply chain

disclosure process, and a thorough analysis of 31 environmental supply chain surveys. The survey analysis identified commonalities and differences regarding question topics, question nature, and question format. The analysis also looked at the stated purpose of the surveys and whether they were created by individual companies versus industry groups and nongovernmental organizations (NGOs).

From the interviews, we found that individuals tasked with responding to surveys expressed a desire for some level of standardization that would reduce the burden of responding to survey requests, while individuals tasked with issuing surveys tend to want the flexibility to focus on the areas and topics that are material to their organizations. Furthermore, it was clear through interviews with individuals responsible for making decisions on the survey data that organizations are at various stages in their ability to act on the results. Some organizations are collecting data in an attempt to start dialogues with their suppliers, while others have incorporated sustainability metrics into their supplier evaluation and selection processes.

The analysis of the collected surveys highlighted differences in topic coverage not only between industries, but also among companies in the same industry. As a result, we conclude that it would be difficult to encourage all organizations to use a single common survey or set of questions. However, our analysis found that the yes/no question format and its variants are the most common question format, comprising of at least 60% of the questions asked across all survey purposes. This highlights an opportunity to focus on standardizing the wording and format of the questions that are being asked.

Finally, this report summarizes a set of considerations for embarking on the development of a questions repository platform, and provides a model development guideline and a preliminary list of questions that could serve as a starting point for the creation of the repository.

Chapter 1: Introduction

1.1 Background

Many organizations now include environmental sustainability, especially throughout their supply chains, as a consideration in evaluating their overall performance. It is increasingly seen as having a meaningful and measurable impact on a company's profitability (BusinessGreen, 2013). For example, a recent CDP survey found that 70% of responding companies believe that climate change can have a significant impact on their revenues. In order to better understand climate-related risk and business opportunities, many companies now ask their suppliers for greenhouse gas emissions data. However, obtaining relevant data from suppliers is a difficult task even when the purchasing companies recognize the importance of environmental concerns. As part of the CDP survey, information requests were sent out to the 52 member companies of CDP's Supply Chain Initiative and over 6,000 of their suppliers across the globe. Thirty-eight percent of these suppliers responded with information on their carbon emissions and their company's strategies to address the effects of climate change on their operations.

Business leaders who recognize that climate change is a relevant issue are concerned about the extent to which their suppliers are taking actions to prepare for potential climate disruptions. Of the 38% who responded to the CDP survey, 27% of those suppliers stated that they were making an effort to lower carbon emissions and energy use, while 69% of their purchasing companies indicated they did so (BusinessGreen, 2013). This points to a large gap between the climate-related measures taken by large corporations with global supply chains and those of the thousands of suppliers that make up those logistics networks.

Concurrently, the rise of social media and digital communication has placed more pressure on corporations to be transparent in their operations. Large purchasing companies, such as Walmart or Nike, are sometimes held responsible for the environmental performance of companies upstream in their supply chains. Due to this, business leaders in operations and supply chain management have experienced increased integration of environmental issues in their operations and purchasing decisions (Seuring, 2008).

Central to sustainable supply chain management is the disclosure of relevant data that allows companies to assess the environmental performance of their suppliers, engage with them to work towards improvements and make purchasing decisions that mitigate climate-related risks and create opportunities for growth. As the old adage goes, what gets measured gets managed. Gary Hanifan, the global sustainability lead for supply chain at Accenture, which assisted CDP in its supply chain report, emphasizes the importance of transparency. He holds that “those who are most transparent about their climate change risks are more likely to achieve the greatest emissions reductions,” referencing the \$13.7 billion in savings reported by suppliers with programs to reduce GHG emissions (BusinessGreen, 2013).

While the significance of supply chain disclosure has caused large companies with global supply networks to take the lead in requesting and providing relevant information on environmental performance, the process is seen as cumbersome and inefficient, constituting a point of frustration for sustainability and supply chain professionals. A 2012 GreenBiz “survey of surveys” found that companies have become increasingly exasperated at the amount of surveys they receive from independent groups (such as NGOs) and customers, with little to no indication of how the information will be used. Sustainability professionals working in corporations are finding themselves with a difficult situation: they must respond to their customers and want NGOs to accurately report on their sustainability performance, but the methodologies of the information requests are inconsistent, even though much of the information requested is similar across surveys. The consensus among those who responded to the GreenBiz survey: “There are too many surveys, they need to be standardized, and there’s a frustrating lack of transparency in the different methodologies” (GreenBiz, 2013).

This is the problem that motivates our study. Sustainability professionals see greater standardization within the sustainability supply chain disclosure process as both an urgent need and an achievable goal. The client for our project, ACCO, a research and convening organization for environmental sustainability professionals, has been a part of collaborative efforts to address this issue in recent years. In the spring of 2012, ACCO engaged the Nicholas School of the Environment at Duke University to address this problem. To provide guidance in this process, ACCO established an advisory committee for our team, made up of experts from the private, public and nonprofit

sectors. This report is the product of the past year's work. In it we explore opportunities and challenges for greater consistency within the sustainability supply chain disclosure process.

1.2 Research Questions

The goal of this project is to identify the needs of stakeholders that are driving the proliferation of environmental sustainability supply chain surveys and to develop a "roadmap" to navigate the current state of environmental supply chain disclosure process. To do so, we have collected and analyzed environmental sustainability supply chain surveys to identify commonalities and differences between both survey content and question structure. In essence, our purpose is to determine what information organizations are trying to obtain from suppliers and in what way. There may be some areas that have a certain degree of consistency and other areas in which there is little common ground. By analyzing the questions quantitatively, our goal is to gain insights into the following research questions:

- What are the most common topics and subtopics asked across all of the surveys?
- Are there differences between the questions being asked by individual companies versus surveys that are not specific to one single purchasing company (aggregate surveys)?
- Are there differences between the non-industry specific supply chain surveys?
- Within an industry, are there differences between the questions being asked by individual companies and their industry-specific aggregate surveys?
- Are there differences in questions being asked between industries?
- How do companies intend to use the survey responses?
- How does the purpose of the survey correspond or relate to the way the questions are being asked?

In addition to the detailed analysis of survey questions, this report outlines the broader, systemic factors of the environmental supply chain disclosure process that are key to the success of any effort to streamline and harmonize the current process. By harmonize, we mean we mean reducing the number of times companies have to ask for and provide information. We interviewed a number of sustainability professionals currently involved in the environmental supply chain

disclosure process and conducted a literature review of current harmonization efforts, with the hope of answering the following research questions:

- What are the challenges and inefficiencies in the current disclosure process?
- Are there opportunities for streamlining and harmonizing the process?
- Are there current efforts by other groups to address this issue?
- Who are the stakeholders that should be involved in the effort to harmonize the process?
- What type of platform or delivery mechanism should be used to manage the survey issuance and response process?
- What are some of the features and functionality of a platform that would attract companies to use it for their environmental supply chain disclosure needs?
- What are other key considerations that will determine the viability of such a platform (e.g. data security and confidentiality, funding, administration)?

1.3 Review of Existing Harmonization Efforts

The complexity and variability of environmental sustainability information requests has resulted in greater cost and commitment of other resources in evaluating a company's supply chain. Not surprisingly, many industry trade groups and other organizations have attempted to address this issue by developing and encouraging the use of survey templates and platforms to evaluate suppliers' sustainability performance. It was critical for us to understand existing efforts to address this issue, which have been categorized in Appendix A.

In addition to cataloging existing supply chain sustainability disclosure and reporting efforts, we also wanted to look at broader sustainability information reporting frameworks and platforms that have gained widespread acceptance, in order to understand the key factors for their success:

- **Carbon Disclosure Project (CDP)** - CDP's success initiated from support from institutional investors and big customers like Walmart and Bank of America. CDP began by engaging companies with the largest market capitalization because these large companies need to respond to their investors. However, the investor interest cannot efficiently drive suppliers through the value chains to respond because the suppliers are usually smaller

companies. The CDP Supply Chain program was developed to engage the next tier of smaller companies. For example, Walmart has invited its supply chain partners to report to CDP as part of its Supplier Sustainability Assessment. Requests from customers like Walmart and Bank of America, which usually represent a significant portion of suppliers' revenue, is often the key reason that suppliers report to CDP (Baier, 2011).

- **The Sustainability Consortium (TSC)** - The Sustainability Consortium was launched in 2009. TSC is focused on evaluating the life cycle impacts of products, and can at least partially attribute their initial success through the support and involvement of Walmart.
- **Sustainability Accounting Standards Board (SASB)** - SASB aims to develop standards for 88 industries in 10 sectors suitable for use in providing decision useful information in the Securities and Exchange Commission (SEC) Forms 10-K and 20-F by 2015 (SASB, 2013). SASB is addressing the need to standardize sustainability metrics in a way that will ultimately allow stakeholders to evaluate companies' sustainability performance along with financial performance. SASB works with publicly listed corporations and their investors to develop standards and information that are useful to investors, companies, and other stakeholders (Makower, 2012). SASB developed a Materiality Map that produces shortlist of material industry-specific issues and relevant standardized sustainability metrics are proposed. These standards are intended to be integrated in financial filings; therefore, the metrics are designed into an auditable way (SASB, 2013). Example of these metrics from the website includes, ratio of cost (\$ per gigajoule) of non-renewable energy to renewable energy, water intensity (m³ of production water per ton of product) in water stressed regions and description of risks and opportunities associated with own greenhouse gas emissions (SASB, 2013).
- **Global Reporting Initiatives (GRI)** - GRI is a recognized framework for sustainability reporting and attributes its success to its "inclusive multi-stakeholder" approach. GRI also leveraged its training partners to reach a large number of organizations (Cohen, 2011).
- **Global Initiative for Sustainability Ratings (GISR)** - GISR was launched in June 2011 by Ceres and Tellus Institute. GISR's mission is to "create a world class corporate sustainability ratings standard as an instrument for transforming the definition of value and value creation by business in the 21st century in a way that aligns with the national

and global sustainability agenda.” GISR aims to address the challenge of request of duplicative information, survey fatigue and inconsistency and discrepancy in rating outcomes (GISR, 2012). The rating standard is developed by the collaboration of partners like GRI and SASB. The standard will have two components: principles and performance. Principles are the foundations for the development of the ratings such as materiality, transparency and comprehensiveness. The performance component is a mix of indicators of an organization’s economic, social, environment and governance activities, as well as current best practices (GISR, 2012).

- **Dow Jones Sustainability Index (DJSI)** - DJSI uses RobecoSAM’s Corporate Sustainability Assessment (CSA) methodology. DJSI guides companies to consider key sustainability issues within their supply chain (Climate Leadership Conference, 2013). The Supply Chain Management section of the DJSI CSA questionnaire asks questions about environmental risks of companies’ suppliers, environmental standards, policies, and codes of conducts for suppliers, capacity building initiatives and incentives for suppliers, and the integration of environmental objectives in supply chain management strategy. It also asks for key performance indicators (KPIs) that companies use to monitor tier 1 suppliers, which include the following:
 - Percentage of supplier contracts including environmental, social, and governance (ESG) contract clauses;
 - Percentage of suppliers with ISO 14001 certification;
 - GHG emissions; and
 - Suppliers’ water use.

By exploring current supply chain sustainability harmonization efforts and the factors of success for widely-adopted sustainability information frameworks, we were able to more deeply understand the context motivating ACCO’s work as we began the analysis for this project.

Chapter 2: Methodology

2.1 Design of Interview Questions

In order to better understand the current situation and to lay out the broader context around the challenges companies face from the proliferation of sustainable supply chain surveys, we worked with ACCO to schedule 30-minute interviews with sustainability professionals at various organizations. We targeted individuals with different perspectives on this process, including individuals involved in creating and issuing surveys to their suppliers, individuals involved in making decisions based on the survey responses, and finally, those responsible for responding to surveys received from their customers.

Prior to conducting the interviews, we developed a list of questions that included both general questions that were asked of each interviewee, as well as a specific set of questions for each of the different perspectives. On September 29, 2012, our team attended the GreenGov Symposium, an event co-presented by ACCO and the White House Council on Environmental Quality (CEQ), which convened leaders from the government, businesses, nongovernmental organizations and universities to identify opportunities for the Federal Government to implement further sustainability practices in its operations. We presented our questions during a workshop attended by over 25 sustainability professionals and solicited feedback to further refine our questions, which ultimately resulted in the final list of questions, as shown in Appendix B.

From October through December 2012, we interviewed representatives from 15 organizations, selected by our client, covering the various perspectives of the sustainability supply chain survey process, as listed in Table 1. We then recorded and transcribed all of the interviews for further analysis.

Table 1. Summary of Organizations Interviewed

Companies	Perspectives Covered		
	Responder	Issuer	Decision Maker
Applied Materials	X	X	X
Bayer		X	X
Best Buy	X	X	X
Coca-Cola	X	X	X

Companies	Perspectives Covered		
	Responder	Issuer	Decision Maker
Dell	X	X	X
Federal Government		X	X
Ford	X	X	X
Herman Miller	X	X	X
Johnson Controls		X	X
Kaiser Permanente	X	X	X
Microsoft	X		X
Northrop Grumman	X	X	X
SAP	X	X	X
SAIC	X		
Sprint	X	X	X

2.2 Interview Analysis Approach

Since our objective for conducting interviews was to gain a better understanding of the context behind the proliferation problem of sustainability surveys, we adopted a qualitative approach to organize the information, in hope of generating a broad picture that illustrates the current situation of how companies deal with supply chain surveys. We used Nvivo software to code and analyze the interview transcripts.

2.3 Supply Chain Survey Sampling and Analysis

We collected surveys in partnership with ACCO in parallel with the interview process that occurred during fall 2012. Surveys were initially targeted to get broad coverage across the Industry Groups listed in the Global Industry Classification Standards (CDP, 2012). The advisory committee also offered input on the inclusion of surveys they felt were relevant to include in the analysis. Surveys were acquired via direct email communication by ACCO and our team, as well as by general internet searching. Overall, we obtained 23 company-specific surveys from 12 industries, and eight aggregate surveys. Table 2 shows the sectors and number of surveys per sector.

Table 2. Summary of Surveys Collected and Analyzed

Sector	Count
Aggregates	8
Aerospace	1
Automobiles and Components	3
Consumer Goods	1
Energy	1
Food Beverage	1
Healthcare/Pharmaceuticals	4
IT/Telecomm	4
Materials	2
Miscellaneous	2
Municipal	1
Retailing	1
Universities	2
Total	31

Once we received the surveys, we entered each question into an Excel database. General company information and demographics requested in the survey were not entered. To account for the varying number of questions in each survey, we utilized a weighting method so that surveys with a high volume of questions did not skew the analysis. Each survey had a total survey weighting equal to one. Therefore, each question was given a weighted value equal to one divided by the number of questions in that survey. For example, each question in a ten question survey was given a weighted value of 0.10. We then used the weighted value to evaluate the frequency of question types and coverage.

In some instances we were only able to receive one survey from one company within an industry. Therefore, we were not able to draw conclusions for specific industries based on company-specific surveys. However, the exceptions were the telecommunications and pharmaceutical industries. We were able to collect a sample of company specific surveys for those industries in which the companies represented a high percentage of market share.

2.3.1 Survey Categorization Structure

In order to methodically analyze the surveys, we categorized the surveys by both survey-level and question-level characteristics. For the survey-level analysis, we categorized each survey according to its

- 1) Purpose/intent (e.g. rate/score a supplier or state a dialogue with a supplier)
- 2) Survey type (company-specific or aggregate)
- 3) Survey level (facility, organization, or product)
- 4) Industry

For the question-level analysis, we categorized each question by the question

- 1) Format (e.g. Open-ended, Yes/No, Multiple Choice)
- 2) Nature (This refers to the particular aspect of a topic or subtopic. For the subtopic of “GHG emissions,” for example a question nature could be “Tracking and Measuring,” “Usage/Output,” or “Reporting/Disclosure.”)
- 3) Topic (This refers to broader environmental categories, such as “Emissions, Effluents, and Waste”)
- 4) Subtopic (This refers to more specific categories with topics, such as “Hazardous Waste” or “Water discharge”)

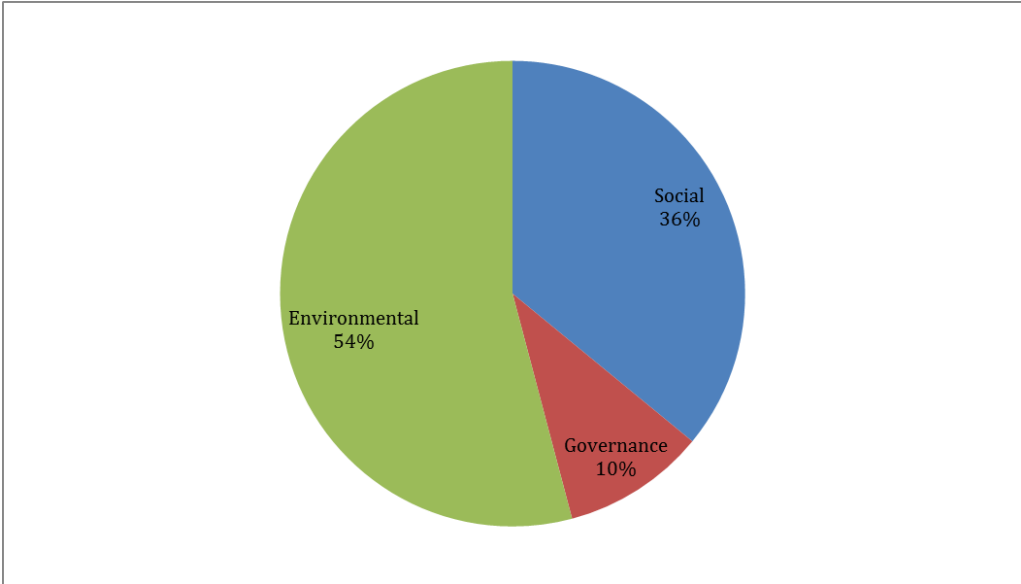
Survey topics and subtopics are, for the most part, aligned to the environmental performance indicators in the Global Reporting Initiative draft G4 Reporting Guidelines (GRI, 2013). We chose the GRI Reporting Guideline as a framework due to input from the advisory committee. However, there were some specific subtopics, such as conflict minerals and renewable energy, which are not explicitly identified as a performance indicator in G4, which we felt were valuable to include as well. Appendix C shows the complete survey categorization structure.

We categorized survey questions by nature, topic, and subtopic so that the analysis could be flexible in comparing these different categories and many questions could be answered from the analysis. We designated questions that asked about two different subtopics in the same question as “duplicates” to avoid double-counting in our analysis. After the categorization of questions was

complete, we cross-checked how questions were categorized according to nature, format, topic and subtopic. This helped ensure that categorizations were accurate and consistent across all surveys.

Based on input from ACCO and the advisory committee, we focused the scope of the study to only include environmental-related topics. Therefore, we eliminated all questions with a Social topic from further analysis. We only analyzed Governance topic questions if the question specifically asked about governance relating to environmental matters. Before removing these questions from the analysis, Social and Governance topics made up 36% and 10% of total questions, respectively (see Figure 1). This high percentage of social questions shows that even though social topics are not in the scope of our analysis, they are still an aspect of sustainability that organizations take into consideration.

Figure 1. Percent of Question Coverage by ESG



Chapter 3: Results

3.1 Interviews

3.1.1 Roles and Responsibilities of Interviewees

ACCO selected the sustainability professionals we interviewed. The fact that they resided in different functional departments and that they served roles at different experience levels confirmed that sustainability was a cross-functional effort at companies. Some interviewees resided in the corporate social responsibility (CSR) or sustainability office. Others, which were the majority, worked in more traditional company divisions such as marketing, procurement, sourcing, environmental health and safety (EHS) or other corporate service departments. Consequently, they covered a wide range of routine job responsibilities including, but not limited to, sustainability, CSR, procurement support, carbon management, climate protection, community engagement, safety, and environmental design.

One research question we aimed to address was whether our interviewees viewed sustainability surveys as a major responsibility of their position. The answers were evenly divided between yes and no. Supply chain surveys may involve collaboration from various departments to fill in the information, but full-time staff members that specialized in managing surveys usually numbered in the single-digits for an individual company. The team that managed these surveys could be either a specialized working group in sustainability, or a team from corporate affairs or customer relations. About half of the interviewees did not consider the survey process to be a major responsibility for them at the time being interviewed, but they believed that it was an important one and its significance had been increasing.

The time spent on those surveys first depended on their size and source. Usually, people spent more time on large annual surveys, such as the CDP Supply Chain survey. CDP was frequently mentioned as a time-intensive survey to complete. Whether a company had established a standard process for sending out and completing surveys determined the efficiency of the process as well. For some companies, sustainability surveys were relatively new, requiring more time to figure out

how to set up a standard procedure, which may include where to collect data, and how to validate and analyze the data.

3.1.2 Forces Driving the Sustainability Surveys

Through our interviews, we found that companies conducted sustainability surveys for various reasons. Some of them were proactive driving forces, such as the endeavor to become sustainability leaders in the industry, identify GHG reduction opportunities or take active management of supply chain risks. Other forces were passive, for example, the pure pressure from stakeholders. Generally, the drivers behind issuing the sustainability questionnaires were toward proactive side. A company could have a combination of multiple motivations to conduct the supply chain surveys, and they were not mutually exclusive. This section summarized the key driving forces behind issuing these surveys.

- **Evaluating suppliers' sustainability** – Most sustainability professionals, eleven out of fifteen, cited evaluating suppliers' sustainability as a force driving sustainability surveys. Sustainability had become a consideration for selecting qualified suppliers. Even if it was not a strict criterion to rule out suppliers, many interviewed companies indicated they would not just consider low price when choosing suppliers, but would be more willing to do business with socially and environmentally responsible companies. They issued supply chain surveys to flag situations that require additional attention and management. Some more demanding companies also assessed whether their suppliers had met their best practice expectations. Some form of a supplier sustainability evaluation process was very common across industries among companies we interviewed. Even though some interviewed companies did not issue formal sustainability surveys, they may have integrated sustainability questions into their request-for-proposal (RFP) processes which could influence those companies' purchasing decisions.
- **Environmental impact reduction opportunities** – Six out of the fifteen sustainability professionals interviewed cited reduction opportunities. Surveys could be utilized to identify GHG emission or other environmental impact reduction opportunities in the supply chain, especially for those companies who began to manage their scope 3 emissions

or those who would like to establish leadership in the climate change and sustainability areas. Some may have even issued a separate survey focusing on GHG emissions. It was also common for those companies to set goals and strategies to collaborate on GHG or other environmental footprint reductions with their suppliers, where more training and engagement was likely to be involved.

- **Risk management** – Five out of the fifteen sustainability professionals interviewed cited risk management as a key force driving sustainability surveys. There were many risks that a company might care about in its supply chain. For example, from a climate viewpoint, the CDP supply chain program could help identify vulnerability of a commodity, including scarcities, continuing impacts from natural disasters or climate changes, and price volatilities. Supplier risk management entailed gathering and analyzing the risk ranking of the supply base, determining the high-risk suppliers, and then engaging them to drive improvements. EcoVadis had a well-regarded risk algorithm, based on supplier category, material groups, country, supplier segmentation (e.g. strategic, key, base suppliers). The software could generate a list of high-risk suppliers given the inputs of suppliers' information. Commodity risk was analyzed for the company's marketable products or services.
- **Compliance** – Compliance was cited by four out of the fifteen sustainability professionals interviewed. Companies sent out surveys to assess whether their suppliers used restricted and prohibited substances in the products, as well as compliance with laws and regulations.
- **Leadership in sustainability** – Two out of the fifteen sustainability professionals interviewed cited leadership in sustainability as a key force. For example, they sent out sustainability surveys because it fitted into their goal of taking a sustainability leadership position in their industry. They integrated sustainable business practices into their core strategic values and worked with their suppliers to fill out the surveys to give them credit for what they do. They also developed a global scorecard for their suppliers, in which sustainability had a 10% weighting.
- **Stakeholder pressure** – Finally, the surveys were issued due to the “pressure of (the) sustainability trend,” as two out of the fifteen sustainability professionals suggested. The

pressures could come from all types of stakeholders, including capital markets, regulatory administrations, customers and employees. Facing this pressure, more and more companies may consider integrating sustainability into their overall business practices.

3.1.3 Three Main Components in the Surveying Process

The three main components in the request-response process of sustainability surveys consist of issuing, responding and decision-making.

3.1.3.1 Issuing

This section discussed the process of how sustainability surveys were issued to suppliers. It described the criteria for selecting to which suppliers the surveys were issued to, the topics the surveys addressed, the percentage of suppliers surveys were issued to, and how survey responses were collected from suppliers.

- **Criteria of selecting suppliers** - Among the companies we interviewed, only one required all of its suppliers to complete its sustainability survey. Due to time and budget constraints, most companies only issued surveys to a certain percentage of their suppliers. Sometimes organization that issued aggregate surveys had a coverage requirement. For example, the Electronic Industry Citizen Coalition (EICC) required the questionnaires to be extended to 80% of Tier 1 suppliers. When companies decided which suppliers will receive surveys, they considered one or more of the following areas: the company's business size, and the strategic importance with the supplier, and the risk or environmental impact associated with the supplier. The risk factor was usually prioritized over other considerations.
- **Survey topics** - Surveys generated by different companies or organizations focused on different topics and are of varying length. Some companies indicated that when they developed their own surveys, although they would refer to GRI or other aggregate surveys, they would not include everything, but instead focus more on actionable questions.
- **Data collection from suppliers** - There were two major data collection approaches: Excel spreadsheets or online portals. Many companies still used Excel-based surveys at the moment, but some of our interviewees expressed interest in using an online-based portal, so that responses from suppliers could be assembled less manually.

Case Study: Initiating a Supply Chain Sustainability Program

When initiating a supply chain sustainability engagement program, an organization should develop a clear vision, communicate expectations to their suppliers, and implement the program in manageable phases.

- *Develop a clear vision* – For one large technology manufacturing company, with hundreds of suppliers, this meant identifying the three main pillars of its program: compliance with legal requirements, meeting EICC membership requirements, and operationalizing sustainable business practices.
- *Communicate expectations* – To communicate the program to their suppliers, the engagement model included a personal letter from the Chief Operating Officer outlining the expectations and timelines of the sustainability program. It also involved webinars and one-on-one meetings with the top 80% of suppliers by spend, which included representatives from both the procurement and sustainability teams on both sides. This robust engagement model ensures that suppliers understand the purpose of the program and what is expected of them.
- *Implement the program in manageable phases* – Internally, the sustainability team has identified three deliverables for the initial phase of the program.
 - *Phase One*: Gather an initial set of data from their suppliers.
 - *Phase Two*: Identify all of the tools and systems that will be necessary to operationalize the data reporting requirements moving forward.
 - *Phase Three*: Finalize the audit protocols, with the aim to integrate the sustainability-focused audit objectives into existing supplier audit procedures.

Future phases of this program include integrating sustainability indicators into the company's traditional supplier risk management program. However, the focus now is on developing the infrastructure and operational processes for data collection, which is a necessary first step and foundation for the future phases of the supply chain sustainability engagement program.

3.1.3.2 Responding

In the last section, we discussed how companies operate as survey issuers. At the same time, however, they may receive surveys from various stakeholders. This section focused on the survey process from the responding perspective, and discussed the types of surveys being received, how the company chooses which surveys they will respond to, and the effort spent on responding to surveys.

- **Types of surveys that companies receive** – The questionnaires companies have received could be grouped into the following categories:
 - CDP Supply Chain Survey: Most frequently mentioned survey from the interviews.

- Third-party reporting platforms: Used to convey corporate sustainability information to investors and other stakeholders. Examples include EcoVadis, SEDEX, and E-Task.
- Ranking agencies: Dow Jones Sustainability Index, Newsweek Green Rankings, Bloomberg CREX, SustainAbility, Sustainable Asset Management, and Maple Crossed Climate Innovation Indexes. Companies may receive a different combination of questionnaires from these issuing organizations.
- Industrial associations: Electronics Industry Citizenship Coalition, GreenPeace Guide to Green Electronics, and Sustainable Apparel Coalition.
- Other stakeholders: customers, government agencies, NGOs, and investors.
- **Responding criteria** – Based on the responses of our interviewees, almost no company responded to all of the surveys that they had received. Usually they responded on a selective basis, and the percentage of responses may vary greatly across companies. Surveys from customers were generally prioritized because they represented companies' revenue streams. Some interviewees indicated that they responded to all questionnaires from customers, and they may consider it as a valuable service to their companies' sales team. Others may choose to respond based on the size and importance of their customers. Some Companies handled surveys from rating agencies seriously on a selective basis. Companies may respond to NGO surveys at a lower rate than others, based on the reputation and mission of the NGO. Finally, besides the selection criteria based on issuing organizations, particular characteristics of the surveys may affect a company's decision on whether to respond. The less complex a survey, and the easier for a company to gather the data, the greater the likelihood a company would respond.
- **Effort spent on responding** – The time spent on a single survey can vary from minutes to days to weeks, depending on the varying complexity of surveys. The time and effort involved in the responding process consisted of data collection, writing responses (essay questions may take more time to answer), substantiation with case studies and links to documents, and clarifying responses. As an example of one end of the spectrum, one interviewee mentioned that they may spend as many as 20 man-hours per week for several weeks responding to the CDP survey.

3.1.3.3 Decision Making

Previous sections discussed the survey process from both the issuing and the responding perspective, but companies also integrated the information acquired through the surveys into the decision-making process. The worst scenario, however, was that companies issued surveys just for the sake of “checking the box,” without integrating the responses into their decision-making process. One interviewee did admit to seeing no value of completing those surveys. Nonetheless, most of the interviewees saw some value to the surveys as a complement to supply chain management.

One value was risk management, which had already been discussed in the previous sections. Some companies had developed a scorecard to evaluate their suppliers and compare their sustainability performance more easily against one another. In these scorecards sustainability may account for a certain percentage of the score, alongside other criteria such as product quality, on-time delivery and financial reliability. If there was a gap in sustainability practices between suppliers, the company may leverage its purchasing power to pressure lower performers to improve. None of our interviewees, however, indicated they would rule out a supplier due to their low score on sustainability. The purpose of conducting surveys or developing a scorecard was more to understand risks and engage suppliers than to weed them out.

Few interviewees mentioned how they currently incorporate the survey information into their core business strategies and corporate DNA. This was a more complicated area to explore, but also a valuable one. However, some companies have shown that progress can be made in this area.

Case Study: Incorporating Environmental Performance into Procurement Decisions

When companies first start to incorporate environmental criteria into their traditional request for proposal (RFP) process, securing internal and external buy-in for the initiative is one of the first steps. It can be challenging, however, to communicate such a plan internally so that employees understand and appreciate the new initiative. It can be even more difficult to communicate and collaborate with their suppliers. A major health care organization has shown how this can be done successfully, however, through the implementation of their environmental purchasing program. Beginning about five years ago, the company formulated a new sourcing model that incorporated financial impacts, patient outcome impacts and environmental criteria from their sustainability scorecard to grade and evaluate products. The next step was to get their internal procurement team and their suppliers on board.

When initiating the program, the organization faced the challenge of building trust with their suppliers because some of them had concerns about disclosing proprietary information. Some suppliers understood the importance that the company placed on sustainability; however, they did not have the personnel or capacity to collaborate with the organization on their new program. For example, a major supplier of the organization established a new division to work with the new program. When more suppliers started to understand the importance of sustainability to the organization and knowing the environmental perspective is included in the sourcing decision process, suppliers saw this as an important element of their competitive advantage and the engagement was brought to a new level.

The organization's accomplishments in this area are evidenced by their recognized influence behind the disclosure of supply chain sustainability in the healthcare industry. They believe that the more accredited organizations publicize their sustainability performance information; the more sustainability will be seen as a value generator and a differentiator among competitors.

3.1.4 Challenges and Opportunities in Streamlining the Survey Process

This section summarized the potential challenges and opportunities in streamlining the survey process. The identification of those challenges and opportunities could help to streamline the survey process and reduce the burden it would place on sustainability professionals.

- **Data management** – It was unlikely that large companies were the only ones issuing sustainability surveys. Small companies could follow suite, leading to a cascade of questionnaires to 2nd or 3rd tier suppliers. Some interviewees worried that the amount of data would grow exponentially. As mentioned above, it was even more troubling for companies, including large ones, on both the issuing side and responding side if they still used spreadsheets as the main data collection method. This situation, however, had brought about great opportunities for third-party reporting management services. There were many companies or organizations providing data management and reporting services to help alleviate the time and effort required, such as OneReport. They may either provide an online platform or software, but there seemed to be no dominating service provider in this market, although, undoubtedly, it had become a promising new market.
- **Data quality and question design** – Data collection and compilation was not the final step in the survey response process. The validation or audit process afterwards can be onerous as well. Sometimes the suppliers may have failed to answer questions in the way the issuing company intended for them to do so. Thus, a lot of back and forth effort was put into checking data, but even that effort was insufficient to ensure that a reply was really relevant. Some interviewees also expressed frustration over open-ended or descriptive questions, which were time-consuming for survey responders to answer. Another problem with survey design was a lack of consistency across companies and even within a single company. The surveys tended to change every year, as some interviewees pointed out. Some changes were unnecessary and cause more confusion if the entire question design was not improved.
- **Maximizing values of survey responses** – Although most of the interviewees acknowledged some value in integrating the supplier information into risk management or supplier engagement, they doubted whether this survey process could truly affect corporate purchasing decisions. It was difficult to change traditional sourcing and purchasing modes given the convoluted business relationship and market power between companies. Thus, the huge effort given to the survey process may not seem worthwhile if other business units within a company do not change their ingrained way of evaluating suppliers.

- **Supplier engagement** – Engaging suppliers to report their sustainability was another challenge. According to some interviewees, it could be a struggle for suppliers to understand that the process was intended to establish a partnership with them, rather than to give them directives. It was also difficult to make suppliers realize that, instead of only being negatively affected, there may be some positive return to engagement. Thus, it may be necessary to provide some training to suppliers. Conversely, suppliers hoped that the issuing company or organization would gain a better understanding of their needs. Those surveys may reflect the environmental goals of the issuing companies, but these goals might not be material to their suppliers. Therefore, supplier engagement could be more effective if a materiality assessment is conducted beforehand that aligns the goals of purchasing companies and suppliers to the extent possible.
- **Operational difficulty** – The survey process could be very inefficient if poor collaboration occurred. To streamline the operation process, a company may consider establishing a standard procedure in dealing with surveys, creating a particular sustainability working group to manage the sustainability surveys when they come through, and appointing a contact person in each relevant business unit to gather information for the working group. Particularly, it is very important to get buy-in from the procurement department to make the supplier evaluation program meaningful and effective. Otherwise, chances are that the survey will have poor responding rate. In addition, the survey process would also be simpler if the survey does not include questions that the issuing company won't answer themselves. This requires the survey designer to truly understand issues or items that are relevant and actionable to the supply chain and other business units.

3.1.5 Harmonization Opportunities

Harmonization could reduce some of the survey fatigue experienced by sustainability professionals. Although not everyone was optimistic about the possibility of consolidating all types of surveys into one master survey, there were several pathways worth exploring. This section provides all potential harmonization opportunities our interviewees put forward.

- **Standardization** – Standardization was one approach many interviewees emphasized. One interviewee suggested that the ultimate goal for standardization would make sustainability reporting similar to financial reporting, so that the type of questions or the way they are being asked would be consistent across differing surveys.
- **Dominating platform(s)** – Some interviews pointed out that public availability and a centralized reporting platform is not a new concept within sustainability disclosure. There are many models already, such as CDP, GRI, SASB, and DJSI. However, many models and reporting initiatives can lead to redundancies. It could be more beneficial for one or two organizations to serve as the dominating agency to issue questionnaires and determine the question types to different industries. However, each platform has its own business interest. Any effort on creating a centralized reporting platform by a third party may be resisted by those existing players. Thus, this harmonization opportunity may be confronted with resistance from different business interests in this market.
- **Better technology** – Modern technology provides another opportunity for harmonization. For example, the GRI is promoting the adoption of a technology called eXtensible Business Reporting Language (XBRL), which enables the development of standard taxonomies and tagging of business data on electronic documents. This technology can replace the need for people to manually read reports to extract specific data. Companies also looked to their technical partners such as SAP for solutions.
- **Market for reporting management services** – A new market for reporting management services has emerged as a result of the business opportunities related to the proliferation of surveys. To reduce survey fatigue, some companies are willing to pay for third-party services to respond to various types of surveys.
- **Industrial sector level harmonization** – If general harmonization seemed unlikely in the near future, harmonization at the industry level may be more likely. According to our interview results, many industries had formed associations to centralize the sustainability effort. Usually, the association developed an aggregate survey, and market players in that industry sent this out to their suppliers. At a lower harmonization level, companies can share sustainability rating results and audit reports of suppliers with their counterparts.

3.2 Surveys

The results of analyzing the results were categorized according to the research questions identified earlier.

3.2.1 What are the most common topics and subtopics asked across all of the surveys?

Just two topic categories make up the majority of all environmental topics that surveys address, but looking at more specific subtopics reveals greater variation in the environmental issues surveys address.

Of the 10 topics covered in the surveys, “Emissions, Effluents, and Waste” and “Overall” covered 30% and 24% of topics across all surveys, respectively, as shown in Figure 2. Twelve subtopics were contained within “Emissions, Effluents, and Waste”, more than in any other topic. They covered everything from GHG emissions, ozone depletion, and multiple categories of waste and water discharges. “Overall” was the most general topic, covering questions that inquired about sustainability practices in general without going into detail about the specific issue they addressed. “Green Buildings” and “Sustainable Agriculture” also fall under “Overall”, but made up only 1% and 6 %, respectively, of the questions under that topic. See Appendix D.1 for a breakdown of total topic and subtopic coverage.

Another 40% was made up of four topics: “Products and Services” (12%), “Supply Chain” (9%), “Energy” (8%), “Water” (6%) and “Materials” (5%). Together with “Emissions, Effluents, and Waste” and “Overall”, these six topics covered 94% of all questions asked by the survey sample.

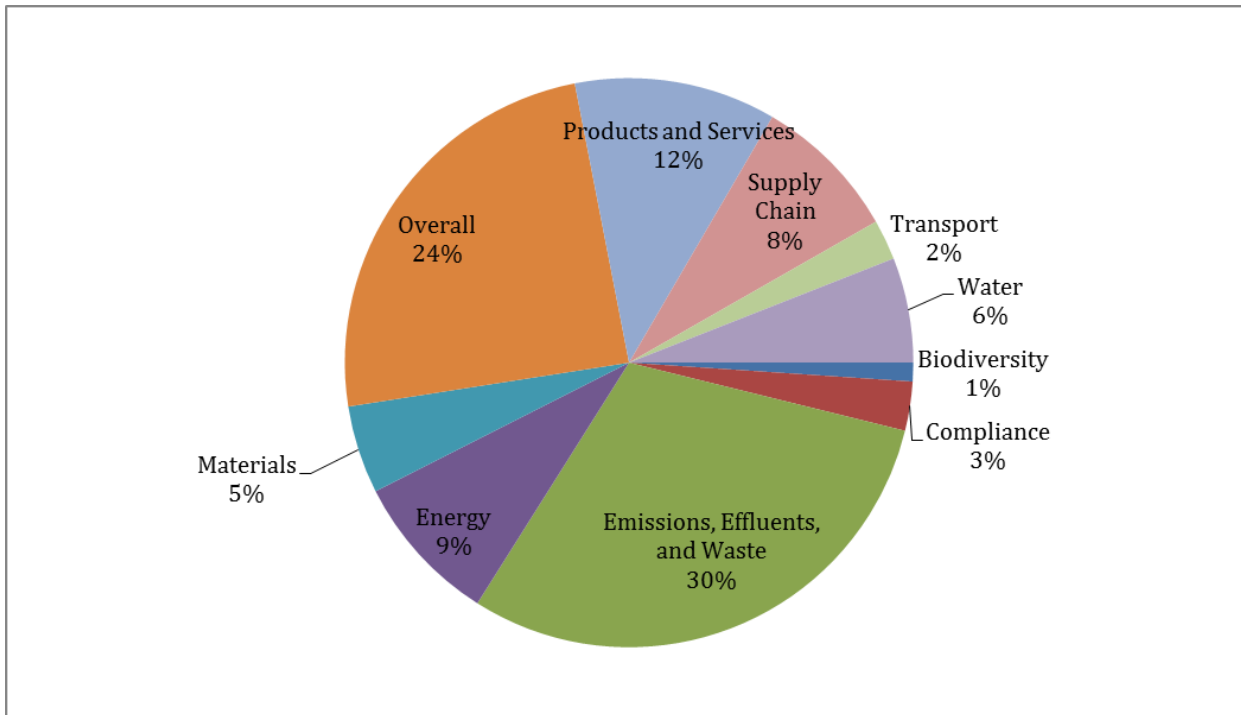


Figure 2. Topic Coverage - All Surveys

Each topic broke down into multiple subtopics, greatly diversifying the number of sustainability subjects the surveys address. Figure 3 showed that within “Emissions, Effluents, and Waste”, the most frequent subtopics were “GHG Emissions” (28%), “Waste” (25%), “GHG Emissions Reduction” (16%) and “Hazardous Waste” (8%), together accounting for 77% of the topic’s questions. Questions directly addressing water discharge only accounted for 6% of the questions under this category, with “Water Discharge Impact” and “Water Discharge Volume” each representing 3%. Although it is important to note that this only covers discharges, as a separate topic was dedicated to other water subtopics, (e.g., “Water Withdrawal”, “Water Sources”, “Water Recycling/Reuse”). Interestingly, questions regarding “CDP Reporting” accounted for 5% of “Emissions, Effluents, and Waste”. While a relatively low percentage, it is interesting that this specific reporting program accounted for more questions across all surveys than do topics such as “Air Emissions” (4%), “Spills and Contaminations” (4%) and “Scope 3 GHG Emissions” (3%).

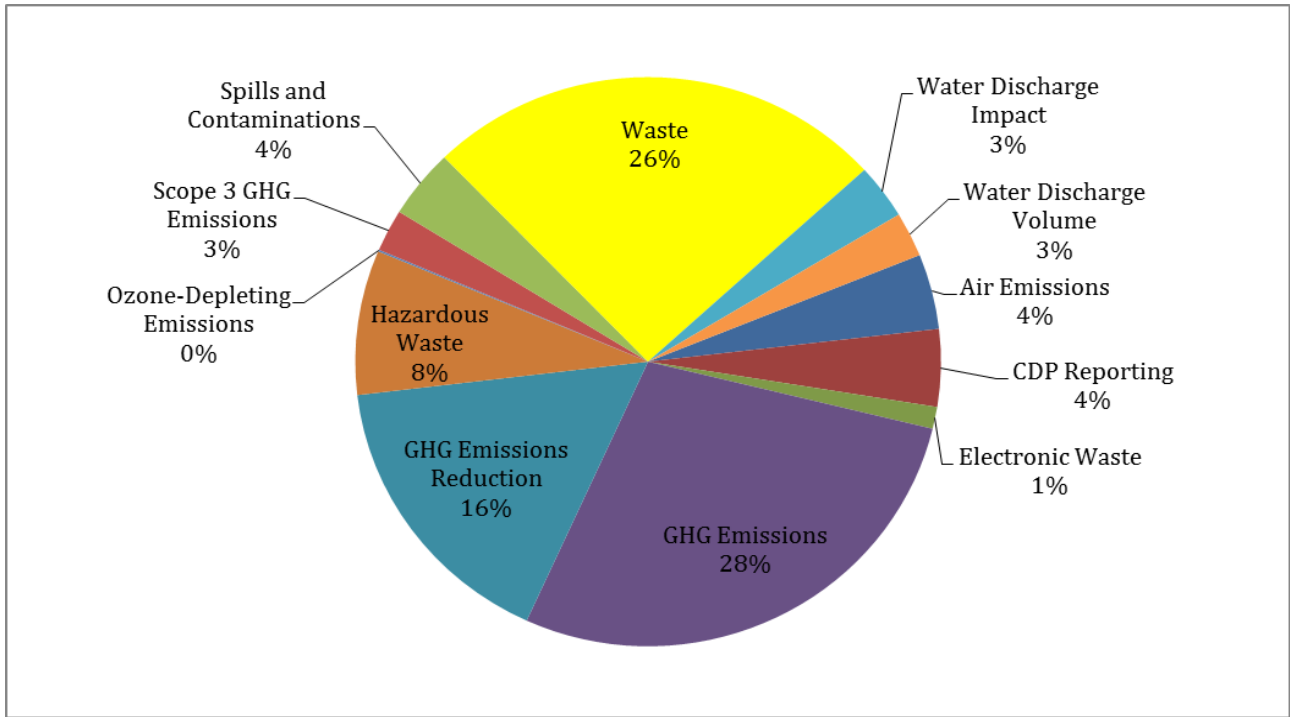


Figure 3. Subtopic Coverage Under Emissions, Effluents and Waste Subtopics Across All Surveys

Looking at the percent coverage of subtopics relative to all questions (i.e. not relative to the particular topics to which they pertain), no subtopic made up more than 10% of all questions. The one exception to this was the “Overall Environmental” subtopic, which makes up 23% of all subtopics. This subtopic referred to questions that did not ask about a specific environmental issue (e.g. “Conflict Minerals”, “GHG Emissions”, “Habitat Protection”), rather they asked about general approaches to environmental sustainability (e.g. goals and targets for environmental performance). See the last column in Appendix D.1 for their percentages of subtopics relative to the total. From this vantage point, the most common subtopics were “GHG emissions” (8%), “Waste” (7%), “Substances of Concern” (7%), “GHG Emissions Reduction” (7%), “Supplier Management” (5%), “Water Withdrawal” (5%) and “Materials Usage” (4%).

3.2.2 Are there differences between the questions being asked by individual companies versus the aggregate surveys?

While aggregate surveys were intended for use among a wide range of organizations, they addressed different topics and subtopics than do organization-specific surveys on average and include many more questions.

This high-level analysis looked at the differences between company-specific surveys and aggregate surveys. Aggregate surveys had approximately five times as many questions as company-specific surveys, as indicated by the median question number of aggregate surveys and company-specific surveys in Figure 4. The vertical lines showed the range (from minimum to maximum) in the number of questions in both questionnaire groups. Both ranges were wide, which indicated the length of each questionnaire varies greatly.

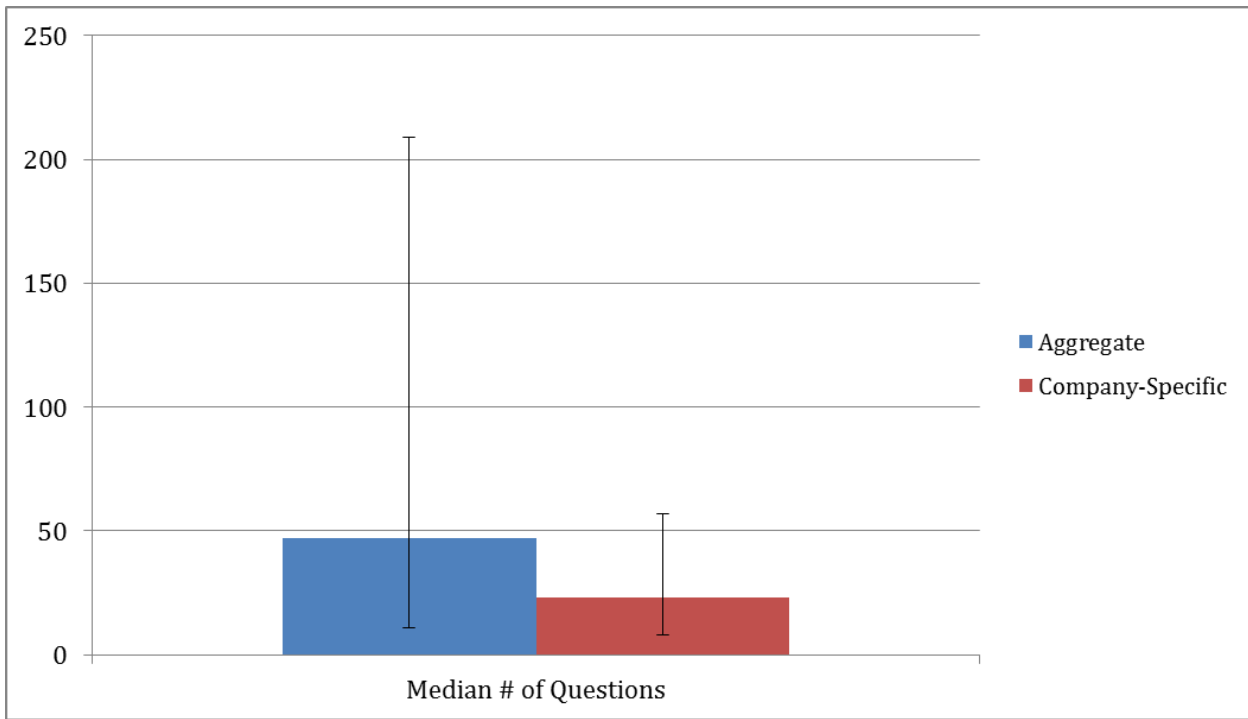


Figure 4. Median of Question Numbers and Range of Question Numbers of Questionnaires

In addition, the team compared the topic and subtopic coverage of the total of all individual organization surveys compared with that of just Ceres and SEDEX. These two aggregate surveys were used in this analysis because they were not industry specific and did not focus only on

particular sustainability areas, as CDP did with energy and emissions. See Appendix D.2 for all topics and subtopics in this comparison.

The findings revealed relative consistency between the total of individual organization surveys and Ceres. The topics of “Emissions, Effluents, and Waste”, “Overall”, and “Products and Services” were the most common topics for each. The most common topics for SEDEX were “Overall”, “Emissions, Effluents, and Waste”, and “Energy”, in that order. The average difference of coverage across all topics between the individual surveys and Ceres was just 2%, while the difference was 7% with SEDEX (see Table 3). One reason for the greater inconsistency with SEDEX could be that it has a much greater emphasis on social responsibility.

Table 3. Comparison Organization-Specific Surveys and Common Aggregate Surveys (By Topic)

Topics	Ceres	SEDEX	Organization-Specific Surveys	Organization-specific vs. Ceres	Organization-specific vs. SEDEX	Ceres vs. SEDEX
Compliance	3%	7%	3%	0%	4%	4%
Emissions, Effluents, and Waste	38%	18%	27%	11%	9%	20%
Energy	6%	11%	9%	3%	2%	5%
Materials	4%	4%	5%	1%	1%	1%
Overall	20%	46%	25%	5%	21%	27%
Products and Services	11%	0%	11%	0%	11%	11%
Supply Chain	8%	4%	10%	2%	6%	5%
Transport	1%	0%	3%	2%	3%	1%
Water	8%	11%	6%	2%	5%	2%
			Avg. Difference	3%	7%	9%

There was less consistency between the subtopics of Ceres and those of all individual surveys, however. In the Ceres survey, within “Emissions, Effluents, and Waste”, the most common subtopics were “Waste” (26%), “Air Emissions” (19%) and “Hazardous Waste” (19%), while for all individual organization surveys the most common were “GHG Emissions” (28%), “Waste” (25%) and “GHG Emissions Reduction” (16%). The subtopics varied within “Products and Services” as well. For Ceres, the coverage consisted of “Conflict Minerals” (50%), “Substances of Concern” (38%) and “Environmental Impact Mitigation” (13%). For the organization-specific surveys, the coverage within “Products and Services” consisted of “Substances of Concern” (57%), “Environmental Impact Mitigation” (29%) and “Conflict Minerals” (6%). This revealed that topic coverage did not tell the whole story, as there could be a wide range of relative importance assigned to subtopics within topic categories.

3.2.3 Are there differences between the non-industry specific supply chain surveys?

Ceres and SEDEX varied quite a bit from each other. In fact, the surveys differed more from each other, in terms of the environmental topics they address, than each of them did from the average of organization-specific surveys.

There were important differences between the topics that Ceres and SEDEX cover. On average across all topics, coverage varied by 9%. “Products and Services” was the third-most covered topic by Ceres, but the SEDEX survey contained no questions that address it. Almost half of SEDEX’s questions asked about general environmental sustainability (“Overall” makes up 46% of coverage), while Ceres’ largest topic was “Emissions, Effluents, and Waste” at 38%. “Emissions, Effluents, and Waste” was 18% of SEDEX, its second-largest topic, but the subtopic coverage varies a great deal between surveys. All of SEDEX’s questions under this topic addressed “Waste” (40%), “Water Discharge Volume” (40%), and “GHG Emission” (20%). Ceres’ survey had a greater range of coverage across the subtopics, with “Waste”, “Air Emissions”, “Hazardous Waste”, “Spills and Contaminations”, and “Water Discharge Impact” ranging from 26% to 11%.

Within the “Energy” topic (6% coverage for Ceres and 11% for SEDEX), the two surveys took different approaches. Ceres addressed “Energy Conservation and Efficiency” (75%) and “Energy Use” (25%), while SEDEX asked about “Energy Use” (67%) and “Renewable Energy” (33%).

A comparison could also be made between CDP and Ceres and SEDEX, but only with the topics included in the CDP Supply Chain Survey: “Emissions, Effluents, and Waste”, “Energy”, and “Supply Chain”. Table 4 below showed this contrast. Not surprisingly, in its first topic, CDP addressed only carbon emissions, with “GHG Emissions”, “GHG Emissions Reduction” and “Scope 3 GHG Emissions”, with 71%, 21% and 8% of the subtopics under “Emissions, Effluents, and Waste”, respectively. Under “Energy”, CDP covered only “Energy Use” (60%) and “Renewable Energy” (40%). There was some consistency across the three surveys under Supply Chain, with the majority of that topic falling under the “Supplier Management” subtopic for each survey.

Table 4. Comparison of CDP Topic Coverage with Ceres and SEDEX

Topics and Subtopics	CDP	Ceres	SEDEX
Emissions, Effluents, and Waste	87%	38%	18%
Air Emissions	0%	19%	0%
CDP Reporting	0%	4%	0%
Electronic Waste	0%	0%	0%
GHG Emissions	71%	4%	20%
GHG Emissions Reduction	21%	7%	0%
Hazardous Waste	0%	19%	0%
Ozone-Depleting Emissions	0%	0%	0%
Scope 3 GHG Emissions	8%	0%	0%
Spills and Contaminations	0%	11%	0%
Waste	0%	26%	40%
Water Discharge Impact	0%	11%	0%
Water Discharge Volume	0%	0%	40%
Energy	6%	6%	11%
Energy Conservation and Efficiency	0%	75%	0%
Energy Use	60%	25%	67%
Energy Use of Products and Services	0%	0%	0%
Renewable Energy	40%	0%	33%
Supply Chain	7%	8%	4%
Collaboration with Survey Issuer	17%	0%	0%
Supplier Incidents	0%	17%	0%
Supplier Management	83%	50%	100%
Supplier Screening	0%	33%	0%

3.2.4 Within an industry, are there differences between the questions being asked by individual companies and their industry-specific aggregate surveys?

In the particular industries studied, the relevant aggregate surveys did not align very closely with the topics and subtopics individual companies address in those industries.

For this, the analysis explored the telecommunications and pharmaceutical industries. We focused on these sectors in particular because we obtained at least three surveys from these industries. The total sample of surveys included three companies in the telecommunications industry, which used the Electronics Industry Citizenship Coalition (EICC) survey across the sector. While a small sampling of companies within the industry, together they made up over 80% of the telecommunications market share. In addition, our sample of surveys included four pharmaceutical companies that also comprised a large portion of the market share in their industry. The Pharmaceutical Supply Chain Initiative (PSCI) survey was commonly used to measure environmental performance among sector companies. Comparing the telecom company

surveys with the EICC survey and the pharmaceutical company surveys with that of the PSCI could provide a glimpse at the degree of survey harmonization within certain industries.

Tables 5 and 6 below showed the topic coverage across surveys in each industry. See Appendix D.3 and D.4 for further breakdown into subtopics. In the telecom industry, “Emissions, Effluents and Waste” was the most common topic, followed by “Overall”. The third most common topic for two of the companies was “Energy”, with 17% and 14%. For the other company, the third-most common topic was “Materials”. The EICC, however, only covers “Energy” and “Materials” 3% and 2% of the time. Considering that this was a snapshot of a single industry, there were considerable differences in the topics covered and the extent of coverage for each.

Table 5. Comparison of Surveys in Telecommunication Industry

Topics and Subtopics	Electronics Industry Citizenship Coalition	Company A	Company B	Company C
Biodiversity	0%	0%	0%	0%
Compliance	3%	0%	0%	4%
Emissions, Effluents, and Waste	52%	23%	52%	26%
Energy	3%	17%	14%	4%
Materials	2%	2%	0%	17%
Overall	25%	22%	19%	17%
Products and Services	9%	13%	0%	4%
Supply Chain	5%	13%	5%	9%
Transport	1%	5%	0%	9%
Water	1%	5%	10%	9%

In the pharmaceutical industry, there was even less consistency. For Company Y, “Emissions, Effluents, and Waste”, “Energy”, and “Supply Chain” all had the most coverage at 27%. The top three for Company Z were “Emissions, Effluents, and Waste” (38%), “Energy” (27%), and “Overall” (19%). Company X had “Products and Services” (24%), “Emissions, Effluents, and Waste” (18%), “Materials” (15%), and “Overall” (15%) as its top three topics. For the PSCI, “Overall” (46%) and “Emissions, Effluents, and Waste” (38%) were the most covered topics, with all the remaining topics tied at 4%. “Biodiversity”, “Materials”, “Products and Services”, and “Transport” were not covered by the PSCI. From looking at both the telecommunications and pharmaceutical industries,

it was clear that these companies must deal with a fair amount of inconsistency in supply chain sustainability disclosure within their own sectors.

Table 6. Comparison of Surveys in Pharmaceutical Industry

Topics	Pharmaceutical Supply Chain Initiative	Company X	Company Y	Company Z
Biodiversity	0%	0%	7%	0%
Compliance	4%	3%	0%	5%
Emissions, Effluents, and Waste	38%	18%	27%	38%
Energy	4%	9%	27%	27%
Materials	0%	15%	0%	0%
Overall	46%	15%	0%	19%
Products and Services	0%	24%	7%	0%
Supply Chain	4%	0%	27%	0%
Transport	0%	3%	0%	0%
Water	4%	12%	7%	11%

3.2.5 Are there differences in questions being asked between industries?

There were some similarities between industries in the questions being asked at the topic level, with “Emissions, Effluents, and Waste” and “Overall” topic categories making up the highest percentage of questions. However, at the subtopic level, there was much more variation between industries in the questions being asked.

To compare across different industries, we used the industry-specific aggregate surveys to represent the overall industry disclosure practices. Analyzing the industry-specific aggregate surveys revealed that each industry placed priorities on different topics in their surveys (as shown in Table 7). Practice Green Health, which represents the healthcare industry, deviated from the other industries for the “Materials” and “Products and Services” topics. No other industry devoted as many questions to these two topics. Also, Practice Green Health did not ask any questions about “Emissions, Effluents, and Waste”, while the other industries devote 29% to 56% of their questions to this topic.

Excluding Practice Green Health, the “Emissions, Effluents, and Waste” and “Overall” topics had the greatest percentage of questions devoted to them, with the Sustainable Apparel Coalition devoting 56% of the survey to the “Emissions, Effluents, and Waste” topic.

Table 7. Comparison of Aggregate Surveys Across Industries

Topics	Electric Utility Industry Sustainable Supply Chain Alliance	Electronics Industry Citizenship Coalition	Pharmaceutical Supply Chain Initiative	Practice Green Health	Sustainable Apparel Coalition
Biodiversity	0%	0%	0%	0%	0%
Compliance	6%	3%	4%	0%	1%
Emissions, Effluents, and Waste	29%	52%	38%	0%	56%
Energy	11%	3%	4%	0%	13%
Materials	3%	2%	0%	23%	0%
Overall	23%	25%	46%	0%	17%
Products and Services	9%	9%	0%	77%	0%
Supply Chain	9%	5%	4%	0%	2%
Transport	0%	1%	0%	0%	0%
Water	11%	1%	4%	0%	11%

At the subtopic level, the differences between industries became even more apparent. Only the Electronics Industry Citizenship Coalition asked questions about the geographical location of their suppliers and transportation issues. All industries, except health care, devoted a significant portion (23% to 46%) to the “Overall” topic, with almost the entirety of those questions devoted to the “Overall Environmental” subtopic.

Figure 5 showed the subtopic breakdown by industry of the “Emissions, Effluents, Waste” topic. Although this topic was the overall most common question topic across different industries, the variation in subtopics was significant. The Electronics Industry Citizenship Coalition asked the most questions about “GHG Emissions Reductions”, while the only other industry to ask about this same subtopic was the Sustainable Apparel Coalition. Almost no industry asked about “Water Discharge Volume” or “Ozone-Depleting Emissions”. This graph further illustrated that there was a wide variance in the subtopics being asked about between different industries.

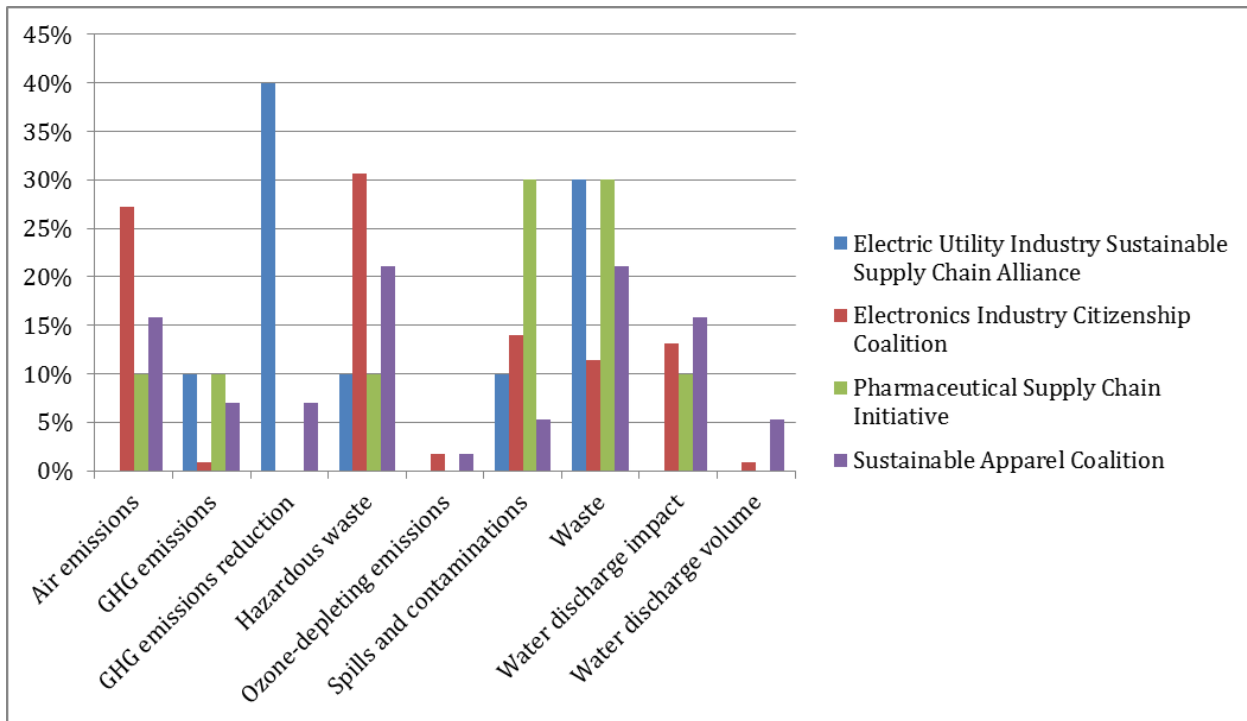


Figure 5. Comparison of Emission, Effluence and Waste Subtopic Breakdown Across Industries

3.2.6 How do companies intend to use the survey responses?

Almost half of all survey questions were intended to rate or score the supplier, while starting a dialogue with suppliers was a much higher priority to aggregate surveys than to company-specific surveys.

The purpose of 47% of total questions was to rate/score the supplier, followed by 18% of all questions asked to audit/track the supplier, and 18% unspecified (as shown in Figure 6).

Unspecified was designated when the survey did not clearly specify the purpose of the survey.

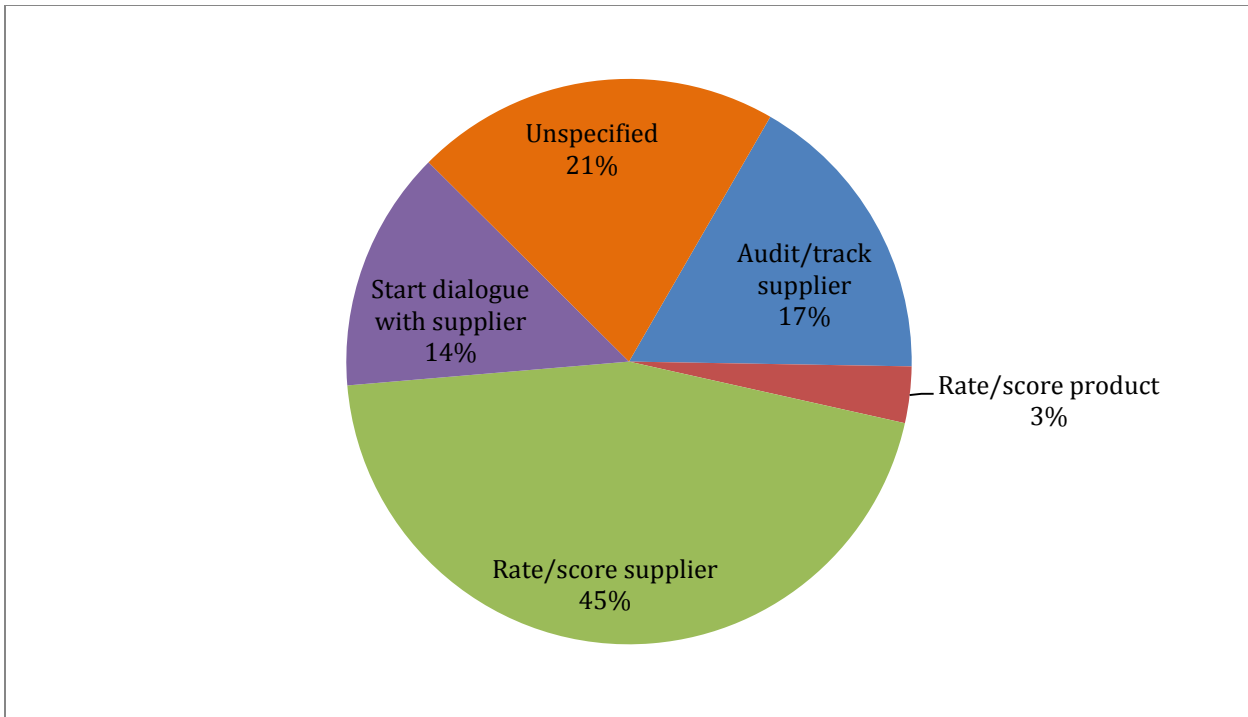


Figure 6. Percentages of Different Questionnaires Purposes

Comparing the purpose of the survey by whether the survey was an aggregate or company-specific survey showed that the aggregate surveys were much more concerned with starting a dialogue with suppliers, while both survey types were concerned with rating and scoring the supplier. However, only Company-Specific surveys were concerned with rating and scoring specific products, as opposed to rating and scoring a supplier's overall performance as an organization (see Figure 7). This seems intuitive since companies were the ones selling the actual product.

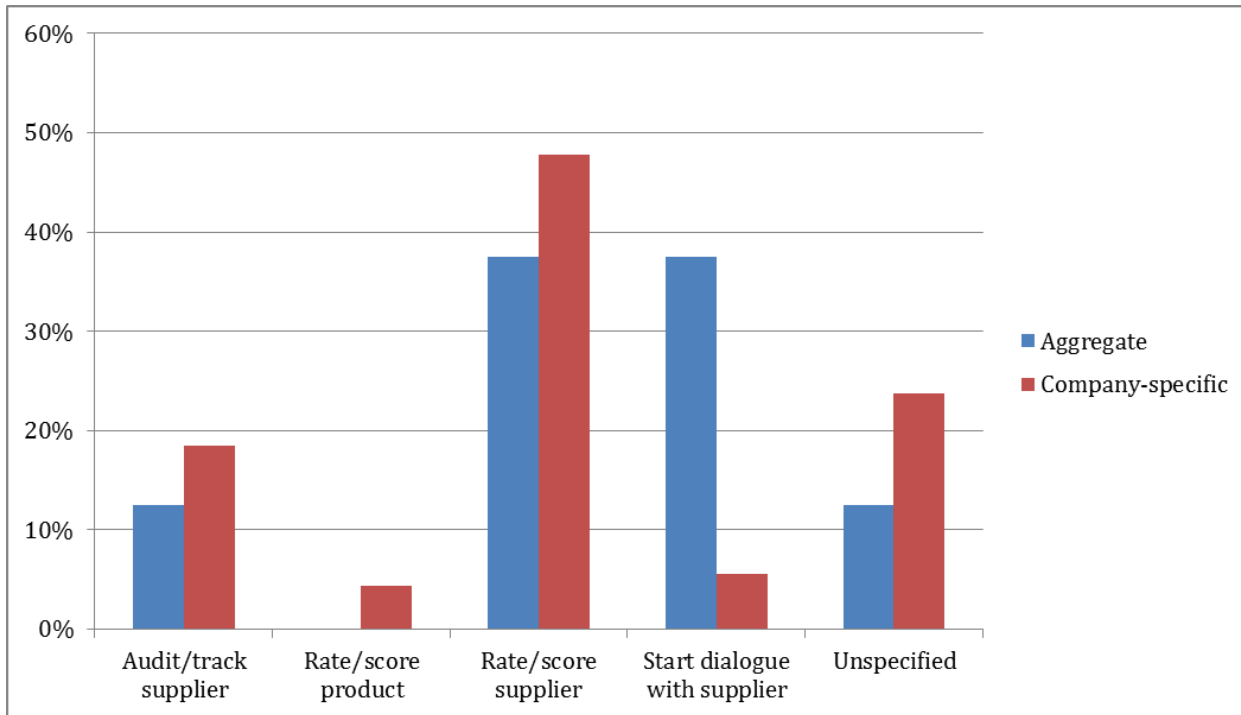


Figure 7. Comparison of Questionnaire Purposes Between Aggregate Surveys and Company-specific Surveys

Looking at the industry-specific aggregate surveys, four out of five of the surveys had a purpose of either rating or scoring the supplier or starting a dialogue with the supplier. Table 8 showed the different purposes of industry-aggregate surveys in our sample.

Table 8. Purposes of Industry-Aggregate Surveys

Survey	Purpose
Electric Utility Industry Sustainable Supply Chain Alliance	Rate/score supplier
Electronics Industry Citizenship Coalition	Start dialogue with supplier
Practice Green Health	Start dialogue with supplier
Sustainable Apparel Coalition	Rate/score supplier
Pharmaceutical Supply Chain Initiative	Unspecified

3.2.7 How does the purpose of the survey correspond or relate to the way the questions are being asked?

The yes/no question format and its variants are the most common question format across all survey purposes.

The purpose of the survey was also compared to the format of the question to determine a possible relationship. We hypothesized that if the purpose of the survey was to rate or score a supplier or product, that the majority of the questions would be those that were easy to assign a score, such as yes/no. The analysis did show this to be true, with 50% of the questions with a purpose to rate or score the product, and 25% of the questions with a purpose to rate or score the supplier corresponding to the yes/no question format. Somewhat contrary to this conclusion, 70% of the questions with a purpose to start a dialogue with the supplier corresponded to the yes/no question format as well. We expected this survey purpose to have a higher percentage of open-ended question formats. After the yes-no question format, the yes-no with open-ended explanation question format was the most consistent across all survey purposes (see Figure 8). These results show that there is potential for standardization around the question format.

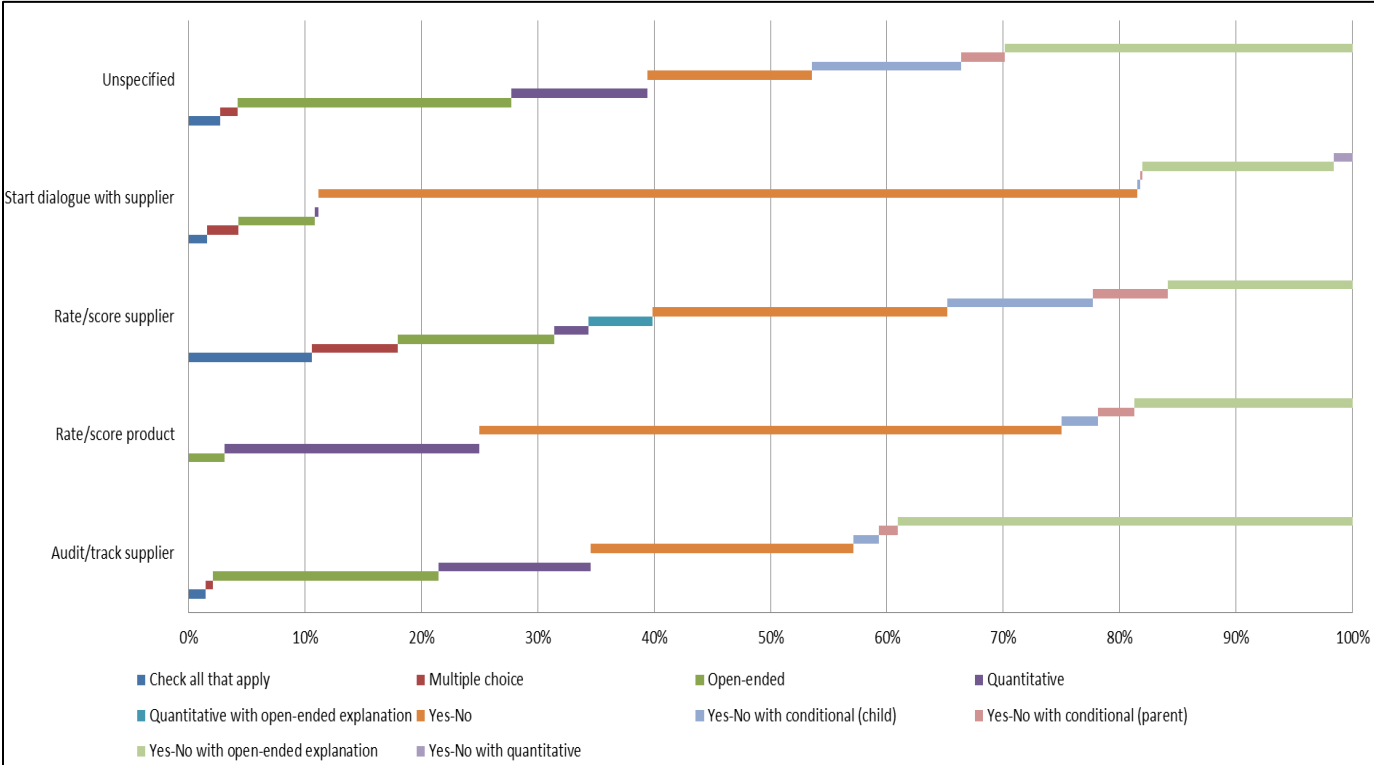


Figure 8. Question Formats by Survey Purposes

Chapter 4: Recommendations and Next Steps

4.1 Recommendations

The objective of our project is to develop a roadmap to navigate the current state of environmental supply chain disclosure process. Given the proliferation of not only supply chain surveys, but also competing efforts to harmonize all or some segments of the surveying process, how can ACCO contribute to the efforts to reduce the burden for companies that are issuing and responding to these surveys?

Through our analysis of surveys in Section 3.2, we conclude that it would be difficult to develop a single survey template that would meet the needs of every company. Even within industries, the environmental topics and the specificity of survey questions (i.e. question nature) differ from company to company. Whether this is due different core-values and areas of emphasis or differences in the maturity level of their supply-chain sustainability programs, the variability of survey content currently exists. So the question becomes: how can we lower the burden for survey responders while maintaining the flexibility to accommodate the needs of different survey issuers? While the flexibility to choose questions that meet the needs or interests of survey issuers should be preserved, we do believe there is room to standardize the way in which questions are asked. From our survey analysis, many companies ask similar questions that are simply worded or formatted differently. For example, we pulled the following questions from the surveys that we reviewed. These questions are asking suppliers to provide the same information, but have different wording and question format:

1. Do you have plans to reduce CO₂ emissions?
2. Does the facility have goals and targets to reduce GHG emissions? If yes, what are the targets?
3. Check all that apply regarding greenhouse gas (GHG) emissions at your organization:
 - GHG Emissions are not currently measured
 - GHG emissions are measured and trended
 - A voluntary commitment to reduce GHG emissions has been established

- A GHG reduction emissions reduction program is in place
- GHG emissions are publicly reported

As a first step on the roadmap towards harmonization, we recommend that ACCO convene a working group of interested stakeholders to develop a standardized list of questions covering a broad range of environmental sustainability topics and different levels of question specificity. We have compiled a list of example questions for each topic and subtopic, covering the most common question natures found in our analysis (see Appendix E). We believe this list could serve as a starting point for the working group to develop a robust list of standardized environmental sustainability questions. Furthermore, the working group should consider the following when developing the questions:

- **Wording** – When developing the questions, the working group should be clear about what conclusion is intended from each question. Also, the working group should consider whether respondents have the ability and availability to the necessary data to answer certain questions. If a question involves quantitative estimation (e.g. economic cost due to environmental impacts), they also have to consider the error that can be tolerated. A correct question can elicit a definitive answer and avoid ambiguity, which can help companies save time and effort.
- **Format** – Many questions from the surveys we analyzed were open-ended. Open-ended questions allow survey responders to provide valuable context and additional relevant information in answering the question, but are extremely difficult to compile and compare in any structured manner, especially as the number of survey responses increase. At the opposite end of the spectrum, many questions analyzed were yes/no questions. Responses to these questions are easy to compile and compare, but do not provide additional context. While some questions are specific enough that a simple yes or no is adequate, other questions could benefit from additional context. In these cases, perhaps the most appropriate format is to have the responder select yes or no, but also provide a text box for the responder to enter additional comments or explanations. This format allows the issuer to compile and compare responses easily based on the yes/no response, but also have the option to read the explanation of a specific supplier if they choose.

Once a list of standard questions has been established, the next step is to identify the survey platform or model that best fits the needs of both the survey issuers and responders. Through our search and review of current supply chain sustainability surveying harmonization efforts (see Appendix A), interviews, and survey analysis, we have identified the following three basic models that are currently used for the surveying process:

- **Stand-alone document** – Provides a standard set of questions, in a format such as PDF, Word, or Excel, that companies can elect to use. Organizations can develop their own survey, but select from this document the questions they want to use. Suppliers would have to fill out responses for each of their customers, but at least they will have the answers readily available after responding the first time to any particular question. An example of this model is the Ceres Supplier Self-Assessment Questionnaire (see Appendix A).
- **Web-based sustainability-specific platform** – Provides an online platform for issuing, responding, collecting, and analyzing environmental sustainability among supply chain partners. This streamlines request/response process, improves data integrity, and may provide value-added reporting services. Many of the interviewees expressed a desire to utilize technology to lower the burden and streamline the survey process. An example of this model is Sedex (see Appendix A).
- **E-sourcing platform/supplier network** – Provides a web-based platform and has the potential to integrate supplier environmental sustainability data with traditional supply chain management data such as spend, operational performance, legal compliance, and other considerations. One of our interviewees identified Ariba as example of this model.

We considered the advantages and disadvantages of each of these models in Table 9. Based on our analysis, we believe that the web-based sustainability-specific platform model is the best option when balancing the benefits and complexity of implementation. Specifically, we believe that a web-based platform provides greater flexibility and data management services than a stand-alone document. Furthermore, in evaluating the e-sourcing platform/supplier network, although it provides an added benefit of integration with other supply chain management data, it also creates several challenges, the most problematic of which is the appearance of a conflict of interest by partnering with a for-profit company and promoting the adoption of their platform.

Table 9. Consideration of Advantages and Disadvantages of Surveying Models

Model	Advantages	Disadvantages
Stand-alone document	<ul style="list-style-type: none"> • No additional technology infrastructure needed • Easy to distribute • Low-cost option 	<ul style="list-style-type: none"> • Requires manual compilation and analysis of responses • Companies have to respond to multiple requests • Greater risk of data entry or compilation errors
Web-based sustainability-specific supply chain platform	<ul style="list-style-type: none"> • No need to answer the same questions repeatedly • Value added data collection, compilation, and reporting services • Lowers risk of errors in data compilation 	<ul style="list-style-type: none"> • Operation and maintenance of technology platform • Membership fees required • Not integrated with other supply chain management data
E-sourcing platform/supplier network	<ul style="list-style-type: none"> • Similar to sustainability-specific platform above • Integrated with other supply chain management data 	<ul style="list-style-type: none"> • Operation and maintenance of technology platform • Membership fees required • More complex and greater coordination is required • Environmental sustainability not a core competency or focus of current platform/network providers • Providers are for-profit companies

We envision a web-based platform where organizations and their suppliers can use these questions to request and exchange environmental sustainability data. As previously mentioned, web-based sustainability data exchange platforms already exist. However, these platforms use general, or even industry-specific survey templates that individual companies cannot modify or customize. While this allows survey responders to just complete the survey once and allow their customers to view the data, it does not provide survey issuers the ability to customize their survey, which we believe is a barrier for gaining widespread adoption of a single platform. In addition,

although the supplier completes the entire survey, there is no guarantee that their specific customers are interested in every question or response in the survey template.

In our proposed platform model, as shown in Figure 9, each survey issuer can select from the repository of standardized questions to create their own survey and send the survey to their suppliers on the platform. Suppliers will enter responses to each question, which will then be saved in the platform. When a second organization creates their custom survey and sends it to the same supplier, if they selected questions that were also selected by the first organization, then it would automatically be populated with the supplier’s saved response, and the supplier would, in most cases, only have to respond to the new questions from the second organization that did not overlap with the first organization.

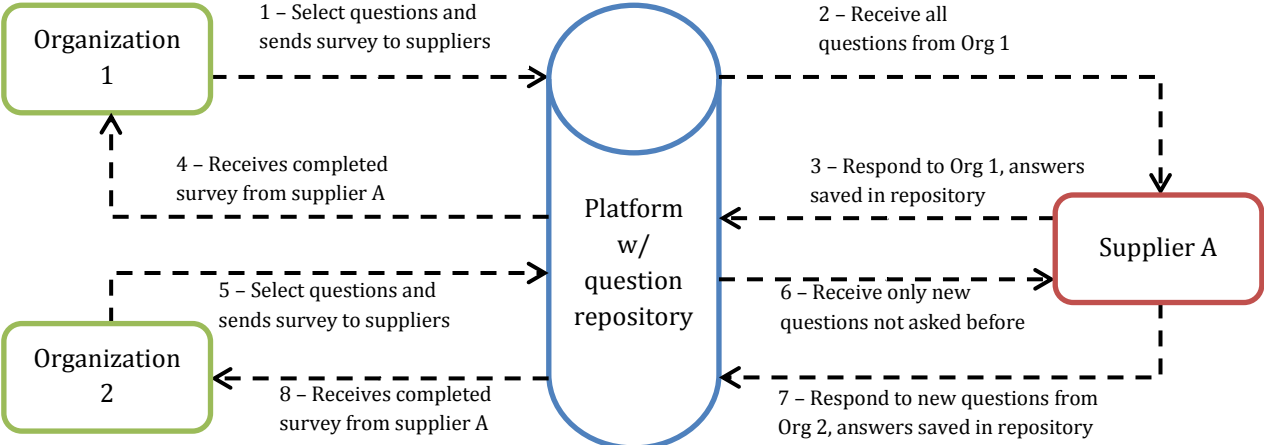


Figure 9. Process Flow of Platform Model

Using this approach, suppliers would, in most cases, only have to answer each question one time. There may be a sub-set of questions that would require unique responses for each customer, such as activity-based GHG emissions from the supplier that are attributable to each customer. In addition, suppliers would have to update their responses if there have been any changes to their business practices. However, since the coverage of topics and questions between most organizations will likely overlap significantly (e.g. questions about energy usage or GHG emissions), it will only require an incremental effort from the supplier to answer each new survey request from a customer. This approach allows survey issuers to customize their own survey and for suppliers to only respond to questions that are of interest to their specific customers.

Alternatively, a supplier could decide to answer some subset of questions proactively so that they would be available for any interested party, including the general public. Each organization using the platform should have direct control over who has access to their data and the extent of that access.

The platform which we have described does not currently exist. Therefore, ACCO will need to decide the best path forward in developing the platform. ACCO can choose to take one of the following two options:

- Partner with an existing platform and integrate the recommendations from our project into that platform
- Work with stakeholders to create a new platform

We considered the advantages and disadvantages of each option in Table 10. Based on our analysis, we recommend that ACCO work with stakeholders to create a new platform. The current market for web-based sustainability-specific supply chain platforms is fragmented. In addition, many of the providers are for-profit companies, which would raise concerns about the appearance of conflicts of interests should ACCO decide to partner with one of them. Lastly, since these providers have already invested time and effort to build their platform, they may not be receptive to our recommendations and ideas to further streamline the survey issuance and response process. Creating a new platform allows for the greatest flexibility and provides an opportunity for ACCO to bring in as many stakeholders into the process as possible.

Table 10. Courses of Action Summary

Course of Action	Advantages	Disadvantages
Partner with an existing platform and integrate the recommendations from our project into that platform	<ul style="list-style-type: none"> • Established user base • Incorporation of new ideas from our project 	<ul style="list-style-type: none"> • Current market fragmentation • Legitimacy of choice of platform • Proprietary platforms, most of which are for-profit • Membership/user fee

		<ul style="list-style-type: none"> required • Receptivity to partnership
Work with stakeholders to create a new platform	<ul style="list-style-type: none"> • Greatest flexibility and input • Opportunity to develop a platform with broad stakeholder involvement/support • Platform could potentially be offered free of charge to users, promoting widespread adoption 	<ul style="list-style-type: none"> • Uncertain stakeholder participation/buy-in • Uncertain adoption rate • Most resource intensive • Funding challenges

In summary, we recommend that ACCO work with stakeholders to first develop a robust list of standardized questions across all relevant environmental sustainability topics. The list of questions that we have compiled in Appendix E can serve as a starting point for this effort. Next, ACCO should develop a web-based platform where the list of questions can be stored in a repository and organizations can create customized surveys by selecting questions from the repository that best address their sustainability areas of interests. Suppliers would only have to respond to the questions selected by their customers and, with the exception of questions related to customer-based activity allocation, would only need to respond to each unique question once.

4.3 Next Steps

We believe this is a challenging endeavor which will require a concerted and thoughtful effort to bring to fruition. Therefore, it is important to break the project down into manageable parts. We believe a viable approach is to divide the development of the platform into two phases.

The first phase should focus on developing the standardized questions to be included in the questions repository and developing a platform that provides guidance to users on how to construct an effective survey, but also allows users to develop a customized survey. However, the survey issuance and response process would be completed outside of this initial platform. While suppliers would still need to respond to each customer’s survey individually, the use of standardized questions should still reduce the amount of effort required to respond these surveys.

For guidance in developing the standard questions during the first phase, we have created a Model Development Guide from our analysis of surveys. The Model Development Guide consists of a detailed look at each question subtopic covered in our analysis. The Guide takes three considerations into account for each subtopic: its percent coverage across all subtopics, the percentage of top five question natures for each subtopic and the percentage of top five question formats for each. This provides initial direction for determining how to word questions on a given subtopic. For example, the “GHG Emissions” subtopic, the most common question natures are “Usage or Output” and “Tracking and Measuring.” These types of questions require organizations to not only have programs in place, but also to record and maintain outcomes of those efforts. The ability to provide such information indicates relatively higher maturity for this aspect of a sustainability program, compared to the question natures of “Policies, Procedures, and Programs” or “Other Internal Actions,” for instance, which tend to ask if a supplier has a stated policy or takes general steps to address an issue, but does not ask for the results from those actions. The Guide also indicates that “GHG Emissions” account for about 10% of all subtopics. This is very high because if all 36 subtopics were covered equally across all surveys, each would have about 3% coverage. Table 11 includes a snapshot of the Model Development Guide. The full Guide is included in Appendix F.

Table 11. Model Development Guide Snapshot

Subtopic (Topic)	Percentage of Total Coverage	Question Nature	Question Format
Hazardous Waste (Emissions, Effluents, and Waste)	5.44%	40% Other Internal Actions	57% Yes-No
		14% Usage or Output	20% Yes-No with Conditional
		12% Policies, Procedures, and Programs	6% Yes-No with Open-ended Explanation
		9% Management	5% Multiple Choice
		8% Regulations, Permits, and Compliance	5% Open-ended
			5% Quantitative

The second phase would then expand the platform to facilitate the survey issuance and response process and store supplier responses in the platform database. This would further reduce the amount of effort required by the suppliers, as their stored answers to most questions could be sent to multiple customers. In addition, once survey requests and responses are stored in the database, this would enable the development of future value-added functionality such as data

analytics and reporting, performance benchmarking within a company's supply chain or across an industry, supply chain mapping, and the marketing of sustainable business practices by suppliers for business development purposes.

Since initially presenting our proposed platform at the Climate Leadership Conference in February 2013, we have received thoughtful feedback from sustainability professionals through multiple channels of communication. The feedback has centered around three main considerations for the project moving forward: the business model, the design of the questions repository, and the technological aspects of the platform. A compilation of the feedback is included in Appendix G, and will be invaluable in terms providing direction to ACCO and its partners as they embark on this effort.

Chapter 5: Conclusion

There is currently a lot of variability among organizations and the ways that they approach the sustainability supply chain disclosure request-response process. This presents an opportunity for further harmonization that could make this process more efficient. Through literature review, interviews, and analysis of 31 sustainability surveys, we were able to identify some of the differences and similarities in survey topics, purpose, and question formats across and within sectors. Through this analysis, we determined that the most appropriate course of action for ACCO is to first develop a list of standardized questions for all relevant environmental sustainability topics, and then develop a web-based platform where the list of questions can be stored in a repository and organizations can create customized surveys from the repository to best address their sustainability areas of interests. This report outlines the first steps of an ambitious and resource-intensive effort to harmonize the environmental sustainability supply chain disclosure process, the success of which will ultimately depend on a coalition of influential stakeholders collaborating in a pre-competitive manner to develop a new platform that is both flexible for survey issuers and reduces the burden of survey responders.

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Appendices

Appendix A – Summary of Existing Supply Chain Disclosure and Reporting Efforts

Organization	Description	Reach	Scope
<p>Carbon Disclosure Project (CDP): Supply Chain</p> <p>Source: https://www.cdproject.net/en-US/Programmes/Pages/CDP-Supply-Chain.aspx</p>	<p>Allows members to collect information on how their suppliers are addressing greenhouse gas emissions.</p>	<p>Membership comprised of over 50 of the world’s largest companies</p>	<p>Climate change, GHG emissions.</p>
<p>Ceres Coalition</p> <p>Source: http://www.ceres.org/about-us/coalition :</p>	<p>Created a Supplier Self-Assessment Questionnaire (SAQ). It is designed to be used as a “conversation starter” with suppliers to assess the sustainability risks in their supply chain.</p>	<p>130 institutional investors, environmental and social-focused organizations and other public interest groups</p> <p>SAQ is available for free</p>	<p>Environment: air, GHG & energy, management systems, other raw materials, packaging, pollution prevention, transportation, waste, water</p> <p>Social: child labor, compensation, discrimination, forced labor, freedom of association, harassment & abuse, health & safety, hours of work, workplace management</p> <p>Governance: accountability, disclosure, grievance & remediation, stakeholder engagement, supplier management</p>
<p>Climate Earth</p> <p>Source: http://www.climateearth.com/</p>	<p>Provides a Supplier Data Collection System as part of its supply chain management solutions</p>	<p>not available</p>	<p>includes GHG, water, waste, toxics, and energy</p>

Organization	Description	Reach	Scope
<p>Ecodesk</p> <p>Source: http://www.ecodesk.com/</p>	<p>Created an open-data sustainability platform for companies and suppliers to publish their sustainability profile</p>	<p>Over 111,000 company profiles</p>	<p>not available</p>
<p>EcoVadis</p> <p>Source: http://www.ecovadis.com/website/!-en/home.aspx</p>	<p>Developed a sustainability rating platform to manage supplier environmental and social performance.</p>	<p>EcoVadis customers comprise of more than 30 of the "Global 500" companies in North America and Europe</p>	<p>21 CSR indicators customized for 150 product categories.</p> <p>Environment: biodiversity, chemicals & waste, customer health & safety, energy & GHG, local pollutions, product end of life, product use, promotion of sustainable consumption, water</p> <p>Labor: career management, child & forced labor, discrimination, employee health & safety, fundamental human rights, labor relations, working conditions</p> <p>Fair Business: anti-competitive practices, corruption & bribery, fair & responsible, marketing</p> <p>Suppliers: suppliers & environment, suppliers & social</p>
<p>Electric Utility Industry Sustainable Supply Chain Alliance (EUISSCA)</p> <p>Source: http://www.euissca.org/</p>	<p>Created standard Environmental RFP Questions that members can incorporate into their RFP process.</p>	<p>Membership comprised of 15 electric utilities in the U.S.</p> <p>RFP question</p>	<p>energy, general environmental impacts, GHG emissions, policy & environmental management, waste & materials management, water</p>

Organization	Description	Reach	Scope
default.aspx		available for free	
<p>Electronic Industry Citizenship Coalition (EICC)</p> <p>Source: http://www.eicc.info/</p>	<p>Developed a self-assessment questionnaire (SAQ) that can be used to evaluate either member's own operations or a supplier's.</p>	<p>Membership comprised of over 70 electronic manufacturers, software firms, ICT firms, and associated manufacturing service providers.</p> <p>List of questions available for free, but scorable online version available to members only.</p>	<p>Environment: air, hazardous substances, permits, pollution prevention, product content, waste water & solid waste</p> <p>Labor: child labor, forced labor, freedom of association, health & safety, humane treatment, non-discrimination, wages & benefits, working hours</p> <p>Ethics: disclosure, fair business practices, improper advantages, integrity, intellectual property, protection of identity</p>
<p>Electronics - Tool for Accountable Supply Chains (E-TASC)</p> <p>Source: http://e-tasc.achilles.com/</p>	<p>E-TASC is a web-based platform for that members can use for evaluating and managing supply chain risk.</p>	<p>Subscribers comprised of over 170 companies, primarily from the ICT sector</p>	<p>environmental, ethics, health, labor, safety</p>
<p>Hospitality Sustainable Purchasing Consortium (HSP)</p> <p>Source: http://www.hspiconsortium.com/</p>	<p>Created a web-based scorecard (HSP Index) that evaluates the sustainability performance of suppliers.</p>	<p>Membership comprised of over 30 companies associated with the hotel and hospitality industry</p>	<p>corporate social responsibility, environmental operations, product sustainability</p>
<p>International Aerospace Environmental Group (IAEG)</p>	<p>Was convened address the increased burden from supply chain information and requests.</p>	<p>Membership comprised of 25 companies associated with the</p>	<p>has not created standard survey yet</p>

Organization	Description	Reach	Scope
Source: http://www.iaeg.com/		aerospace industry	
OneReport Source: http://www.one-report.com/	OneReport is a CSR information management and reporting platform. Allows users to enter CSR information once and send out to various requesting organizations.	OneReport customers include Anheuser-Busch InBev, Biogen Idec, Dell, Hess Corporation, IBM, Johnson Controls, Microsoft Corporation, Occidental Petroleum, State Street Corporation, The Coca-Cola Company, and many more.	covers nearly 20 research and rating agencies and frameworks such as Calvert Group, EIRIS, MSCI, SAM, GRI, CDP, and UN Global Compact
Pharmaceutical Supply Chain Initiative (PSCI) Source: http://www.pharmaceuticalsupplychain.org/	Developed the Self-Assessment Questionnaire for Pharmaceutical Industry Suppliers	Membership comprised of AstraZeneca, Bayer, Biogen Idec, Bristol-Myers Squibb, Covidien, Lilly, GlaxoSmithKlein, Johnson & Johnson, Merck, Novartis, Novo Nordisk, Pfizer, Roche, and Sanofi SAQ is available for free	ethics, labor, environmental, health & safety, management systems
Practice Greenhealth Source: http://practicegreenhealth.org/	Created the Standardized Environmental Questions for Medical Products.	Membership comprised of over 675 healthcare-related organizations	natural resources, chemicals

Organization	Description	Reach	Scope
		Questionnaire is available for free	
<p>Supplier Ethical Data Exchange (Sedex)</p> <p>Source: http://www.sedexglobal.com/</p>	<p>Sedex is the largest platform for sharing ethical supply chain data, and aims to reduce the burden on suppliers.</p>	<p>Membership comprised of more than 27,000 organizations across 23 industry sectors</p>	<p>Environment: energy, GHG emissions, waste, water</p> <p>Labor: child labor, discrimination, entitlement to work, forced labor, freedom of association, humane treatment, regular employment, safety & hygiene, subcontracting, wages & benefits, working hours</p> <p>Business practices: bribery, corruption, ethics, whistle-blowing</p>
<p>Sustainable Apparel Coalition (SAC)</p> <p>Source: http://www.apparelcoalition.org/</p>	<p>Created the Higg Index, which in addition to other uses, aims to standardize how environmental performance of apparel products across the supply chain is measured.</p>	<p>Membership comprised of over 50 apparel/footwear brands, retailers, suppliers, industry affiliates, and non-profit/government/education organizations</p>	<p>management program, energy, GHG emissions, water, air, waste, pollution prevention, supplier tracking, chemicals, packaging, transportation, product end of life</p>
<p>Together for Sustainability (TfS)</p> <p>Source: http://www.ecovadis.com/tfs-initiative/l-en/</p>	<p>TfS is sustainable supply chain initiative for the chemicals industry. Members use EcoVadis' platform to share sustainability assessment and audit data.</p>	<p>Membership comprised of BASF, Bayer Material Science, Evonik Industries, Henkel, Lanxess, Solvay</p>	<p>See EcoVadis</p>

Appendix B – Supply Chain Disclosure Interview Questions

General:

1. Which function or department in your company does your job position reside?
2. Is the sustainability survey request/response process a major responsibility for your job position?
 - a. What requires more time, sending out surveys and collecting responses, or responding to surveys received from customers and other stakeholders?
 - b. How does it affect your other work responsibilities?

Creating/issuing surveys:

1. What are the key drivers behind the initiative to issue supply chain surveys?
2. Which suppliers do you issue the survey to?
 - a. What are your criteria for selecting survey recipients among your suppliers (e.g., any cut-off criteria)?
3. What categories of sustainability are included in your survey?
 - a. How did you compile the list of questions in the survey (e.g. is it based on any standard or framework)?
4. When do you issue the surveys and how often?
 - a. How was that determined?
5. What process is used for collecting survey responses (e.g. email, online repository, Excel)?
6. How are surveys responses compiled and analyzed?
 - a. What are the challenges for analyzing qualitative vs. quantitative data in survey responses?

Decision making from survey results:

1. How are survey results used to inform decisions within your company?
2. How valuable are the survey results to your company? (Not Valuable, Valuable, Very Valuable)
 - a. In what ways does your company find them valuable?
3. Are there specific questions in the survey that are more important or relevant than others?
4. Are the survey results summarized in an effective and easily understood way?
 - a. How could it be improved?

Responding to surveys:

1. About how many people work on completing survey responses?
2. How long does it take to respond to a survey on average?
3. About how many surveys do you receive per year?
 - a. How often do you receive surveys from them and when?
4. If you respond to surveys on a selective basis, about what percentage of surveys do you respond to?
 - a. What is the selection criteria (in other words, why do you think responding to some surveys are important, while others are not)?
5. Which companies, organizations or industry alliances do you receive surveys from related to sustainability performance?
6. How difficult is it to fill out these surveys?
 - a. How would you rank it? (Not difficult, difficult, very difficult)
 - b. What aspects are difficult?
7. What is the process for collecting and organizing the performance data required for completing the surveys?
8. What percentage of the organizations issuing these surveys specifically communicates how these results will be used?
 - a. If it is communicated, how are these results used?

Wrap-up:

1. In your opinion, what could be changed about this whole process that would make your life easier?
2. In your opinion, do you think standardization of supply chain surveys across your industry or across industries is feasible?
 - a. Why or why not?

Appendix C – Summary of Survey/Question Categories and definitions

C. 1. Survey Level Analysis

Survey Level Analysis			
Purpose/Intent	Survey Type	Survey Level	Industry
Audit/track supplier	Aggregate	Facility	Aerospace
Rate/score product	Company-specific	Organization	Aggregate
Rate/score supplier		Product	Automobiles and Components
Start dialogue with supplier			Consumer Durables and Apparel
Unspecified			Energy
			Food Beverage
			Healthcare/Pharmaceuticals
			IT/Telecomm
			Materials
			Miscellaneous
			Municipal
		Retailing	
		Universities	

C. 1. Question Format

Question Format
Check all that apply
Multiple choice
Open-ended
Quantitative
Quantitative with open-ended explanation
Scale
Yes-No
Yes-No with open-ended explanation
Yes-No with quantitative
Yes-No with conditional (parent)
Yes-No with conditional (child)

C. 2. Question Nature

Question Nature	Definition
3rd-party verification/audit	Related to internal or external/third party audits, verification, assurance, inspections
Certifications and labels	Related to any question in which the word certifications or labels is used, or if the question refers to specific certifications, like FSC or ISO 14000 series
Communications	Related to communications in terms of if and how documents are made publically available, if information is published, if information is made available in the local language of operations, if information is communicated in a way that can be understood by all levels of workers
External collaboration	Related to how companies collaborate with external organizations, including government, working groups, industry consortia, community organizations. Also includes opportunities for collaboration with issuing company
Frameworks and standards	Related to specific frameworks or standards, such as GRI, or codes of conducts
Geography	Related to location of facilities and material sources, where treatment is occurring
Goals and targets	Related to goals, targets, objectives, plans, how the company is performing relative to goal/target, if and how often the company is reviewing the goal/target
Governance	Related to management responsibility
Management systems	Related to EHS, EMS, systems, how often the system is updated
Organizational statistics	Related to statistics on spend, number of employees
Other internal actions	Related to any question that does not fit into any other nature, and is a discreet action
Policies, procedures and programs	Related to any question that specifically uses the word policy, procedure, program, method, plan, initiative, all, or requirement in some form
Product characteristics	Related to any question about a company's products, including type of materials, packaging, recycled content, hazardous material use in the product, recyclability
Regulations, permits and compliance	Related to any questions asked to determine if the supplier is compliant with applicable regulations and permits, if the supplier is fully aware of regulations
Reporting and disclosure	Related to any reporting or disclosure to the public, to organizations such as CDP, or about publishing a sustainability report
Risk management	Related to risks in the supply chain, how the supplier manages risk, if there is a risk management system or policy in place
Roles and responsibilities	Related to questions about who specifically in the staff is responsible for various tasks

Sourcing	Related to where and how inputs are sourced
Strategy	Related to how a supplier is accomplishing actions
Tracking and measuring	Related to tracking and measuring any aspect of the organization, including annual reviews, testing
Training	Related to training of employees, the topics covered in the training
Usage or output	Related to the actual usage or outputs of the supplier

C. 3. Topics and Subtopics

Topics and Subtopics Name	Definition
Materials	
Materials Usage	Related to the amount and type of materials used in products and services
Recycled Content	Related to the amount of recycled content in products
Energy	
Energy Use	Related to energy management, usage and consumption
Energy Conservation and Efficiency	Related to energy conservation and efficiency efforts
Energy Use of Products and Services	Related to the energy usage and intensity of products and services
Scope 3 Energy Conservation and Efficiency	Related to energy conservation and efficiency efforts such as business travel, employee commuting, and energy embedded in equipment and materials used by the supplier
Renewable Energy	Related to the amount and type of renewable energy sources used
Water	
Water Withdrawal	Related to water management, usage and consumption
Water Sources	Related to the type and location of water sources
Water Recycling/Re-Use	Related to water recycling and re-use efforts
Biodiversity	
Geographical Location	Related to the geographical location of facilities and operations

Activities Impacting Biodiversity	Related to the nature and extent of a supplier's activity that impacts biodiversity
Emissions, Effluents, and Waste	
GHG Emissions	Related to scope 1 and 2 GHG emissions output and management
Scope 3 GHG Emissions	Related to scope 3 GHG emissions output and management
GHG Emissions Reduction	Related to GHG emissions reduction strategies and efforts
CDP Reporting	Related to specific questions about whether or not the supplier reports to CDP
Ozone-Depleting Emissions	Related to ozone-depleting emissions output and management
Air Emissions	Related to air emissions output and management
Waste	Related to waste output and management
Spills and Contaminations	Related to incidents of spills and contamination
Hazardous Waste	Related to hazardous waste output and management
Water Discharge Volume	Related to the amount of waste water discharged
Water Discharge Impact	Related to waste water discharge impact management
Electronic waste	Related to electronic waste management
Products and Services	
Environmental Impact Mitigation	Related to the environmental impacts of products and services and efforts to minimize them
Product Reclamation	Related to product take-back and recycling efforts
Conflict Minerals	Related to the reporting and disclosure of conflict minerals in products
Substances of Concern	Related to the whether a product contains specific materials or substances that are of concern
Compliance	
Fines and Violations	Related to actual fines or violations related to environmental laws and regulations

Transport	
Transportation	Related to efforts to reduce the impact of transportation and logistics
Overall	
Overall Environmental	Related to general environmental questions that do not fit specifically into any of the other subtopics
Green Buildings	Related to green building programs and implementation
Sustainable Food/Agriculture	Related to sustainable food and agriculture efforts
Supply Chain	
Supplier Screening	Related to efforts to screen and evaluate suppliers during the procurement process
Supplier Management	Related to monitoring and managing the environmental impacts of existing suppliers
Supplier Incidents	Related to actual incidents or grievances about environmental impacts from supplier operations or activities
Collaboration with Survey Issuer	Related to efforts to collaborate with the survey issuer to improve environmental performance

Appendix D – Additional Tables and Graphs

D. 1. Subtopic Coverage by All Surveys

Topics and Subtopics	Percentage (Subtopics relative to topics)	Overall Percentage
Biodiversity	1%	1%
Activities Impacting Biodiversity	17%	0%
Geographical Location	83%	1%
Compliance	3%	3%
Fines and Violations	100%	3%
Emissions, Effluents, and Waste	30%	30%
Air Emissions	4%	1%
CDP Reporting	4%	1%
Electronic Waste	1%	0%
GHG Emissions	28%	8%
GHG Emissions Reduction	16%	5%
Hazardous Waste	8%	2%
Ozone-Depleting Emissions	0%	0%
Scope 3 GHG Emissions	2%	1%
Spills and Contaminations	4%	1%
Waste	25%	8%
Water Discharge Impact	3%	1%
Water Discharge Volume	3%	1%
Energy	9%	9%
Energy Conservation and Efficiency	40%	3%
Energy Use	27%	2%
Energy Use of Products and Services	3%	0%
Renewable Energy	31%	3%
Materials	5%	5%
Materials Usage	68%	3%
Recycled Content	32%	2%
Overall	24%	24%
Green Buildings	0%	0%
Overall Environmental	94%	23%
Sustainable Food/Agriculture	6%	1%
Products and Services	11%	11%
Conflict Minerals	6%	1%
Environmental Impact Mitigation	29%	3%
Product Reclamation	9%	1%
Substances of Concern	57%	7%
Supply Chain	8%	8%
Collaboration With Survey Issuer	15%	1%
Supplier Incidents	7%	1%
Supplier Management	63%	5%
Supplier Screening	15%	1%
Transport	2%	2%
Transportation	100%	2%
Water	6%	6%
Water Recycling/Re-Use	10%	1%
Water Sources	4%	0%
Water Withdrawal	86%	5%
Grand Total	100%	100%

D. 2. Comparison Between Organization-Specific Surveys and Common Aggregate Surveys (by Topics and Subtopics)

Topics and Subtopics	Ceres	SEDEX	Individual Organization Surveys
Compliance	3%	7%	3%
Fines and Violations	100%	100%	100%
Emissions, Effluents, and Waste	38%	18%	27%
Air Emissions	19%	0%	1%
CDP Reporting	4%	0%	6%
GHG Emissions	4%	20%	30%
GHG Emissions Reduction	7%	0%	19%
Hazardous Waste	19%	0%	6%
Spills and Contaminations	11%	0%	1%
Waste	26%	40%	30%
Water Discharge Impact	11%	0%	1%
Water Discharge Volume	0%	40%	2%
Energy	6%	11%	9%
Energy Conservation and Efficiency	75%	0%	38%
Energy Use	25%	67%	25%
Renewable Energy	0%	33%	33%
Materials	4%	4%	5%
Materials Usage	100%	100%	74%
Overall	20%	46%	25%
Overall Environmental	100%	100%	92%
Products and Services	11%	0%	11%
Conflict Minerals	50%	0%	6%
Environmental Impact Mitigation	13%	0%	36%
Substances of Concern	38%	0%	52%
Supply Chain	8%	4%	10%
Supplier Incidents	17%	0%	7%
Supplier Management	50%	100%	61%
Supplier Screening	33%	0%	16%
Transport	1%	0%	3%
Transportation	100%	0%	100%
Water	8%	11%	6%
Water Recycling/Re-Use	33%	33%	8%
Water Sources	33%	33%	0%
Water Withdrawal	33%	33%	92%
Grand Total	100%	100%	100%

D. 3. Telecommunications Industry Snapshot

Topics and Subtopics	Electronics Industry Citizenship Coalition	Company A	Company B	Company C
Biodiversity	0%	0%	0%	0%
Geographical Location	100%	0%	0%	0%
Compliance	3%	0%	0%	4%
Fines and Violations	100%	0%	0%	100%
Emissions, Effluents, and Waste	52%	23%	52%	26%
Air Emissions	27%	0%	0%	0%
CDP Reporting	0%	7%	0%	17%
Electronic Waste	0%	0%	9%	0%
GHG Emissions	1%	57%	55%	50%
GHG Emissions Reduction	0%	14%	0%	0%
Hazardous Waste	31%	7%	0%	0%
Ozone-Depleting Emissions	2%	0%	0%	0%
Scope 3 GHG Emissions	0%	14%	0%	0%
Spills and Contaminations	14%	0%	0%	0%
Waste	11%	0%	36%	33%
Water Discharge Impact	13%	0%	0%	0%
Water Discharge Volume	1%	0%	0%	0%
Energy	3%	17%	14%	4%
Energy Conservation and Efficiency	67%	50%	33%	0%
Energy Use	0%	0%	33%	0%
Energy Use of Products and Services	0%	30%	0%	0%
Renewable Energy	33%	20%	33%	100%
Materials	2%	2%	0%	17%
Materials Usage	75%	0%	0%	75%
Recycled Content	25%	100%	0%	25%
Overall	25%	22%	19%	17%
Green Buildings	2%	0%	0%	0%
Overall Environmental	98%	100%	100%	100%
Products and Services	9%	13%	0%	4%
Conflict Minerals	11%	63%	0%	0%
Environmental Impact Mitigation	11%	13%	0%	100%
Product Reclamation	5%	13%	0%	0%
Substances of Concern	74%	13%	0%	0%
Supply Chain	5%	13%	5%	9%
Collaboration with Survey Issuer	0%	0%	0%	50%
Supplier Management	100%	100%	0%	0%
Supplier Screening	0%	0%	100%	50%
Transport	1%	5%	0%	9%
Transportation	100%	100%	0%	100%
Water	1%	5%	10%	9%
Water Recycling/Re-Use	50%	0%	0%	0%
Water Withdrawal	50%	100%	100%	100%
Grand Total	100%	100%	100%	100%

D. 4. Pharmaceutical Industry Snapshot

Topics and Subtopics	Pharmaceutical Supply Chain Initiative	Company X	Company Y	Company Z
Biodiversity	0%	0%	7%	0%
Activities Impacting Biodiversity	0%	0%	100%	0%
Geographical Location	0%	0%	0%	0%
Compliance	4%	3%	0%	5%
Fines and Violations	100%	100%	0%	100%
Emissions, Effluents, and Waste	38%	18%	27%	38%
Air Emissions	10%	0%	0%	0%
CDP Reporting	0%	33%	25%	0%
Electronic Waste	0%	0%	0%	0%
GHG Emissions	10%	0%	0%	29%
GHG Emissions Reduction	0%	33%	50%	0%
Hazardous Waste	10%	0%	0%	7%
Ozone-Depleting Emissions	0%	0%	0%	0%
Scope 3 GHG Emissions	0%	0%	0%	0%
Spills and Contaminations	30%	0%	0%	7%
Waste	30%	33%	25%	29%
Water Discharge Impact	10%	0%	0%	14%
Water Discharge Volume	0%	0%	0%	14%
Energy	4%	9%	27%	27%
Energy Conservation and Efficiency	100%	67%	50%	0%
Energy Use	0%	0%	0%	60%
Energy Use of Products and Services	0%	0%	0%	0%
Renewable Energy	0%	33%	50%	40%
Materials	0%	15%	0%	0%
Materials Usage	0%	80%	0%	0%
Recycled Content	0%	20%	0%	0%
Overall	46%	15%	0%	19%
Green Buildings	0%	0%	0%	0%
Overall Environmental	100%	100%	0%	100%
Sustainable Food/Agriculture	0%	0%	0%	0%
Products and Services	0%	24%	7%	0%
Conflict Minerals	0%	0%	0%	0%
Environmental Impact Mitigation	0%	13%	100%	0%
Product Reclamation	0%	25%	0%	0%
Substances of Concern	0%	63%	0%	0%
Supply Chain	4%	0%	27%	0%
Collaboration with Survey Issuer	0%	0%	50%	0%
Supplier Incidents	0%	0%	25%	0%
Supplier Management	100%	0%	25%	0%
Supplier Screening	0%	0%	0%	0%
Transport	0%	3%	0%	0%
Transportation	0%	100%	0%	0%
Water	4%	12%	7%	11%
Water Recycling/Re-Use	0%	0%	0%	0%
Water Sources	0%	0%	0%	0%
Water Withdrawal	100%	100%	100%	100%
Grand Total	100%	100%	100%	100%

Appendix E – List of Example Questions Covering the Common Question Natures for Each Topic/Subtopic

Topic	Subtopic	Question nature	Question format	Example (extracted from reviewed surveys)
Materials	Materials Usage	Product characteristics	Check all that apply	<p>What type of sustainable packaging/shipping materials do you use? Please check the items that apply.</p> <p><input type="checkbox"/> Our packaging/shipping materials are recyclable</p> <p><input type="checkbox"/> Our packaging/shipping materials are reusable</p> <p><input type="checkbox"/> Our packaging/shipping materials are bio-degradable</p> <p><input type="checkbox"/> Our packaging/shipping materials are made from 100% post-consumer recycled materials</p>
		Sourcing	Yes-No with conditional	<p>Do you supply products or packaging made from timber products? (If Yes, then -)</p> <p>(a) Can you demonstrate evidence that all products and packaging derived from timber that you seek to supply to us are legally sourced?</p> <p>(b) Can you demonstrate evidence that all products and packaging derived from timber that you seek to supply to us are non-controversially certified as PEFC, FSC or other nationally recognized sustainable forest management standards (such as LEI in Indonesia)? (If you use PEFC, please also answer (d) and (e), otherwise skip to part (e))</p> <p>(c) Can you confirm and demonstrate evidence where ‘PEFC certified’ fiber is included in timber products you supply for our products that your company retains these ‘PEFC rights’?</p> <p>(d) Can you demonstrate evidence that all timber products you supply for our products which are to be labeled as ‘PEFC certified’ are sourced as stated, and do not use any ‘PEFC rights’ accrued elsewhere?</p> <p>(e) Can you demonstrate evidence that all timber products you supply to us be from plantation only sources by 2020?</p>

Topic	Subtopic	Question nature	Question format	Example (extracted from reviewed surveys)
		Other internal actions	Yes-No with conditional	<p>Does your company package/repackage products before shipping to us? If yes:</p> <p>Does your company improve packaging materials through the use of materials made of renewable resources (e.g. such as measured by ASTM D6866 or through materials that meet ASTM D6400 or ASTM D6868)? If yes, please indicate the renewable material you use and show evidence. If no, please explain.</p> <p>Does your company use packaging that is reusable, if applicable? If yes, please document examples of reusable packaging utilized. If no, does your company have plans to implement packaging that is reusable and when?</p> <p>Does your company eliminate unnecessary packaging materials to reduce packaging waste (e.g. through light weighting or through minimizing size to eliminate excess materials)? If yes, please document the unnecessary packaging, boxes or layers eliminated from packaging. If no, does your company have plans to eliminating unnecessary packaging, boxes or layers to and when?</p> <p>Do your company "right-size" packages, optimize material strength, and design packages appropriately for the contents to enable damage-free transportation? If yes, please document the "right-size" packaging completed to enable damage-free transportation. If no, does your company have plans to "right-size" packaging to enable damage-free transportation?</p>
		Policies, procedures and programs	Yes-No with open-ended explanation	Does your company have a goal and programs to Reduce Packaging Material? If yes, please provide goal statement and performance to date
	Recycled Content	Product characteristics	Yes-No with quantitative	Does this product contain postconsumer recycled content (excluding steel)? If yes, what percentage by weight?

Topic	Subtopic	Question nature	Question format	Example (extracted from reviewed surveys)
		Usage or output	Quantitative	What percent of total weight or volume of manufacturing input material is recycled material? (Please specify percentage of weight or volume. If possible, please provide both percentages)
		Other internal actions	Yes-No with open-ended explanation	Does your company use post-consumer recycled input materials for packaging? If yes, please provide examples. If no, please explain.
Energy	Energy Conservation and Efficiency	Policies, procedures and programs	Yes-No with open-ended explanation	Does the facility have a program and/or procedures to reduce the use of energy? If so, please describe.
		Goals and targets	Yes-No with conditional	Do you set and review at least annually improvement targets for reducing energy use (including fuel use for on-site transportation if applicable)? If so: What are your current formal targets? A formal target should include 1) the start date (i.e., "baseline") of the target, 2) the end date of the target, and 3) an exact reduction quantity.
		Tracking and measuring	Check all that apply	Check all that apply regarding energy consumption at your organization: <input type="checkbox"/> Energy consumption is not currently measured and trended <input type="checkbox"/> Energy consumption is measured and trended <input type="checkbox"/> A voluntary program to improve energy efficiency is in place <input type="checkbox"/> An energy efficiency goal has been established <input type="checkbox"/> Renewable energy is utilized as part of meeting energy needs
		Other internal actions	Yes-No with open-ended explanation	Can you demonstrate evidence of projects completed to reduce your corporate greenhouse gas emissions and / or energy use?
	Energy Use	Usage or output	Quantitative	Please state how much energy in the following forms has your organization consumed during the reporting year? (All units in MWh) Fuel Electricity Heat Steam Cooling

Topic	Subtopic	Question nature	Question format	Example (extracted from reviewed surveys)
		Tracking and measuring	Yes-No	Does this site track and measure, at least annually, energy use from all sources, including energy used on-site (direct) and purchased energy (indirect)? If no, please specify what energy use you do not track.
	Energy Use of Products and Services	Product characteristics	Yes-No with quantitative	Can the company provide energy intensity data in MWh/\$ for products sold to us?
		Other internal actions	Yes-No with open-ended explanation	Does your company have efforts to improve the energy efficiency of equipment and products that you sell to us (for example, energy efficiency targets, Energy Star ratings, etc.). If yes, please describe.
	Renewable Energy	Usage or output	Multiple choice	Please estimate the percent of your energy mix that is obtained from alternative or renewable energy sources, such as solar, wind, bio-fuels, and geo-thermal.
		Goals and targets	Yes-No with conditional	Have you set a target for the use of renewable or alternative forms of energy? If yes, have you developed a strategy to reach this target?
		Other internal actions	Yes-No	Do you currently use "green" or alternative forms of energy? (i.e. solar, wind, hydroelectric, hybrid vehicles, etc...)
		Policies, procedures and programs	Yes-No with open-ended explanation	Does your company have any initiative or program to use renewable energy [i.e., biomass, solar, wind, or purchase renewable energy certificates (RECs)]? If yes, please provide details
Water	Water Recycling/Re-Use	Usage or output	Quantitative	Please provide the percentage of Water Volume Recycled
		Other internal actions	Yes-No with open-ended explanation	Do you reuse "Grey" water or other water which may have been previously used? Please give details.
		Policies, procedures and programs	Yes-No with open-ended explanation	Does the facility have a program and/or procedures to reduce water use or reuse/recycle water? If yes, please describe.
	Water Sources	Geography	Yes-No	Does the facility identify the sources of its water (e.g. aquifers, municipal water sourced from local water body, harvested rainwater, etc.)?
		Risk management	Yes-No	Does the company assess external supply and quality risks related to these water sources?

Topic	Subtopic	Question nature	Question format	Example (extracted from reviewed surveys)
		Usage or output	Yes-No with open-ended explanation	Does this site identify its sources of water? If so, what are this site's primary water sources (e.g., municipal mains, surface water, groundwater, recycled water, etc.)? List up to 10.
	Water Withdrawal	Goals and targets	Yes-No with open-ended explanation	Does the facility have set targets to reduce water consumption? If yes, what are the targets?
		Usage or output	Quantitative with open-ended explanation	(Input/Withdrawal) Water Usage Unit of Measure Scope Data Current Year Past Year Comments
		Policies, procedures and programs	Yes-No with open-ended explanation	Do you have any plans / initiatives to reduce water consumption or to increase efficiency of water usage? Please give details.
		Tracking and measuring	Yes-No	Are you measuring water use at this site, at least annually, from all water sources (e.g., municipal mains, surface water, groundwater, recycled water, etc.)?
		Reporting and disclosure	Yes-No	Does Supplier measure and publicly report on the total water usage for the operations within its Operational Control?
Biodiversity	Activities Impacting Biodiversity	Policies, procedures and programs	Yes-No with open-ended explanation	Does your company have a biodiversity policy? If yes, please provide the policy.
	Geographical Location	Geography	Yes-No	Do you know the geographical location of all the facilities that produce your product(s)?
		Tracking and measuring	Yes-No	Does your company know the locations of 100% of the facilities that produce your products?
Emissions, Effluents, and Waste	Air Emissions	Management systems	Yes-No	Does your facility have a program and/or procedures for management of airborne emissions, including monitoring, characterization, control, and treatment?

Topic	Subtopic	Question nature	Question format	Example (extracted from reviewed surveys)
		Usage or output	Yes-No with conditional	Do you have demonstrated evidence of reduced quantity of air emissions for this site? The air emissions reductions must be "normalized". See "More Info" for additional information. Please explain your air emissions reduction achievement. Please include 1) the exact amount of emissions that were reduced, 2) which sources of emissions were reduced, and 3) over what years your facility achieved the reduction.
		Regulations, permits and compliance	Yes-No with open-ended explanation	Are permits for airborne emissions required for your facility operations? If so, please list the types of emissions and their permits?
		Goals and targets	Yes-No with open-ended explanation	Does the facility have targets in relation to reducing air emissions? If yes, what are the targets? Please include 1) the quantity of reduction goal; 2)units; 3)start date and end date.
		Policies, procedures and programs	Yes-No	Does your facility have a process to identify and measure all air emissions from your facility?
	CDP Reporting	Reporting and disclosure	Yes-No	Have you reported your greenhouse gas emissions to the Carbon Disclosure Project (CDP)?
	Electronic Waste	Policies, procedures and programs	Yes-No with open-ended explanation	Does Supplier have a publicly available plan (with targets for improvement) to ensure reuse and recycling of used electronics? If so, please provide link.
	GHG Emissions	Tracking and measuring	Yes-No	Does your organization track enterprise greenhouse gas emissions?
		Usage or output	Quantitative	Please describe your gross combined Scope 1 and 2 emissions for the reporting year in metric tonnes CO2e per unit currency total revenue
		3rd-party verification/audit	Yes-No with open-ended explanation	Does Supplier have its greenhouse gas emissions assured/verified externally? If "Y", please attach your statement of assurance/verification" (ISO 14064-3 is the standard for carbon assurance reporting)
		Reporting and disclosure	Yes-No with open-ended explanation	Does your company participate in any reporting initiatives for carbon emissions? If yes, please specify which one(s):

Topic	Subtopic	Question nature	Question format	Example (extracted from reviewed surveys)
		Goals and targets	Yes-No	Do you set and review (at least annually) improvement targets for reducing greenhouse gas (GHG) emissions?
		Frameworks and standards	Multiple choice	Please give the name of the standard, protocol or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions:
	GHG Emissions Reduction	Goals and targets	Yes-No with open-ended explanation	Did you have an emissions reduction target that was active (ongoing or reached completion) in the reporting year? If you have an absolute target: Please provide details of your absolute target
		Policies, procedures and programs	Yes-No	Does your company have programs to reduce Greenhouse Gas (GHG) Emissions? If yes, please provide details.
		Tracking and measuring	Check all that apply	Check all that apply regarding greenhouse gas (GHG) emissions at your organization: _ GHG Emissions are not currently measured _ GHG emissions are measured and trended _ A voluntary commitment to reduce GHG emissions has been established _ A GHG reduction emissions reduction program is in place _ GHG emissions are publicly reported
		Usage or output	Yes-No with open-ended explanation	Do you have demonstrated evidence of reducing the amount of greenhouse gas (GHG) emitted for this site beyond the reductions directly linked from reducing normalized energy use? The GHG reductions must be "normalized". See "More Info" for additional information.
		Other internal actions	Yes-No	Have your company retrofitted your facilities, or replaced your fleet, or made process improvements to decrease GHG emissions and energy use?
		Strategy	Yes-No	Is climate change integrated into your business strategy?
		Roles and responsibilities	Open-ended	Please identify the position of the individual or name of the committee with the responsibility in GHG emissions reduction.
	Hazardous Waste	Other internal actions	Yes-No	Does the facility maintain up-to-date material safety data sheets (MSDS) for all hazardous substances used on-site?

Topic	Subtopic	Question nature	Question format	Example (extracted from reviewed surveys)
		Policies, procedures and programs	Yes-No with open-ended explanation	Do you have any plans / initiatives to decrease the amount of hazardous waste? Please give details.
		Usage or output	Quantitative	What is the quantity (in kg) of hazardous materials that is on-site? (Include all flammables, combustibles, corrosive reactive, toxic gasses, radioactive, biological and hazardous waste materials.)
		Management systems	Yes-No	Does the facility have a system in place to address pollution prevention and management of hazardous and potentially hazardous substances?
		Regulations, permits and compliance	Yes-No	Are permits for chemical handling and/ or storage required for your facility operations?
		Goals and targets	Yes-No with open-ended explanation	Does the facility set targets in relation to eliminating or reducing hazardous substances on-site? If yes, what are the targets?
		Training	Yes-No	Does your facility provide hazardous material training to workers?
	Ozone-depleting Emissions	Usage or output	Yes-No	Are the following emissions generated at your facility: Ozone depleting substance emissions?
	Spills and Contaminations	Policies, procedures and programs	Yes-No	Does your emergency program include the following: Identification of Hazardous Releases or Exposures?
		Regulations, permits and compliance	Yes-No with open-ended explanation	Has your organization had any reportable spills in the past year? If yes, how many?
		Other internal actions	Yes-No with open-ended explanation	Does your company have any on or off-site liabilities (e.g. contaminated land / groundwater) which can affect the site license to operate? If yes, please elaborate.
		Training	Yes-No	Do you train all relevant personnel (employees, contractors, emergency response team, etc.) at this site on formalized and documented procedures regarding: 1) how to handle, transport, use, and store hazardous substances and 2) how to manage and respond to spills, in their respective work areas?

Topic	Subtopic	Question nature	Question format	Example (extracted from reviewed surveys)
		Communications	Yes-No	Does your emergency program include the following: Procedures for External Communication and Reporting?
	Waste	Policies, procedures and programs	Yes-No with open-ended explanation	Does Supplier have a publicly available, active recycling program (including reuse or recycling of used electronics) with targets for improvement in operations within its Operational Control?
		Usage or output	Quantitative	In the previous FY, what percent of total waste generated by your company and its subsidiaries was recycled or reused?
		Tracking and measuring	Yes-No with open-ended explanation	Do you measure and record, at least annually, waste generated from all waste streams at this site? What are this site's most significant waste streams? List up to 10.
		Goals and targets	Yes-No with open-ended explanation	Does your company have a goal and programs to Reduce Waste Generation? If yes, please provide goal statement and performance to date
		Management systems	Yes-No	Does the facility have a management system regarding disposal of solid waste?
		Other internal actions	Yes-No	Can you demonstrate evidence of projects completed to improve disposal options, reduce hazardous waste, correctly store or reduce waste generated by your company?
		Water Discharge Impact	Management systems	Yes-No
	Other internal actions		Yes-No with open-ended explanation	Does the facility treat wastewater prior to off-site discharge? If yes, what is the standard?
	Policies, procedures and programs		Yes-No with open-ended explanation	Do you have a contingency (or backup plan) in case the treatment equipment or systems malfunction? If so, please describe briefly.
	Regulations, permits and compliance		Yes-No	Are permits for industrial wastewater discharge required for your facility operations?
	Geography		Yes-No with open-ended	Is any treatment is occurring off-site? If so, what is the treatment facility used (name and location)?

Topic	Subtopic	Question nature	Question format	Example (extracted from reviewed surveys)
			explanation	
	Water Discharge Volume	Usage or output	Quantitative with open-ended explanation	(Output/Discharge) Water Usage Unit of Measure Scope Data Current Year Past Year Comments
		Tracking and measuring	Yes-No	Do you measure, at least annually, wastewater at this site from all wastewater generation sources?
Products and Services	Conflict Minerals	Policies, procedures and programs	Yes-No with open-ended explanation	Does your company have a sourcing policy and procedures to address conflict minerals in your supply chain? If no, please explain.
		Regulations, permits and compliance	Yes-No with open-ended explanation	In order to support your company and/or your suppliers compliance with Conflict Minerals regulation (Section 1502 of the Dodd-Frank Wall Street Reform and Consumer Protection Act) has your company taken any actions such as policy creation/revision, supplier engagement and data collection request, due diligence, industry cooperation initiatives, surveys or IMDS reporting of Conflict Minerals content? Please describe:
		Management systems	Yes-No	Does the facility have a policy statement and/or management system that address conflict minerals?
	Environmental Impact Mitigation	Certifications and labels	Yes-No with open-ended explanation	Has your company obtained 3rd party certifications (ex. EPA - ENERGY STAR) for any of the products that you sell to us? If yes, please provide documentation on existing 3rd party certifications. If no, does your company plan to pursue obtaining any 3rd party certification?
		Product characteristics	Yes-No with open-ended explanation	Do you sell products/materials to us that take into account some elements of sustainability? If yes, please describe.
		Other internal actions	Yes-No with open-ended explanation	Do you utilize lifecycle assessments and/or Design for the Environment Principles in the design of your product/material to assure sustainability? Provide details.

Topic	Subtopic	Question nature	Question format	Example (extracted from reviewed surveys)
		Policies, procedures and programs	Yes-No with open-ended explanation	Are there plans or activities to improve existing products or production process with regard to environment impact (taken the whole life cycle into consideration)? If yes, please describe.
		Reporting and disclosure	Yes-No with open-ended explanation	Are reports on Life Cycle Assessments, Environmental Product Declarations etc. available? If so, please attach.
	Product Reclamation	Policies, procedures and programs	Yes-No with open-ended explanation	Do you offer any end-of-life product take-back programs, including electronics? If so, please list all items you take back for responsible recycling, donation, or reuse, and outline the process for participating in the program.
		Product characteristics	Yes-No with open-ended explanation	Can your product be easily recycled, reused or disposed of in a safe manner? If yes, please provide details.
	Substances of Concern	Product characteristics	Yes-No	Will this product be classified (on its own or when aggregated) as non-hazardous waste according to EPA's RCRA when disposed? (under 40 CFR 261.31-33)?
		Regulations, permits and compliance	Yes-No	Are your company's products REACH (Registration, Evaluation, Authorization of Chemicals) Compliant, including REACH Article 67?
		Other internal actions	Yes-No	Has your facility established a list of materials (e.g. lead, mercury, cadmium, CFCs, flame retardants) that are regulated or controlled in the products that you manufacture?
		Communications	Yes-No	Will you update information about articles you deliver regarding the candidate listed substances for authorization once a year?
		Policies, procedures and programs	Yes-No with open-ended explanation	Does your facility have a program to phase out controlled materials from its product within a specified time period, consistent with international legislation on restriction of hazardous substances? If yes, please explain
	Compliance	Fines and Violations	Regulations, permits and compliance	Yes-No with open-ended explanation

Topic	Subtopic	Question nature	Question format	Example (extracted from reviewed surveys)
Transport	Transportation	Policies, procedures and programs	Yes-No with open-ended explanation	Do you have any plans initiatives to reduce Transport emissions or to increase efficiency of Transport? Please give details.
		Other internal actions	Check all that apply	What does your company do to minimize the environmental costs associated with shipping? Please check the items that apply.
		Sourcing	Yes-No	Do you purchase service from shipping/delivery companies that have taken steps to reduce their GHG emissions.
Overall	Green Buildings	3rd-party verification/audit	Yes-No with open-ended explanation	We operate in third party verified green buildings and have developed a plan to meet third party verified standards (such as LEED, BREEAM, etc.) in as many of our facilities as possible. Please specify the verification system :
	Overall Environmental	Policies, procedures and programs	Yes-No with open-ended explanation	Do you have an environmental policy? If yes, please attach or provide a link to it on your web site.
		Reporting and disclosure	Yes-No with open-ended explanation	Does your company measure and publicly report Environmental Information (i.e., annual environmental, sustainability, or corporate socially responsible (CSR) report)? If yes, please provide a copy or link
		Certifications and labels	Yes-No with open-ended explanation	Does the facility have up-to-date ISO 14001, RC 14001, or EMAS certification? Please list relevant certifications:
		Management systems	Yes-No with open-ended explanation	Do you have a formal environmental management system or program aimed at understanding and continually improving this site's environmental impacts? Please describe your environmental management program's overall policy/ strategy that guides decision-making.
		Goals and targets	Yes-No with open-ended explanation	Does your company have any publicly-stated environmental goals? (exclude internal goals) If answered yes, briefly describe what they are.

Topic	Subtopic	Question nature	Question format	Example (extracted from reviewed surveys)
		Other internal actions	Yes-No with open-ended explanation	Has your firm received any awards for environmental stewardship? If yes, describe.
		Tracking and measuring	Yes-No with open-ended explanation	Do you know what this site's environmental impacts are (positive or negative)? What are this site's most significant impacts?
		Frameworks and standards	Yes-No with open-ended explanation	Do you participate in any public reporting, such as through the Global Reporting Initiative (GRI, www.globalreporting.org), Ceres, or similar programs? If yes, please list.
		3rd-party verification/audit	Yes-No with open-ended explanation	Are this site's environmental management systems certified and/or audited by an independent third party auditor or an accredited internal auditor? If certified, what international standard/ framework was used for certification? If an audit was conducted, who conducted the audit and was it an internal or external auditor?
		Regulations, permits and compliance	Yes-No with open-ended explanation	Does Supplier's environmental policy promote operating in a manner that protects the environment and ensures compliance with all of the following: all applicable environmental laws, regulations and standards (including laws related to air emissions, water discharges, hazardous waste disposal, environmental permitting and reporting, and product labeling and warning requirements)? Providing documentation is required to meet criteria.
		Roles and responsibilities	Yes-No with open-ended explanation	Does the facility have a management representative assigned responsibility for assuring compliance with environmental laws, regulations, and codes? List the name(s) and title(s):

Topic	Subtopic	Question nature	Question format	Example (extracted from reviewed surveys)
	Sustainable Food/ Agriculture	Sourcing	Yes-No with conditional	Do you supply food product/s? (If Yes, then -) (a) Can you demonstrate evidence that no “Artificial Colors” are used, where a suitable natural color is available, or, if no suitable natural alternative currently exists, have you made a written phase out commitment for the artificial colors? (b) Can you demonstrate evidence that the six undesirable preservatives (benzoate preservatives (210-218), sulphites (220-228), propionates (280-283) and synthetic antioxidants 310-312 and 319-320) are used as ingredients in your product, where a suitable natural alternative exists, or, if no suitable natural alternative exists, have you made a written phase out commitment for the preservatives?
		Goals and targets	Yes-No	Does your company have a goal to steadily increase employee access to local, sustainable food in your cafeterias and vending areas?
Supply Chain	Collaboration With Survey Issuer	External collaboration	Yes-No with open-ended explanation	Are there additional sustainability opportunities (alternate materials, new processes, new designs) that you would like to discuss with us? If yes, please add some details/information below.
	Supplier Incidents	Regulations, permits and compliance	Yes-No with open-ended explanation	Are you aware of any concerns that have been publicly raised about your tier 1 suppliers regarding sustainability (labor, ethics, safety, environment, etc.)? If yes, please describe.
	Supplier Management	Policies, procedures and programs	Yes-No with open-ended explanation	Does your company have a compliance program for its suppliers to assess and encourage continuous improvement of performance regarding the aligned code elements?
		Other internal actions	Yes-No with open-ended explanation	Does your organization currently work with its suppliers on their environmental performance and the impact of climate change on their business? (e.g. through purchasing requirements, education, training). If yes, please provide details.
		Communications	Yes-No	Are environmental policies, practices, and expectations communicated to all employees and suppliers in local or appropriate languages?

Topic	Subtopic	Question nature	Question format	Example (extracted from reviewed surveys)
		Tracking and measuring	Yes-No with open-ended explanation	Have you taken steps with your key suppliers to measure and improve or set expectations re: Environmental Sustainability? If yes, please describe or provide a link to the details.
		Regulations, permits and compliance	Yes-No with open-ended explanation	Do you have procedures in place to ensure that suppliers, including labor brokers, operate in compliance with all applicable environmental and labor laws and regulations? If yes, please describe.
		3rd-party verification/audit	Yes-No	Does your company verify its supplier's sustainability performance via (third party) audits?
	Supplier Screening	Policies, procedures and programs	Yes-No with open-ended explanation	Does your company have an established environmentally preferable purchasing and supply chain program? If so, please describe.
		Other internal actions	Yes-No	Does the facility factor supplier's performance on key ESG indicators into its purchasing decisions?

Appendix F – Model Development Guide

Model Development Guide			
Subtopics	Percentage of Total Coverage	Question Nature	Question Format
Biodiversity			
Activities Impacting Biodiversity	0.25%	100% Policies, Procedures, and Programs	33% Yes-No 67% Yes-No with Open-ended Explanation
Geographical Location	0.59%	71% Geography 14% Reporting and Disclosure 14% Tracking and Measuring	43% Open-ended 43% Yes-No 14% Multiple Choice
Compliance			
Fines and Violations	2.60%	97% Regulations, Permits, and Compliance 3% 3rd-Party Certification/Audit	26% Open-ended 26% Yes-No with Open-ended Explanation 16% Yes-No 13% Yes-No with Conditional 6% Quantitative 6% Yes-No with Quantitative
Emissions, Effluents, and Waste			
Air Emissions	4.10%	27% Management Systems 24% Usage or Output 16% Regulations, Permits, and Compliance 10% Goals and Targets 8% Policies, Procedures, and Programs	61% Yes-No 24% Yes-No with Conditional 6% Open-ended 4% Multiple Choice 2% Yes-No with Open-ended Explanation 2% Multiple Choice
CDP Reporting	0.67%	100% Reporting and Disclosure	75% Yes-No 13% Yes-No with Open-ended Explanation 13% Multiple
Electronic Waste	0.25%	67% Policies, Procedures, Programs 33% Other Internal Actions	67% Yes-No 33% Open-ended

GHG Emissions	9.55%	32% Usage or Output 25% Tracking and Measuring 9% Reporting and Disclosure 9% 3rd-Party Verification/audit 8% Goals and Targets	40% Yes-No with Conditional 19% Quantitative 13% Yes-No 11% Open-ended 7% Yes-No with Open-ended Explanation
GHG Emissions Reduction	4.44%	34% Goals and Targets 15% Policies, Procedures, and Programs 13% Tracking and Measuring 9% Usage or Output 8% Other Internal Actions	45% Yes-No with Conditional 23% Yes-No 15% Yes-No with Open-ended Explanation 9% Open-ended 4% Check All That Apply 4% Multiple Choice
Hazardous Waste	5.44%	40% Other Internal Actions 14% Usage or Output 12% Policies, Procedures, and Programs 9% Management 8% Regulations, Permits, and Compliance	57% Yes-No 20% Yes-No with Conditional 6% Yes-No with Open-ended Explanation 5% Multiple Choice 5% Open-ended 5% Quantitative
Ozone-Depleting Emissions	0.17%	50% Regulations, Permits, and Compliance 50% Usage or Output	100% Yes-No
Scope 3 GHG Emissions	0.92%	55% Product Characteristics 18% Frameworks and Standards 9% Policies, Procedures, and Programs 9% Tracking and Measuring 9% Usage or Output	45% Yes-No with Conditional 36% Open-ended 9% Yes-No with Quantitative 9% Quantitative with Open-ended Explanation
Spills and Contaminations	2.43%	41% Policies, Procedures, and Programs 17% Regulations, Permits, and Compliance 10% Other Internal Actions 7% Management Systems 7% Training	62% Yes-No 10% Yes-No with Conditional 10% Open-ended 7% Yes-No with Open-ended Explanation 7% Multiple Choice

Waste	7.20%	24% Usage or Output 20% Policies, Procedures, and Programs 17% Goals and Targets 10% Management Systems 10% Tracking and Measuring	37% Yes-No 17% Yes-No with Conditional 16% Quantitative 13% Yes-No with Open-ended Explanation 7% Open-ended
Water Discharge Impact	2.51%	37% Management Systems 23% Other Internal Actions 13% Policies, Procedures, and Programs 7% Regulations, Permits, and Compliance 7% Usage or Output	47% Yes-No 30% Yes-No with Conditional 10% Multiple Choice 10% Open-ended 3% Yes-No with Open-ended Explanation
Water Discharge Volume	0.84%	80% Usage or Output 10% Goals and Targets 10% Tracking and Measuring	40% Quantitative 30% Yes-No Conditional 10% Multiple Choice 10% Open-ended 10% Quantitative with Open-ended Explanation
Energy			
Energy Conservation and Efficiency	4.10%	31% Goals and Targets 31% Policies, Procedures, and Programs 12% Other Internal Actions 10% Tracking and Measuring 7% 3rd-Party Verification/Audit	38% Yes-No 33% Yes-No with Conditional 12% Yes-No with Open-ended Explanation 7% Open-ended 5% Check All That Apply
Energy Use	2.18%	65% Usage or Output 19% Tracking and Measuring 8% Goals and Targets 4% Organizational Statistics 4% Reporting and Disclosure	54% Quantitative 19% Yes-No with Conditional 12% Yes-No 8% Quantitative with Open-ended Explanation 4% Open-ended 4% Check All That Apply
Energy Use of Products and Services	0.34%	50% Product Characteristics 25% Policies, Procedures, and Programs 25% Other Internal Actions	50% Yes-No 25% Yes-No with Quantitative 25% Open-ended

Renewable Energy	2.35%	43% Usage or Output 18% Other Internal Actions 18% Goals and Targets 14% Policies, Procedures, and Programs 4% Strategy 4% Tracking	32% Yes-No with Conditional 21% Yes-No 18% Quantitative 11% Yes-No with Open-ended Explanation 7% Check All That Apply
Materials			
Materials Usage	2.60%	26% Other Internal Actions 16% Policies, Procedures, and Programs 16% Sourcing 13% Goals and Targets 10% Usage or Output	32% Yes-No 29% Yes-No with Conditional 23% Yes-No with Open-ended Explanation 6% Open-ended 6% Quantitative
Recycled Content	1.09%	38% Product Characteristics 31% Usage or Output 15% Policies, Procedures, and Programs 15% Other Internal Actions	38% Yes-No 23% Yes-No with Quantitative 15% Open-ended 8% Yes-No with Conditional 8% Open-ended 8% Check All That Apply
Overall			
Green Buildings	0.08%	100% 3rd-Party Verification/Audit	100% Quantitative with Open-ended Explanation
Overall Environmental	21.27%	13% Policies, Procedures, and Programs 9% 3rd-party verification/audit 9% Certification and labels 8% Other Internal Actions 8% Management Systems	34% Yes-No 22% Open-ended 19% Yes-No with Open-ended Explanation 14% Yes-No with Conditional 6% Multiple Choice
Sustainable Food/Agriculture	1.68%	95% Sourcing 5% Goals and Targets	95% Yes-No with Conditional 5% Yes-No
Products and Services			

Conflict Minerals	1.09%	46% Policies, Procedures, and Programs 15% Regulations, Permits, and Compliance 8% Management Systems 8% Goals and Targets 8% External Collaboration 8% Other Internal Actions 8% Training	62% Yes-No 16% Yes-No with Conditional 15% Yes-No with Open-ended Explanation 8% Open-ended
Environmental Impact Mitigation	1.93%	26% Other Internal Actions 22% Certifications and Labels 17% Product Characteristics 13% Policies, Procedures, and Programs 4% Communications 4% External Collaboration 4% Goals and Targets 4% Reporting and Disclosure 4% Risk Management	48% Yes-No 30% Yes-No with Open-ended Explanation 22% Open-ended
Product Reclamation	0.75%	78% Policies, Procedures, and Programs 22% Product Characteristics	33% Open-ended 33% Yes-No 33% Yes-No with Open-ended Explanation
Substances of Concern	5.44%	42% Product Characteristics 15% Permits, Regulations, and Compliance 12% Policies, Procedures, and Programs 12% Other Internal Actions 6% Tracking and Measuring 6% Communication	62% Yes-No 14% Yes-No with Open-ended Explanation 12% Yes-No with Conditional 6% Open-ended 3% Multiple Choice 3% Check All That Apply
Supply Chain			
Collaboration With Survey Issuer	0.75%	67% External Collaboration 11% Communications 11% Goals and Targets 11% Policies, Procedures, and Programs	56% Open-ended 33% Yes-No with Open-ended Explanation 11% Yes-No with Conditional

Supplier Incidents	0.25%	100% Regulations, Permits, and Compliance	67% Yes-No with Open-ended Explanation 33% Yes-No
Supplier Management	4.86%	31% Policies, Procedures, and Programs 14% Other Internal Actions 10% Communications 9% Regulations, Permits, and Compliance 7% Frameworks/Standards 7% Strategy	36% Yes-No 24% Yes-No with Open-ended Explanation 19% Yes-No with Conditional 17% Open-ended 2% Check All That Apply 2% Multiple Choice
Supplier Screening	0.75%	56% Policies, Procedures, and Programs 22% Other Internal Actions 11% Sourcing 11% Tracking and Measuring	44% Yes-No 33% Yes-No with Open-ended Explanation 11% Open-ended 11% Quantitative
Transport			
Transportation	1.76%	52% Policies, Procedures, and Programs 19% Other Internal Actions 10% Usage or Output 5% External Collaboration 5% Sourcing	38% Yes-No 33% Yes-No with Open-ended Explanation 10% Yes-No with Conditional 10% Check All That Apply 5% Quantitative 5% Quantitative with Open-ended Explanation
Water			
Water Recycling/Re-Use	0.50%	67% Policies, Procedures, and Programs 17% Other Internal Actions 17% Usage or Output	50% Yes-No 33% Yes-No with Open-ended Explanation 17% Quantitative
Water Sources	0.34%	50% Geography 25% Risk Management 25% Usage or Output	50% Yes-No 25% Yes-No with Conditional 25% Open-ended
Water Withdrawal	4.52%	28% Goals and Targets 26% Usage or Output 15% Tracking and Measuring 13% Policies, Programs, and Procedures 7% Other Internal Actions	31% Yes-No with Conditional 22% Yes-No with Open-ended Explanation 17% Yes-No 15% Quantitative 7% Open-ended

Appendix G – Project Feedback on Next Steps

Over the course of our project, we have received thoughtful and invaluable feedback from a number of interested sustainability professionals regarding the feasibility of a questions repository platform and the practical matters that need to be taken into consideration before embarking on this effort. We have compiled and organized the feedback into three areas, the business model, the questions repository design, and technology.

Business model – Firstly, the working group will have to develop a business plan which details an approach for developing, marketing, and maintaining a new platform. Strategic and operational considerations include:

- There is a gap between the survey request-response process to collect data and whether the collected data is actually being used to make supply chain decisions. Should ACCO first conduct a separate survey to identify the drivers for greening the supply chain, similar to the recently completed survey on GHG reduction drivers.
- Should this effort be divided into smaller phases?
 - Should the initial model focus on efforts that are common to across all industries, rather than industry-specific?
 - Should the initial model focus on just providing standard questions, with other functionality such as storing supplier responses and data analytics considered at a later phase?
- To what extent has the market for this been type of platform been validated?
 - Given the existing universe of supply-chain sustainability efforts/platform, there are elements of political pressure and entrenched businesses.
 - Can this questions repository be developed in a manner that does not infringe upon the entrenched businesses?
 - A number of the current efforts (e.g. DJSI, Ceres, Sedex) cover more than just environmental questions. Can a standardized environmental-only questionnaire or repository gain traction given that most surveys extend beyond environmental issues?
 - What will the uptake be?
- What is an on-going revenue model that would support the platform?
- What is the hook to encourage organizations to adopt and use this platform?
 - The reasons for using this type of platform will be different for different roles (e.g. issuing organizations vs. responding suppliers). Therefore, incentives should be tailored to each different perspective to encourage broader adoption.
 - Example – How can the supplier response rate be increased? During the bid process is where you'll likely see the highest response rates from suppliers.

- Example – For procurement folks, this might be seen as an opportunity to be seen as taking the lead on a compliance initiative.
- At what level within the organization should prospective users be engaged? CFO office, procurement, or sustainability?
- How do we coordinate compliance items (e.g. REACH and conflict minerals) with the other environmental topics?
 - Conflict minerals template from EICC and GeSI has become a standard template. This is an example of our recommendation in action.
 - Are companies sending separate questionnaires for REACH and conflict minerals?
 - Is this skewing our figures/analysis?
 - Are there parallel work streams that we did not account for?

Questions repository design – In order to provide added-value and guidance to organizations which are at different stages of maturity with their supplier engagement process, the repository of questions will need to be structured in a dynamic manner. Possible design considerations include:

- Questions should hone in on what exactly procurement professionals need to know; expected responses to the questions should provide “actionable” data.
 - Perhaps a more a more fundamental review should be conducted determine what questions/data are actionable versus which are “feel good.”
 - The working group should include inputs from suppliers’ perspectives regarding how to ask questions that enable them to provide answers that are actionable and makes it clear as to how the data will be used.
- The repository could be modularized, with one basic module that includes general questions that are likely material to most companies and multiple industry-specific modules.
- The repository could have vertical layering that would move from the more general questions (e.g. questions on reduction plans and goals) to the specific ones (e.g. allocation of scope 3 emissions) and let a surveyor ask for more detailed vertical information depending on their specific interests and purposes. The repository could also have horizontal layering (e.g. covering different parts of a company’s operation or different topics). The layered approach is an important concept to establishing a workable “standardized” survey.
- The questions repository could be organized based on the different stages of surveying maturity and the goals that companies expect achieve. The proposed platform could include the ability to select an option and give the surveying company a recommended base set of questions to work with, which would not overwhelm them with information and allow them to create a path to program maturity. Possible maturity levels could include:

- Initial survey to develop baseline understanding of a company's suppliers' sustainability program maturity and establish an environmental footprint baseline.
- Detailed survey to quantify suppliers' footprint and activities to reduce environmental impact of operations, thereby fully understanding opportunities.
- Surveying to establish preferred supplier lists based on a sustainability scorecard.
- The repository could provide some guidance as to which questions or set of questions should be material and important for a company. For example, surveyors could expand on the possible goals of the surveys, and the platform would, in turn, recommend certain questions. Possible goals could include:
 - Establish a baseline understanding of where their suppliers are with respect to their sustainability program.
 - Engage suppliers and increase the number of suppliers who both measuring are publicly reporting their environmental impact.
 - Ensure that products/materials are sustainably sourced.
 - Mitigating risks associated with climate change are being addresses in order to ensure that they have a reliable supply chain.
 - Identify opportunities to reduce costs through sustainability activities.
 - Product foot-printing - fully understand the environmental foot print of our products and reduce this impact. This might enable a company to market products with this information.
- One of the end goals is to minimize the number of times that suppliers need to complete surveys. One of the recommendations is to store supplier responses which can then be sent to multiple customers. However, there will be some questions that are related to customer-specific activity data (e.g. requesting a supplier to provide GHG emissions attributable to a specific customer). In these cases, suppliers will need to provide unique responses to each customer; these types of questions need to be identified within the repository.
- The repository should allow organizations the ability to rank particular topics higher than others. For example, the repository could allow organizations to customize the relative weighting of each questions (same responses, different scoring).
- Questions should be formatted with controlled responses (e.g. dropdowns or yes/no) and then a comment section for a group of questions. It lets organizations get controlled data and allows the responder to provide additional context to the set of answers.

Technology – Besides the design of the questions repository, questions about the technological infrastructure of the platform have to be considered. The technology components will directly affect the usability of the platform and whether it can be integrated into the existing universe of enterprise, procurement, and sustainability data management and reporting systems. Possible technology-related considerations include:

- Based on past experiences of other efforts to encourage the wide-spread adoption of a questionnaire, if an online system is too complicated or difficult for suppliers to understand and use, it will fail. Therefore, the system should be very user-friendly and aim to be just as easy to complete as a spreadsheet.
 - The Electric Utility Industry Sustainable Supply Chain Alliance has a web-based platform that may be worth investigating.
 - Alternatively, just for consideration, responders could enter responses in a spreadsheet and scripts can be written to pull data from a spreadsheet into database software.
- If responses are stored in a central repository:
 - Where does the data go?
 - Who has access to the data?
 - How are security issues handled? Who is liable?
 - Should there be some type of error checking or data validation mechanism?
 - Can the stored data be extracted from this platform? This can enable further integration with other enterprise or sustainability data management systems.
 - Companies could search this information as a prescreening tool enabling them to select suppliers that they would want to include on a bidders list.
 - Suppliers could use this as a platform to market their services based on their sustainability record/efforts – possibly have a way for suppliers to respond to questions and post their corporate sustainability reports.
- Should interfaces to other platforms be included? For example, should the questions in this repository be made available to be easily imported into other platforms?
- Who should be responsible for administering and maintaining this platform?