

Emerging Trends in Supply Chain Emissions Engagement

“Sometimes smaller suppliers feel that this [environmental management] is an extra cost, so we endeavor to help them appreciate that this is entry into doing business in the twenty-first century and that as our own experience has shown, good environmental management is good for business.”

– Louis R. Ferretti, Project Executive

Product Environmental Compliance & Supply Chain Social Responsibility, IBM

Table of Contents

Emerging Trends in Supply Chain Emissions Engagement

Why Engage Suppliers?

Building Internal Support

Engaging Suppliers: Building Awareness and Gathering Data

Empowering Action: Reducing Supply Chain Emissions

The Road Ahead

Introduction and Background

Over the last decade more companies have gained experience measuring their greenhouse gas (GHG) inventories and setting and achieving GHG emissions reduction targets. Leading companies continue to set ambitious GHG targets and operationalize GHG emissions reduction strategies into their business practices. Today, initiatives such as improving energy efficiency of operations and purchasing green power are more commonplace among leading companies, whereas newer efforts, such as reporting on the materiality of global emissions risks and opportunities to investors are starting to take root.

As companies continue to assess their full environmental impacts, many have found that their supply chain accounts for most of their GHG emissions. Several years ago, select companies began evaluating the emissions risks of their supply chain operations, which contribute to the overall lifecycle GHG emissions of the goods and services they sell. As seen in Figure 1, this is especially true in sectors such as information technology, consumer product manufacturing, and telecommunications, which require robust supply chains.¹ Since 2012, with the publication of supply chain, or ‘Scope 3,’ GHG [Protocol](#) and inventory tools, more companies assessed GHG ‘hotspots’ in their supply chains, including upstream and downstream value chain partners. Today, many recognizable brands in the United States engage their suppliers to quantify the full GHG emissions impact of their business and set targets to reduce supply chain GHG emissions. Among the most visible corporate sustainability initiatives, Walmart announced a companywide goal in April 2017 to reduce its supply chain emissions by one gigaton (one billion metric

¹ “Missing link: Harnessing the power of purchasing for a sustainable future.” CDP Supply Chain Report 2016|2017.

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U.S. Environmental Protection Agency

tons) by 2030 with its Project Gigaton². Additional examples of corporate supply chain engagement and reduction targets include:

- **Johnson & Johnson:** Increase the recyclability of its consumer product packaging to 90 percent to decrease the products' lifecycle emissions by 2020.³
- **Clif Bar & Company:** Request 50 key suppliers to power their operations with at least 50 percent green energy by 2020.⁴
- **General Mills:** Reduce 28 percent of emissions across its entire value chain by 2025.⁵
- **Dell:** Encourage 95 percent of direct materials spend and key logistics suppliers set GHG emissions targets and report their emission inventory by 2020.⁶

² "Walmart Launches Project Gigaton to Reduce Emissions in Company's Supply Chain." Walmart Sustainability. 2017. Source: <https://news.walmart.com/2017/04/19/walmart-launches-project-gigaton-to-reduce-emissions-in-companys-supply-chain>

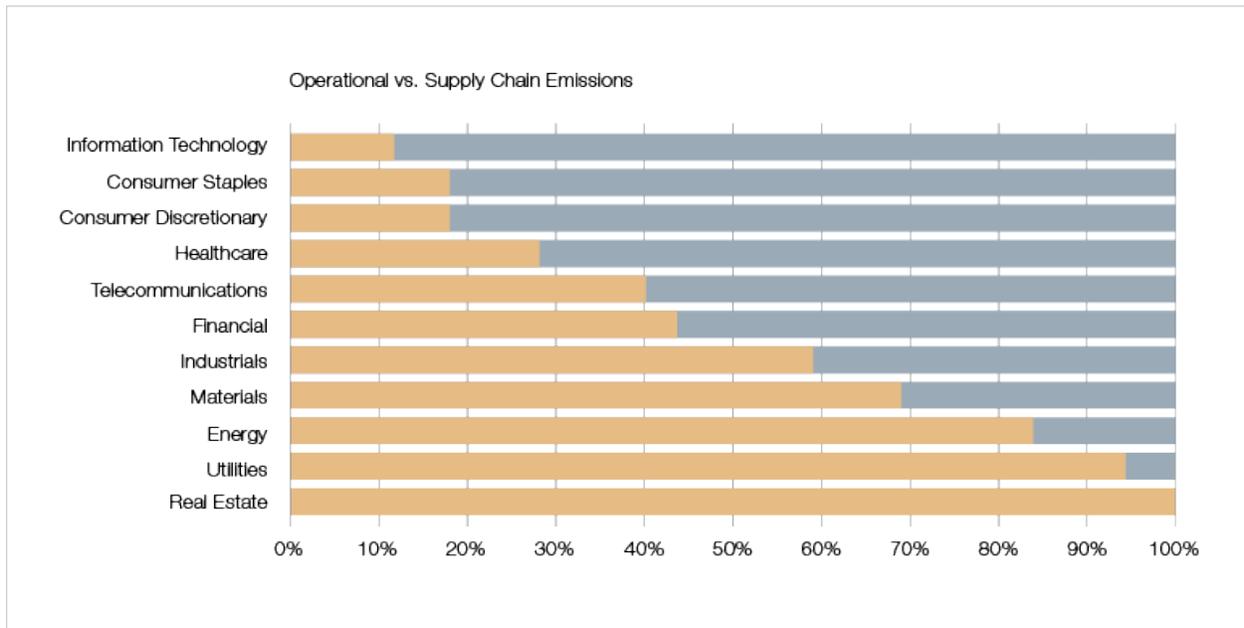
³ Health for Humanity 2020 Goals: Progress Scorecard. Source: http://healthforhumanityreport.jni.com/_document?id=0000015c-cdab-de5a-a15e-efbf0d950000

⁴ "Clif Bar & Company Receives 2017 Climate Leadership Award for Supply Chain Efforts from the U.S. EPA." Source: <http://www.clifbar.com/press-room/press-releases/clif-bar-and-company-receives-2017-climate-leadership-award-for-supply-chain-efforts-from-the-u-s-epa>

⁵ General Mills Global Responsibility 2017. Source: https://globalresponsibility.generalmills.com/images/General_Mills-Global_Responsibility_2017.pdf

⁶ 2020 Legacy of Good Plan, 2017 Annual Update. Dell. Source: <https://www.delltechnologies.com/en-us/microsites/legacyofgood/2017/supply-chain.htm>

Figure 1. Proportion of operational and supply chain GHG emissions by sector⁷



The federal government has also sought to better understand potential impacts from supply chain GHG emissions. As part of the contracting process, suppliers that provide more than \$7.5 million in services to the federal government must disclose if they publicly report their GHG emissions inventories and GHG emissions reduction goals.⁸ If the supplier declares their GHG information is publicly available, the supplier must also provide a functioning link to the information.

This resource presents a brief overview of current trends in supply chain GHG management and provides examples of best and emerging practices in supply chain GHG emissions management to help organizations develop approaches—both internal and external—to reduce their supply chain GHG emissions. It is intended to be used as a primer for organizations to orient and focus their supply chain GHG management efforts, not to provide a comprehensive operational guide for engaging suppliers. In developing this resource, the Center for Corporate Climate Leadership researched existing data and literature on corporate GHG performance and conversed with leading companies actively seeking to reduce their supply chain GHG emissions, building upon new insights gained since EPA released the previous guidance [Managing Supply Chain GHG Emissions](#) in 2010. This resource provides reasons to engage suppliers on reducing their GHG emissions; helps develop the value proposition to gain internal support from both management and peer divisions; offers practical options for engaging suppliers, especially those newer to implementing sustainability-related initiatives; and provides examples of

⁷ “Missing link: Harnessing the power of purchasing for a sustainable future.” CDP. 2017. Source: <https://www.bsr.org/reports/Report-Supply-Chain-Climate-Change-2017.pdf>

⁸ Federal Acquisition Regulation 52.223-22.

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U.S. Environmental Protection Agency

industry collaborations that facilitate technical assistance and/or create environmental guidelines, codes of conduct, or standards to help spur suppliers to reduce their GHG emissions.

In sum, reducing supply chain GHG emissions requires collaboration among customers, suppliers, and third-party organizations to try innovative approaches and solutions. Through internal support from leadership and technical support for suppliers, the companies highlighted throughout this document exemplify those who are actively managing supply chain GHG emissions to promote a more sustainable future.

Why Engage Suppliers?

Companies engage their suppliers to manage and reduce GHG emissions for four primary reasons: 1) to demonstrate their sustainability commitments and retain or enhance their brand's reputation, recognizing that supplier impacts extend to their overall environmental impacts; 2) to reduce costs; 3) to mitigate risk and pursue new opportunities; and 4) to respond to downstream corporate customer, individual consumer and, increasingly, investor queries and demands.

Align Sustainability Commitments

For many companies, supplier GHG emissions are intrinsically linked to the final goods and services they deliver. Therefore, as companies commit to reduce the GHG footprint of their products and services, they also request that suppliers begin aligning to their sustainability goals. For example, consumer food brands' sustainable sourcing goals hinge on their suppliers' efforts to reduce GHG emissions (e.g. General Mills is dependent on its supply chain to meet its goal of sustainably sourcing 100 percent of its priority ingredients by 2020⁹). Thus, leading global companies are beginning to develop supply chain GHG emissions reduction goals to meet their sustainability commitments, in addition to setting GHG emissions reduction targets for their own operations. The interdependence between supplier and buyer can be leveraged to launch emissions reduction initiatives that support the bottom line of both parties and achieve sustainability goals.

“Our supply chain is crucial to our final product. We share our best practices with our suppliers, because when they succeed, we all succeed.”

– Jacklyn Watt, Director of Supply Chain Sustainability, Ford Motor Company

⁹ General Mills CSR Report 2016-2017. Source: http://investors.generalmills.com/2017-interactive-annual-report/HTML1/general_mills-ar2017_0010.htm

Reduce Costs

Some leading companies engage with their supply chain on GHG emissions to ensure that key partners implement best-management cost-saving practices, which could lead to eventual cost savings for the companies. Where more financially resilient suppliers then pass on cost savings to companies, these companies gain a competitive advantage, allowing them to pass on those savings further downstream to their customers. In another example, Dell has encouraged participation in [CDP's Action Exchange](#) pilot program, whereby third-party consultants use data from CDP's Supply Chain Information Request responses to provide suppliers with no-cost technical support around strategies to reduce energy usage. From this program, 27 of Dell's suppliers identified 753 energy efficiency opportunities. In 2013, participants in CDP's Action Exchange pilot program saved \$11.5 billion due to emissions reduction activities.¹⁰ Between 2011 and 2016, CDP's Investor Action, determined that a \$5 investment in carbon reduction projects correlated with 1 ton of carbon dioxide avoided (CO₂). The average return on investment for said emission reduction projects was three years.¹¹

By analyzing the sources of emissions within its supply chain, a company may also identify opportunities to directly reduce its own operational costs, in addition to reducing GHG emissions. For example, when Hewlett-Packard switched transportation of its Visual Collaboration Studio products from air cargo to ship cargo, the company saved \$7,000 per shipment as well as 900 tons of CO₂ per shipment.¹² Similarly, by utilizing the rail freight backhaul of a competitor instead of trucking products from New Jersey to Florida, Ocean Spray reduced its fuel consumption by 68 percent and reduced costs by \$200 per load.¹³

Engaging suppliers directly to implement best management practices to decrease GHG emissions may succeed most where high levels of trust exist in the relationship. Conversely, engaging suppliers on reducing operational costs from implementing GHG emissions reduction activities may present challenges and sensitivities where low trust exists between companies and their suppliers. In many industries, suppliers fear that customers will request reduced pricing of goods and services due to potential cost savings. For example, General Motors historically scored poorly on the Supplier Working Relations Index for the automotive industry, an annual survey that measures supplier trust in the automotive industry. However, after implementing its Strategic Supplier Engagement program, General Motors ranked fourth on the index, having shifted from an adversarial relationship to one built on trust and transparency with suppliers. In doing so, General Motors acknowledged improved financial and vehicle performance due to its improved supplier relationships.¹⁴ Where low trust exists among

¹⁰ "CDP Action Exchange." CDP 2013-2014. Source: <https://www.cdp.net/Documents/Guidance/2014/cdp-action-exchange-program-overview-2013-2014.pdf>

¹¹ "Carbon Action." CDP. Source: <https://www.cdp.net/en/investor/carbon-action>

¹² "Smart Moves: Creative Supply Chain Strategies Are Cutting Transport Costs and Emissions" EDF 2012. Source: http://business.edf.org/files/2014/03/smartmoves_07_screen1.pdf p. 4

¹³ "Ocean Spray." Case Study conducted by MIT-EDF. Source: http://business.edf.org/files/2014/03/OceanSpray_factsheet_02_01.pdf

¹⁴ "How they did it: Supplier Trust at General Motors." Source: http://www.scmr.com/article/how_they_did_it_supplier_trust_at_general_motors

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U.S. Environmental Protection Agency

corporate customers and suppliers, these customers may prefer to leverage industry-wide collaborative, sustainability-related initiatives to build capacity among suppliers to implement GHG reduction programs (see Engaging Suppliers section).

Mitigate Risks and Pursue New Opportunities

Managing supply chain GHG emissions effectively can mitigate the risk of damage to brand value, reduce exposure to energy price volatility and other cost increases, and enhance supply chain resilience.

Proactive risk management is an opportunity for competitive advantage and advancing market growth as companies seek to decouple emissions from growth.

Brand Risk

Companies are keenly aware that their proven and transparent reputation for sustainability impacts their brand. For instance, years after Volkswagen confessed to using software to hide the true emissions of its vehicles, whereby its stock price fell 30 percent,¹⁵ it continued to face repercussions for evading diesel emissions standards.¹⁶ Association with less environmentally friendly suppliers can undermine the credibility of firms actively seeking to differentiate their brands through environmental leadership. To protect their carefully curated brands, companies seek relationships with suppliers that “walk the walk” by taking steps to be proactive environmental stewards. For example, in response to concerns that deforestation of tropical rainforests to produce palm oil contributes significantly to global GHG emissions, one citizen-driven campaign, “Say No to Palm Oil,” collected more than 250,000 signatures from consumers vowing to boycott Starbucks’ products until unsustainably sourced palm oil is removed from its supply chain.¹⁷ In 2013, Starbucks committed to sourcing 100 percent sustainable palm oil by 2015, a goal that has now been pushed to 2018.¹⁸ Pharmaceutical companies also currently face international scrutiny for documented harmful impacts found in their supply chains. For example, Pfizer stands accused of polluting rivers in Hyderabad, India’s drug manufacturing capital, with antibiotic and anti-bacterial waste.¹⁹

Brand Opportunity

Global economies are in a transition period as the availability of natural resources diminish and sustainable sourcing becomes common and preferred practice. Thus, branding opportunities can also

¹⁵ “Here’s a timeline of Volkswagen’s tanking stock price.” Source: <http://fortune.com/2015/09/23/volkswagen-stock-drop/>

¹⁶ “Engineering a Deception: What Led to Volkswagen’s Diesel Scandal.” 2017. Source: <https://www.nytimes.com/interactive/2017/business/volkswagen-diesel-emissions-timeline.html>

¹⁷ http://www.saynotopalmoil.com/What_can_i_do

¹⁸ Starbucks Corporation 2016 Report. Published by the Roundtable on Sustainable Palm Oil. Source: <https://rspo.org/file/acop2016/submissions/starbucks%20corporation-ACOP2016.pdf>

¹⁹ “Impacts of Pharmaceutical Pollution on Communities and Environment in India.” 2016. https://www.nordea.com/Images/33-107450/2016%2004_Nordea%20report_final_web_single%20page%20small.pdf

CLIMATE LEADERSHIP

U.S. Environmental Protection Agency

exist as companies seek to decouple GHG emissions from growth. For example, the transportation sector faces scrutiny by shareholders and stakeholders due to its contributions to GHG emissions. In part to improve its reputation and seize opportunities for market growth, the transportation sector has developed electric vehicle alternatives. Consumers are now offered competitively priced electric vehicles, sometimes branded with environmental themes such as the “Leaf” or “Bolt” to emphasize the improved cleanliness of the fuel source. Even mainstream luxury brands, such as BMW, now offer electric models to compete with Tesla. In the last three years BMW has integrated CDP supply chain scores into its procurement process as part of its commitment to Europe’s [Drive Sustainability](#) partnership.²⁰ Products with lower emissions and shorter emissions lifecycles are increasingly preferred by consumers, therefore brands that embrace these products now stand to benefit from future consumer demand.

Risks Associated with Unexpected Costs

Companies also seek to insulate their supply chains from sudden spikes in energy costs or disruptions due to natural resource scarcity, as such risks affect the prices and availability of their goods and services. To insulate supply chains from energy cost fluctuation, leading companies are working with suppliers to ensure they become more energy efficient. For example, Walmart encouraged dairy suppliers to package milk in airtight plastic containers so that Walmart could save energy by using less refrigerated shelving and shippers could save energy by not using refrigerated trucks.²¹ Walmart also facilitated energy reduction efforts in 500 of its manufacturing facilities in China, reducing energy consumption by 45 million kWh and saving \$2.8 million through the Resource Efficiency Deployment Engine tool.²²

Companies with global supply chains must consider how increases in extreme climate-related events can impact business resilience. Thus, asking suppliers to provide data on their GHG emissions helps companies mitigate the risk of global supply chain disruptions and helps increase supply change resiliency. For example, in the fall of 2011, extreme floods in Thailand inundated over 800 industrial parks resulting in a 2.5 percent reduction in global industrial production.²³ The supply chain manufacturing impacts from the Thailand flood reverberated throughout the transportation sector; most notably Toyota lost 240,000 cars and Honda lost 150,000 cars to flood damage. Toyota also lost \$1.25 billion in operating profit alone due to the flood. In response to significant financial loss, Toyota converted its manufacturing supply chain to a regionally independent production system instead of a centralized production system to reduce future supply chain disruptions. Through globalization, as

²⁰ BMW Supplier Management. Source: <https://www.bmwgroup.com/en/responsibility/supply-chain-management.html>

²¹ “Adding Energy Savings in the Supply Chain.” <https://aceee.org/files/proceedings/2015/data/papers/4-55.pdf>

²² Walmart 2016 Global Responsibility Report. Source: <https://corporate.walmart.com/2016grr/enhancing-sustainability/reducing-energy-intensity-and-emissions>

²³ “Flood risks and impacts: A case study of Thailand’s floods in 2011 and research questions for supply chain decision making.” *International Journal of Disaster Risk Reduction*. 2014.

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U.S. Environmental Protection Agency

Toyota's experience demonstrates, supply chain risks are cumulative. The companies that can gather data fastest and identify disruptions or shortages first will have a competitive advantage.

Opportunities to Advance Sustainable Technology

Successful companies are often defined by their ability to adopt and develop new technology to meet customer demands.²⁴ For example, to achieve its goal of being supplied by 100 percent renewable energy, in 2014, Walmart partnered with SolarCity, SunEdison, and Plug Power.^{25,26} To advance existing solar technologies, Walmart and SolarCity developed and piloted two 9-kilowatt batteries and eleven 30-kilowatt batteries in 13 California stores to capture solar energy during peak demand and cloudy days.²⁷ Due to their innovative effort, Walmart received a 2015 Energy Storage North America Innovation Award. Through its partnership with Plug Power, Walmart has replaced over 2,500 forklift lead-acid batteries with GenDrive fuel cells. Plug Power's GenDrive fuel cells run on hydrogen fuel and can be refueled in under a minute, reducing emissions and increasing operational efficiency.²⁸ Advanced recognition, reduced operational costs, and increased efficiency are among several potential opportunities for risk mitigation and decoupling GHG emissions from growth.

Meet Customers, Investor, and Consumer Demand

Increasingly, customers, consumers, and investors are asking companies to provide information on the environmental impacts, including life-cycle GHG emissions, of the products and services they produce and are looking to purchase products that are both good for them, as well as for society. For example, in 2013, 31 major investment funds, representing nearly 1.5 trillion dollars of assets under management, called on food industry giants, including Mars, to improve their supply chain policies and transparency.²⁹ In 2014, Mars published its "Incorporated Deforestation Policy," updated its Supplier Code of Conduct, and launched its Palm Oil Policy. To reduce deforestation in its supply chain, Mars will exclusively source raw materials from suppliers that comply with the following principles: no deforestation of primary forest or areas of high conservation value, no development in high carbon stock forest areas, no

²⁴ Christensen, Clayton M. *The Innovator's Dilemma: When New Technologies Cause Great Firms to Fail*. Boston, MA: Harvard Business School Press, 1997.

²⁵ "Walmart Builds on Leadership of Commercial Solar Deployment and Expands On-Site Solar Energy Projects." 2014. Source: <https://corporate.walmart.com/news/news-archive/2014/11/20/walmart-builds-on-leadership-of-commercial-solar-deployment-and-expands-on-site-solar-energy-projects>

²⁶ "Helping Walmart Meet Sustainability Goals with Fuel Cell Technology." 2015. Source: <https://blog.walmart.com/sustainability/20140516/helping-walmart-meet-sustainability-goals-with-fuel-cell-technology>

²⁷ "Making Solar Possible, Even When the Sun's Not Out." 2015. Source: <https://blog.walmart.com/sustainability/20151020/making-solar-possible-even-when-the-suns-not-out>

²⁸ "Helping Walmart Meet Sustainability Goals with Fuel Cell Technology."

²⁹ Investors push food industry giants for urgent action on transparency." Oxfam America, September 17, 2013. Source: <https://www.oxfamamerica.org/press/investors-push-food-industry-giants-for-urgent-action-on-transparency/>

CLIMATE LEADERSHIP

U.S. Environmental Protection Agency

development on peat lands regardless of depth, and no burning to clear land for new developments or to re-plant existing developments.³⁰

Investors are also demanding that companies address the sustainability of their supply chains. When J.M. Smucker Company (Smuckers) purchased the Folgers coffee brand in 2008, it became one of the five largest coffee buyers in the world. Unlike their coffee competitors Nestlé and Sara Lee, however, Smuckers did not include any discussion of sustainability or resilience in the supply chain for its coffee in its corporate social responsibility (CSR) reports. Concerned by the fragility of coffee crops and the contribution of coffee harvesting to deforestation, Trillium and Calvert Asset Management used their shareholder influence to request that the Smuckers Board provide a report describing how the company would manage the social and environmental risks and opportunities of its coffee supply chain. Denied in 2011, Trillium and Calvert continued pressure until the board approved a new sustainability initiative in 2012. The initiative set a goal for certified coffee to make up 10 percent of the company's total retail purchases by 2016.³¹ Today, Smuckers is the largest purchaser of UTZ-certified coffee in North America.³² UTZ recently merged with the Rainforest Alliance and is now the largest sustainable farming certification program for coffee and cocoa. In 2016 over 567,000 hectares of coffee production were UTZ certified.³³

Recently, stakeholders in the investment community developed the Task Force on Climate-Related Financial Disclosures (TCFD)³⁴ to create voluntary, consistent financial risk disclosures for companies to use when providing GHG emissions risk assessments and corporate resilience strategies to investors, lenders, insurers, and other stakeholders. TCFD was created to consider the physical, liability and transition risks associated with increased global emissions and what information constitutes effective financial disclosures across industries. In June 2017, TCFD released its recommendations for climate-related financial disclosures. Thus, companies with supply chain risks related to GHG emissions that could lead to negative publicity or a sudden increase in costs, may increasingly be asked to share such vulnerabilities with investors.

Companies also understand that they can gain competitive advantage by improving the environmental sustainability of their products and marketing this feature to consumers. In 2017, 16 percent of Americans surveyed made a purchasing choice based on environmental or social performance of a company (up from 6 percent in 2014), whereby the most popular brands included Seventh Generation,

³⁰ <http://www.mars.com/global/about-us/policies-and-practices/deforestation-prevention-policy>

³¹ "TRILLIUM Corporate Engagement Spotlight." 2012. Source: <http://www.trilliuminvest.com/wp-content/uploads/2014/05/Corporate-Engagement-Spotlight-J.M.-Smucker-Company.pdf>

³² 2017 Smuckers digital CSR report: <http://corporateresponsibility.jmsmucker.com/responsible-sourcing/commodity-sourcing.html>

³³ "About Us." UTZ: <https://utz.org/who-we-are/about-utz/>

³⁴ "About the Task Force" Task Force on Climate-Related Financial Disclosures: <https://www.fsb-tcf.org/about/>

CLIMATE LEADERSHIP

U.S. Environmental Protection Agency

ENERGY STAR, Target, Google, Tesla, Amazon, and Honest.³⁵ In another study conducted by Unilever in 2017, one-third of consumers chose to purchase goods featuring social or environmental benefits. Unilever's study also notes that consumers in emerging markets are more likely to have "purpose-led purchasing" habits than those in developed markets. Thus, companies interested in reaching emerging markets, especially those known by their consumer-facing brands, such as Target³⁶, Walmart³⁷, and Clif Bar & Company,³⁸ will likely increasingly take consumer preference for purposeful products into consideration.³⁹

Finally, implementing sustainability-related efforts can also attract and retain talent. According to the 2016 Cone Communications Millennial Employee Engagement Study⁴⁰, companies that engage and invest in CSR (includes sustainability) have a higher ability to appeal to, retain, and inspire Millennial talent. More companies are recognizing that Millennials, more than any other generation, see a company's commitment to responsible business practices as a key factor in their employment decisions.

Building Internal Support

Executive support for managing supply chain GHG emissions and a clear understanding among an organization's leadership of resource needs is critical for supply chain initiatives to succeed. Many companies agree that Chief Executive Officer (CEO) and board-level buy-in is also necessary to drive supply chain engagement programs because they often require other operational changes throughout the organization, such as product design and sourcing. For example, Clif Bar & Company's supply chain program is heavily supported by its founder and both co-owners as the organization aims to build business resulting in minimal or no emissions.

³⁵ Presentation by the Sheldon Group, an environmental marketing firm, at the 2018 GreenBiz Conference, Phoenix, AZ on February 8, 2018.

³⁶ Target CSR Report, "transparency is fundamental to running a sustainable business and building trust with consumers" (p.13)

³⁷ Walmart CSR Report, "enhancing consumer safety and allowing consumers to have confidence in the products they purchase" (p.77)

³⁸ "Clif Bar & Company Supply Chain Case Study." EPA Center for Corporate Climate Leadership. Source: <https://www.epa.gov/climateleadership/clif-bar-company-supply-chain-case-study>

³⁹ "Report shows a third of consumers prefer sustainable brands." Unilever 2017. Source: <https://www.unilever.com/news/press-releases/2017/report-shows-a-third-of-consumers-prefer-sustainable-brands.html>

⁴⁰ "2016 Cone Communications Millennial Employee Engagement Study." Cone Communications. Source: <http://www.conecomm.com/research-blog/2016-millennial-employee-engagement-study>

“Sustainability is part of our DNA at Ford. Leadership at all levels are actively engaged and committed to sustainability.”

*– Sherry Mueller, Environmental Business Analyst, Supply Chain Sustainability Group,
Ford Motor Company*

However, executive-level support alone does not suffice to engage with and reduce supply chain GHG emissions. Below are some common measures that companies implemented within their organizations to incorporate GHG emissions management into mainstream internal business practices and corporate culture.

Operationalize Sustainability Within Business Units

Companies need champions throughout the organization to drive change and leverage limited resources, especially within individual business units responsible for influencing supply chain decisions. For example, in addition to executive-level leadership, IBM states that sustaining a successful supply chain program around environmental issues requires staff with defined responsibilities to carry out, and management systems to support ongoing execution. Internal champions can include a senior-level manager or team dedicated to sustainability and managing supply chain GHG emissions that develop initiatives and reports to the board on progress. Target, for instance, established a Director for Responsible Sourcing position to manage the responsible sourcing of all components and materials in Target-branded products.

Most companies with robust supply chain emissions engagement programs also build an integrated team dedicated to helping senior managers implement supplier outreach programs. As part of this team, leading companies have determined that allocating least one dedicated staff person to engage suppliers and monitor challenges and improvements ensures greater longevity and success for supplier outreach efforts, given the large amount of GHG emissions data that must be evaluated from several suppliers.

Develop Cross-functionality Across Business Units

In addition to cultivating internal champions, some supply chain leaders developed cross-functional sustainability teams that include members from diverse units, including environmental affairs, procurement, risk and audit, as well as investor relations. Such diverse teams help raise concerns unique to each member’s respective business unit to develop robust environmental management strategies across the organization.

Environmental, health, and safety (EH&S) staff stress the importance of developing relationships with key managers and procurement personnel in each business unit to help foster coordination among such internal champions and thereby collectively engage suppliers on managing their GHG emissions. At IBM, the Global Procurement organization designs and implements supply chain management programs that

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U.S. Environmental Protection Agency

are consistent with the policies established by IBM's Corporate Environmental Affairs organization. Collaboration between the Global Procurement and Corporate Environmental Affairs organizations also occurs during the Global Procurement's monthly review of supplier compliance with IBM's environmental requirements. Together, the Global Procurement manager and the director of Corporate Environmental Affairs review how suppliers have implemented sustainability in their operations.

Demonstrate Value in Managing Supplier GHG Emissions

By demonstrating a direct connection between reducing emissions and achieving business unit and company performance goals, sustainability champions can build broad internal support for reducing emissions risks in the supply chain. Supply chain leaders need frequent communication with procurement personnel and business unit staff to encourage them to factor GHG and sustainability metrics into their purchasing decisions, just as they consider cost, quality, and service. Asking suppliers for information on their GHG emissions should, where possible, be framed as generating more value from existing supplier relationships across multiple divisions or business units. For example, Unilever developed its Partner to Win program in 2011 to increase communication among suppliers to drive innovation. Unilever's SupplierNet platform supports global collaboration, produces customized reports, and provides information on best-practice supply chain performance. SupplierNet is a mutually beneficial platform providing customized performance reports for suppliers and insight for Unilever into consumer behavior. Additionally, Unilever's Research & Development teams work with the suppliers utilizing SupplierNet to drive innovation in a collaborative network.⁴¹ If supplier data is shared freely between EH&S, procurement departments, and business units all staff glean its full value by understanding how suppliers are taking steps to improve their efficiencies and where opportunities lie for making additional improvements from both a cost savings and an environmental standpoint.

Provide procurement staff and other key personnel across all business units with training to explain the importance of reducing the company's impact on GHG emissions, how doing so benefits the organization, and how to interpret supplier GHG emissions reports is critical to enact change. In developing a training program for staff, the most effective approaches incorporate the value propositions that will resonate strongest with the audience. Education among the employee base is necessary to carry the momentum of any sustainability initiative as the employees will be responsible for the day-to-day changes that will build sustainability into corporate culture. For example, to align procurement training with corporate environmental initiatives, Ford has included supply chain sustainability in the training courses for its internal Supplier Technical Assistance engineers. Throughout the year, Ford's supply chain sustainability team also speaks to Ford's Purchasing Organization to promote collaboration on any new or evolving corporate initiatives. For some procurement groups asked to internalize and operationalize GHG management, sustainability performance metrics should be included in the procurement staff's performance metrics. For example, Ford includes GHG emissions weightings as part of the performance criteria for the Company's Annual Incentive Compensation Plan.

⁴¹ <https://www.unilever.com/about/suppliers-centre/working-together/>

Engaging Suppliers: Building Awareness and Gathering Data

At present, companies strive to build awareness among suppliers on risks due to increased GHG emissions and to gather data from them to improve their understanding of opportunities to reduce supply chain GHG emissions. Once companies prioritize which suppliers to engage, they often leverage industry collaborative platforms and common questionnaires to help ease supplier participation in providing data.

Prioritize Engagement

Typically, most companies prioritize engaging suppliers that comprise 75 to 80 percent of their spend. They also include suppliers--regardless of size or spend--that pose the greatest risk to a company's financial performance or brand reputation if they do not manage their emissions. Such suppliers may provide critical inputs or services to a company, or they may represent other risk factors, such as energy-intensive operations, that are vulnerable to rising costs from energy price increases. For example, Ford focuses on engaging through the CDP supply chain program, 250 suppliers, that account for 75 to 80 percent of supplier spending, while Clif Bar & Company prioritizes supplier engagement based on spending and supplier interest in participation. On the other hand, IBM engages with all of its nearly 12,000 suppliers. Each company will develop supplier engagement strategies consistent with their resources and their goals, however, leading companies prioritize engaging suppliers with the largest global environmental impact.

Utilize Industry Collaboration

Many of the most successful supply chain engagement programs are supported by third-party organizations that bolster corporate supplier outreach. Current third-party programs generally fall into two categories: 1) collaborative efforts with industry peers designed for gathering industry-specific GHG emissions data, and 2) broad programs that disseminate common questions across industry supply chains spanning various sectors.

Build Collaborative Initiatives to Engage Common Suppliers and Develop Helpful Tools

Creating initiatives among companies in the same industry to collect data from common suppliers and help them manage their emissions can reduce reporting and data management burdens. Suppliers that are shared by many companies need respond only once, and in a single format, to a request to report their GHG emissions inventories and other environmental data. In addition, questionnaires can be tailored to the key issues for each industry. For example, in 2004, a group of multinational electronics manufacturers launched the Responsible Business Alliance (RBA, formerly known as the Electronic Industry Citizenship Coalition) to help incorporate common sustainability tenets across their industry. In partnership with its member companies, the RBA has developed models and a platform for suppliers to track and calculate GHG emissions. Similarly, the Sustainable Apparel Coalition has developed the Higg Index, a set of standardized supply chain measurement tools for the apparel, footwear, and textile industries. The Higg Index collects data on GHG emissions from suppliers, and these data are verified by a third-party consultant.

CLIMATE LEADERSHIP

U.S. Environmental Protection Agency

Collaboration between corporate and public partners has increased to facilitate data collection as well as awareness. The Sustainability Consortium (TSC), a collaborative research organization supported by both industry and academia, has developed product category life-cycle assessments and other tools and services to help buyers and suppliers produce sustainable consumer products. TSC began in 2007 as a collaboration between Walmart and the University of Arkansas, together they developed key product indicators across several product categories, which are used to collect information from common suppliers. TSC provides supplier data to its members – companies– and helps them to benchmark performance and measure progress in reducing supply chain environmental impacts over time. TSC also provides trainings for member companies and facilitates the dissemination of best practices, especially in the consumer goods sector. Beyond data gathering, several organizations are devoted to awareness within their relevant sectors. Notable organizations include [Together for Sustainability](#), the [Automotive Industry Action Group](#), and the [Information Technology Industry Council](#). Collaboration enables buyers to reach hundreds or more common suppliers and provides a united voice to demonstrate progress towards supply chain engagement within the sector.

Disseminate Common Questions Across Industries

Various third-party programs collect GHG emissions data from suppliers in many industries. Many organizations leverage the CDP (formerly named Carbon Disclosure Project) to send common questions to shared suppliers to reduce administrative and reporting burdens for both companies and suppliers alike. Companies also use other programs which either develop sector-specific common reporting criteria and metrics and/or aggregate and analyze results directly for clients to identify GHG emission ‘hotspots’ in the supply chain.

CDP, a voluntary global disclosure platform, provides public GHG emissions data for investors, shareholders, and stakeholders to inform financial decision-making. More than 100 purchasing organizations representing \$3 trillion in purchasing collect data through the CDP Supply Chain Information Request. In 2017, nearly 10,000 suppliers responded to the CDP Supply Chain Information Request at the request of their customers⁴². Companies can become CDP Supply Chain members and then identify which suppliers across industry sectors should receive the Information Request. CDP then sends each a supplier a request to complete the online questionnaire, collects the requests from all nominating participants, cross-references the suppliers, accounts for multiple requests from companies intended for a single supplier, and then ensures that each supplier receives only one questionnaire. Suppliers can specify whether their information can be shared publicly or only with their requesting customers.

In addition to CDP, other third-party entities have developed questionnaires and platforms to collect sustainability-related data from suppliers across industries that include, but are not limited to, emissions and mitigation efforts. The most common reporting platforms include the Down Jones Sustainability

⁴² CDP 2018 Supply Chain report accessed here: https://b8f65cb373b1b7b15feb-c70d8ead6ced550b4d987d7c03fcdd1d.ssl.cf3.rackcdn.com/cms/reports/documents/000/003/014/original/CDP_Supply_Chain_Report_2018.pdf?1517331548

CLIMATE LEADERSHIP

U.S. Environmental Protection Agency

Index (DJSI), the Global Reporting Initiative (GRI), EcoVadis, the Sustainability Accounting Standards Board (SASB), and the Global Real Estate Sustainability Benchmark (GRESB). Variety in reporting programs provides improved data and the opportunity for increased transparency among the corporate sector’s sustainability efforts; however, with several clients requesting different reporting platforms every year, suppliers often experience survey fatigue. Since no reporting platform is exactly harmonized, suppliers must reconfigure emissions data and develop new written content several times a year to meet client demands. To help alleviate such fatigue, as CDP has done through its Supply Chain program, EcoVadis developed a supplier-focused platform which creates a sustainability scorecard for all suppliers which is sent out to all inquiring clients. The EcoVadis questionnaire asks suppliers to address four key pillars of corporate citizenship: environment, fair labor practices, ethics and human rights, and the supply chain. Broad questionnaires help supply chain leaders determine which aspects of CSR their suppliers have historically prioritized and which programs need more support.

| FRAMEWORK | FOCUS |
|---|--|
|  | GHG Emissions, governance and management of emissions impacts |
|  | Supply chain engagement, the improvement of CSR initiatives, and sustainable procurement |
|  | Environmental, Social, and Governance (ESG) performance in real estate investment trust (REIT) community includes asset and entity level disclosure requirements |
|  | CSR, ESG with comprehensive stakeholder engagement throughout |
|  | Equally weighted and in-depth economic, social and environmental focus |
|  | US public companies with an emphasis on disclosure and sustainability strategies |

Finally, EPA developed a basic [questionnaire](#) for organizations to use as a starting point to understand the GHG emissions across their supply chains and engage suppliers on measuring and reducing their emissions. This questionnaire serves as a simple way to collect emissions-specific information from suppliers. Information reported in response to this questionnaire can also be leveraged to complete aspects of other questionnaires, such as CDP. EPA designed the questionnaire such that suppliers asked to assess their GHG emissions for the first time should feel more comfortable responding to any future requests to publicly report their GHG emissions after using this questionnaire.

Empowering Action: Reducing Supply Chain Emissions

Once GHG data has been collected, either the company requesting the data or its suppliers will calculate the total GHG emissions produced by the supplier to determine its emissions baseline. After a company has quantified its supply chain emissions, several approaches currently employed by leading companies can then manage and reduce those emissions. The approaches outlined below are intended to provide several options for companies to leverage and are not necessarily listed per their complexity. Companies should evaluate which strategies align best with their efforts and capacities to reduce GHG emissions in their supply chain: setting supply chain emissions reduction goals; providing technical support to suppliers; sharing best practices; adopting supplier codes of conduct; and incorporating sustainability standards in procurement of goods and services from suppliers.

Set Scope 3 Reduction Goals

Increasingly companies are setting GHG emissions reduction goals that include their supply chain emissions, thereby linking the success of their suppliers to reduce GHG emissions to their ability to meet ambitious GHG reduction targets. ‘Scope 3’ includes GHG emissions outside of a company’s direct operations. In GHG inventory reporting standards, supply chain emissions fall within one of the 15 Scope 3 emissions categories. In recent years, greater adoption of Scope 3 emissions reduction targets has been driven, in part, by the development of [science-based targets](#)⁴³ (SBT), which represent current best-practice in corporate GHG emissions reduction target setting. Companies looking to set a SBT must calculate Scope 1, 2, and 3 emissions; should Scope 3 emissions account for more than 40 percent of the company’s total emissions, the company must also develop a Scope 3 emissions reduction target for their SBT to be considered valid by the [Science Based Targets Initiative](#).⁴⁴ Although the Scope 3 target itself need not be science-based, it must be included in a company’s overall goals where supply chain emissions occupy a substantial portion of its GHG emissions portfolio. Available Scope 3 accounting tools, namely the WRI [Scope 3 GHG Reporting Protocol](#)⁴⁵ and the ISO 14067 standard, both of which have been utilized by companies to assess supply chain impacts within the last several years, have thus made it easier for companies to develop supply chain GHG reduction targets based on data-driven insights.

“It’s not enough to green our own company or green the supply chain; we have to build a larger movement to rewire the planet with clean energy.”

– Elysa Hammond, Director of Environmental Stewardship, Clif Bar & Company

⁴³ <http://sciencebasedtargets.org/what-is-a-science-based-target/>

⁴⁴ <http://sciencebasedtargets.org/about-the-science-based-targets-initiative/>

⁴⁵ <http://www.ghgprotocol.org/standards/scope-3-standard>

CLIMATE LEADERSHIP

U.S. Environmental Protection Agency

While some leading companies set corporate-wide GHG emissions goals that include supply chain emissions, other companies set separate goals for reducing GHG emissions from suppliers and/or for engaging a certain percentage of their supply chain to raise awareness on GHG emissions measurement and reductions. For example, Mars, Inc., committed to reducing its value chain GHG emissions 27 percent by 2025 and 67 percent by 2050.⁴⁶ Meanwhile, AT&T has set a 2020 goal for increased an understanding of sustainability among suppliers by incorporating sustainability performance metrics into its sourcing decisions for 80 percent of its supplier spending.⁴⁷ Ford asks all suppliers to adopt the same environmental and sustainability policies Ford has applied to its own operations. Acer asks key suppliers to achieve an emissions intensity reduction target between one percent and five percent per unit annually.⁴⁸ Other companies have joined—and encourage their suppliers to also join-- the RE100 campaign⁵⁰, a platform managed by The Climate Group and CDP, and set targets to procure 100 percent renewable energy. Through these methods, leading companies are developing sustainability commitments across their value chains.

Provide or Leverage Technical Support

Providing training and capability or building capacity for suppliers is critical to building a customer-supplier relationship that prioritizes GHG emissions management and to help suppliers implement continuous improvement to reduce their emissions. Many companies host conferences for their key suppliers, where training on managing GHG emissions is included. For example, Ford and other automotive companies working through the Automotive Industry Action Group, developed e-learning modules, supplier workshops, and documents to educate suppliers on sustainability expectations and best practices.

Technical support is important to help suppliers measure and report their GHG emissions, as they often have limited experience and fear that doing so will involve extensive resources. Yet, as companies frequently observe, suppliers developing a GHG emissions inventory for the first time find that gathering the utility bills and other necessary information for an inventory is more time-consuming than it is difficult. Though developing a GHG inventory for the first time may require dedicated staff time and resources, the cost savings that suppliers stand to gain by discovering where they can implement energy-saving measures often encourages them to continue on a path toward managing their GHG emissions effectively. Smaller suppliers generally need more assistance than larger suppliers, due to fewer resources and less in-house expertise.

In addition to helping suppliers develop a GHG inventory, some leading companies also provide technical assistance to suppliers, at no cost, to reduce their GHG emissions. For example, through its

⁴⁶ “Mars Take Climate Action.” Mars Webpage. Source: <http://www.mars.com/global/sustainable-in-a-generation/healthy-planet/climate-action>

⁴⁷ “Data Highlights.” AT&T: <http://about.att.com/content/csr/home/issue-brief-builder/environment/engaging-our-supply-chain.html>

⁴⁸ Ford Case Study interview.

⁴⁹ “Missing link: Harness the power of purchasing for a sustainable future.” CDP Supply Chain. CDP.net P. 32.

⁵⁰ <http://there100.org/companies>

CLIMATE LEADERSHIP

U.S. Environmental Protection Agency

green power planning program Clif Bar & Company provides an independent energy consultant to work with suppliers to determine the best green power purchase or solar installation options for each individual supplier. As a result, over 90 percent of suppliers sought further consultation or made a clean power commitment.

Some companies also connect their suppliers with other third-party technical support programs. For example, Walmart depends heavily on third-party assistance to implement achievable emissions reductions across its diverse supply chain, via participation in the Midwest Row Crop Collaborative, a Keystone Policy Center project that supports farmers in Illinois, Iowa, and Nebraska who are improving soil health via sustainable farming practices.⁵¹ The [Renewable Energy Buyers Alliance \(REBA\)](#),⁵² a platform managed by World Wildlife Fund (WWF), World Resources Institute, Rocky Mountain Institute (RMI), and Business for Social Responsibility (BSR), helps companies understand the benefits of transitioning to the use of renewable energy. REBA coalesces energy buyers including corporations, cities, and public institutions to grow large buyer demand for renewable power and helps utilities better understand and serve the needs of all energy buyers.

EPA's voluntary programs also provide companies with technical assistance. SmartWay⁵³ helps companies advance supply chain sustainability by measuring, benchmarking, and improving freight transportation efficiency. The public-private partnership works to reduce freight emissions through education and providing public recognition for companies that adopt more efficient transportation options. Notable SmartWay partners include Gap, Inc., Union Pacific Distribution Services, and Lowe's Companies, Inc. Together with its partners, SmartWay has avoided over 94 million metric tons of air pollutants and 197 million barrels of oil since 2004.⁵⁴ EPA's [ENERGY STAR](#)⁵⁵ program, with over 16,000 partners, provides tools and resources to help buildings and plants implement energy management systems and streamline their operations. The [Green Power Partnership](#)⁵⁶ program increases organizations' voluntary green power use to advance the American market for green power and the development of those renewable electricity sources. Current Partners' green power use represents approximately 50 percent of the U.S. voluntary green power market.

⁵¹ Walmart 2017 Global Responsibility Report p. 99

⁵² <http://rebuyers.org/>

⁵³ <https://www.epa.gov/smartway>

⁵⁴ "How SmartWay Advances Sustainable Transportation Supply Chains." EPA SmartWay. Source: <https://www.epa.gov/smartway/how-smartway-advances-sustainable-transportation-supply-chains>

⁵⁵ <https://www.energystar.gov/>

⁵⁶ <https://www.epa.gov/greenpower>

CLIMATE LEADERSHIP

U.S. Environmental Protection Agency

Share Best Practices and Recognize Success

Supply chain leaders engage with their suppliers to share best-practices in GHG emissions management within their sectors, often leveraging industry collaborative platforms or via public-private partnerships. For example, Ford provides a host of educational programs to support suppliers as they develop environmental best practices. Ford adopted three frameworks to engage with suppliers regarding environmental and social advancement: RBA’s audit process, Ford’s own Partnership for A Cleaner Environment (PACE) program, and CDP’s Supply Chain Information Request. Through the RBA, Ford conducted 31 audits among Tier 1 suppliers in 2016 to determine compliance with Ford’s sustainability expectations. Through the PACE program, Ford shares its own best-practices (such as GHG and water management initiatives) for suppliers to replicate. The PACE program helps suppliers to create a multiyear roadmap, record environmental data, measure progress against the baseline, and share best practices with other suppliers.

“We are committed to reducing the environmental footprint of our supply chain. Through the PACE program, we share the leading practices and lessons learned from our operations, to help our suppliers minimize their environmental impacts and improve their sustainability.”

– Jacklyn Watt, Director of Supply Chain sustainability, Ford Motor Company

EPA voluntary partnership programs that aim to reduce emissions, including ENERGY STAR, the Green Power Partnership, [Combined Heat & Power](#)⁵⁷, SmartWay and [Landfill Methane Outreach Program](#)⁵⁸, also provide platforms companies can join and where they can learn best practices from industry peers via conferences, webinars, case studies, and peer-to-peer exchange. Such programs also provide [awards](#)⁵⁹ and recognition for Partners, which they can leverage in communicating success to upstream or downstream value chain partners.

Supplier Codes of Conduct

Supplier codes of conduct are a set of principles companies adopt and to which suppliers must adhere. For example, IBM requires all of its suppliers adhere to a supplier code of conduct which covers a broad range of topics from labor relations to workplace safety, to the environment, and more. In addition, IBM sets forth specific requirements for its suppliers to establish a social and environmental management system, and measure environmental performance and set goals for improvement. These goals must, at a

⁵⁷ <https://www.epa.gov/chp>

⁵⁸ <https://www.epa.gov/lmop>

⁵⁹ Examples of award and recognition from EPA programs:

Green Power Partnership: <https://www.epa.gov/greenpower/green-power-leadership-awards>

ENERGY STAR: <https://www.energystar.gov/about/awards>

Smartway: <https://www.epa.gov/smartway/smartway-excellence-awardees>

CLIMATE LEADERSHIP

U.S. Environmental Protection Agency

minimum, address GHG emissions, energy conservation and waste management. Through the Code of Conduct and social and environmental requirements IBM communicates to its suppliers that sustainability is a priority, and complying with these requirements is a condition of doing business with IBM. IBM shares with suppliers its own experience that efficient and sustainable operations can result in decreased operational costs and greater profits. IBM's Supplier Conduct Principles and Supplier Social and Environmental Management Requirements support the company's commitment to conduct business with suppliers that take responsibility for their operations. In addition, through these programs IBM aims for help suppliers build capabilities in managing their environmental impact.

IBM wants to help suppliers appreciate that meeting these social and environmental requirements is a basic requirement for doing business with IBM. Meeting these requirements can contribute to more efficient and sustainable operations and aid in achieving decreased operational costs and improved margins. Upon notification, each supplier must demonstrate compliance to IBM's Social and Environmental Management Requirements within one year, or less. Non-compliance could result in termination. Through these requirements, IBM aims ensure that it conducts business with suppliers that are actively managing environmental impacts in their operations. Through its social responsibility and environmental management systems, IBM aims to empower suppliers to build resilience against emissions risks.

IBM's Supplier Social and Environmental Management Requirements:

1. Establish a corporate social responsibility and environmental management system that address the intersections of their operations with employees, society, and the environment
2. Build programs within the system to accomplish goals and compliance
3. Measure performance and establish quantifiable goals, at a minimum in the areas of waste, energy and GHG emissions
4. Publicly disclose the results of environmental goals and other program aspects
5. Train staff who are responsible for environmental monitoring, measuring, and reporting
6. Conduct self-assessments and audits as well as management review
7. Cascade the above requirements to their suppliers

Codes of conduct provide a foundation from which buyers and suppliers can align sustainability efforts. As companies incorporate environmental and social management into their own codes of conduct, in turn, suppliers are expected meet the same standards of environmental and social compliance. For example, Johnson & Johnson's Responsibility Standards for Suppliers includes eight guiding principles outlining how each supplier is encouraged to embrace sustainability and implement environmental management programs.⁶⁰ Apple outlines in its Supplier Code of Conduct that all GHG emissions shall be

⁶⁰ "Responsibility Standards for Suppliers." Johnson & Johnson: <https://www.jnj.com/document/responsibility-standards-for-suppliers?id=0000015e-7c9c-d575-a1ff-fddef38c0000>

identified, managed, reduced, and responsibly controlled.⁶¹ 3M's Supplier Responsibility Code also requires that significant GHG emissions and energy consumption be tracked and that suppliers implement energy efficient measures into their operations to reduce their environmental impact.⁶²

Procurement and the Use of Sustainability Standards

To drive procurement that incentivizes supply chain sustainability, suppliers must be rewarded for improved performance and recognized for their efforts and risks taken to innovate. Companies and their suppliers alike have noted that reported metrics alone may not provide the full context of supplier performance and discussions on environmental improvements between the procurement department with the supplier can unearth additional insights. Though meaningful recognition of suppliers, via awards programs and/or via partnerships with stakeholders, can provide validation of supplier efforts and improve interest and participation from suppliers, ultimately, to drive sustainability, companies should reward suppliers that reduce their environmental impacts with more business.

Product sustainability standards can provide procurement divisions with 'off the shelf' language to engage suppliers to address their GHG emissions. Such standards are most often developed through a multi-stakeholder process and have increasingly begun to include corporate performance criteria for both brand manufacturers and their suppliers alike to reduce GHG emissions from their operations and purchase green power to mitigate emissions. For example, the IEEE 1680 series of sustainability standards for computers, televisions, imaging equipment and the UL 110 sustainability standard for mobile phones provide required and optional multi-attribute criteria such as reduction of toxic materials, increased recyclability, greater energy efficiency, and less impactful packaging, but also introduced criteria to reduce impacts in upstream manufacturing. A 2018 revision to the IEEE 1680.1 standard for computers and monitors includes criteria for component manufacturers to reduce potent F-GHG emissions in manufacturing flat panels and semiconductors and criteria for increasing green power use by suppliers.

EPA's recommendations⁶³ for specifications, standards, and ecolabels, developed to help federal purchasers identify and procure environmentally sustainable products and services, can also assist procurement teams in identifying relevant criteria for use with their suppliers, where applicable across certain industries. Some recommendations are based on an independent assessment of private sector environmental performance standards and ecolabels against the multi-stakeholder developed EPA Guidelines for Environmental Performance Standards and Ecolabels.⁶⁴

⁶¹ Apple Supplier Code of Conduct: https://www.apple.com/anzsea/supplier-responsibility/pdfs/supplier_code_of_conduct.pdf

⁶² 3M: <https://multimedia.3m.com/mws/media/12045670/3m-supplier-responsibility-code-eng.pdf>

⁶³ <https://www.epa.gov/greenerproducts/recommendations-specifications-standards-and-ecolabels-federal-purchasing>

⁶⁴ <https://www.epa.gov/greenerproducts/guidelines-assessment-environmental-performance-standards-and-ecolabels-federal>

The Road Ahead

Voluntary corporate commitments to reduce GHG emissions through their supply chains are increasing and becoming more commonplace among leading companies. Reducing supply chain GHG emissions requires collaboration among customers, suppliers, and third-party organizations to try innovative approaches and solutions.

Looking ahead, supply chain management will likely remain an effective, and growing, opportunity for companies to impact corporate GHG emissions reductions. As companies gain experience in reducing GHG emissions within their operations, corporate entities can turn to their supply chains to explore energy efficiency, develop innovative methods for packaging and transportation, manage natural resource consumption, and encourage suppliers to purchase green power as renewable energy comes more ubiquitous. Developing collaborative and environmentally focused relationships with suppliers will fortify corporate resilience to financial, physical, and regulatory change and uncertainty. Based on feedback from leading companies, successful supply chain engagement currently hinges on the following actions:

- **Identify suppliers as allies in GHG emissions reduction efforts.** Supply chain emissions are often substantially larger than those from a company's operations and need to be accounted for to accurately assess the totality of each company's overall GHG emissions' impacts.
- **Assess the economic and social value of supply chain engagement.** Both the suppliers and engaging companies benefit from increased monetary savings, reduced exposure to risks, and greater alignment between sustainability practices and customer preferences. Robust communications are needed to clearly communicate emissions risks and opportunities to investors and consumers, who are increasingly asking companies to report on their GHG emissions.
- **Establish support systems internally to promote engagement.** Build support from executive leadership and within diverse teams across departments to ensure sustainability factors are incorporated into business decision-making processes. Incentivize sustainable behavior and encourage innovative practices across all employee levels.
- **Collaborate with suppliers to establish achievable environmental goals.** Prioritize high-impact suppliers and develop a model of success to replicate throughout the supply chain, including leveraging third-party technical assistance programs, where needed. Maintain open communication for best-practices and celebrate suppliers that have achieved their goals.

Resources

Federal Resources:

[EPA's Energy & Greenhouse Gas Emissions Mitigation Supplier Questionnaire](#) has been designed by the EPA Center for Corporate Climate Leadership to collect baseline information about GHG emissions and related policies and practices from suppliers at any time during the year. This questionnaire is meant to provide a starting point for organizations that are seeking to begin engaging with their supply chain and are looking for a starting point. The questionnaire focuses on collecting information on GHG emissions for use in quantifying Scope 3 emissions, developing targets, or quantifying and mitigating risk. The questionnaire is meant to be consistent with other, more in-depth, reporting frameworks and it should be relatively easy for your suppliers to respond to the questionnaire, especially if an organization reports GHG and sustainability information to multiple customers. If your organization has additional information it seeks to collect from suppliers, please modify the questionnaire as necessary.

Supply Chain Leader Case Studies:

- [Clif Bar & Company](#)
- Ford Motor Company
- IBM

[The Federal Supplier Energy and Risk Management Tool](#) combines federal contract data with data about federal suppliers' and contractors' corporate-level sustainability practices related to reporting and reducing GHG emissions. Developed by the General Services Administration (GSA) for use by the federal government, the tool features data gathered from suppliers' CDP reports pertinent to federal suppliers and contractors. Companies can explore the data provided by the tool to determine the GHG emissions performance of any shared suppliers. Companies can also reference the tool as an example from which to build their own internal tools and resources that provide a user-friendly dashboard for assessing annual supplier performance on GHG emissions. The data provides an overview of which suppliers have developed GHG emissions inventories, to extent to which they have set GHG reduction goals, if they are purchasing green power, etc. However, some details, such as whether companies have set science based reduction targets may not be available.

Non-Federal Resources:

[CDP's Supply Chain Information Request](#) is a program for voluntary, public reporting of corporate GHG emissions inventories and other related information. The CDP Supply Chain Information request allows its member companies to collect detailed information from the suppliers it chooses.

[Global Reporting Initiative \(GRI\)](#) presents the most widely used standards for sustainability reporting, including reporting on a company's supply chain. The GRI guidelines provide examples of

CLIMATE LEADERSHIP

U.S. Environmental Protection Agency

relevant information and data to collect from suppliers and presents a framework for identifying importing suppliers and reporting on the impacts of a company's supply chain.

The Reporting Exchange: An online resource managed by the World Business Council on Sustainable Development (WBCSD) and other partner organizations that provides companies with information on global sustainability reporting requirements and resources.

Recommendations of the Task Force on Climate Related Financial Disclosures: Developed by the Financial Stability Board with participations from large banks, insurance companies, asset managers, pension funds, large non-financial companies, accounting and consulting firms, and credit rating agencies, the recommendations provide a framework for climate-related financial disclosure, which include four widely adoptable recommendations on climate-related financial disclosures that are applicable to organizations across sectors and jurisdictions.

The Sustainability Accounting Standards Board (SASB) is an independent, private-sector standards setting organization that develops and maintains sustainability accounting standards—for 79 industries in 11 sectors—that help public corporations disclose financially material information to investors in a cost-effective and decision-useful format. The SASB's transparent, inclusive, and rigorous standards-setting process is materiality focused, evidence-based and market informed.