From Agreement to Action:
Mobilizing suppliers toward a climate resilient world

Written on behalf of 75 organizations with over US$2 trillion of procurement spend

Written by BSR

Contents

CDP's supply chain member organizations

In 2015 the following 75 organizations engaged their suppliers through CDP. As CDP supply chain members they leveraged their US$2 trillion of procurement spend to request information from over 7,800 suppliers, on which the data in this report is based.

Lead members

- Bank of America
- Dell Inc.
- Goldman Sachs Group
- Imperial Tobacco Group
- Juniper Networks, Inc.
- JT International S/A
- L'Oréal
- Microsoft Corporation
- PepsiCo, Inc.
- Philip Morris International
- PricewaterhouseCoopers LLP
- Royal Philips
- The Coca-Cola Company
- The Lego Group
- Wal-Mart Stores, Inc.

Corporate members

- Abbott Laboratories
- Accenture
- Acer Inc.
- Amdocs Ltd.
- Arcos Dourados
- AT&T Inc.
- Banco Bradesco S/A
- BMW Group
- Braskem S/A
- Bridgestone Corporation
- Bristol-Myers Squibb
- British American Tobacco
- BT Group
- Caesars Entertainment
- Caixa Geral de Depósitos
- CIA Ultragaz
- Cisco Systems, Inc.
- CNH Industrial NV
- Colgate Palmolive Company
- CSX Corporation
- Deutsche Telekom AG
- Diageo plc
- Eaton Corporation
- Electronic Industry Citizenship Coalition
- Elopak
- Enagás
- Endesa
- Fiat Chrysler Automobiles NV
- Ford Motor Company
- Gas Natural Fenosa
- General Motors Company
- IMI plc
- Jaguar Land Rover
- Johnson & Johnson
- Johnson Controls
- KAO Corporation
- Kellogg Company
- KPMG LLP
- MetLife, Inc.
- National Grid
- Nestlé
- Nissan Motor Company
- Nokia Group
- Northrop Grumman Corporation
- Pirelli
- Rexam
- SABMiller
- S.C. Johnson & Son, Inc.
- Sky plc
- Sopra Steria Group
- Starwood Hotels & Resorts Worldwide, Inc.
- Swisscom
- Taisei Corporation
- Toyota Motor Corporation
- Unilever plc
- U.S. General Services Administration
- Vodafone Group
- Volkswagen Group
- Wal Mart de Mexico
- World Resources Institute (WRI)

- climate change
- water
- action exchange

Foreword by Christiana Figueres

Executive Secretary of the UN Framework Convention on Climate Change (UNFCCC)

Achieving climate neutrality is no longer theoretical, but now possible. Everyone is under starter's orders, including multinational organizations and their worldwide supply base.

When over 150 heads of state and more than 190 governments gathered in Paris in December, the eyes of the world were on them.

They did not disappoint. The world emerged from the UN conference with a landmark universal climate change agreement that exceeded the expectations of many.

The agreement is important for at least two reasons. First, it shows that the world is serious about working together to combat climate change, and that governments are prepared to put in place the national and international policies needed to meet the challenge.

Second, the agreement provides the pathways forward toward a climate neutral world, where, somewhere in the second half of the century, the levels of pollution are so low the balance of planet Earth has been restored.

The national climate change plans submitted by close to 190 countries and covering around 95% of total greenhouse gas emissions are the blueprints that kick-start this exciting journey toward a climate secure world.

The year 2015 was indeed a turning point, with both a climate treaty and a suite of Sustainable Development Goals agreed. Achieving climate neutrality, or, as some say, net-zero, over the coming decades is no longer theoretical but now possible.

That journey starts today and many actions are going to be needed to achieve the world's stated aims. One crucial area is the corporate supply chain.

Climate change is a planetary phenomenon that will require actions at home but also across the globe. Given their worldwide reach, multinational businesses are uniquely placed to support governments in realizing a low-carbon global economy and a sustainable future.

Millions of businesses operate within the supply chains of the world's biggest organizations, either as direct suppliers or as suppliers to their suppliers.

We can be certain of two truths with respect to this global supply base: One, their collective impact on the climate is significant. Two, they respond to market demand. To generate that demand, the world's biggest corporations must clearly and loudly communicate that low-carbon technologies and energy efficiency are two of the key ways forward.

CDP and the member organizations of its supply chain program provide a model for the brand of proactive leadership we need. These organizations have been working with their suppliers to manage and disclose climate issues for some time and last year collected information from over 4,000 suppliers around the world. More large corporations should follow their lead.

Why? Because only about half of the suppliers that report on their climate impacts are taking active steps to manage the associated risks linked with climate change. As a result, emissions are not reducing at the rate required to meet the Paris goals, nor are suppliers building the resilience they need to deal with the climate impacts they will inevitably face.

If last year was about moving nations, companies, and local authorities toward a new, ambitious international climate treaty, the year ahead must be about setting in place the means to achieve it.

Achieving climate neutrality is no longer theoretical, but now possible. Everyone is under starter's orders including multinational organizations and their worldwide supply base.

United Nations
Climate Change Secretariat

Executive summary

With the December 12 2015 completion of the Paris Agreement on climate change and widespread corporate engagement in the negotiations, the world may be turning a corner in its effort to address climate change.

72%

of participants identified regulatory, physical, and/or a wide range of other climate-related risks

More suppliers need to take action. This report offers a path toward better management and decreasing emissions.

Nonetheless, risks to businesses and society continue to grow. Greenhouse gas (GHG) emissions and global temperatures will continue to rise as governments try to establish regulatory mechanisms to ratchet down emissions and stay well below a 2°C increase in mean temperatures.

It is in this context that CDP and the 75 member organizations, which comprise the CDP supply chain program, continue to gather data on climate risks and resilience in their supply chains. Upstream GHG emissions are, on average, more than twice those of a company's operational emissions, which makes it critical to build climate resilience into supply chains.

Resilient suppliers work to minimize their contribution to climate change and cope with adverse climate impacts. They also understand and manage their risks, and measure their GHG emissions.

In 2015, CDP collected information from 4,005 global suppliers, most of whom recognize the climate risks they face: 72% identified regulatory, physical, and/or a wide range of other climate-related risks, and most of those (64%) specifically highlighted their regulatory risks.

However, suppliers are slow to act. Half of the suppliers that CDP supply chain members invited to report their climate and water data did not do so. Only about half of those participating implement any given measure of climate risk management, from integrating climate change issues into business strategy (the highest measure, at 63%) to engaging with suppliers (the lowest, at 25%). Even fewer suppliers measure and manage their water-related risks, although this can be one of the most critical aspects of climate risk.

More suppliers need to reduce their GHG emissions: Only a third of participants reported decreasing Scope 1 and 2 emissions[1] for the reporting year. Such limited reporting, management, and emissions reductions will not be nearly enough to ensure supplier resilience in the face of climate change. Without supplier action, purchasers cannot effectively mitigate their supply chain risks.

The supplier data also offer hope, and a path toward better management and decreasing emissions. First, as suppliers report on their climate performance, they take more action to manage their climate risks and are more likely to reduce their emissions from the previous year. So while "novice" reporters perform poorly, they can clearly build resilience over time.

In addition, both purchasers and suppliers can use several levers to help improve performance. Purchasers can provide financial incentives for buyers and set supplier engagement targets – both of which correlate with greater supplier management implementation and emissions reductions. Suppliers can pursue several management activities that support emissions reductions, including integration of climate issues into business strategy and establishment of emissions reduction targets.

The critical point is that change can happen. Purchasers can motivate suppliers to understand and address their climate risks, and suppliers can take steps to engage their customers on climate issues and reduce their emissions and risks. However, many companies, purchasers, and suppliers are behind where they need to be. On the heels of the Paris Agreement, now is the time to get started.

1. Scope 1 emissions are direct emissions from owned or controlled sources. Scope 2 emissions are indirect emissions from the generation of purchased energy. Scope 3 emissions are all indirect emissions (not included in Scope 2) that occur in the value chain of the reporting company, including both upstream and downstream emissions (Greenhouse Gas Protocol FAQ, http://www.ghgprotocol.org/files/ghgp/public/FAQ.pdf). Unless stated otherwise in this report, company or supplier "emissions" refer to Scope 1 and 2, not Scope 3.

The BSR perspective
BSR President and CEO Aron Cramer

The year 2015 was the time for a historic agreement, and the year 2016 must be the time for action.

The role of the private sector in addressing climate change cannot be understated.

The chambers of the 2015 United Nations Conference of the Parties (COP21) in Paris echoed with the sentiment that the cost to governments of mobilizing the US$100 billion[2] required to seal the climate deal would be far outweighed by the benefits of the trillions of dollars that an agreement would unlock from the private sector. Now that the ink on the Paris Agreement is dry, governments have set the scene for all actors to play their roles, including for business to deliver on its promise to unlock the trillions.

For more than 20 years, BSR has been working with leading global businesses to address the world's most pressing sustainability challenges. Our climate practice has worked in partnership with our member companies and others to develop strong strategies and targets, and achieve GHG emissions reductions and their related benefits in supply chains. BSR is proud to have partnered with CDP in developing this report. Our organizations are founding partners of the We Mean Business coalition, and we are both firmly committed to enabling business to deliver for the world what is so badly needed: Decisive, irrevocable action to keep the planet on a pathway to less than 2°C of warming. The year 2015 was the time for a historic agreement, and the year 2016 must be the time for action.

The CDP supply chain program data analyzed in this report offer the most comprehensive view of how global suppliers are actually responding to climate change: How they view their risks, what targets they set, what actions they take, and the results they achieve. The data from more than 4,000 global suppliers have painted a clear picture of what constitutes a "climate resilient" supplier, and the good news is that it is within reach of all. The bad news is that the data also show that there are still too many suppliers not taking action, or not taking enough action. In addition, it is not clear what drives suppliers to act: The data point to a range of factors that can influence suppliers to take action, and businesses will have to continue to experiment with different ways of engaging their supplier partners.

There is a lot of work to do, but there is a clear business case for action. Taking action delivers benefits by enabling massive leaps in energy efficiency, reducing reliance on energy sources that experience wide price swings, contributing to public health benefits that also affect suppliers' workforces, strengthening productivity, and helping create demand for low carbon energy sources that will lead to lower prices over time.

Businesses and their suppliers are simply going to have to react because taking action and becoming climate resilient is becoming a business necessity. As part of the Paris negotiations, 187 countries submitted Post-2020 Intended Nationally Determined Contributions (INDCs) to the United Nations Framework Convention on Climate Change (UNFCCC), which is going to mean more legal requirements on business, and more climate action needed to support a company's license to operate.

Organizations participating in CDP's supply chain program should be commended for their role in asking for change in their supply chains, and in demonstrating leadership by reporting to CDP. We believe there is an even greater opportunity to be captured if the millions of suppliers not yet reporting follow the lead of those who are. Widening the circle of reporters will spread the message further, wider, and deeper, with decisive action that aids business, climate, and public health.

2. Short scale: 1 billion = 109

Introduction:
Climate and supply chains – growing risks and the need for resilience

This is a decisive time for the Earth's climate and for the global economy.

The world has relied on carbon-intensive energy, agriculture that drives deforestation, and GHG-emitting industrial processes to fuel economic growth, development, and well-being for billions of people. Yet the GHGs from these activities are destabilizing the global climate; contributing to rising sea levels; increasing the likelihood of extreme weather events; and creating risks to societies, economies, businesses, and people around the world.

The world is starting to turn toward a more resilient path – one that will minimize climate-driven dislocations, reduce business risks, and support sustainable development and low-carbon growth. In 2015, two key events highlighted this change:

- In December, the world came together to adopt the Paris Agreement on climate change. This commits the world to keeping the rise in global temperatures to well below 2°C and driving efforts to limit the temperature increase even further to 1.5°C, with a goal of achieving net-zero carbon emissions between 2050 and 2100; and
- An update to the United Nations Sustainable Development Goals (SDGs), which stress the need for "urgent action to combat climate change and its impacts." Strengthening all countries' resilience and ability to adapt to climate change is key to this goal, which is one of 18 goals that comprise the UN's Transforming Our World: The 2030 Agenda for Sustainable Development framework.

The ultimate aim of the SDG climate goal, the Paris Agreement, and future climate change negotiations is to dramatically reduce GHG emissions in order to keep global warming well below 2°C. To achieve this, global emissions will have to decline by at least 60% by 2050.[3] This will require significant regulation to increase the cost of the carbon intensive energy and the activities that drive climate change.

Under these circumstances, organizations face increased regulatory risks, in addition to growing physical risks from climate change. These risks will play a critical role in business success in the coming years. For example:

- Energy sources will have to change, as it is estimated that most of the world's fossil fuels must remain in the ground;[4]
- The cumulative global cost of climate change impacts on the environment, health, and food security will reach between US$2 trillion and US$4 trillion by 2030;[5] and
- There may be billions of dollars in regulatory penalties, and there is a likelihood of significant market shifts in industry, as illustrated by CDP's 2015 report on the global automotive industry.[6]

As noted in previous CDP reports, supply chains are critical levers for action, with GHG emissions at least twice as large as a company's operational Scope 1 and 2 emissions. For non-energy and mining companies, supply chain emissions contribute four times the amount of operational emissions.[7,8] Supply chains are also a key element of a company's climate-related risks, as noted in BSR's 2015 report on climate-resilient supply chains.[9] Supply chains must be resilient systems that account for regulatory risk, minimize adverse contributions to climate change, and adapt to climate-related disturbances ranging from resource scarcity to infrastructure damage from extreme weather events.

Throughout this report, we define "supply chain climate resilience" (or, more briefly, "supply chain resilience") as the capacity of organizations to minimize their supply chain contributions to climate change and to cope with and adapt to climate-related hazardous events, trends, or disturbances that could include disrupted supply chains, reduced availability of natural resources, infrastructure impacts, disrupted transport and logistical routes, and other unpredictable impacts.[10,11]

Critical to supply chain resilience is the concept of "supplier resilience," or the capacity of suppliers to minimize their contribution to climate change and to cope with adverse climate impacts.

3. Hassol, Susan Joy. 2011. "Questions and Answers: Emissions Reductions Needed to Stabilize Climate." Presidential Climate Action Project.
4. McGlade, Christophe.; Ekins, P. 2015. "The Geographical Distribution of Fossil Fuels Unused When Limiting Global Warming to 2°C." Nature. http://www.nature.com/articles/nature14016.epdf
5. Mercer. 2011. "Climate Change Scenarios – Implications for Strategic Asset Allocation." Mercer LLC, Carbon Trust, and International Finance Corporation: New York.
6. Magness, James. 2015. "No Room for Passengers." CDP report. CDP: London.
7. CDP and A.T. Kearney. 2011. "Carbon Disclosure Project Supply Chain Report 2011." CDP report. CDP: London.
8. CDP. 2015. "Committing to Climate Action in the Supply Chain." CDP report. CDP: London.
9. Norton, Tara; Ryan, Meghan; and Wang, Fengyuan. 2015. "Business Action for Climate-Resilient Supply Chains: A Practical Framework from Identifying Priorities to Evaluating Impact." BSR Working Paper. BSR: San Francisco.
10. This is an extension of the Intergovernmental Panel on Climate Change (IPCC) definition of climate resilience as "…the capacity of social, economic, and environmental systems to cope with a hazardous event or trend or disturbance, responding or reorganizing in ways that maintain their essential function, identity, and structure, while also maintaining the capacity for adaptation, learning, and transformation." Source: IPCC. 2014. "Fifth Assessment Report, Climate Change 2014: Impacts, Adaptation, and Vulnerability Working Group II."
11. Cameron, Edward; Erickson, Cammie; Prattico, Emilie; and Schuchard, Ryan. 2015. "Business in a Climate-Constrained World (Second Edition): Creating an Action Agenda for Private-Sector Leadership on Climate Change." BSR Working Paper. BSR: San Francisco. Also: Norton, Tara; Ryan, Meghan; and Wang, Fengyuan. 2015. "Business Action for Climate-Resilient Supply Chains: A Practical Framework from Identifying Priorities to Evaluating Impact." BSR Working Paper. BSR: San Francisco.

The key building blocks of supplier resilience are suppliers' ability to:

- Understand their climate-related regulatory, physical, and other business risks;
- Manage those risks by enhancing their capabilities to reduce emissions and by building adaptive capacity through operational strategies, management integration, stakeholder engagement, and operational initiatives and programs; and
- Measure, report, and reduce their GHG emissions.

About this report and its authors

CDP is an international nonprofit organization that motivates purchasing organizations and cities to disclose their environmental impacts, giving decision-makers the data they need to change market behavior. CDP provides the only global system for companies and cities to measure, disclose, manage, and share vital environmental information. CDP's supply chain program consists of 75 member organizations, which requested that nearly 8,000 of their suppliers disclose their climate and water data to CDP's supply chain program to help assess climate-related supply chain risks and opportunities.

In 2015, CDP worked closely with BSR to develop this annual supply chain program report. BSR is a global nonprofit organization that works with its network of more than 250 member organizations to build a just and sustainable world. To compile this report, BSR and CDP used data from the supply chain program and combined this with insights from both organizations' work with members to understand and address climate change.

BSR and CDP partner through We Mean Business, a coalition of organizations working with thousands of the world's most influential businesses and investors to amplify the business voice, catalyze bold climate action by all, and promote smart policy frameworks. We Mean Business has put forward policy initiatives for companies to accelerate a transition to a low-carbon economy, including adopting science-based emissions reduction targets, enacting meaningful carbon pricing, and encouraging responsible corporate engagement in climate policy. An additional commitment will be announced shortly for companies to reduce GHG emissions in their supply chains. Global supply chain performance is central to the success of all of these commitments.

Our goal with this report is to highlight current levels of supplier activity to address climate change, and to identify opportunities for suppliers and purchasers to take additional action to reduce risks and build their climate resilience.

Data and methodology

This report uses CDP's supply chain program data submissions to evaluate the state of climate resilient supply chains, and to identify measures that purchasers can take to enhance supplier and supply chain resilience.

The CDP supply chain program, representing 75 member organizations with US$2 trillion in annual procurement spend, requested that suppliers report to members on their climate and water risks and opportunities. Suppliers responded to standardized questionnaires: Either a full climate change questionnaire ("full questionnaire") or a shorter version ("SME questionnaire") for small and medium-sized enterprises (SMEs, or organizations with fewer than 250 employees and annual turnover of less than US$50 million or €50 million), as well as a water questionnaire. Requests were distributed to 7,879 suppliers. A total of 4,005 suppliers responded, providing 3,932 total climate change questionnaires, including 3,015 full questionnaires and 917 SME questionnaires, as well as 826 water questionnaires. These suppliers represented 1,532 U.S.-based organizations, 1,108 organizations from the EU, 238 from China, and 1,127 from other parts of the world.

CDP and BSR aggregated the submitted questionnaires and used the information to assess key measures of supplier resilience, which are outlined in the chart below.

In addition to these key questions from the CDP questionnaire, CDP and BSR also assessed how the strategic actions of 57 CDP supply chain program members influence the actions of their suppliers. To do this, we reviewed a total of 10,074 member-supplier pairings through a member survey, in which we asked members whether they:

- Have a public supplier engagement or Scope 3/value chain target;
- Provide incentives for buyers related to the management of climate change issues; and
- Provide incentives for suppliers related to the management of climate change issues.

We used the information gathered from members and their suppliers to evaluate the activities of suppliers reporting to CDP as a group, and to identify actions that suppliers and purchasers can take to encourage greater supplier resilience.

Key CDP climate change questionnaire data analyzed in this report

Characteristic	CDP data
Understanding climate-related risks	◥ Identification of regulatory, physical, or other risks ◥ Risk likelihood ◥ Risk magnitude
Managing climate-related risks	◥ Highest level of direct responsibility for climate change (e.g. board level) (full questionnaires only) ◥ Incentives for management of climate change issues (full questionnaires only) ◥ Risk assessment and management procedures (full questionnaires only) ◥ Integration of climate change into business strategy ◥ Active emissions reduction targets ◥ Emissions reduction initiatives ◥ Engagement with suppliers
Reporting, GHG emissions measurement, and GHG reduction	◥ Reported to CDP ◥ Scope 1 or 2 emissions measured ◥ Gross emissions increase/decrease (full questionnaires only)

Suppliers and climate resilience:
Limited activity, opportunities for action

Suppliers recognize their climate risks, at least to a degree. However, the awareness and action thus far may be insufficient to meet the scale of these risks and ensure resilient supply chains.

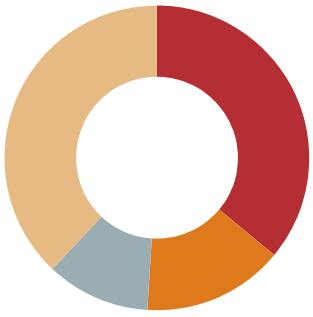
By understanding the risks to their own organizations and working to mitigate those risks, suppliers will be more effective in contributing to a climate resilient world. They will also gain business benefits by doing so. This section explores the existing, albeit often limited, levels of supplier resilience.

Climate risks are significant – yet perceptions are slow to change

A large majority of suppliers participating in CDP's supply chain program acknowledge climate risks: A full 72% identified inherent physical, regulatory, and/or other climate change risks that may significantly affect their business operations, revenue, or expenditures. Most suppliers (64%) specifically called out regulatory risks, and as shown in Figure 1, more than a third of all suppliers disclosed regulatory risks that are both significant and likely to occur. The top three most commonly reported regulatory risks are fuel/energy taxes and regulations, followed by carbon taxes, and obligations to report on emissions.

A smaller but still sizeable percentage of suppliers (46%) highlighted the physical risks of climate change to their business, including sea level rise, change in precipitation or temperatures, and/or the occurrence of tropical cyclones. Additionally, 40 percent of suppliers identified a wide range of other climate risks, from changing consumer behaviors and uncertain market signals to company reputational risks.

1. Regulatory risk magnitude



Percentage of total suppliers reporting:
- **36%** No identified risks
- **15%** Low or low-medium
- **11%** Unknown or no magnitude
- **38%** Medium to high

38% of participating suppliers identified regulatory climate risks with a high, medium-high, or medium magnitude. More than 80% of these higher-magnitude risks are relatively likely to occur ("about as likely as not" or higher likelihood).

Not only are these risks significant, they are growing over time – particularly regulatory risks in the wake of the Paris Agreement. Both purchasers and suppliers need to understand these risks and act if they are to ensure the resilience of their supply chains and businesses. But supplier data demonstrate that, if anything, these risks are underestimated.

A significant percentage of suppliers lack climate risk assessment and management procedures. While 60% of those disclosing to CDP have such procedures in place, at least 35% do not – and suppliers that did not respond to CDP are even less likely to have procedures in place, as discussed in the section on response rates and underperforming suppliers below. As noted by CDP supply chain program member Sky UK: "One of the most effective ways to get suppliers to begin managing their climate change risks is to get them to start assessing what those risks are. We ask our most carbon intensive suppliers to disclose these details through the CDP supply chain program on an annual basis. Once they start measuring, they become better at managing."

Given that so few suppliers have risk assessment and management procedures in place, it's likely that reported risks underrepresent reality. Meanwhile, average supplier risk perceptions are not growing with the probability of real climate regulation and other risks. Although a substantial majority of suppliers identified climate regulation risks (64%), this is unchanged from 2014 and down from 66% in 2013. Views about both the likelihood and magnitude of these risks remained virtually the same between 2013 and 2015, in spite of the growing prospect of climate regulation during preparations for the 2015 Paris climate talks.

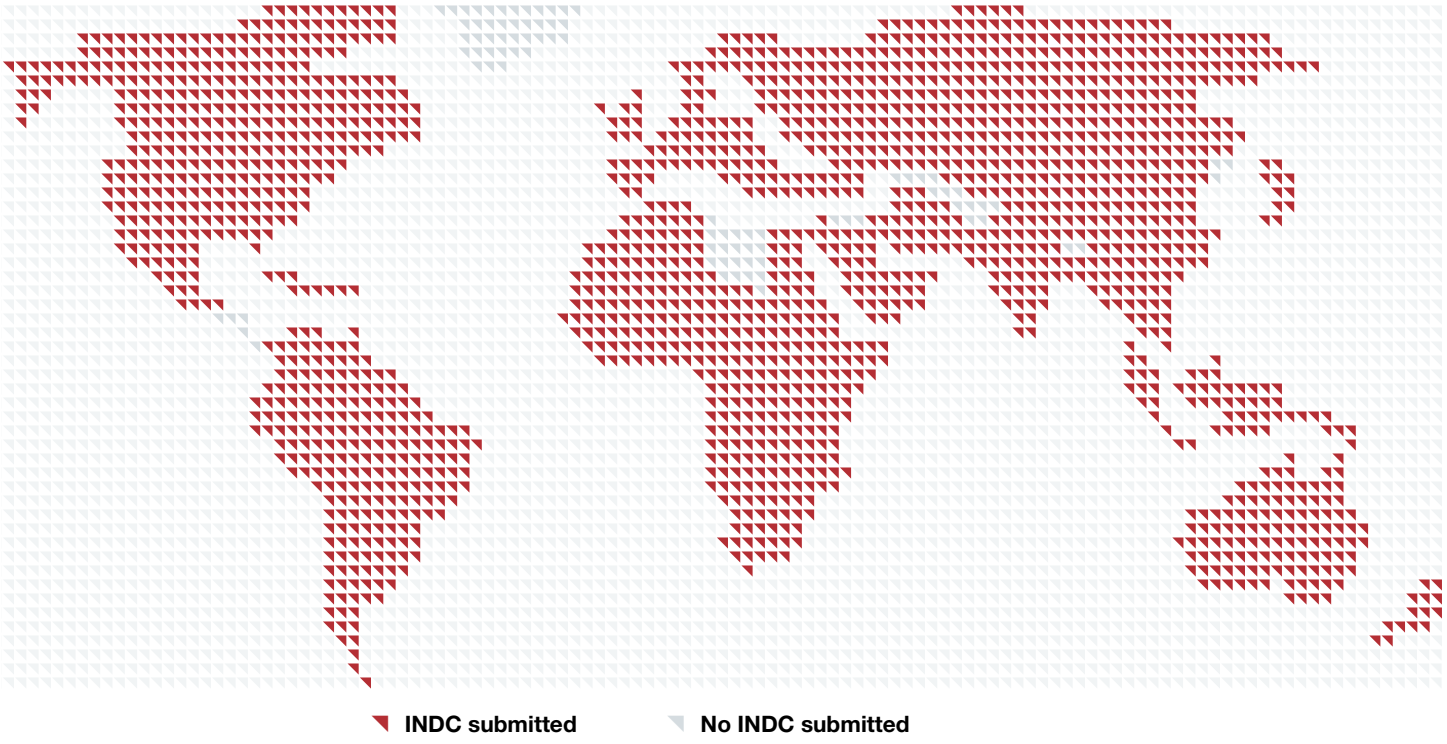
Water risks are among the most notable physical impacts of climate change, and these are particularly under-evaluated and under-reported. Only 826 of the 1,969 suppliers (42%) that were invited to participate in the CDP supply chain water program actually did so. Among suppliers that participated in the program, 41% actually assess their water risks, 45% integrate water into their business strategy, and 36% have a water policy setting out clear goals and guidelines for action.

As of December 15 2015, 187 countries emitting 98.6% of global GHG emissions were covered by INDCs submitted through the negotiation process for the Paris Agreement.[12]

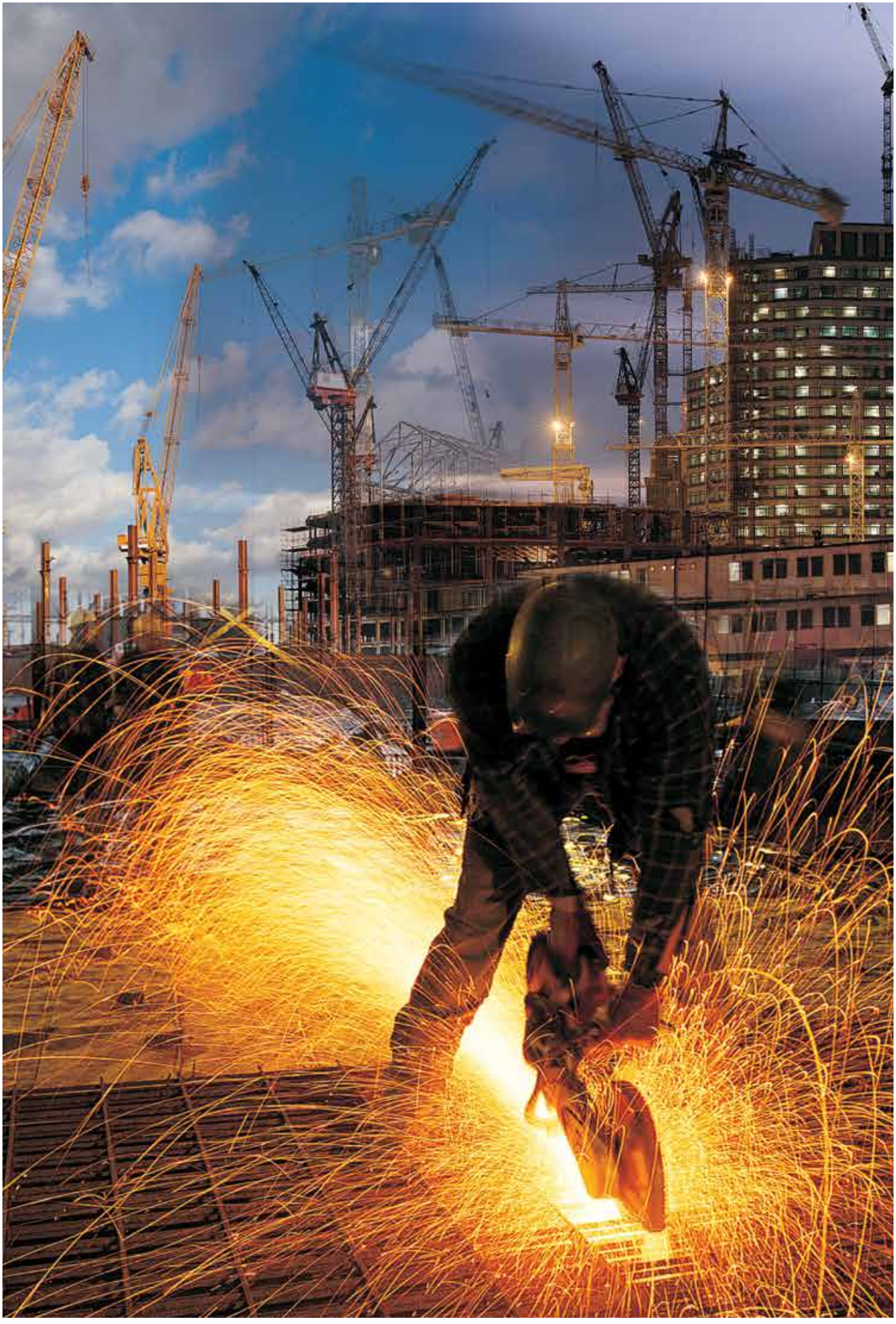
These data points – limited supplier climate risk evaluation, and, in particular, a lack of change in perceived risks about climate change – are out of step with the consensus among scientists, governments, and many business customers. Over the course of 2015, the vast majority of countries committed to significant emissions targets. Indeed, more than 98% of global emissions were covered by national commitments as of December 2015 (see map). While these targets vary considerably among countries, in each case, they represent a reduction in emissions from business as usual and a tightening of the regulatory regime. In many cases, these country targets will affect the costs of carbon-intensive practices, with resulting impacts on energy and other costs.

These trends suggest a significant and potentially growing gap between suppliers' climate risk perception and reality. Without understanding their risks, supplier climate resilience will be limited, which increases their customers' own supply chain risks.

Paris Agreement: Intended Nationally Determined Contributions



12. World Resources Institute. CAIT Climate Data Explorer. 2015. World Resources Institute: Washington, D.C. http://cait.wri.org.



CDP's water program

Launched as a pilot in 2013, CDP's supply chain water program enables multinational purchasing organizations with large supply chains to better understand how their suppliers are addressing water-related impacts and associated risks and opportunities. The program has experienced consistent growth, both in terms of the number of purchasing organizations (members) asking their suppliers to respond through CDP (up to 18 in 2015, from 4 in 2013) and the number of suppliers responding (up to 826 in 2015, from 229 in 2013).

Leading the way are the 18 organizations working with CDP to deliver corporate water stewardship throughout the supply chain. One such member, Ford Motor Company, a 2015 CDP Water A Lister, has worked with CDP to engage 250 suppliers representing almost 60% of the car giant's total procurement spend.

Suppliers are provided with a clear framework that allows for effective reporting and action. Greater transparency, robust governance of corporate water issues, long-term thinking, and business planning are some of the major areas that business can explore in terms of improving their management of water resources.

Stanley Black & Decker for example, ***"uses CDP's water questionnaire and associated education programs-workshops as a framework to assist us in setting strategic and tactical initiatives on water stewardship that will lead to our more responsible use of freshwater resources, and to help ensure the right to water for current and future generations."***

Data is of critical importance to members, and the manner in which they utilize supplier response data varies. Many members incorporate this data into procurement decisions, feature it in their corporate reports and on company websites, and work with suppliers to drive stewardship and deliver increased business resilience and cost savings.

Colgate Palmolive Company does this, acknowledging that ***"water issues, such as drought, are likely to lead to changing supply patterns, increasing cost volatility, and shifting of demand to available materials. Colgate uses CDP's supply chain program to engage suppliers in assessing water risk and water-related impacts annually."***

Supplier capabilities lag growing risks

Measurement, management, and emissions reductions are critical elements of supplier climate resilience. Using standardized tools like the CDP supply chain questionnaire to evaluate risks and performance helps suppliers understand their risks and address them. Thoroughly and realistically answering these questions can reveal the true state of climate resilience in an organization. Yet in the face of growing risks, supplier performance lags in each of these three areas.

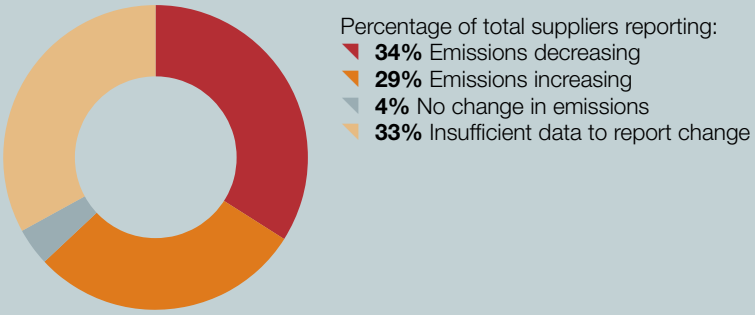
Measurement and reporting continue to lag CDP member requests

CDP members sent out nearly 8,000 requests for supplier data in 2015, which was more than any previous year. While the total number of participants increased to more than 4,000 in 2015 from 3,396 in 2014, 49% of suppliers did not participate. This is a critical issue: If only half of suppliers report on their climate-related risks, management activities, and emissions, it will be difficult for their customers to adequately identify, evaluate, and address their own supply chain regulatory, physical, and other climate risks.

Even more troubling is that these figures come from suppliers to purchasing organizations that are leading the effort to address climate change. CDP supply chain member organizations often have mature, proactive climate management and supply chain engagement practices. If these suppliers are not taking sufficient action, it is likely that the organizations that are not reporting on their efforts are performing even worse.

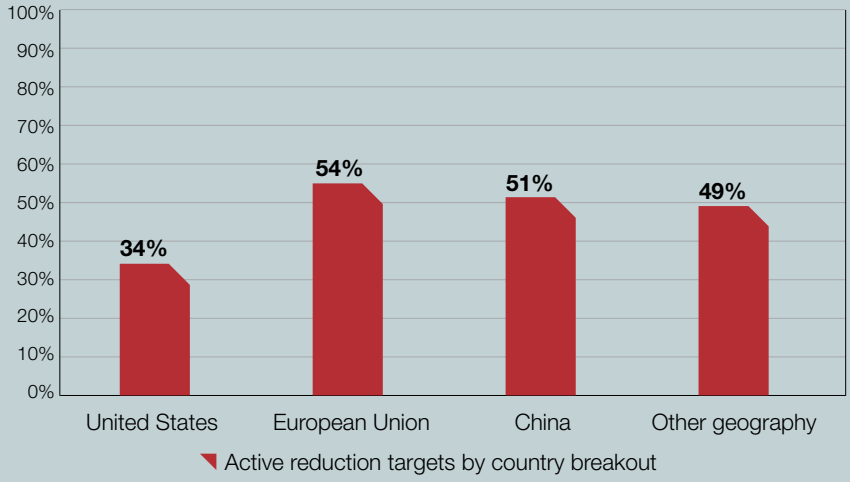
> ***CDP's supply chain program provides Bank of America with a wealth of information on the climate change activities of hundreds of our vendors. We rely on this information throughout the year to monitor collective progress, compare to internal Bank activities, develop potential engagement strategies, and build stronger relationships with our supply base.***
>
> Bank of America

2. Supplier year-over-year emissions direction

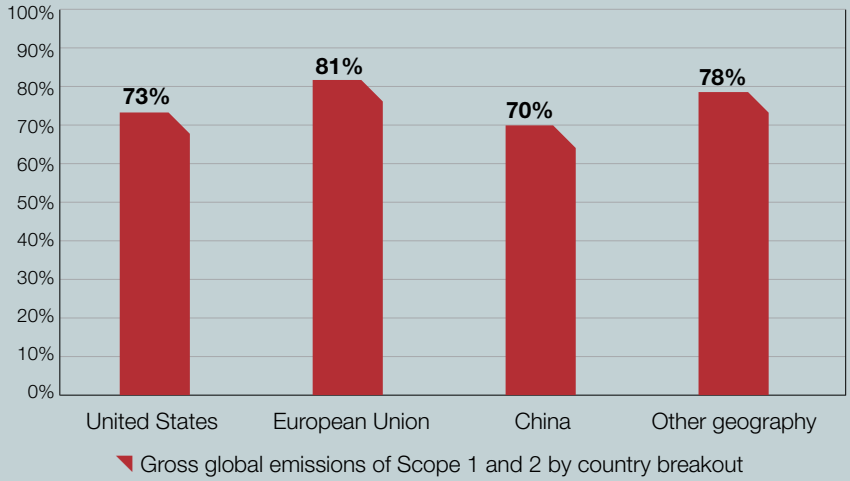


Suppliers are roughly evenly split among those whose emissions decreased from the previous year, those whose emissions increased, and those without enough data to report the direction of change.

3. Percent of suppliers with emissions reduction targets, by geography



4. Percent of suppliers reporting emissions data, by geography



Suppliers in different regions approach climate management differently, including the percentages they use to apply emissions reductions targets and how they report their emissions data.

Climate management and emissions reductions do not adequately address risks

When examining suppliers' climate management activities, we found that between 25% and 63% of suppliers adopt any given measure:

- 53% of suppliers have board-level responsibility for climate change;
- 46% provide incentives to individuals for the management of climate change issues;
- 63% integrate climate change into their business strategy;
- 45% have an active emissions reduction target;
- 55% have emissions reduction initiatives; and
- 25% engage with their suppliers.

This level of action is reassuring, suggesting that there is a strong pool of suppliers that are managing their climate risks at least to an extent. Yet significant percentages of suppliers have not adopted these measures and are therefore not likely to be effectively managing climate risks. About half of suppliers failed to report after receiving a CDP supply chain questionnaire, and since those suppliers are likely performing worse than the suppliers that did answer the questionnaire, there is good reason to be concerned about poor performance. This suggests that a large number of suppliers are not taking steps to manage their climate risks.

CDP supply chain program member Sky UK highlighted the need for greater management action: "With the new global climate agreement signed in Paris, we would like to see our suppliers set targets that match the ambition out there. We would also like to see more of our suppliers begin engaging their supply chains so we can see greater change across the entire lifecycle of our products and services."

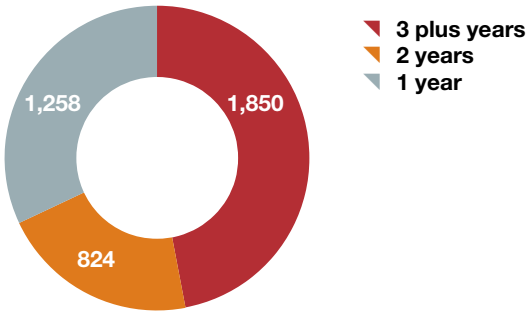
Supplier emissions reductions are also lower than what is needed to address climate-related risks. As shown in Figure 2, only 34% of suppliers reduced their emissions from the previous year. Those with increasing emissions, or without information about emissions changes, may have greater difficulty managing their risks in the face of greater climate regulation after the Paris Agreement.

Data on emissions reporting and reductions vary by country, as highlighted in last year's CDP supply chain report. A higher percentage of suppliers in the European Union apply emissions reduction targets, while a much lower percentage of U.S. suppliers do so, as shown in Figure 3. This trend continues in suppliers reporting emissions data, shown in figure 4. Such regional differences may create geography-specific risks and opportunities in supply chains.

Response rates mask underperforming suppliers

The number of suppliers participating in CDP's supply chain program has grown significantly over the past several years (see Figure 5), and while this growth is welcome, it can mask concerns about supplier performance. The most telling issue is that "novice" first-year participants perform dramatically worse than multiyear reporters on the adoption of climate risk management actions – often 25 percentage points or more below those that have participated for three or more years, as shown in Figure 6.

5. Supplier CDP climate change participants, by number of years reporting



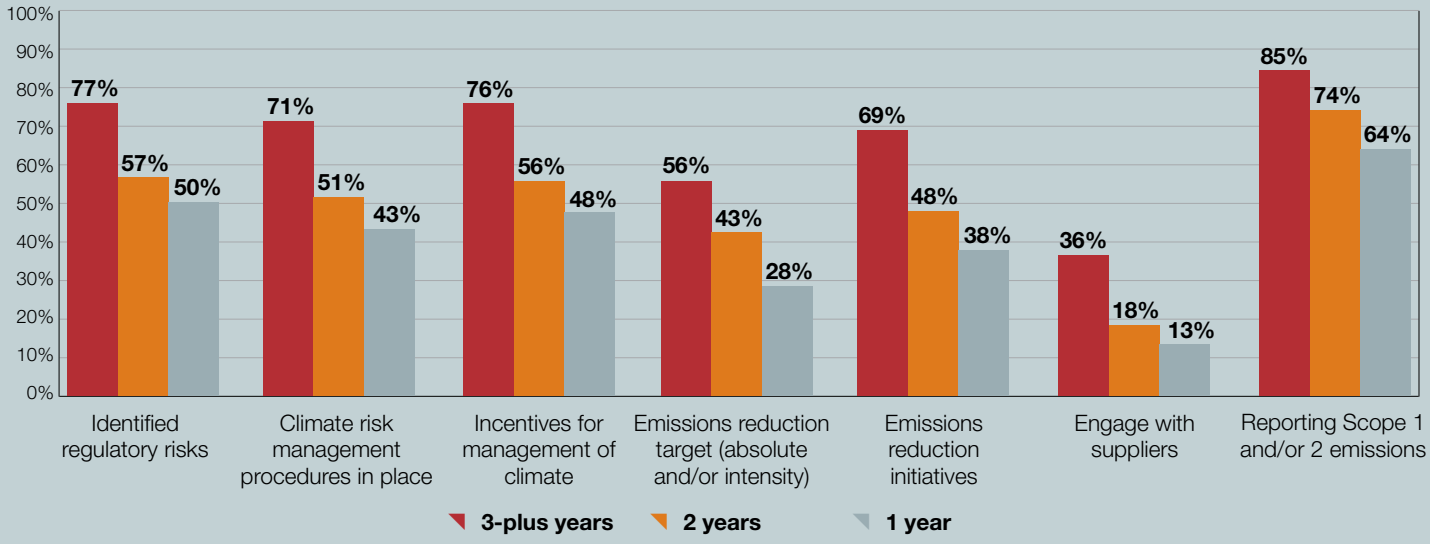
Nearly half of CDP supply chain participants have been participating for three years or more, while about a third are participating for the first time.

If we use first-time CDP participant data as a proxy for the 49% of suppliers that received but did not respond to the CDP supply chain questionnaire,[13] it is possible to deduce that this much larger group of non-reporting suppliers also performs poorly. This suggests that existing data may present too positive a picture of supplier performance, and increasing response rates will be important to generate a better understanding of climate risks and management.

CDP supply chain member, The LEGO Group, has highlighted the importance of recognizing differences among suppliers, saying that "the information provided by the CDP questionnaire shows that suppliers are all at different levels of maturity, which allows us to identify what support and dialogue is most appropriate." Similarly, Royal Philips noted: "Our suppliers have very different maturity levels, which need to be addressed in a different way. For those that have a low maturity level, we work on awareness and developing a strategy. With more developed suppliers, we work on collaboration, and challenge each other to improve."

Water data show a relatively similar pattern of performance across these reporting cohorts, with experienced three-year reporters two to three times as likely as first-time reporters to conduct water risk assessments, declare their exposure to water risks, and/or integrate water management into business strategy.

6. Percent of suppliers taking action, by number of years reporting to CDP



First-time supplier participants have significantly lower levels of risk recognition, management activity, and emissions measurement than suppliers that have participated for two or more years.

13. 409 suppliers, over a third of 2015 first-time responders, received CDP questionnaires in 2014 but did not respond. These suppliers accounted for 13% of the 3,107 total suppliers that received CDP questionnaires but did not respond in 2014. This group may be a reasonable proxy for suppliers that received CDP questionnaires but did not respond in 2015.

U.S. General Services Administration perspective

As the federal government's leading supplier of real estate, acquisition, and technology services, the U.S. General Services Administration (GSA) seeks to maximize benefits from energy efficiency and clean energy for our environment and economy. Since 2008, GSA has cut its carbon footprint by nearly 50%, and dramatically reduced use of water and non-renewable energy. In doing so, we've saved agencies and the American public over US$340 million million in energy and water bills since 2008 — over US$90 million in fiscal year 2015 alone.

Yet like other large organizations, GSA is limited in the progress it can make through internal changes, because at least three-quarters of GSA's estimated carbon footprint comes from vendors, contractors, and supply chains associated with performance of GSA contracts.

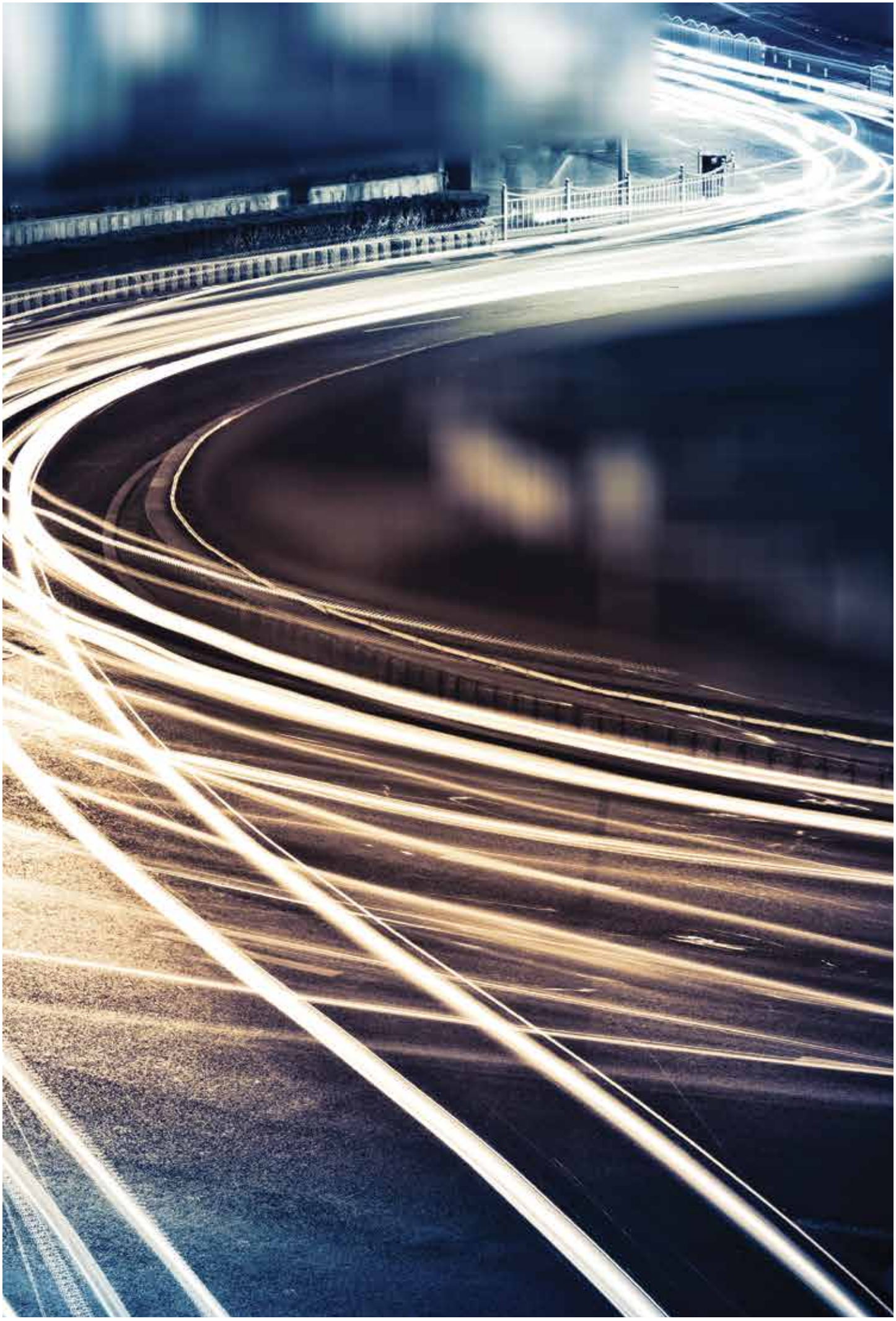
That's why, in 2015, GSA joined CDP's supply chain program to work with strategic suppliers to reduce the carbon footprint of its supply chain. This program gives participating suppliers an opportunity to plan comprehensively to cut costs and carbon. By disclosing through CDP supply chain, GSA's private sector partners can prepare themselves to do business with us in the future, as the agency continues to incorporate carbon disclosure goals and performance criteria into specific contracts.

In 2015 — GSA's first year working with CDP supply chain — 63 of the 115 suppliers we invited to participate submitted data through CDP, including 14 suppliers who responded or chose to share their data publicly for the first time. Of these suppliers, 44% disclosed to one or more other customers through CDP, meeting multiple requests with a single response. And I'm thrilled to see that our suppliers are taking action to reduce their emissions. This year, 85% of GSA's responding suppliers reported emissions reduction investments totaling US$11.7 billion, collectively saving US$1 billion and 15.9 million metric tons of CO_2e.

Starting in fiscal 2017, Executive Order 13693, Planning for Federal Sustainability in the Next Decade, will require each of the seven largest procuring federal agencies to begin including supply chain GHG management in at least five contracts annually. GSA stands ready to assist our partner agencies with this requirement as we collectively develop best practices for integrating climate performance measures into our procurements.

For GSA, sustainability is more than just a metric or measure — It means helping federal agencies meet their missions today, while preserving their ability to serve future generations. By leveraging the standardized, comparable data captured through CDP's supply chain program, we've been honored to join our corporate peers — including many of our own key suppliers — to track supplier climate performance.

Kevin Kampschroer
Chief Sustainability Officer
U.S. General Services Administration



Corporate and public procurement performance:
Encouraging increased supply chain resilience

> ***In 2010, Walmart expressed its commitment to reducing its environmental footprint by setting the ambitious goal of eliminating 20 million metric tons of GHG emissions from our global supply chain by the end of 2015. We're proud to say that we exceeded this goal early by eliminating 28.2 million tons to date - the equivalent of removing more than 5.9 million cars off the road for a year. This lowers costs, contributes to the strength of our business, and, most importantly, ensures our customers continue to save money and live better - all while working to protect our environment.***
> Walmart

As shown in the previous section, resilient suppliers that fully understand and address their climate risks are the exception rather than the norm.

There are significant opportunities for purchasers to support supplier and supply chain resilience, drive more supplier reporting, and encourage the adoption of important risk management practices, including emissions reduction targets.

From underperformance to action: Measurement, management, and emissions reductions

The ultimate test for supplier resilience is a change in emissions: If a supplier's emissions are decreasing, they are much more likely to successfully navigate future regulations and other potential climate risks. CDP supplier data suggest a path to get from performance measurement and reporting, to management, to emissions reductions.

In contrast to the concerns described above about the poor performance of novice suppliers, suppliers that have participated in the CDP supply chain program for three or more years perform much better than average suppliers – and demonstrate notable improvement. The 1,850 suppliers that have reported every year from 2013 to 2015 show noticeable increases in both their risk perception and their level of action:

- Perception of climate risks has grown from 78% in 2013 to 84% in 2015;
- Perception of regulatory risks has grown from 71% to 77%;
- Suppliers with an emissions reduction target grew from 50% to 56%; and
- Suppliers reporting gross global emissions increased from 68% to 85%.

Integration into business strategy, use of emissions reduction initiatives, and engagement with suppliers were virtually unchanged.

The strong performance of three-year reporters is also displayed in the carbon and cost savings in the reporting cohorts. Suppliers saved a total of US$6.6 billion annually through GHG reduction projects, and an average of US$1.3 million per supplier emissions reduction initiative (however, this was heavily influenced by a few companies with very large savings). Those reporting for three or more years reported an average savings of US$1.5 million per initiative, versus first-time reporters, which had an average savings of US$900 thousand per initiative. Similarly, of the 606 million metric tons of estimated supplier carbon savings in 2015, three-year reporters had an average reduction of nearly 400,000 metric tons per company (again heavily influenced by a few companies with very large savings), which is comparable to the emissions of 84,000 passenger vehicles driven for one year.[14] First-time reporters saved an average of only 320,000 metric tons per company.

14. Estimated using U.S. EPA GHG equivalencies calculator, www.epa.gov/energy/greenhouse-gas-equivalencies-calculator.

The data also demonstrate a strong correlation between management action and year-over-year emissions reductions. Suppliers implementing any single management action are more likely to reduce emissions from the previous year than those not taking that action. All of the climate management indicators in Figure 7 demonstrate this result.

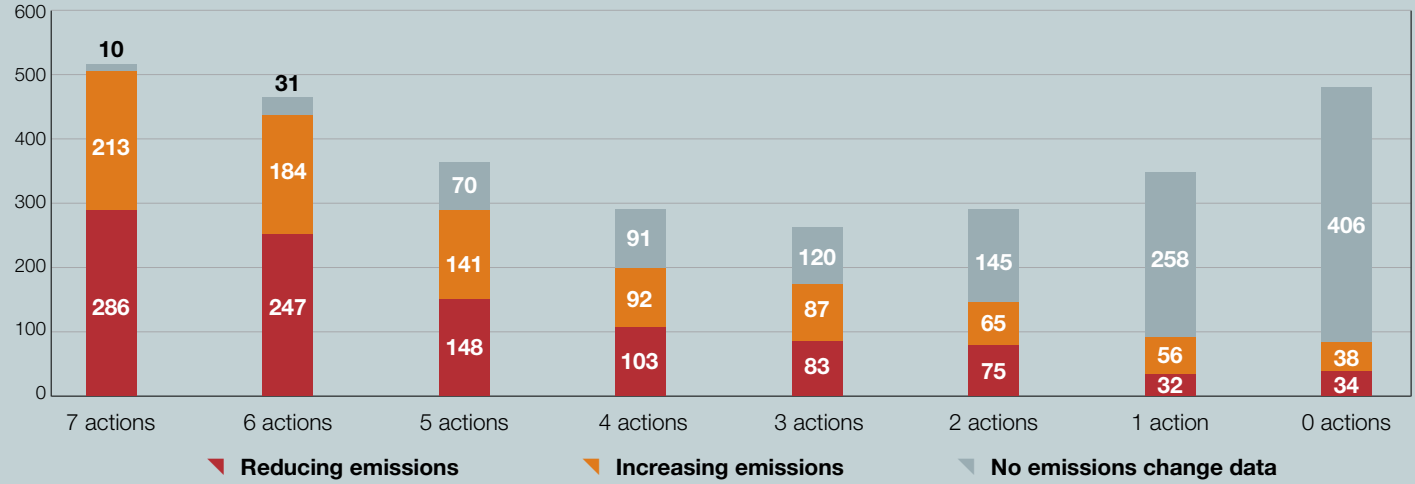
Each of these management indicators has an individual impact, while the total number of initiatives adopted by suppliers also strongly correlates with supplier emissions performance. Among suppliers that have seven management actions in place, 56% decreased their emissions in 2015. Meanwhile, of those suppliers with only one or no actions in place, less than 10% decreased their emissions. Additionally, more than half of suppliers that reduced their emissions have either six or seven actions in place. In short, the more comprehensive a supplier's climate management structure is, the more likely it is to reduce its GHG emissions from the previous year. These are likely to be the most resilient suppliers. Figure 8 illustrates this trend.

Purchasers can use these trends to better understand their supply chain risks and identify their priorities. In particular, they can target and encourage suppliers that do not report emissions data and have little or no management structure in place to manage and report their emissions.

7. Percent of suppliers reporting annual emissions reductions, with and without specific climate management actions

Suppliers with management actions in place are much more likely to report year-over-year emissions reductions.

8. Management actions and emissions performance



Suppliers with more management actions in place are more likely to report their year-over-year emissions performance, and they are more likely to reduce their emissions from the previous year.

Member actions and supplier response

At its most useful, CDP supply chain information does more than demonstrate how suppliers are performing. It also suggests opportunities to encourage supplier performance.

Incentives: Buyer financial incentives matter

Purchasers' financial incentives for buyers (such as bonus pay for employees in the purchaser's procurement function that exceed annual performance targets) may help drive climate management activities among suppliers. Four CDP members provide such incentives, including a structured incentive scheme for buyers meeting program targets. Compared with average suppliers, the 507 suppliers of these members were more likely, by six to ten percentage points, to deploy a range of resilient management steps, including integrating climate change issues into business strategy, having active emissions reduction targets or initiatives, and tracking and reporting gross emissions data.

Neither nonfinancial buyer incentives nor supplier incentives (such as increased spend with suppliers that achieve climate targets) show any clear influence on supplier performance, but this may be masked by the wide variety of incentives in each of these categories. Specific types of incentives may have an impact, and exploring types of incentives and their impacts is worthy of more detailed study.

Indeed, several organizations employ these wider incentives and find that they have an impact. The Coca-Cola Company, for example, is looking for innovative ways to reward suppliers who share the company's values and help to meet sustainability targets. For example, the company encourages suppliers to implement sustainable agricultural practices, reduce material used in packaging, and reduce the carbon footprint of vending machines.

The LEGO Group is also piloting engagement mechanisms with suppliers, such as convening innovation camps to spur collaboration and identify co-creation projects that reduce CO_2 emissions. The innovation camps also act to strengthen partnerships with suppliers and create shared value.

Engagement targets: Clear correlation with performance

Leading CDP supply chain members have committed to a suite of targets that focus on two areas:

- Action: Increased levels of activities to reduce emissions by including environmental key performance indicators from their CDP response into supplier performance reviews; and
- Transparency: Increased levels of monitoring and reporting emissions, accompanied by supplier capacity-building and programs that increase their understanding of the relevance of environmental reporting.

Suppliers of the 24 CDP members with these types of supplier engagement or Scope 3/value chain targets were somewhat more likely to demonstrate resilience than average suppliers. These suppliers are:

- More likely to integrate climate into business strategy (52% of suppliers with targets, versus 45% of those without declared targets);
- More likely to have emissions reduction targets (38% versus 32%);
- More likely to have emissions reduction initiatives (50% versus 42%);
- More likely to report Scope 1 and Scope 2 emissions (58% versus 55%); and
- More likely to engage with their own supply chain (29% versus 26%).

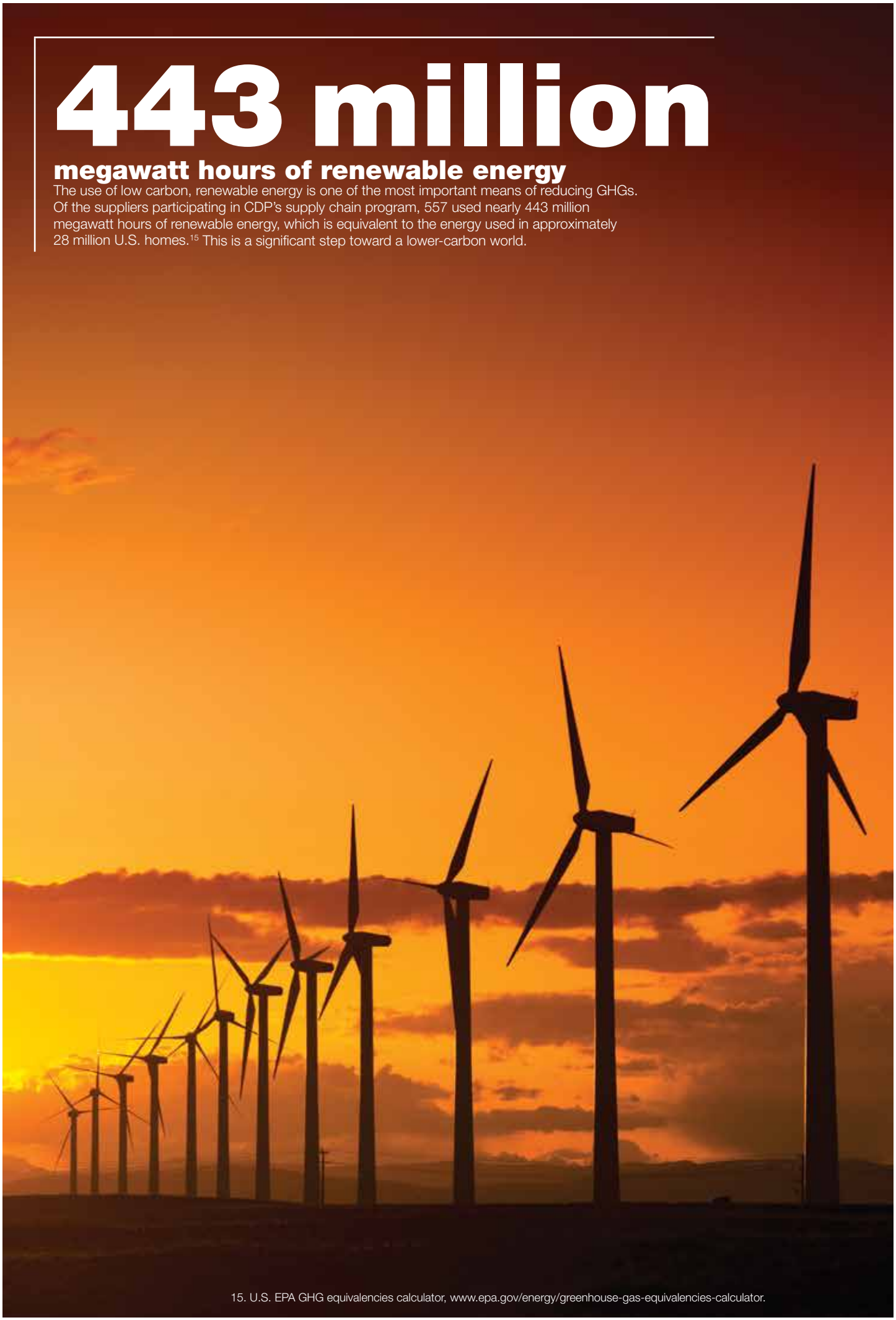
This suggests that supplier engagement targets affect suppliers' response to climate change, and purchasers should consider developing and applying such targets.

Several CDP supply chain member organizations have highlighted the value of targets, including AT&T and L'Oréal. By the end of 2014, suppliers representing more than half of AT&T's spend reported that they track GHG emissions and have emissions reduction goals, achieving the company's goal one year early. L'Oréal aims to help suppliers build capacity and engage more deeply on their climate change strategies so that, by 2020, suppliers representing 80% of direct spend will set an emissions reduction target and report activities to reduce emissions through CDP. In 2015, the beauty company's suppliers reduced emissions by an average of 207,000 metric tons per year.

443 million

megawatt hours of renewable energy

The use of low carbon, renewable energy is one of the most important means of reducing GHGs. Of the suppliers participating in CDP's supply chain program, 557 used nearly 443 million megawatt hours of renewable energy, which is equivalent to the energy used in approximately 28 million U.S. homes.[15] This is a significant step toward a lower-carbon world.



15. U.S. EPA GHG equivalencies calculator, www.epa.gov/energy/greenhouse-gas-equivalencies-calculator.

What to do next

As the world turns its attention from the Paris Agreement to the question of what to do next, the findings in this report demonstrate that suppliers are underprepared to meet the climate challenge. The findings also offer guidance to help purchasers and their suppliers increase their climate resilience.

Collecting, tracking, and sharing climate performance data should be a key part of supplier plans: Over time, those organizations that have been reporting and acting through both management activities and emissions reductions demonstrate much greater resilience than companies that are just starting out.

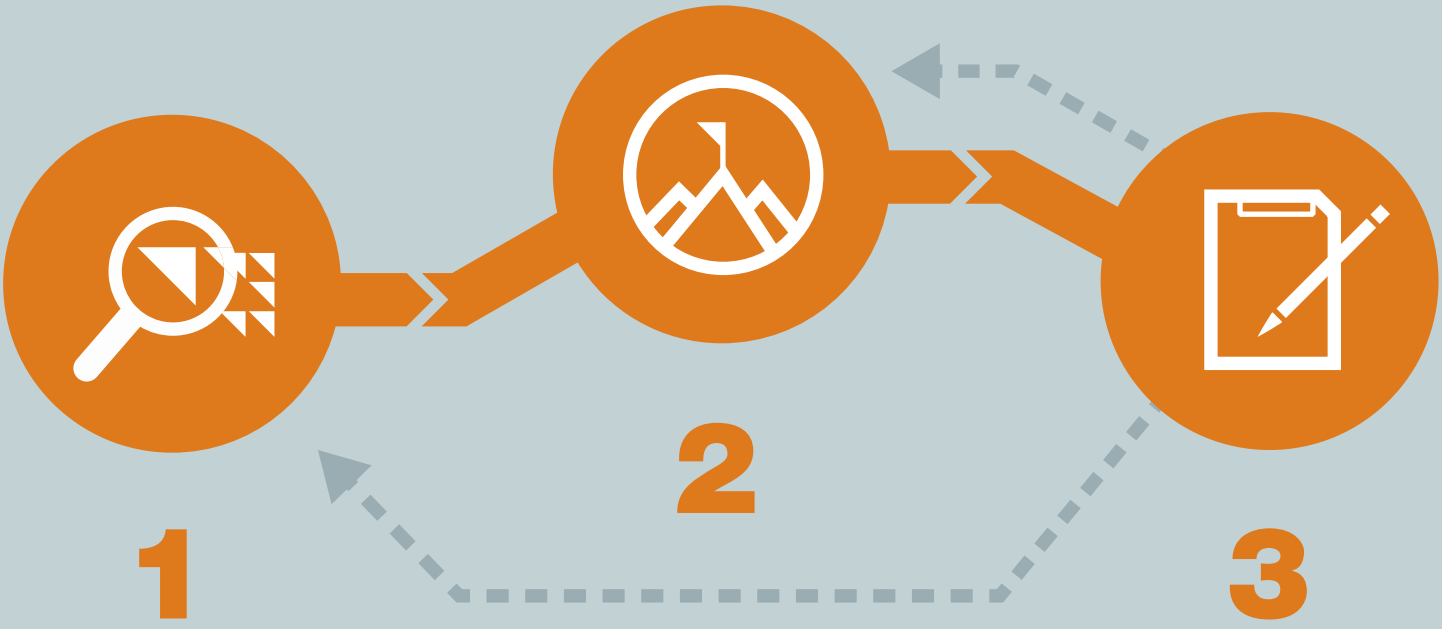
Organizations should also consider how they evaluate climate risks. As our research found, there is often a wide gap between how organizations perceive risk and the reality, particularly with regard to climate change and tightening regulations. Additionally, though CDP welcomes greater numbers of responding suppliers to the CDP supply chain program each year, only half of those invited annually respond. This is of great concern as risks are rapidly evolving. This can slow the adoption of measures to achieve greater organizational climate resilience, compounding the potential risk to business.

Finally, both suppliers and purchasers should consider climate management measures as part of their broader operational strategy. These measures, explained above, include having board responsibility for climate change, providing incentives for climate change management, establishing emissions reduction targets and initiatives, and engaging with suppliers through buyer incentives and engagement targets.

Based on work with leading global companies to develop and implement supply chain climate strategies, BSR has laid out a three-step framework to build climate resilient supply chains. This framework supports the development of climate resilient suppliers who understand their risks; manage those risks through mitigation and adaptation; and measure, reduce, and report on GHG emissions.

> ***To reach our ambitious GHG reduction goal, Walmart looked to the collaboration and expertise of several advising partners - including CDP, who has been integral in helping identify projects, quantify GHG reductions, and engage suppliers. CDP's guidance throughout our journey set the stage for successful supplier relationships and more engagement opportunities down the line. We have come a long way, but our work toward advancing the sustainability of our supply chain will never be finished.***
>
> Walmart

BSR's three-step framework for climate resilience[16]



Identify supply chain priorities.
These include areas of a supply chain with both high GHG emissions and high climate vulnerability. Key categories of spend and relevant operational geographies should be assessed. In order to identify priorities, it's important for purchasers to understand the types of suppliers that are likely to be less resilient. Based on the findings in this report, special attention should be given to priority suppliers that are:

- Non-reporters and first-time reporters, which are likely to be much less resilient than average suppliers; and
- Suppliers with little or no management action in place, which are likely to be well behind others in reducing their emissions and addressing climate risks.

Take action and develop targets.
Purchasers should engage with their suppliers to encourage action and develop targets for performance. Procurement actions may include:

- Requests for information;
- Buyer financial incentives;
- Supply chain engagement targets;
- Requests for specific supplier management activities, such as board-level responsibility; and
- Collaboration to drive performance.

Evaluate impact.
Monitoring, evaluating, and reporting help companies understand how different actions contribute to achieving targets, which can enable improvement over time. Supplier reporting on climate risks, management, and emissions is an important element for purchasers that are evaluating their supplier engagement programs. As noted above, various supplier incentives and nonfinancial incentives for buyers do not appear to work in aggregate, but they may work on a case-by-case basis.

16. Norton et al. 2015.

Collaboration is key

Avaya has a successful track record reducing emissions within its business operations, with a 39% reduction since 2009. As a next step, we recognize that working in close partnership with our customers would help further our efforts. And through our engagement with the CDP, we realized an exciting opportunity to partner with our customer, BT.
Sara Broadbent
Director of Corporate Responsibility, Avaya

We are pleased to announce that BT and Avaya will be working together in 2016 to reduce climate change impacts. As part of BT's environmental sustainability strategy, we engage with our suppliers to realize emissions reductions and recognise Avaya's success and commitment to do more. We look forward to continuing our collaboration with Avaya.
Liz Cross
Head of Sustainability for Procurement, BT

Through our Supplier Efficiency Program, we send our own energy experts to supplier facilities to help identify low-cost and no-cost energy savings measures through one-day, interactive workshops. This helps them reduce energy use and costs, builds their capacity and knowledge, and reduces their long-term operational risks.
Johnson Controls

CDP supply chain members and their suppliers represent 12,057 member-supplier relationships. Additionally, suppliers highlighted more than 3,000 opportunities to engage with their customers to address climate risks and reduce emissions. These represent important times to learn and share knowledge to address climate risks and reduce emissions.

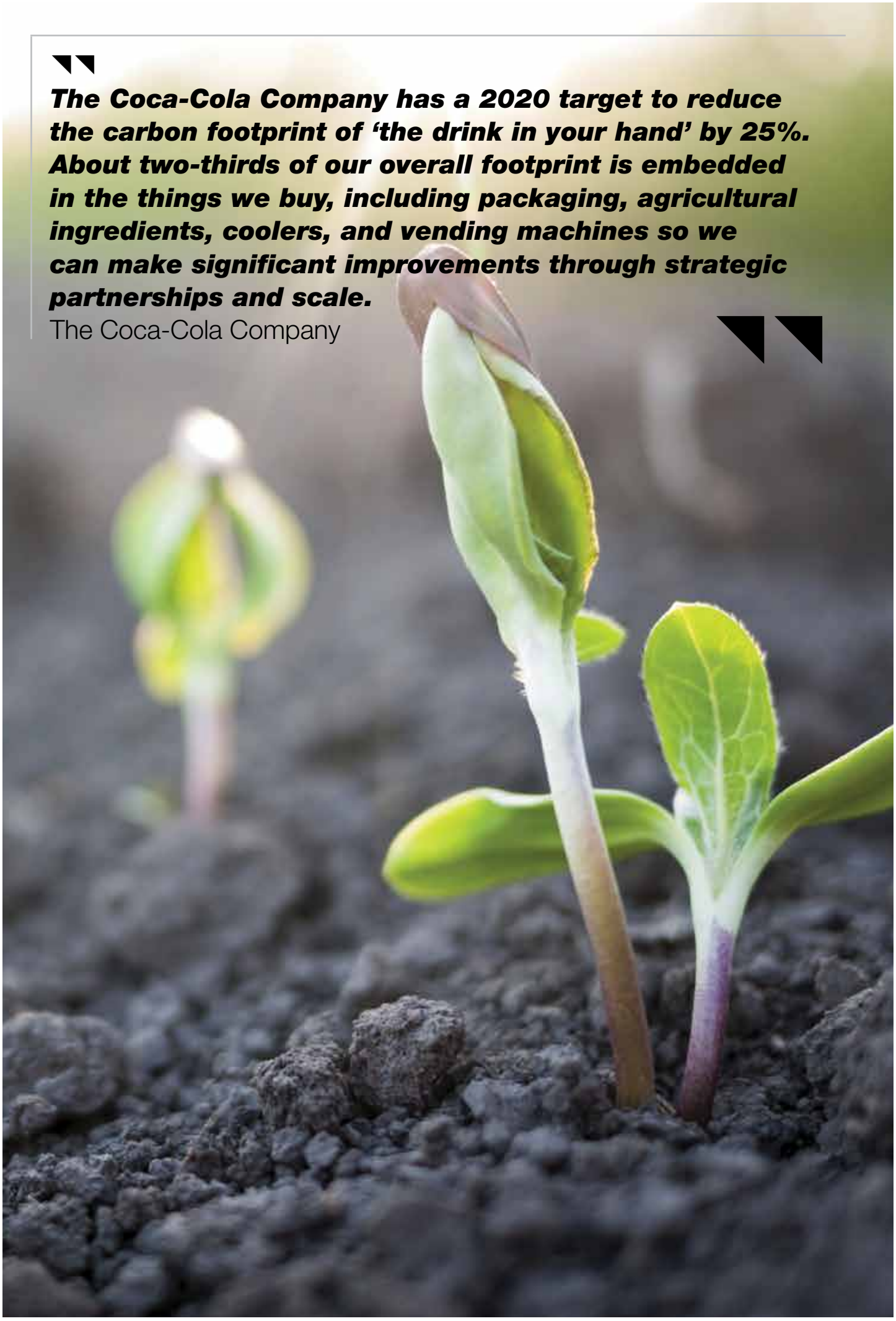
This type of supply chain collaboration is already driving emissions reductions in supply chains: Suppliers reported that member engagement is directly responsible for more than 3.5 million tons of carbon emissions reductions in the space of one year. Planting 90 million trees would sequester the same amount of carbon.[17]

Unfortunately, too few organizations are engaging their suppliers. Of the 4,005 companies that disclosed to the program in 2015, roughly a quarter reported engaging with their suppliers. We know that supply chain emissions comprise twice the emissions of a company's own operations on average, which means that direct supply chain engagement is critical for reducing emissions. It is time for more companies to follow suit and use their purchasing power to encourage positive climate action in their supply chain. This will greatly contribute to the global transition to a low-carbon economy.

In closing

Ultimately, these findings, recommendations, and processes are part of a longer-term strategic direction for businesses to build their resilience in the face of global climate change and the business risks it creates. The introduction posited that this research would ask whether business and supply chains were doing their part to bring about climate resilience. The answer is mixed. But it is clear that organizations with a reporting system and effective management measures are better suited to deal with these changes.

17. U.S. EPA GHG equivalencies calculator, http://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator.



The Coca-Cola Company has a 2020 target to reduce the carbon footprint of 'the drink in your hand' by 25%. About two-thirds of our overall footprint is embedded in the things we buy, including packaging, agricultural ingredients, coolers, and vending machines so we can make significant improvements through strategic partnerships and scale.

The Coca-Cola Company

Launch of CDP's supply chain ranking
Groundbreaking supply chain climate change ranking

How well do you manage climate change in your supply chain?

In January 2017, with the support of the world's leading climate change philanthropic organization, ClimateWorks, CDP will launch a first-of-its-kind ranking of how global corporations are managing climate change in their supply chains. Examining the existing climate change questionnaire through a supply chain lens, we will assess organizations on the breadth and depth of their supply chain engagement on climate change.

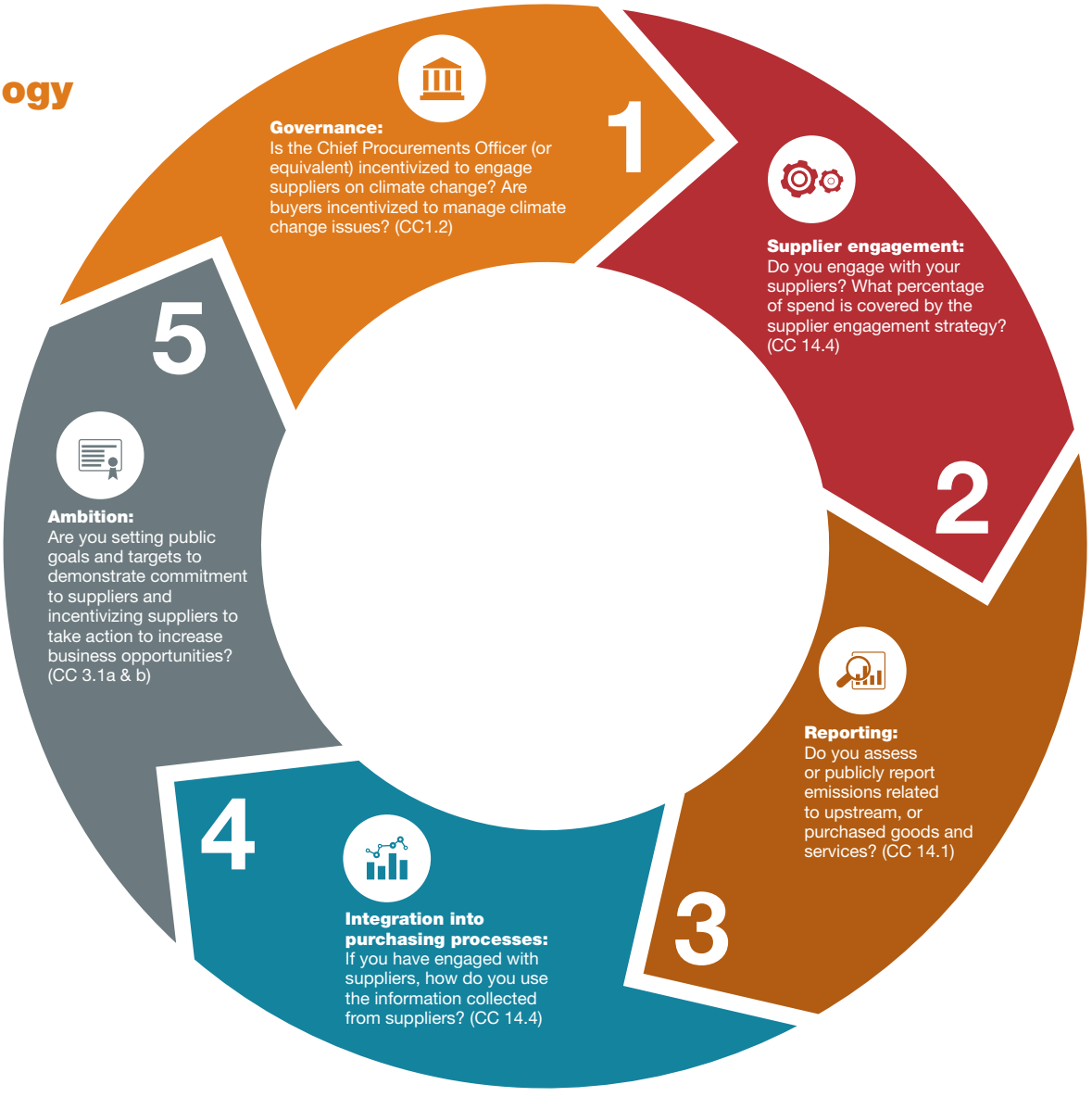
It is no longer acceptable for large corporations to avoid the wider climate impacts of their supply chains. CDP will aim to highlight the efforts of those that are managing this issue effectively and shine a light on those corporations that are not engaging with their suppliers on the issue.

In 2016, we will be consulting widely with businesses, investors, consultants, and other non-governmental-organizations on the methodology for this research. Our initial thoughts are to focus on governance, supplier engagement, reporting, integration into procurement, and ambition. We will not be making any changes to the existing CDP climate change questionnaire, beyond slight modifications to the guidance.

The methodology will likely include some of the questions outlined in the graphic below.

We feel this ranking will celebrate the leaders and draw appropriate attention to the laggards. It has the potential to accelerate climate action in the supply chain and ensure that global supply chains are prepared to meet the obligations of the Paris Agreement.

Potential methodology



CDP-McKinsey & Company collaboration

While there is good cause to celebrate the agreements at the recent Paris COP, most experts suggest that substantial additional reductions in global emissions beyond the Paris commitments are required to stay within the 2°C UNFCCC threshold for avoiding the most dangerous impacts of climate change.[18] Delivering (and exceeding) the Paris commitments will require an acceleration of carbon reductions in operational value chains upstream of companies' own operations. This is because supply chain emissions represent the lion's share of end-to-end corporate footprints. And so far, focus and – more importantly – progress, in this area falls far too short of the progress on emission reductions companies have made in their direct corporate operations.

This year's annual report on CDP's supply chain program backs up this call for more action in the supply chain. Supplier response rates have steadied at roughly 50%, as have the proportion of suppliers integrating climate change into business strategy (63%) and supplier risk awareness in general. So while enormous strides are being facilitated through the program – over 15 million metric tons in reported emissions reductions in 2015 alone – we believe a "new S-curve" of corporate supply chain ownership and accountability is essential to further progress.

It is in this spirit that we have collaborated with CDP on a number of efforts linked to the supply chain program. Specifically, we're working together to:

- Enhance the tools and technology included as part of CDP's Action Exchange initiative, which aims to empower participating suppliers to reduce emissions through financially beneficial means;
- Launch sector-specific supply chain cooperatives, FRESCo,[19] that look to collectively engage the common supplier base in target industries with a suite of tools to remove barriers and motivate action on emissions reductions; and
- Remodel the individual custom reports that members participating in CDP's supply chain program receive in conjunction with this public report, focusing on providing a comparative assessment and guidance on actions across categories of member strength, supplier response, supplier insight, and supplier action.

Perhaps the most striking outcome from our joint effort on the custom reports comes from the category of supplier action: while nearly half of all members (47%) have supplier bases who are moderately cooperative – willing to work with members and each other – they are essentially inactive when it comes to emissions reductions. Suppliers are seeking guidance, support, and recognition. And, remarkably, looking across the supply chains of the industries covered, there is a dearth of examples of any considerable level of supply chain emissions reduction performance. Supplier inaction remains both the crux of the problem and key to meaningful progress on global value chain emissions reductions. The solutions are myriad and rooted in both the tools of procurement organizations as well as the mutual benefits afforded to buyers and suppliers in eliminating operational waste and risk in the value chain. Supply chain engagement must be tailored to the fingerprint of a member's supplier base (a goal of CDP's custom reports), leverage a member's individual strengths, and combine aspirations and incentives with real consequences, e.g. 'goals with teeth'.

The newly agreed global consensus on the need for targets, the potential of acceleration mechanisms (e.g., reduction mandates or carbon pricing), and complete value chain accountability point to a clear opportunity for organizations to improve the carbon efficiency and climate resilience of their supply chains. Just as governments are aligning on individual accountability for their respective countries' emissions, the time has come for global corporate leaders on climate change to meaningfully engage the full emission impact across their respective value chains. Those who get it right will not only serve as exemplary stewards of the planet, but may very well outcompete their less engaged peers.

18. http://www.nature.com/ngeo/journal/vaop/ncurrent/full/ngeo2559.html
19. The Factory Resource Efficiency Supply Chain Cooperative

The Supplier Climate A List

Each year, with our valued scoring partner First Carbon Solutions, we analyze and score supplier responses to CDP's climate change information request against two parallel scoring methodologies: disclosure and performance. The Supplier Climate A List recognizes companies that are leading in their actions to reduce emissions and mitigate climate change in the past CDP reporting year.

Its intent is to highlight positive climate action as demonstrated by a company's CDP response. A high-performance score signals that a company is measuring, verifying, and managing its carbon footprint – for example, by setting and meeting carbon reduction targets and by implementing programs to reduce emissions in both its direct operations and its supply chain. Many members use supplier scores in their assessments of suppliers. The CDP scoring methodology is the highest-rated sustainability rating system.[20]

The following companies represent 1.8% of total climate change disclosures in 2015.

Global supply chain scoring partner:

FIRSTCARBON SOLUTIONS™

Company Name	Score	Country
Consumer Discretionary		
BMW AG	A	Germany
Fiat Chrysler Automobiles NV	A	Italy
LG Electronics	A	South Korea
Melia Hotels International SA	A	Spain
NH Hotel Group	A	Spain
Sky UK Limited	A	United Kingdom
Sony Corporation	A	Japan
Consumer Staples		
Brown-Forman Corporation	A	USA
Diageo Plc	A	United Kingdom
Emsland	A	Germany
L'Oréal	A	France
Nestlé	A	Switzerland
Unilever plc	A	United Kingdom
Energy		
Galp Energia SGPS SA	A	Portugal
Financials		
Bank of America	A	USA
BNY Mellon	A	USA
Citigroup Inc.	A	USA
MAPFRE	A	Spain
State Street Corporation	A	USA
Health Care		
Roche Holding AG	A	Switzerland
Industrials		
Abengoa	A	Spain
Carillion	A	United Kingdom
CNH Industrial NV	A	United Kingdom
CSX Corporation	A	USA
Dai Nippon Printing Co., Ltd.	A	Japan
Deutsche Bahn AG	A	Germany
Deutsche Post AG	A	Germany
FERROVIAL	A	Spain
Huber + Suhner AG	A	Switzerland
Kone Oyj	A	Finland
Obrascon Huarte Lain (OHL)	A	Spain
Pitney Bowes Inc.	A	USA
Royal Philips	A	Netherlands
Samsung C&T	A	South Korea
Schneider Electric	A	France
Shimizu Corporation	A	Japan

20. http://www.sustainability.com/projects/rate-the-raters

Company Name	Score	Country
Industrials (continued)		
Siemens AG	A	Germany
Stanley Black & Decker, Inc.	A	USA
United Technologies Corporation	A	USA
Information Technology		
Accenture	A	Ireland
Alcatel - Lucent	A	France
Alphabet, Inc.	A	USA
Apple Inc.	A	USA
Atos SE	A	France
Autodesk, Inc.	A	USA
Cisco Systems, Inc.	A	USA
EMC Corporation	A	USA
Hewlett-Packard	A	USA
Hitachi, Ltd.	A	Japan
Juniper Networks, Inc.	A	USA
Nokia Group	A	Finland
Microsoft Corporation	A	USA
Samsung Electronics	A	South Korea
Samsung Electro-Mechanics Co., Ltd.	A	South Korea
Materials		
BillerudKorsnäs	A	Sweden
FIRMENICH SA	A	Switzerland
Givaudan SA	A	Switzerland
International Flavors & Fragrances Inc.	A	USA
Sealed Air Corp.	A	USA
Symrise AG	A	Germany
Telecommunication Services		
Proximus	A	Belgium
Sprint Corporation	A	USA
Swisscom	A	Switzerland
Telefonica	A	Spain
Telenor Group	A	Norway
Utilities		
ACCIONA S.A.	A	Spain
Entergy Corporation	A	USA
Iberdrola SA	A	Spain

SMEs Company Name	Score	Country
Consumer Discretionary		
Gerber Gear	A-	USA
Consumer Staples		
Mario Camacho Foods, Llc	A-	USA
Materials		
Kurita do Brasil	A-	Brazil

Notes

Acknowledgments

CDP would like to thank the members and responding companies interviewed during the research for this report. We would also like to thank the United Nations Framework Convention on Climate Change (UNFCCC), the U.S. General Services Administration, The Ministry of Finance of the People's Republic of China, and Accenture Strategy. We owe a great debt of gratitude to Jamie Nesbit, Pete Snow, Fran Parris, Alexandra Ross Taylor, Chloe Chan, Karl Wasmuth, Yue Qui, Elinor Nissbrandt, and Weiren Lim for their support on data analysis throughout the year.

We are very grateful to our Brazil scoring partners Gestão Origami Consultoria and MGM Innova Consulting, and our Japanese scoring partner, Propharm. We are deeply indebted to our global scoring partner, FirstCarbon Solutions for their help and support. We would also like to thank Nick Bennette and Steve Swartz from McKinsey & Company, and Jed Ela from the U.S. General Services Administration.

Our new ranking of how global corporations are managing climate change in their supply chains has been made possible through the generous support of ClimateWorks Foundation.

Our sincere thanks are also extended to the BSR report writing team of Tara Norton, Marshall Chase, and Cassi Wright.

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BSR would like to thank Brooke Avory, Eva Dienel, John Pabon, Emilie Prattico, and Xiaochen Zhang for their valuable contributions toward developing this report, as well as We Mean Business for their support of BSR's work on climate action in supply chains.

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BSR

CDP scoring partner

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CDP 2016
This report and all of the public responses from corporations are available for download from www.cdp.net.

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