

ERM: Bridging the Gap between  
Sustainability and Finance

# Climate change risk: the new investment fundamental

*The business of sustainability*



## Executive takeaways

A new ERM survey of 120 CFOs and Chief Sustainability Officers reveals few companies are ready to bridge the gap between sustainability and finance in addressing climate risk to their businesses. We found:

- Mainstream investors have ramped up pressure on companies to disclose in financial terms the business risks associated with climate change.
- Most companies see the need to develop climate change strategies, but lack tools to shape and report accurately.
- The finance function is lagging in awareness and prioritization of managing climate change risk.

We believe that to bridge the gap companies need to:

- Directly address changing investor pressures on climate change – to provide greater comfort to capital markets.
- Take an integrated approach to reporting – so everyone in the company speaks from the same page.
- Find fresh leadership clarity to build climate change risk into their wider business strategy.

## Introduction

Until recently climate risk was seen by most companies as a concern for governments and NGOs to worry about. Not any more. Today, that laissez faire view is rapidly changing as global political action, regional legislation, technology breakthrough and market disruption, extreme weather events, investor priorities and consumer sentiment have turned climate risk into an investment fundamental that directly impacts all of business. A new survey by ERM has revealed that few companies are ready to bridge the gap between sustainability and finance.

Amid these growing concerns the way companies report on climate risk takes on new significance as investors look to accurately assess and measure the environment's impact on their business models, assets and reputation, as well as the organizational preparedness to cope with these risks.

The 2015 United Nations COP21 agreement in Paris played a major role in elevating climate risk from an environmental to a financial issue. Two hundred countries pledged to cut carbon emissions and keep global warming to no more than 2C above pre-industrial levels. Even though the pledges were non-binding the commitments by so many world governments – and the spectre of new greenhouse gas emissions (GHG) regulations – highlighted to business and investors the potential economic cost of climate risk.

For many companies climate risk is already very real. Coffee and chocolate producers are facing long-term chronic shortages of raw materials in existing producer regions, due to temperature and rainfall changes. Consumer goods manufacturers are developing new waterless toiletries and clothing products in anticipation of widespread freshwater scarcity, especially in parts of Asia and Africa. And automakers are running over themselves to create new low-carbon cars and trucks to meet future demand that is being shaped by governmental policies and technology breakthroughs that may herald the death of the internal combustion engine.



**“You may or may not believe man-made climate change is real, or dismiss the science behind it. No matter. Climate change risk has arrived as an investment issue.”**

Blackrock Investment Institute

For the investment community the risks posed by a company’s GHG emissions or its dependency upon them somewhere in the value chain, is of particular concern. According to a London School of Economics report, climate change could reduce the value of global financial assets by \$2.5 trillion. Central to investment concerns is the issue of “stranded assets” – particularly fossil fuel deposits that may not be recovered and converted to cash, if they cannot or will not be extracted due to climate change policies or shifts in technology.

The concerns over fossil fuel investment vulnerabilities are prompting concrete action. In November 2017 Norway’s \$1 trillion Sovereign Wealth Fund (built on the back of the country’s North Sea oil industry no less) proposed withdrawing from all fossil fuel investments, because “the vulnerability of government wealth to a permanent drop in oil and gas prices will be reduced if the fund is not invested in oil and gas stocks.” New York Mayor, Bill De Blasio announced in January 2018 the city’s pension fund would divest \$5bn from companies involved in the fossil fuel business.

Even the world’s biggest publicly owned oil and gas company, ExxonMobil, is starting to feel the heat. A majority of its shareholders demanded in 2017 that the company publish more open and detailed analyses of the risks posed to its business by climate change policies, via a formal shareholder resolution. A vote which saw some of the biggest US institutional investors, such as Blackrock, Vanguard and State Street supporting the shareholder action. ExxonMobil recently published their report.

Ultimately it’s not just the fossil fuel producers or companies that produce greenhouse gases in their value chain that will need to be concerned. As a study by Blackrock Investment Institute warned: “You may or may not believe man-made climate change is real, or dismiss the science behind it. No matter. Climate change risk has arrived as an investment issue.”<sup>[1]</sup>

Already, the economics of energy seems to be tipping away from fossil fuels and towards renewables. According to the International Energy Agency the world’s capacity to generate electricity from renewable sources overtook coal in 2016. This shift is being driven in no small part by a financial sector that is now moving quickly to mitigate its own climate risk while maximising the potential of the low-carbon economy through the \$15 billion impact investing sub-sector and the \$41 billion strong green bond market.

A second major driver of climate risk awareness within business comes from policy led initiatives such as the United Nations Sustainable Development Goals (SDGs). Climate action is one of the 17 global goals adopted by 193 nations and a top priority for the hundreds of major companies that have already committed resources to tackling the goals. Their rationale for supporting the SDGs and climate action is grounded in commercial business thinking: according to the Business and Sustainable Development Commission, the SDGs can be a key driver of economic growth – an estimated \$12 trillion a year by 2030. Frameworks like the Task Force on Climate Related Financial Disclosure (TCFD) – a recommendation from the Financial Stability Board to the G20 – are quickly bringing shape to a once amorphous discussion. ERM are the authors of the technical supplement, which explains how to undertake scenario analysis in planning and reporting a company’s preparedness for climate change.

The actual physical risks of climate change also have a real world impact on a company's operations. This dimension of risk can affect any company, irrespective of their contribution to GHG emissions.

Climate risk also has a tangible effect on business in terms of reputation and future recruitment. It is an issue regularly cited by Millennials – that will have a major impact on business and society in coming decades. Millennials represent a growing influence in the impact investing community – it is estimated that they will receive more than \$30 trillion of inheritable wealth in the US alone over the coming decades.[ii] They hold very different positions to many of their parents when it comes to issues like fossil fuels and consumption of goods and services. These views influence not only what they purchase, but also the type of company where they want to work (and the values it holds).

Increasingly then, climate related risk is becoming not just an environmental issue, but one that has a direct impact on a company's financial standing and reputation. This is increasingly a real CFO/C-suite set of challenges. As a result it has a trickle-down effect to environmental, health, safety and sustainability (EHSS) heads in the firm.

So how prepared are companies to understand the importance of climate related risk to their business and to put in place the strategies needed to transform risk into opportunity? And, in particular, how prepared are two parts of the business – finance and sustainability – to work together to achieve these goals?

To explore these important questions, ERM recently surveyed 120 Chief Financial Officers (CFOs) and Chief Sustainability Officers (CSOs) or equivalents, from medium and large companies around the world. The goal was to determine: how important climate risk was considered within the organization; where responsibility for climate risk lies; whether sustainability and finance professionals share responsibility for climate and sustainability strategies and to what extent investors were advancing internal action around sustainability and climate risk?

Here's what we found.



## Understanding and Prioritising Climate Risk

### Investor Pressure Drives Action

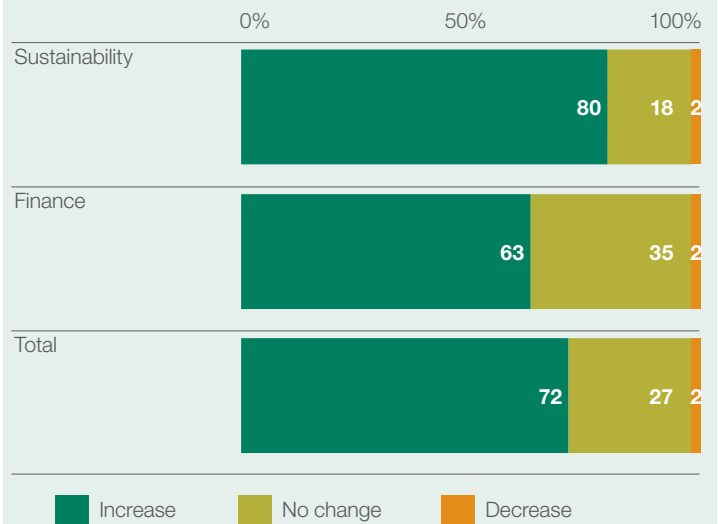
The majority of companies already publish climate-related risk information in annual reports (77%) and CSR (74%) reports. Most of the executives (74%) surveyed also said that their executive committee regularly discusses climate-related risk in leadership meetings. An even greater proportion (78%) said their organization had a strategy in place to manage the potential risks resulting from future climate change.

Companies have plenty of internal reasons to evaluate, develop strategy and report on climate risk, but it's clear they are feeling particular pressure from investors. More than half (57%) of the executives surveyed said their organization is facing significant pressure from investors to report on climate-related risk and management. That was the case for a majority of companies all over the world – 72% said investor pressure had increased over the past five years. But it was most keenly felt in Europe. The pressure to report today was felt equally by both sustainability and financial executives though far more sustainability executives (80%) than financial ones said that investor pressure had increased over the past five years.

There could be a few explanations for why sustainability and finance professionals hold different views on the growth in investor pressure. Traditionally, sustainability teams would probably have had the climate-related conversations with investors most interested in the topic. As the voices of impact and now mainstream investors have grown louder, so more finance executives are becoming aware of the issues, but may not have the historical experience of how to deal with them. For those in finance it could also be driven by the increased costs from capital markets through the potential penalization on loan conditions in less transparent and carbon intensive markets.

Chart 1

Q: Over the last five years, has your organization faced an increase or decrease in significant pressure from investors to report on climate-related risk and management?



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**More than half (57%) of the executives surveyed said their organization is facing significant pressure from investors to report on climate-related risk and management**

## Does Finance Understand Climate Risk?

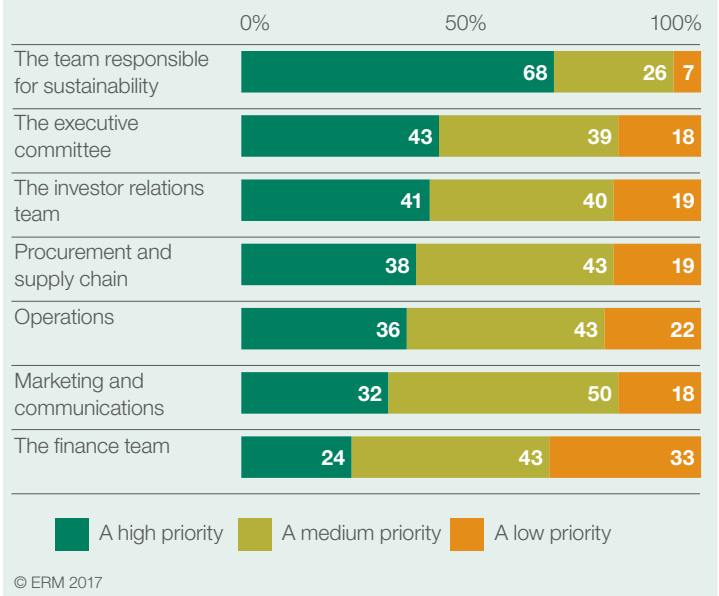
While finance professionals are increasingly aware of investor pressure around climate risk neither they, nor their colleagues view the issue as their responsibility. When asked which job roles are more likely to make climate-related risk and management disclosure a high priority, only 24% mentioned the finance team compared with 68% for sustainability. A further 41% chose the investor relations team – interestingly those companies that are experiencing pressure to report on climate-related risk are more likely to recognize this as a priority for the investor relations team.

Given that climate risk has only recently become a financial issue for many companies it is understandable that parts of the organization might still view the issue as the responsibility of sustainability professionals alone. But what do finance executives themselves think? If companies are going to fully measure and report on climate risk, sustainability and finance teams must work in concert, and their collaboration will have to be understood and encouraged at the executive board level.

At present, very few finance executives view climate risk as the responsibility of finance. Just 28% in our survey believed climate risk was a priority for the finance team, despite the call from the TCFD, led by Bank of England chief Mark Carney, for increased disclosure of climate-related financial risk. Tellingly, the majority of sustainability executives agreed with this assessment – suggesting a disconnect in evaluating the combined environmental and financial risks associated with climate actions, despite executives saying they have strategies in place to handle climate related risk. Other job functions that should arguably have a solid understanding of sustainability and climate risk – like enterprise risk management, strategy, marketing, communications and operations for example – barely registered with executives when thinking about climate risk responsibility. This reinforces the concerns of the TCFD group that the gap between sustainability and finance functions needs bridging.

**Chart 2**

**Q: How much of a priority do you perceive climate-related risk and management disclosure to be for the following functions within your organization?**



**At present, very few finance executives view climate risk as the responsibility of finance**

**24%**

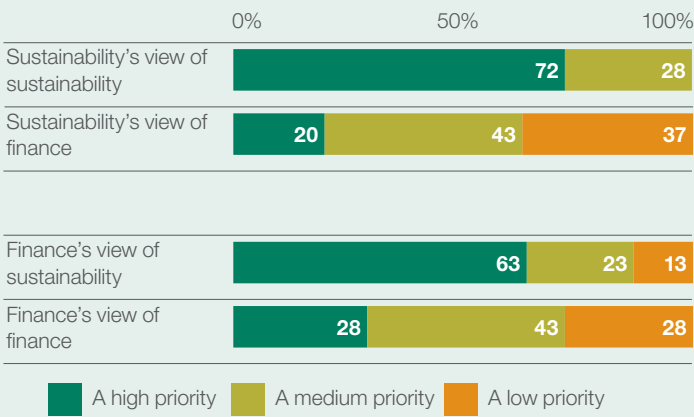
**When asked which job roles are more likely to make climate-related risk and management disclosure a high priority, only 24% mentioned the finance team**

Not surprisingly this disconnect is reflected in executives' limited understanding of climate risk reporting standards and also in their possible over confidence in their organization's ability to report on climate risk. Less than half of finance executives (compared with 90% of sustainability executives) were aware of the Carbon Disclosure Project (CDP) a leading global disclosure system for investors, companies and municipalities to manage and measure their environmental impacts. Even fewer finance executives had heard of the Global Reporting Initiative (GRI) even though more than 11,000 organizations currently adhere to its sustainability reporting standards and cite them in their own non-financial reporting. Could it be finance executives aren't reading their own company's sustainability and CSR reports?

Certainly, despite being confident that their organizations have a strategy linking climate risk to business value, most executives still don't believe they can accurately report on this work. Just 35% felt their organization was in a position to report on the impact of climate-related risks and opportunities on business, strategic and financial planning. More than half said they were planning to improve on this in the next year. Just 40% felt their organization could accurately report on the processes it uses to identify, assess, and manage climate-related risks. Slightly fewer executives expressed confidence about being able to report on the metrics and targets used to assess climate-related risks and opportunities.

Taken as whole, the executives' responses to the survey suggest that while organizations understand the importance of a strategy that equates climate-related risk to business value and reporting on it, they lack that vision, knowledge, tools and culture to implement. In order to best prepare for rising investor expectations, and to realize the business opportunities for mitigating climate related risk, organizations are going to have to better align the priorities of finance and sustainability.

**Chart 3**  
**Q: How much of a priority do you perceive climate related risk and management disclosure to be for the following functions within your organization?**



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# 28%

**Just 28% of CFOs in our survey believed climate risk was a priority for the finance team**



## How to Bridge the Gap Between Sustainability and Finance

Based on ERM's survey of sustainability and finance executives it seems clear that the majority of organizations understand the need to have a strategy that links climate-related risk to business value and financial performance. They also need to report on their work for increasingly demanding investors and in anticipation of potential new regulation and governmental policies.

Key to that strategy is an environment where sustainability and finance professionals can work together to understand, quantify, measure and report on the environmental and financial risk of climate change. At present though, based on the responses to our survey, sustainability and finance operate in silos. How then can business get finance and sustainability executives working together to identify climate related risk and, just as importantly, the growth opportunities available in a low-carbon economy?

### Leadership and Strategy

Leadership at Board level is one way. Companies that have taken a forward-thinking approach to climate-related financial risk often have a CEO and Board that have a strategic long-term sustainability plan that ties to future financial growth. Unilever, led by CEO Paul Polman, is an acknowledged cheerleader for this approach, but many other major companies have implemented board-level growth strategies that incorporate the financial up and down-side of their future exposure to climate opportunities and risk.

For these strategies to work the finance and sustainability departments (along with others) have to operate in concert. At Intel, a portion of each employee's compensation is tied to achieving environmental sustainability metrics. IBM, meanwhile, has compiled metrics from its decades-long energy conservation program to demonstrate how each kilowatt of electricity not consumed directly improves the company's bottom line.



Building climate risk into future business planning can also help the economy as a whole, according to Harvard Business Review. A recent article argued: "If major corporations are not prepared for emerging climate risks, then the country's economic performance could suffer during times of extreme climate shocks. In contrast, if companies are required to disclose their climate risk exposure...then this discovery process would be reflected in asset prices, which would incentivize companies to build up their climate resilience."

### Investor Pressure

Some corporations will shape a climate-related financial risk strategy because of a CEO's vision for future sustainability. Many more however, are going to do so because of growing investor and regulatory pressure to account for and report on climate risk. Back in 2010, the US Securities and Exchange Commissions (SEC) issued guidance for companies to improve their disclosure on climate risks noting how climate change poses material financial risks and opportunities in many industries. In 2016, the European Union passed a law that requires all European pension funds to account for environmental, social and governance factors.


That same year, the G20 Financial Stability Board Taskforce on Climate Related Disclosures was launched. Co-chairs Bank of England chairman, Mark Carney and Bloomberg CEO, Michael Bloomberg, noted that investors currently lack the information needed to respond to climate change. "This must change if financial markets are going to do what they do best: allocate capital to manage risks and seize new opportunities". They argued, "without the necessary information, market adjustments to climate change will be incomplete, late and potentially destabilising".



Other investment initiatives are also raising the bar on climate risk for companies. The UN's Sustainable Stock Exchange works with global bourses to promote improved environmental, social and governance (ESG) disclosure and performance among listed companies. The Asset Owners Disclosure Project, meanwhile, helps pension funds, sovereign wealth funds and insurance companies encourage increased corporate disclosure on climate risk.

To meet the challenges posed by the investment community, finance and sustainability executives are going to have to work together – particularly when it comes to reporting and disclosure of climate-related risks. For more than a decade the vast majority of climate-related risk has been reported voluntarily in sustainability reports, rather than in corporate financial reports where most information is disclosed in accordance with a company's fiduciary duties.

So while the sustainability and finance departments have been working towards a common goal – namely satisfying the many questions investors have about financial and ESG performance – they have been doing so independently of each other. That maybe why so few of the finance executives surveyed are aware of important sustainability reporting frameworks such as GRI and CDP.



## **“...investors currently lack the information needed to respond to climate change”**

Bank of England chairman Mark Carney and Bloomberg CEO, Michael Bloomberg, co-chairs of the Taskforce on Climate-Related Financial Disclosure (TCFD)

### **An Integrated Approach to Reporting**

Moving forward these two sets of professionals will need to collaborate so that they can measure the financial value of climate-related financial risk on their business and report it to investors. Integrated reporting offers one form of disclosure that could make this work. It is a much bigger undertaking than simply combining financial and non-financial accounting into a single report. Instead it requires companies to measure and value the activities of their business beyond basic productivity and sales. In doing so, companies place a cost not just on the ways their business impacts and adds value to financial and manufactured capital but also to so-called natural, social, human and intellectual capitals.

The International Integrated Reporting Council (IIRC) has launched a framework that seeks to “enable a better understanding of the factors that materially affect an organization's ability to create value over time.” The IIRC believes integrated reporting can lead both to behavioural changes and improvement in performance throughout organizations.

The UN SDGs offer a second, potentially complementary way of creating a common language for sustainability and finance professionals. The detailed targets and indicators of success for each of the 17 goals may have been drawn up with government, not business in mind but they can still help companies prioritize their most relevant climate related risks and help the entire organization work together. The TCFD recommendations are another input into the reporting equation with scenario analysis as a useful exercise to demonstrate a company's preparedness for change.

## Future Proofing for Climate-Related Risk

Inspiring leadership, smart strategy, meeting the demands of increased investor scrutiny and more collaborative approaches to measurement, disclosure and reporting will be key to better understanding climate-related financial risk and to bridging the gap between the worlds of sustainability and finance. None of that progress is going to take place however, if sustainability and finance professionals lack the expertise, analysis and technological tools necessary to truly understand climate-related financial risk.

In order for organizations to adapt to the challenges ahead they will need to apply new types of thinking and analytics to their growth and risk mitigation strategies in five key areas:

### 1. Scenario Mapping

Envisioning, anticipating and mapping future market and sector trends is key. This includes developing plausible alternative views about how future climate change issues could evolve. It involves assessing financial exposure to both transition and physical climate-related risks and opportunities. It requires identifying early market signals to monitor and define the range of business risks. And it necessitates the consideration of both financial impacts and management actions around climate related risk.

Scenario mapping is not just important for the operating and planning strategies of companies when applied to portfolios. It also provides investors with the risk management perspective they require. Not only can scenario mapping provide insight on financial risk exposure, it can help plan a robust strategy for solid investment returns. Another investment area where scenario mapping has proven its value is in assessing the materiality of sustainability risk and opportunity around capital projects.

### 2. Regulation, Policy and Transition Risk Assessments

Understanding new low carbon regulations and policies should also be a top priority. Increasingly this involves an understanding of how climate-related risk might impact business at a time when regional and national authorities are shaping often contradictory policies and when governments are torn between meeting global commitments while at the same time protecting local industries.

### 3. Physical Risk Assessments

How susceptible are physical plants and those in the supply chain to climate-related risk? Rising sea levels, increasing desertification, new regions of resource-conflict and extreme weather disruption of transportation routes are just some of the factors that will change the way companies do business in the coming decades. Smart modeling of future climate and related geopolitical disruption should be part of every company's planning to protect assets, sourcing ability and employee safety.

### 4. Investor Relations, Reporting and Reputation Management

Companies will struggle to develop a more joined-up way of measuring, accounting for and reporting on climate-related risk unless they have the tools and insight that can identify strengths and weaknesses in the organization and its supply chain. Training both finance and sustainability professionals to identify economic value and costs throughout the business and regulatory compliance outside of it is one step. As is having the expertise to accurately report through external climate risk frameworks such as GRI, CPD, SASB and TCFD with the help of digital tools to track greenhouse gases, water and an increasingly complex supply chain. Having that full suite of insight and understanding will provide the backbone for the type of transparent climate-risk disclosure that will give confidence to investors and reassure society.

### 5. Technology

More and better data will play a fundamental part in how pro-active a company can be in understanding and managing its climate risks going forward. As this issue gets greater attention, finance and sustainability professionals need to speak with a greater understanding and fluency with the issues and a common voice to investors, regulators and other stakeholders.

## Conclusion

We have reached a tipping point where addressing climate risk is now something a business cannot put on the ‘back-burner’. Our survey highlighted:

- The pressure from mainstream investors to manage climate risk is unavoidable.
- Many companies lack the tools and experience to report accurately on their businesses’ exposure.
- The finance function does not currently prioritize climate risk, possibly due to short term pressures.
- The disconnect between the priorities of the CFO and the Sustainability function is not serving the organization well.

To address this companies need to think about:

- Leadership clarity to build climate risk into the wider business strategy. Companies with a forward-thinking approach to climate-related financial risk often have a CEO and executive board that have a strategic long-term sustainability plan that ties directly to future financial growth.
- Actively understanding and managing changing investor pressures to provide comfort to the capital markets. To meet the challenges posed by the investment community finance and sustainability executives are going to have to work together – particularly when it comes to disclosure of climate related risks.
- Adopting a scenario and risk management based approach to financial disclosure around climate change, so that everyone speaks from the ‘same page.’

By addressing these issues companies will place themselves in the strongest possible position to mitigate climate change risks, to communicate effectively with an ever more informed investor base, and to capitalize on the opportunities that will arise as both our world and business sentiment changes.

[1] <https://www.environmental-finance.com/assets/files/The%20Price%20of%20Climate%20Change%20-%20BlackRock.pdf>

[2] [http://www.ey.com/Publication/vwLUAssets/ey-sustainable-investing-the-millennial-investor-gl/\\$FILE/ey-sustainable-investing-the-millennial-investor.pdf](http://www.ey.com/Publication/vwLUAssets/ey-sustainable-investing-the-millennial-investor-gl/$FILE/ey-sustainable-investing-the-millennial-investor.pdf)  
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For more information on this paper and our approach to managing climate risk contact:

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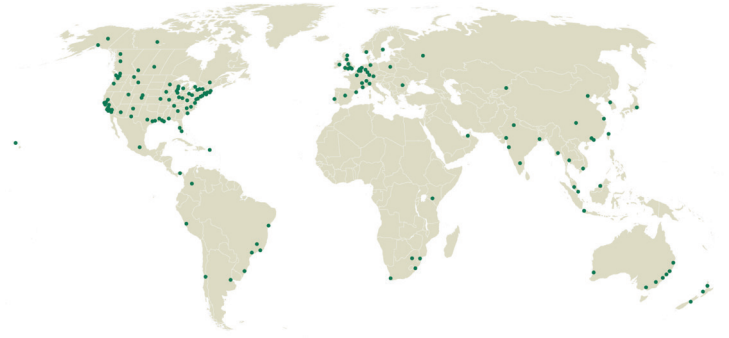
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