





UNLOCK GROWTH BY INTEGRATING SUSTAINABILITY:

HOW TO OVERCOME THE BARRIERS



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Lucy Nottingham, Director, Global Risk Center, Marsh & McLennan Companies Integrating sustainability into finance and risk management strategies will help companies capture growth in the face of shifting customer, capital market and regulatory demands.









EIGHT TAKEAWAYS

- 1. The rising pressures of a changing physical environment present a wide array of strategic and operational risks to many companies. Executives must ask themselves: How sustainable is our business, and are our strategies and operations at risk?
- 2. Customers, capital markets, and regulators are increasingly examining corporate sustainability risk profiles. The focus on sustainability and climate-change-related practices will affect both the cost and availability of financing for many companies.
- 3. Companies must identify, assess and respond to the strategic and operational risks and opportunities presented by the changing business environment.
- 4. Yet there are often disconnects between established corporate finance modeling and enterprise risk management processes and the discourse and expertise surrounding sustainability issues.
- 5. Three factors contribute to the organizational gap between finance and enterprise risk management and sustainability: unclear terms, unclear roles and risk responsibilities, and unclear corporate leadership and engagement on sustainability.
- 6. Companies that do not close this gap may find themselves losing ground in an increasingly competitive global marketplace.
- 7. Leading companies have leveraged sustainability initiatives to raise capital and reduce operational costs and volatility.
- 8. Finance, enterprise risk and sustainability leaders must integrate their efforts to provide real value in helping their organizations respond to evolving risks and capture competitive advantages.

INTRODUCTION

At many companies, the overlap between corporate sustainability challenges and operational and strategic risks is growing. At the same time, there are often disconnects between established finance modeling and enterprise risk management processes and the discourse and expertise surrounding sustainability issues. Companies that do not close this gap may find themselves losing ground in an increasingly competitive global marketplace.

This report, prepared by Marsh & McLennan Companies' Global Risk Center (GRC) with the support of the GreenBiz Group and the Association for Financial Professionals (AFP), explores how companies are incorporating sustainability assessments into their financial modeling and enterprise risk management strategies and processes. The report incorporates findings from surveys, roundtables, and interviews to outline three barriers that companies must overcome and three recommended actions to improve the connection between risk, finance, and sustainability.

It is clear that corporate sustainability approaches must move from "nice to have" efforts to promote the company and create employee engagement to a means to drive growth, manage risks to corporate earnings, and engage with financial markets. As one CFO notes, "Sustainability is smart business, and [it is] how we are managing our business going forward."

¹ Sustainability in this context means the consideration of environmental, societal, and economic risks and opportunities.

Exhibit 1: A rising focus on sustainability is changing the risk profile of many companies and their interaction with financial markets, supply chains, reporting bodies, and customers

CUSTOMERS EVOLVING DEMANDS



In a global survey,

66 PERCENT OF RESPONDENTS

are willing to pay more for sustainable goods

REVENUES FROM PORTFOLIOS

of branded sustainable products **grow six times faster** than
the rate of overall company revenues^{*1}

REPORTING REQUIREMENTS



SEC VOLUNTARY GUIDELINES

on disclosure of climate change impacts

SUSTAINABILITY

reporting standards (SASB)

IN 2015, 81%

of Fortune **500** companies published sustainability reports

SUPPLY CHAIN TRANSPARENCY



IN 2015,

5,500

companies responded to requests for information on GHG emissions, on water use, supply chain resilience, and deforestation

FINANCIAL MARKETS

SUSTAINABILITY INCREASINGLY IMPACTING COST AND AVAILABILITY OF CAPITAL



SUSTAINABILITY

bonds open new pools of capital

IN 2014, TOTAL ASSETS

under management using socially responsible strategies accounted for over

\$21.4 TRILLION GLOBALLY

AGENCIES AGENCIES

will be considering an **individual company's exposure** to those climate related risks and assess the credit implications

40% OF SHAREHOLDER RESOLUTIONS

filed by investors in **2016**relate to sustainable
and environmental issues

Rising environmental pressures are impacting companies Risks of highest concern over a 10-year horizon Weak High Natural National Water climate Extreme Food Social Biodiver-Cyber catastrogovernance unemploysity loss change weather instability crises crises attacks failures ment phes respose 8 9 10 Econimic Environmental — Geopolitical Societal Technological

Source: World Economic Forum, Global Risks 2016

 $^{^{\}star}1\ \ \text{The Nielsen Global Survey of Corporate Social Responsibility and Sustainability, 2015}.$

Corporate risk profiles are changing in response to environmental pressures and three associated trends: The growth of responsible investing, stronger regulatory requirements for disclosure on sustainable practices, and customer preferences cascading through supply chains. As a result, executives must ask themselves: How sustainable is our business, and are our strategies and operations at risk?

ENVIRONMENTAL PRESSURES

The World Economic Forum's Global Risks Report 2016, prepared with the support of Marsh & McLennan Companies, found that six of the top 10 global risks over the next decade are related to natural resources and the environment. Other critical risks, such as social instability and unemployment, can be exacerbated by environmental or natural catastrophes. Taken together, the rising pressures of a changing physical environment present a wide array of strategic and operational risks, including supply-chain disruptions caused by decreased availability of key resources, the loss of customers or vendors, and changing policy and regulatory regimes aimed at reducing the risk of man-made, or "anthropogenic," climate change.

INVESTOR SCRUTINY

There is growing interest in the active consideration of sustainability factors among financial institutions (including pension funds and insurance companies). This is driven, in part, by the consensus that growing threats of energy, water, and resource shortages, and long-term environmental problems such as climate change may materially impact the companies in which they invest. Investors are making changes in investment portfolios as they calculate how environmental changes,

as well as associated technology, regulatory, and policy factors, will impact returns in the mid- and long-term and are more frequently targeting sustainably managed companies for their capital. (See also Text Box: Sustainability will increasingly affect both the cost and availability of financing.)

REGULATORY AND VOLUNTARY DISCLOSURE

There are growing regulatory disclosure requirements and rising expectations for companies to voluntarily report on sustainability practices. European companies, including US-incorporated multinationals, will soon need to disclose information on their policy and risks as well as measurable results related to employees, the environment, and social practices.²

CUSTOMERS AND SUPPLY CHAINS

Both B2B and B2C companies are facing rising demands for product information, supply chain transparency, and sustainable business practices, which are pushing many companies to make operational and strategic changes. In fact, a 2016 GreenBiz Group survey found that customer pressure is the single most important factor in raising internal focus on sustainability.³

² Sustainability Practices, 2015: Key Findings, The Conference Board, 2015.

³ State of the Profession 2016, GreenBiz Group.

Sustainability and transparency around the product is no longer a tie-breaker after cost, quality, and delivery; they have become table stakes. ⁴ As the CFO of a food products supplier observes, "If it is important to the customer, then it is important throughout the supply chain."

Despite the significant implications and measureable financial impacts of sustainability-related risks and opportunities, in many companies, sustainability remains linked primarily to Corporate Social Responsibility (CSR) programs with weak links to the corporate financial, risk, and strategy agendas. As one executive surveyed says, "It is as if everyone knows

"If it is important to the customer, then it is important throughout the supply chain."

the global trends and risks (water scarcity, climate adaptation) are driving our business, but have not connected those drivers with risk in a concrete way." BlackRock, the world's largest private investment fund, highlighted the issue in a February 2016 letter to chief executives: "Generating sustainable returns over time requires a sharper focuson environmental and social factors facing companies today. These issues offer both risks and opportunities but, for too long, companies have not considered them core to their business."

FACTORS DRIVING SUSTAINABILITY INTO STRATEGY AND OPERATIONS

Supply chains that are heavily dependent on agricultural products or scarce resources, such as water, are often leaders in their approach to sustainability. As the treasurer of a forest products company notes, "If we're not sustainable, we don't have a business. Sustainability is consistent with having a long-term business."

However, sustainability pressures are building throughout supply chains in all economic sectors, as companies look for competitive advantages such as higher customer engagement, greater resilience, reduced operational costs, and improved risk management. For example, major freight shippers like Walmart, Lowe's, Procter & Gamble, and Owens Corning have asked trucking providers to incorporate natural gas vehicles into their fleets as they look to reduce the carbon footprint of supply chains. Banks are recognizing that lending, raising capital, advising, or investing with clients with poor environmental or social risk management practices could lead to credit, reputational, or financial risks within the bank's portfolio. In response, some are reducing exposure to select industries, such as mining or coal production, and are integrating the assessments of environmental and social risks, such as the company's impacts on water use and quality, energy consumption, and occupational health and safety trends into their investment considerations. In the fossil fuels sector, regulatory requirements to reduce greenhouse gas emissions, coupled with technology advancements, are fundamentally shifting the economic framework of the business.

"If we're not sustainable, we don't have a business. Sustainability is consistent with having a long-term business."



IMPACTFUL RENEWABLE ENERGY PROCUREMENT FOR SMALLER OFFTAKERS THROUGH FINANCIAL INNOVATION

MEETING GROWING EXPECTATIONS OF CUSTOMERS, INVESTORS, EMPLOYEES, AND NGOS

Low-carbon content delivery is a differentiating feature sought by an expanding segment of Akamai's customer base. Reducing the environmental impact of global operations is a key concern of Akamai's employees and a rising focus area for investors. That's why the company recently made a commitment to reduce by 2020 its absolute greenhouse gas emissions below 2015 levels. It will do so through the creation of a low-carbon-powered global delivery network by sourcing renewable energy for 50 percent of its network operations. Financial innovation and a long-term contract for differences (CFD) with a renewable-energy-project developer provided a feasible procurement mechanism that is consistent with Akamai's sustainability principles and shareholder concerns.

The ability to aggregate multiple off-takers for a single project is an innovation that is critical to expand corporate procurement of renewable energy via virtual power purchase agreements (PPA). For smaller companies, or for companies with smaller, more distributed loads (e.g., retail stores), only a fraction of a typical project's output is required to provide the energy needed. Project developers are stepping in to aggregate the demand.⁷

The overall analysis of these projects assumed a modest net cost to the business but the benefit of exceeding customer and investor expectations – as well as the underlying climate benefit – was the primary driver to move forward. Having said that, Akamai expects that, over time, these agreements will serve as a hedge against rising energy prices, which was an additional bonus when the case was presented to the executive team and Board.

Creating this energy procurement solution required a close working relationship among the heads of sustainability, business units, and all finance functions. For instance, with the treasurer taking a lead role, the finance teams considered the various accounting treatment and market risks and the tax implications of the agreement, while treasury examined the counter-party and pricing risks.

Developing the agreement took a considerable amount of time from both the finance and sustainability teams as each became educated on the various energy procurement options and their financial implications. The process pushed the finance team to learn more about the concept of sustainability and the implications of its application in the organization. Sustainability team members were pushed to better define and understand sustainability goals in terms of financial measures.

- 5 See also, "Akamai will power internet with sun and wind," GreenBiz.com, https://www.greenbiz.com/article/akamai-will-power-internet-sun-and-wind
- 6 See: https://www.akamai.com/us/en/about/corporateresponsibility
- 7 In a virtual PPA structure, one company agrees to act as the long-term energy "off-taker" at a fixed price, called the strike price. The electricity generated is sold into the wholesale market, with the difference between the strike and market prices flowing to the off-taker company as a debit or credit, along with the credits for the renewable energy generated (RECs), which are subsequently retired by the company. With a corporate assuming much of the market risk and providing assurance through its superior credit rating, the developer can then secure cost-effective funding for a project that will generate electricity commensurate with the company's annual energy usage in the particular power market.

WHAT IS DRIVING THE RISK AND SUSTAINABILITY GAP?

Three factors contribute to the organizational gap between risk and sustainability: Unclear terms, unclear roles and risk responsibilities, and unclear corporate leadership and engagement.

UNCLEAR TERMS

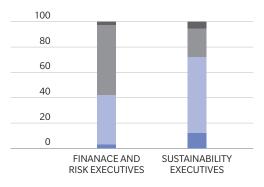
Both the terms "sustainability" and "risk" have a wide range of interpretations within companies. As one executive says, "There can be a lack of broad understanding about what 'sustainability' is and means to a company." Sustainability can be understood in terms of limited environmental impacts, or tied to corporate social responsibility goals with a focus on brand or reputation management, or it can be more widely understood as corporate focus on the impacts on "people, profit, and planet." Risk is a similarly ambiguous term. Risk and risk management can be understood narrowly in terms of insurance, compliance, or operational risk management focused on downside risk minimization, or it can mean a broader

Enterprise Risk Management (ERM) approach applied in strategy that factors in both risks and opportunities.

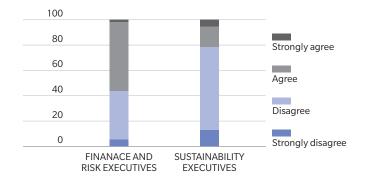
Such ambiguity can create real problems. Responses to a short survey conducted with AFP and GreenBiz Group members highlights the differing expectations of the finance and sustainability teams on their working relationships and the support each function provides to the other. Financial and risk executives were more than twice as likely than sustainability executives to agree that "sustainability risks are effectively integrated into risk management and risk reporting in our organization" and "the organization's finance and risk management teams are effectively integrated into sustainability programs." (See Exhibit 2)

Exhibit 2: Mismatched expectations can undermine effective collaboration

PERSPECTIVES ON HOW WELL SUSTAINABILITY RISKS ARE EFFECTIVELY INTEGRATED INTO RISK MANAGEMENT AND RISK REPORTING



PERSPECTIVES ON HOW WELL FINANCE AND RISK MANAGEMENT TEAMS ARE EFFECTIVELY INTEGRATED INTO SUSTAINABILITY PROGRAMS



Source: Marsh & McLennan Companies, 2016.



SUSTAINABILITY GUIDING DECISIONS AROUND CAPITAL ALLOCATION AND ROLAT WASTE MANAGEMENT

For Waste Management, sustainability is a fundamental element of business strategy and operations.

Over the years, the company has provided an increasingly broad array of sustainability solutions for its customers. Thirty years ago, Waste Management focused on how it could best provide its customers with the kind of environmental stewardship sophisticated landfill design and management systems could provide. Twenty years ago, the company's strategy was expanded to couple its commitment to environmental excellence with a focus on conservation of resources through recycling. In recent years, Waste Management has moved even further along the spectrum, developing the capacity to meet its customers' evolving sustainability needs and aspirations, up to and including "zero waste" strategies.

None of these innovations are static and none exist in a vacuum independent of sound financial policy. For the company's finance leadership, investment in sustainability innovations that enhance environmental utility and address customer preferences must be assessed in a manner that also carefully considers project economics.

In the past few years, the intersection of economics and environment has been evident in the company's leadership to ensure the long-term sustainability of recycling. In an environment of sustained low recyclable commodity prices, the revenue streams and margins for recycling facilities have been severely challenged. This triggered a comprehensive effort to: improve operational efficiencies; de-risk this part of the overall business; actively engage customers to ensure recycling contracts reflected the true costs of recycling; demonstrate the value of recycling using life cycle analysis, and better educate customers and stakeholders on how to "Recycle Often. Recycle Right. The company also carefully evaluated long-term trends in waste generation and recycling commodity pricing to ensure capital allocation matched demand for capacity.

At Waste Management, there is a need to ensure that communities can preserve environmental benefits of recycling and the company knows that the only way that can be achieved is by ensuring that the business is financially viable.

UNCLEAR ROLES AND RISK RESPONSIBILITIES

Another issue that should be of concern to the executive team and the board is that both financial and sustainability leaders view "lack of clear ownership and organizational leadership for sustainability risk management" as a top challenge to better integration of sustainability risks. Comments like "[The] sustainability group is too silo-ed to know who else is reviewing sustainable risks," and "The dialogue between sustainability and risk is minimal" are common. Each group may not be aware that the other is involved in overlapping corporate initiatives. As one treasurer says, "When I first went over to the global responsibility and PR side of the building to discuss financing a sustainability initiative, people asked me, 'Who are you?'."

Finance and risk and sustainability functions need clear roles and responsibilities for sustainabilityrelated risk assessment, financial modeling, and risk management. A close working relationship will improve each function's understanding of joint metrics and key performance indicators (KPIs) and will improve the sustainability team's knowledge of corporate risk, controls, and financial impacts. For example, one leading manufacturing company noticed gaps in the risk ownership of the chemistry risks of a product when it faced questions from the US FDA, EU regulators, and clients. The issue of managing risks of that one product was used as the platform to drive a wide cross-functional conversation about how to better manage this risk by adopting more sustainable chemical use. That approach helped secure new clients and maintain existing clients.

If the sustainability team doesn't understand the financial metrics and financial implications of sustainability initiatives, it simply won't be able to work effectively across the organization (see text box: Financial innovation for renewable energy procurement at Akamai). By the same token, financial leaders must understand their role in communicating corporate sustainability initiatives to the capital markets and investors. For example, one company had initially channeled sustainability initiatives in its marketing and public relations efforts. The treasurer of the company, however, said that such efforts "felt like talking to yourself." Only when the financial planning and risk team engaged in the dialogue did credibility on sustainability initiatives greatly increase, both inside and outside the organization.

"The dialogue between sustainability and risk is minimal."

UNCLEAR CORPORATE LEADERSHIP AND ENGAGEMENT ON SUSTAINABILITY

Strong C-suite leadership and engagement is a key factor in determining how effectively a company achieves greater integration of risk and sustainability. Yet C-suite leadership on sustainability is tepid in many companies. As one sustainability executive explains, "Sustainability integration is hindered by disbelief and disinterest [from] upper management." GreenBiz Group research shows that 70 percent of CEOs are at least "interested" in climate, even if they don't "own it." Other research indicates that sustainability is listed as a top 2016 challenge for global CEOs who are recognizing the value in terms of lowering operational costs by reduced consumption of key resources (water, energy) and building a portfolio of sustainable products and services.

However, just 1 percent of directors ranked corporate social responsibility (CSR/Sustainability as a top

three governance issue, and just 3 percent of the Global S&P 1200 link executive compensation to Environmental, Social, and Governance (ESG) performance, which suggests that few companies have integrated sustainability goals into their executive compensation philosophy.⁹

Securing greater leadership and engagement on sustainability is dependent on demonstrating that sustainability is integral to overall performance – not distinct to corporate initiatives, such as product development, responding to client demands, or

improving supply chain resilience (see text box: Aligning risk and sustainability to the balance sheet at Campbell Soup Company). As another executive notes, "When your CFO is well-versed in sustainability, it goes a long way."

"When your CFO is well-versed in sustainability, it goes a long way."



ALIGNING RISK AND SUSTAINABILITY TO THE BALANCE SHEET

The Vice President of Public Affairs & Corporate Responsibility at one large food company has found that the annual risk outlook process helps align the sustainability strategy with that of internal audit and enterprise risk.

The annual risk outlook process employs a systematic approach to identify the top ten enterprise risks.

The sustainability team focuses on the risk assessment and response plans to drive integration of sustainability goals and approaches into strategies and operations. For instance, efforts to address "resiliency in the supply chain" could include efforts to reduce waste in the supply chain, or increase transparency on agricultural or employee practices of key vendors.

Through this process, the sustainability team engages in dialogues with relevant business units and serves as a valuable resource helping to tie risk and sustainability together and align them to the balance sheet.

RECOMMENDATIONS TO BETTER INTEGRATE FINANCE, RISK. AND SUSTAINABILITY

Companies must focus on integrating sustainability into critical strategic planning and enterprise risk management planning process, embed sustainability into financial modeling and risk assessment processes, and create a common terminology.

EMBED SUSTAINABILITY INTO EXISTING OPERATIONAL AND STRATEGIC PLANNING

To support growth and achieve a competitive advantage, sustainability must be integrated into the strategic and financial planning process. This is the clear message from many of the executives involved in our research. The survey of AFP and GreenBiz Group members reveals that financial and sustainability leaders agree: A top challenge to closing the risk and sustainability gap is that "sustainability risk information is not linked to the organization's strategic and operational objectives."

Sustainability executives should secure leadership support and become allies with those who have a seat at the strategy and executive table. Participation in cross-functional bodies that cut across silos, such as a loan committee that includes marketing, finance, and product development representatives, is a successful mechanism in many companies. As finance and sustainability leaders stress, "sustainability needs to be involved in cross-functional risk teams" and "sustainability leaders must be included in risk forums with business leaders from across the organization." (See also Exhibit 3).

Exhibit 3: Intersections of financial and risk management and sustainability

EVALUATE STRATEGIC OPTIONS ANALYZE RISK EXPOSURE AND RISK MANAGEMENT SOURCES OF KNOWN VOLATILITY **CORPORATE STRATEGY Balance Sheet** Risks facing the day-to-day Range of strategic options that business and chose alter the company's direction/ strategy execution market positioning (e.g. commodity prices and availability, supply (e.g. market or site selection based on Income Statement chain interruptions; environmental, health, environmental impacts, renewable energy and safety compliance) procurement, and new product development) **EXOGENOUS RISK AND EVENTS CORPORATE ACTIONS AND RESPONSES** Statement of Cash Flow Risks largely outside of Range of risk management options that indicate affordability and mitigate management's control: lower likelihood, high impact financial losses 0 (e.g. natural disasters, reduced resource (e.g. switching fleet to electric or natural gas 0 **Key Financial Ratios** availability, regulatory changes, and changing vehicles, sustainability bonds, renewable energy customer expectations) procurement, and product substitution)

Indeed, in many companies, there is a wide array of sustainability-related actions taking place that may not be labeled as such; instead, they are embedded in how the organization manages strategic and operational risk. For example, one company chose to ensure a high level of LEED certification in constructing a new plant in China. This created a "sustainability win" and also provided a competitive advantage, as customers approved of this approach. It also ensured greater operational resiliency by reducing energy costs, reducing waste water, and generating other operational efficiencies that position the company for success in the face of fluctuating water costs or the introduction of a carbon price. As the CFO notes, "We are investing \$90 million, and we don't want to do this twice."

Building relationships with the Strategy Planning team and Internal Audit can also help drive ownership of the concept through the organization. At one organization, the Internal Audit group has helped to align sustainability and enterprise risk management processes as well as to support external reporting. Perhaps more important, the group has guided the Sustainability team in shaping conversations across the business and executive team.

Leading companies are factoring externalities into corporate scenario planning or three-year strategic planning processes. A global clothing manufacturer incorporated information on water stress and scarcity into strategic planning and discussions on emerging market growth plans and factory leasing and siting. Discussions on a ten-year lease for a factory were

enriched by questions of whether there would be sufficient water to support operations, and the analysis helped the company identify potential issues in business continuity.

Finance and enterprise risk leaders are also recognizing that sustainability-related initiatives offer opportunities to secure new or expanded conversations with capital markets (see Text box: Sustainability as a means to attract new investors at Starbucks). For example, one manufacturer's \$60 million expansion of a facility was financed by a new market tax credit program that attracted four different impact investors focused on community development. The organization's finance team worked closely with the sustainability group to promote the project, including working on a video segment on the green impact of the expansion.

"Leading companies are factoring externalities into corporate scenario planning or three-year strategic planning processes.

The integration of enterprise risk management and strategy and the increased visibility of sustainable practices may create other risks for companies by exposing the company's processes and supply chain to greater scrutiny. For example, there is no explicit standard regarding how extensively the supply chain needs to be tracked for unsustainable practices. As one executive acknowledges, "You need to be ready for prime time."



SUSTAINABILITY AS A MEANS TO ATTRACT NEW INVESTORS AT STARBUCKS

Starbucks has long had a focus on sustainability, driven in part driven by the need to ensure the continued supply of coffee and in part by the company's leadership. But now other factors driving the integration of sustainability as a way of doing business. Consumer focus on product origin and sustainability is a key factor, and while this focus is higher in Europe, the trend is shifting in the United States. Investors, including large pension funds and other institutional investors, are also increasingly looking at sustainability scorecards and company ratings when deciding whether to invest or divest from businesses. Starbucks was able to tap into the interest for Environmental, Social, and Governance (ESG) investing and issued the first sustainability bond by a US corporate issuer, with Bank of America as the lead underwriter.

The sustainability bond is meant to address social, agricultural, and environmental concerns, and it yielded a host of ESG investors that were "new pockets of money" interested in Starbucks equity. Specifically, 40 new investors were on the deal and 25 percent of the money invested can be traced back to an ESG-specific fund. The investments reveal that for the sake of sustainability, ESG investors can be less price-sensitive than others investors. For example, although Starbucks reduced its proposed coupon during the day of issuance, the offering remained significantly oversubscribed.

SUSTAINABILITY WILL INCREASINGLY AFFECT BOTH THE COST AND AVAILABILITY OF FINANCING

A focus on sustainability and climate change-related practices will increasingly affect both the cost and availability of financing for many companies. Recently, leading credit rating agencies joined an initiative to develop more systematic and transparent consideration of sustainability factors in credit ratings and analysis. ¹⁰

Voluntary disclosure and reporting standards are supporting this communication with capital markets. The Global Reporting Initiative (GRI) Sustainability Framework is used by many companies in preparing sustainability reports, and the Sustainability Accounting Standards Board ("SASB") is developing voluntary sustainability standards. Most recently, meanwhile, the Financial Stability Board's Task Force on Climate-related Financial Disclosures (TCFD) is developing recommendations for voluntary corporate climate-related financial disclosures that are consistent, comparable, reliable, clear, and efficient. The goal is to enhance how physical, liability, and transition risks related to climate change can be assessed, priced, and managed. Doing so would allow companies to more effectively measure and evaluate their own risks and those of their suppliers and competitors; investors to make better informed decisions on where and how they want to allocate their capital; and lenders, insurers, and underwriters to better evaluate their risks and exposures over the short, medium, and long terms. The Task Force is an industry-led initiative with 31 members representing both users and preparers of disclosures from across the G20's constituency and covering a range of economic sectors and financial markets. Final Task Force recommendations will be delivered in December 2016, and this effort is expected to bring climate-related financial reporting to a mainstream audience.¹¹

2. EMBED SUSTAINABILITY RISKS INTO RISK ASSESSMENT PROCESSES AND FINANCIAL MODELING

Few companies have integrated sustainability risks into ongoing risk assessment processes. A survey of GreenBiz Group and AFP members indicates that approximately 20 percent of companies have defined potential financial exposure to the strategic and operational impacts of expanding environmental regulations, and a similar of them are in the process of doing so. The survey also reveals the limited extent to which sustainability risks are included in ongoing risk assessment processes. For example, approximately 12 percent of respondents report that sustainability risks are included in risk assessments of large projects/capital projects; just 12 percent use include sustainability trends in key risk indicators.

Interviews and roundtable discussions pinpoint some of the reasons why sustainability-related risks are disconnected from existing risk assessment processes. The horizons for many sustainability risks (three to five years) far exceed those used in most corporate risk assessments (six to 18 months). That creates challenges in quantifying sustainability risks in meaningful financial terms for the company. Given the different risk horizons, sustainability issues can be considered "immaterial." As one executive explains, "We select suppliers for about five years, build products for three to seven years, and develop buildings for 20 to 40 years. Yet Wall Street cares about quarterly earnings. It is hard to blend the different time horizons in truly quantified means." Another notes, "The biggest problem is lack of accountability for risk exposure that happens to be profitable in the short term."

¹¹ For more information, see https://www.fsb-tcfd.org.

Sustainability executives expressed some frustration in survey responses. For example, "Finance and treasury are typically unresponsive to questions and discussions that would involve greater inclusion of sustainability risks into financial models." For their part, financial leaders acknowledge the challenges in effectively quantifying and assessing sometimes loosely defined risks, such as "evolving regulation" or "shifting consumer demand." The lack of clear policy or regulatory frameworks around nature resources compounds the problem. For example, many markets do not have carbon price or accurately priced water. As a result, the externalities of profits are poorly accounted for and the associated risks are not fully evaluated in corporate performance measures or return-on-investment calculations.

Yet companies are making progress. For example, many now apply an internal carbon price to project evaluations as part of the risk assessment and capital allocation process. One organization categorizes and embeds sustainability risks (such as climate change impacts or transitions in energy supply) into its risk taxonomy and enterprise risk management risk categories (financial, strategy, or reputation) as an accelerant and driver of other key risks (see text box: Embedding sustainability in Enterprise Risk Management at EMC Corporation). This approach enables the enterprise risk management and sustainability teams to identify overlaps between many corporate-identified exogenous risks and so-called "sustainability risks." In this way, a sustainability focus has become an element of risk mitigation and a contributor to achieving organizational strategies.

At another company, the sustainability executive became part of the ERM committee. In that role, the individual has been able to integrate sustainability discussions into an ERM process that is strongly focused on the economic and financial risks to the company by working closely with the Treasury, Finance, and Legal leaders of the annual ERM review. Or consider the business that has all

of its Senior Vice Presidents sit on a Risk Committee that includes the Director of Corporate Environmental Affairs, who has worked to integrate sustainability responses as a horizontal element into the ERM framework and the business unit risk response and business plans.

As these examples illustrate, the very act of embedding sustainability risks into risk assessment processes and financial modeling also helps to clarify roles and responsibilities among financial and enterprise risk management teams.

CREATE A COMMON LANGUAGE RELATING TO RISK AND RESILIENCE

The framing and communication of sustainability risks has a huge impact on bridging the gap to the finance and enterprise risk management programs. As one executive observes, "The language of risk is much more useful in a company than sustainability. If you can tie risk and sustainability together and align [them] to the balance sheet, it moves the topic forward."

Corporate sustainability goals and programs need to be communicated in the language of the business and in terms of the core corporate metrics. The sustainability team must communicate the benefits and returns of sustainability-related targets or programs in terms consistent with those required from any strategic or operational business plans. Those might include a risk-adjusted return number, a range on the potential cost saving, or revenue increase or earnings increase, with a clear identification of the assumptions and a clear understanding of the risks that create the range (uncertainty).

Framing issues through a risk lens can be extremely useful. For example, a conversation around issues such as "how to increase the resilience of the supply chain" is more likely to gain traction in a company than a discussion around "a sustainable agriculture strategy."

Establishing a common core language relating to risk and resilience clarifies the issues that are deeply tied to business operations. Conversations are crucial particularly in areas where the organization is bumping up against sustainability issues—such as when supply chain improvements are being considered, or when there is a reputation concern, or when changing regulations will require the reformulation of a product.

By building an ongoing conversation around resilience and risk, a medical device manufacturer's sustainability team drove forward a sustainability-based risk management programs. The head of the sustainability team met with the CEO and other key leadership team members to highlight the benefits of considering the overall sustainability of the enterprise and the focus on "doing good by stakeholders" as a means of doing good for shareholders. They reframed the sustainability discussion to one around growth and returns, and that has led to measurable value for shareholders.

The organization now has a cross-functional sustainability committee with 14 vice presidents from across the organization, including Marketing, R&D, Quality, Public Affairs, and Strategy. The committee looks for opportunities to decrease risks and costs and increase the organization's sustainability and resilience to changing technologies, regulations, resources, and customer concerns.

"Establishing a common core language relating to risk and resilience clarifies the issues that are deeply tied to business operations."

To date, it has come up with proactive responses to regulations and identified ways to reduce waste and breakage in manufacturing. Its work has also ensured higher sales with key customers who are asking suppliers to report on meeting higher level social and environmental requirements.



EMBEDDING SUSTAINABILITY IN ENTERPRISE RISK MANAGEMENT AT EMC CORPORATION

Including sustainability-related risks in corporate risk assessment and risk management practices began at EMC Corporation with a push from the board of directors. Members of the board urged the sustainability group, which was conducting a regular materiality assessment, to link up with evolving ERM initiatives.

Collaboration began at a very high-level with the inclusion of "sustainability risks" as exogenous risks in the ERM framework. The sustainability and ERM teams mapped how trends such as climate change and energy shifts serve as risk drivers and accelerants across core risk categories – including financial, strategy, and reputation – over a 12- to 18-month period. This allowed sustainability issues to be clearly reflected on the enterprise risk register (using primarily a qualitative assessment), as well as alignment on the risk monitoring and risk management response tracking. Embedding sustainability issues in the risk register enabled the sustainability team to define the risks, outline a possible trajectory, and explain the importance of the issues in the context of the top corporate metrics and board-level priorities, such as financial loss, client impacts, or reputation impacts. This approach demonstrated that sustainability-related risks have impacts across the company, and are thus not just issues for the sustainability function.

EMC's CRO also established a Global Risk and Compliance (GRC) Council. The council includes representatives from all the corporate risk management centers of excellence as well as from finance, supply chain compliance, legal, security, insurance, treasury, IT, and business unit leaders. The sustainability team was invited to join the council as a risk management center of excellence on par with other areas. The team's integration into the GRC supports a dialogue on sustainability risks. For example, the risk matrix and risk register exposed important overlaps between exogenous risks and sustainability risks, leading to questions around whether enterprise risks and sustainability risks are the same or overlapping. Greater integration into the risk management organization is allowing the sustainability team to better identify sustainability-related risk management programs that are already active.

The CRO acknowledges that the process to link the sustainability and enterprise risk management teams continues to evolve, but notes, "Don't try to create the perfect process or else it just becomes a 'science project.' You need to find a starting point and do something."



Sustainability issues will continue to affect businesses as climatic changes, resource depletion, and other related impacts present financial risks. Shareholders, investors, and regulators are demanding greater disclosure on the risks to a corporations' long-term sustainability. Customers are also setting higher standards for performance throughout supply chains.

Finance and enterprise risk leaders must help their corporations financially assess and integrate sustainability-related initiatives to enable enterprise risk mitigation and capture competitive advantages. For their part, sustainability leaders must look to better integrate their efforts into corporate strategic and operational planning, financial modeling, and enterprise risk management to provide real value in helping the corporation respond to evolving risks.

Those companies that can effectively identify, assess, respond to, and manage the strategic and operational risks and opportunities presented by the changing business environment will be best positioned for long-term growth.

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