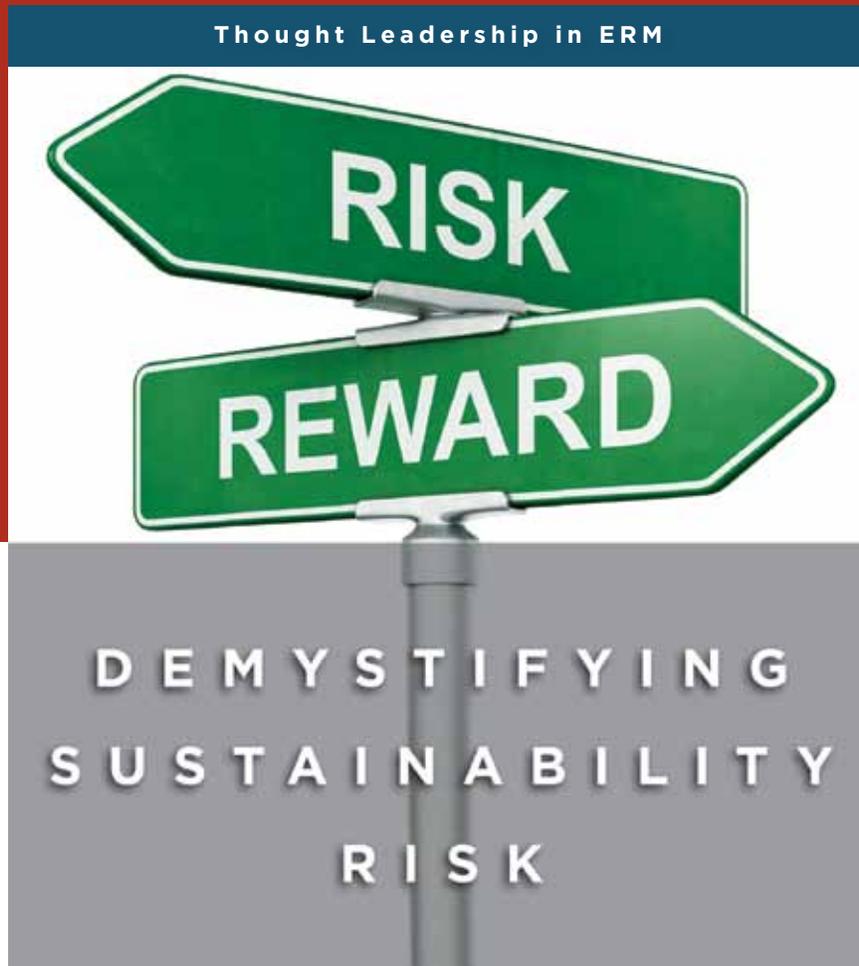




Committee of Sponsoring Organizations of the Treadway Commission



Integrating the triple bottom line into an enterprise risk management program

By

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Preface

This project was commissioned by the Committee of Sponsoring Organizations of the Treadway Commission (COSO), which is dedicated to providing thought leadership through the development of comprehensive frameworks and guidance on enterprise risk management, internal control, and fraud deterrence designed to improve organizational performance and governance and to reduce the extent of fraud in organizations. COSO is a private-sector initiative jointly sponsored and funded by the following organizations:



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Sustainability's Evolving Role in Business

The world has changed. In today's highly competitive markets and volatile economic environments, no organization, especially those that rely on limited or declining natural resources, can operate the way they did a decade ago.

Consumers are more sophisticated, driven, in part, by the wider availability of information, increased visibility into corporate business practices and a better understanding of the interconnectedness of all that we do. The pressure to

Sustainability is no longer one function's domain. It's a responsibility that everyone needs to own.

succeed is enormous. More importantly, the pressure to succeed in a manner that supports sustainability principles is rapidly growing.

Intangibles identify an organization's true value

The confluence of risks and opportunities associated with environmental, social and economic performance has made sustainability a strategic priority for companies as part of their overall business strategy. Measuring an organization's environmental, social and economic performance is often referred to as the "triple bottom line."

Ocean Tomo's 2010 Intangible Asset Market Value report suggests that only 20% of an S&P 500 company's market value can be explained by its physical and financial assets. This is down from 83% in 1975.¹ The remainder comprises intangible factors, such as intellectual capital, human capital, brand and reputation, and relationships with regulatory bodies, non-governmental organizations, customers, suppliers and other external stakeholders.

Defining Sustainability

Sustainability can be described in a number of ways. The most cited definition originates from *Our Common Future*, known also as the Brundtland Report. "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs."²

Within the context of this article, we will use the term sustainability synonymously with corporate social responsibility, corporate citizenship, stewardship and corporate responsibility.

The scope of this paper does not afford us the opportunity to explore the concepts of the "six capitals," "value creation," "integrated thinking," "planetary limits" and "sustainable outcomes" distributed by the International Integrated Reporting Council (IIRC). However, we do lay the foundation for incorporating sustainability-related risks into an existing Enterprise Risk Management (ERM) framework.

Social

- Public policy and advocacy
- Community investments
- Working conditions
- Health/nutrition
- Diversity
- Human rights
- Socially responsible investing
- Anticorruption and bribery
- Safety



Environmental

- Energy-fuel, oil, alternative
- Water
- Greenhouse gases
- Emissions
- Waste reduction: medical; hazardous; non-hazardous; construction
- Recycling
- Reprocessing/re-use
- Green cleaning
- Agriculture/organic foods
- Packaging
- Product content
- Biodiversity

Economic

- Accountability/transparency
- Corporate governance
- Stakeholder value
- Economic performance
- Financial objectives

¹ Ocean Tomo, *Intangible Asset Market Value - 2010*, 2011, www.oceantomo.com/media/newsreleases/intangible_asset_market_value_2010.

² World Commission on Environment and Development (WCED), *Our Common Future*, Oxford: Oxford University Press, 1987, p. 43.

Any board member hearing this analysis should be asking two key questions:

1. What does our specific market value profile look like?
2. Do we have strategies, processes and approaches to effectively manage that profile?

Sustainability’s corporate evolution

For many organizations, sustainability has evolved from a “feel good” exercise to a strategic imperative that focuses on economic, environmental and social risks and opportunities which, left unattended, can potentially threaten the long-term success of strategies and the viability of business models. They understand that sustainability is not one function’s domain, but rather a responsibility that the entire enterprise needs to own. This new perspective has raised the visibility of sustainability within the organization and prompted more meaningful discussions at the senior executive and board levels.

Sustainability is no longer seen solely as a way of cutting costs or gaining efficiencies. It also can be used as a vehicle to achieve competitive advantage and growth through the positioning of products, services and brands that appeal to the organization’s stakeholders.

In addition to the benefits, there are expectations. Stakeholders are demanding that organizations not only demonstrate responsible sustainable business practices, but also report on these practices in a timely, relevant and objective way.

Success depends on more than policies and procedures

To successfully demonstrate effective sustainability practices, organizations find that they need to do more than implement policies and procedures. They need to set a tone from the top that fosters a culture of sustainability and weaves sustainability practices into the fabric of the strategic planning and business objective setting processes. For example, for a consumer products company, this may mean placing a strategic focus on sustainable production practices and packaging to achieve enhanced market share by reaching an emerging consumer segment of people who are focused on “buying green.”

Business ethicists have suggested that when an organization or their leadership fails to act on responsibility,

Sustainability and shareholder value

Academics have conducted a number of studies that explore the correlation between effective management of sustainability matters and shareholder value.

One such study, *Corporate Social Responsibility and Shareholder Value: The Environmental Consciousness of Investors*, finds “that companies that are reported to behave responsibly towards the environment experience a significant stock price increase.”³

they may use as a defense one of three forms of denial to justify their stance. These are:

- Knowledge denial: “We didn’t know.”
- Control denial: “We knew, but couldn’t do anything about it.”
- Connection denial: “Whether we know or not, it’s another organization’s problem.”

These organizations need to be aware of both the opportunities and threats employing these forms of denial may have on their business and, by extension, long-term value creation. To provide value through sustainability, organizations must be able to recognize, manage and respond to both the opportunities and the risks.

Integrating sustainability to better manage enterprise risk

Since 2004, organizations seeking to manage enterprise risk have looked to the Committee of Sponsoring Organizations of the Treadway Commission’s (COSO) Enterprise Risk Management (ERM) – *Integrated Framework* (Framework) for guidance.

The COSO ERM Framework has historically provided a good starting point for organizations as they begin their ERM journey. It enables the organization to establish the relationship of key risks across the business, and how they can identify, address and monitor these uncertainties.

The COSO ERM Framework has most often been used to manage downside risks, as well as compliance and reporting. We believe that a more systematic integration of sustainability into COSO-based ERM programs can extend the benefits of these programs. More importantly, it can provide additional strategic and operational leverage for businesses as they seek to succeed and grow in today’s complex world.



³ Flammer, Caroline, MIT Sloan School of Management, 18 July 2011, www.papers.ssrn.com/sol3/papers.cfm?abstract_id=1888742.

Applying a Sustainability Lens to COSO's Objectives Categories

To achieve their mission, organizations need to develop interrelated strategies and objectives across the enterprise. The COSO ERM Framework breaks these strategies and objectives into four distinct categories: strategic, operations, reporting and compliance. These categories provide an organizing dimension that creates a strong context for risk consideration.

By applying a sustainability lens, we seek to reinforce the importance of these context categories and introduce a more holistic evaluation of interrelated and specific risks that could affect the business. It is also important to highlight an additional dimension that crosses all four categories and can often be a key factor when sustainability issues arise: reputation. Although reputation is usually addressed in the strategic category, we believe it is important to highlight it further as we see it both as an outcome and as a key consideration relative to other risks, such as operation risks. It is this interconnectedness and a propensity to drive often unrecognized consequences that elevate its significance in the sustainability arena.

1. Strategic Risks

Organizations need to consider a number of sustainability issues, many of which can have a significant strategic impact. These range from marketing position and changing consumer demand to strategic investments, stakeholder communications and investor relations. Often, these risks tend to prompt management to focus on what could go wrong. However, in the changing landscape of sustainability, organizational leaders should also be proactively thinking about what should go right.

Business customer expectations have grown substantially since Walmart first embarked on its Sustainability Product Initiative in 2009. Developed to determine the environmental and social impact of the products it had on its shelves, the project had three phases. The first phase involved surveying all of Walmart's suppliers globally using a 15-question, four-category format. The second phase included creating a Sustainability Index Consortium, which brought together governments, non-governmental organizations, universities, suppliers and retailers to build a global lifecycle database that could measure the environmental impact of product development from raw materials to end of life. In the third phase, Walmart created a customer-facing rating system that allowed shoppers to control their shopping experience based on the environmental footprint of their purchases.⁴

Today, there is a proliferation of sustainable supplier programs asking companies to report on everything, from the carbon content in products to policies on managing the human rights issues in their own supply chain. How a company deals with this pressure can impact its competitiveness both positively and negatively.

Shareholder expectations around sustainability are also placing pressure on organizations. The investment community (including investors and regulators) has become increasingly prescriptive in asking boards to mitigate risks tied to evolving regulations, shifting global weather patterns and heightened public awareness of climate change issues — any of which can affect a company's business.

These pressures are compelling organizations to demonstrate their appreciation of risks, as well as the steps they are taking to manage them. Board members and senior management need to understand requests for information related to environmental subjects. Just as important, they must work actively to mitigate shareholders' concerns about environmental issues. Increasing support on shareholder proposals will put pressure on boards to respond. To satisfy shareholders and investors, many organizations are reporting to the Carbon Disclosure Project (CDP). The CDP is an independent, not-for-profit organization that provides a consistent global framework for organizations to measure, disclose, manage and share environmental information.

The pace of change in both technology and consumer demand also is driving strategic sustainability initiatives. Consumers care more about the environmental or social impact of the products or services they purchase and consume, and more independent organizations are now rating and publishing these impacts online. This can provide new revenue opportunities for companies looking to penetrate this consumer demand by developing new lines of green products, enhancing existing products to give them a competitive edge, or moving into new markets. However, these opportunities also carry some form of strategic risk.

⁴ "Walmart's Sustainability Index, Version 1.0," *GreenBiz.com*, 16 July 2009, www.greenbiz.com/research/tool/2009/07/16/walmarts-sustainability-index-version-10.

2. Operational Risks

The context for business operations has changed significantly in the last five to ten years. More notably, the volatility that surrounds business operations is expected to continue for the foreseeable future.

Changes in weather patterns and escalating impacts of natural disasters, including recent events such as the 2011 Fukushima earthquake and tsunami in Japan and Hurricane Sandy in the US in 2012, have raised the specter of operational risks. The Fukushima earthquake ground auto production at Nissan to a halt, as one of its key factories was seriously damaged. Toyota lost production of approximately 370,000 vehicles and, for a time, also lost its crown as the world's number one automobile manufacturer.⁵ It is too soon to tell how much damage Hurricane Sandy has inflicted upon businesses affected by the storm. However, a recent Associated Press article estimated that the storm is responsible for \$62 billion in damage and other losses.⁶

The physical impacts of increasingly violent weather are impacting operations, reducing performance and increasing insurance premiums.

Extreme weather events, such as earthquakes and hurricanes, can present short- to medium-term operational risks. Other extreme weather events, such as heat waves and droughts, can pose longer-term risks. These kinds of events, combined with rising population, deforestation and degradation, are threatening the availability of natural resources — including water. In *Carbon Disclosure Product's 2012 CDP Water Disclosure Global Report*, 53% of the Global 500 companies have experienced some form of negative water-related business impact. For some companies, the cost has been as high as US\$200 million.⁷ It is no longer enough for organizations to identify locations where their operations may be impacted by resource shortages. They need to actively manage those risks.

There are also the value chain risks associated with sustainable supplier programs. Most organizations are part of another organization's supply chain. Historically, most organizations assessed their supply chains for environmental and safety performance. Primarily intended to prevent business interruptions as companies moved

to just-in-time manufacturing, organizations are now expanding these programs. They are also gathering sustainability performance information, including carbon footprint, water and waste information, and labor policies. The burden of these requests poses operational risk for the suppliers.

Many organizations are now required to complete a lifecycle assessment of their products and provide this information to their customers. They are also being asked to disclose their plans for improving the environmental footprint of their products and processes. For these reasons, organizations have intensified their focus on their supply chains as both a risk area and as an opportunity to enhance operational efficiencies.

Within the context of operational risk, sustainability factors often have a disproportionately large impact on corporate reputation and business results. And yet, these considerations are often downplayed or overlooked, yielding an incomplete view of risk drivers and potential impacts. For example, inattention to reputational considerations can lead to not only reduced financial performance, but also to an impairment of a "license to operate" in certain markets or product lines. This impairment can come in the form of both actual legal restrictions or lost credibility with key demographic targets.

Sustainability performance also can be linked to customer satisfaction and loyalty, stronger supplier relationships and attracting and retaining top talent — especially among new workforce entrants. Increasingly, social media is the vehicle creating the links. An organization's reputation or brand can live or die based on what users are saying about its sustainability performance.

Some organizations cultivate their own online followers with useful and credible social media contributions that connect with the public. Organizations concerned about their reputations can also protect their brand by being disciplined about issuing candid and truthful statements about their sustainability practices — including those employed by upstream stakeholders.

⁵ "A year after quake, Japan's auto industry recovers," *DriveOn, USA Today*, 11 March 2012, www.content.usatoday.com/communities/driveon/post/2012/03/a-year-after-japans-quake-nissan-thrives/1.

⁶ "A month after Superstorm Sandy, death toll is at 125 in US; damage estimated at \$62B," Associated Press, 29 November 2012, www.foxnews.com/us/2012/11/29/month-after-superstorm-sandy-death-toll-is-at-125-in-us-damage-estimated-at-62b/.

⁷ Ernst & Young, *Water resources at the corporate level: Moving from a risk-based approach to active management*, 2012.

3. Compliance Risks

Many companies face new and expanding regulatory compliance risks resulting from an increasing number of international, national and regional programs. These initiatives not only open up new regulatory compliance risks for organizations, but also reputational ones, given that in some cases specific facilities will be placed under the microscope. For example, it is not difficult to imagine a new suite of building code regulations in coastal areas as a response to sea level rise. Areas, such as Florida, are already seeing salt water intrusion degrading the foundations of buildings and effectively reducing their anticipated usable lifespan.

The key risk areas resulting directly or indirectly from regulatory measures are varied and can include health and safety, human rights and labor laws, anti-bribery and environmental risks. Environmental risks can include direct impacts (e.g., emissions trading cost exposures) and indirect impacts (e.g., energy price increases and accompanying reporting and compliance costs). Certain programs will also require audit and verification activities, resulting in additional cost exposures. Organizations in unregulated jurisdictions face additional risks around policy uncertainty.

In June 2012, a US federal appeals court upheld the US Environmental Protection Agency's "endangerment finding" that greenhouse gases (GHG) threaten the public health and welfare of the American people.⁸ This is significant, as very few emissions have resulted in an endangerment finding. As such, the EPA is mandated to regulate GHG emissions and has started by regulating large emitters. Also at a federal level, the US Congress enacted Section 1502 of the Dodd-Frank Act, requiring certain public companies to provide disclosures about the use of conflict minerals from the Democratic Republic of the Congo (DRC) and nine adjoining countries. The law was implemented to dissuade companies from continuing to engage in trade that ends up supporting regional conflicts.⁹

At a state level, on 30 September 2010, then Governor Arnold Schwarzenegger signed into law the California Transparency in Supply Chains Act of 2010.¹⁰ That same year, the Occupational Safety and Health Administration (OSHA) notified approximately 15,000 employers that their injury and illness rates at their work sites were higher than national averages and urged these businesses to seek assistance.¹¹ As well, California's cap and trade program — the Global Warming Solutions Act of 2006 (AB 32) — officially went into effect on 1 January 2012, with the first compliance period scheduled to begin 1 January 2103.¹²

Regulatory bodies have also gotten involved. In 2009, the Securities and Exchange Commission (SEC) issued a staff legal bulletin that allowed shareholder proposals to include the term financial risk when discussing environmental and other issues. This has impacted the effectiveness of the shareholder resolution movement mentioned earlier.¹³ In February 2010, the SEC published interpretive guidance reminding organizations of their disclosure requirements related to climate change risk.¹⁴ Issued in response to petitions from several institutional investors, the guidance does not amend any existing disclosure requirements nor does it create any new ones. However, it does signal companies to maintain a heightened awareness of climate change risk when preparing disclosures for SEC filings. In footnote 62, the guidance document reminds companies that the executive officer and principal financial officer certifications on disclosure controls should not be limited to disclosure specifically required, but should also ensure timely collection and evaluation of "information potentially subject to [required] disclosure," "information that is relevant to an assessment of the need to disclose developments and risks that pertain to the [company's] businesses," and "information that must be evaluated in the context of the disclosure requirement."¹⁵

⁸ Wald, Matthew L., "Court Backs E.P.A. Over Emissions Limits Intended to Reduce Global Warming," *The New York Times*, 26 June 2012, © The New York Times Company, www.nytimes.com/2012/06/27/science/earth/epa-emissions-rules-backed-by-court.html?_r=0.

⁹ Ernst & Young, *Conflict minerals: What you need to know about the new disclosure and reporting requirements and how Ernst & Young can help*, 2012.

¹⁰ Senate Bill No. 657, Chapter 556, www.state.gov/documents/organization/164934.pdf.

¹¹ Lucas, Stacey, "U.S. OSHA Targets 15,000 Facilities with High Incident Rates," *EHS Journal*, 4 April 2010, © 2012 EHS Journal, <http://ehsjournal.org/stacey-lucas/u-s-osh-a-dart-high-incident-rates/2010/>.

¹² "Assembly Bill 32: Global Warming Solutions Act," *California Environmental Protection Agency, Air Resources Board*, www.arb.ca.gov/cc/ab32/ab32.htm.

¹³ Staff Legal Bulletin No. 14E, *Division of the Corporation Finance, Securities and Exchange Commission*, 27 October 2009, www.sec.gov/interps/legal/cfs14e.htm.

¹⁴ "SEC Issues Interpretive Guidance on Disclosure Related to Business or Legal Developments Regarding Climate Change," *U.S. Securities and Exchange Commission*, 27 January 2010, www.sec.gov/news/press/2010/2010-15.htm.

¹⁵ Ibid.

Internationally, a growing number of countries have some form of mandatory sustainability reporting. For example, in France, Article 225 of Grenelle II requires certain French companies, including French subsidiaries of US companies, to publicly report on and have a third-party independent audit of a number of environmental, social and governance metrics.¹⁶ In India, the Securities and Exchange Board of India (SEBI) has mandated the inclusion of business responsibility reports within annual reports for listed entities.¹⁷ Other countries, such as South Africa and Denmark, have also announced sustainability reporting requirements.

4. Reporting Risks

In the face of mounting pressure to be transparent, a growing number of organizations are choosing to report on sustainability. Sustainability reports help readers understand how well the reporting organization is doing on the triple bottom line.

Sustainability data are also available to institutional investors through commercial information services such as Bloomberg and Thomson Reuters, and to individual investors through websites such as fidelity.com. The information on these sites comes primarily from publicly available data disclosed voluntarily by the organizations, adding to the importance of credible transparent disclosure. More than 300,000 Bloomberg subscribers have access to comprehensive non-financial company information such as emissions data, energy consumption, human rights information, corporate policies and board composition. Thomson Reuters gives more than 400,000 subscribers access to similar information at the touch of a button.

Research also indicates that equity analysts increasingly consider sustainability practices when valuing and rating public companies. In a recent Ernst & Young/Greenbiz survey, more than 40% of the respondents believe that equity analysts currently include sustainability performance in

company valuations.¹⁸ As well, a study by Ioannis Ioannou of the London Business School and George Serafeim at Harvard University showed that equity analysts have begun giving higher ratings to companies with exemplary corporate social responsibility (CSR) practices.¹⁹ Ioannou and Serafeim surveyed more than 4,100 publicly traded companies over a 16-year period and found that since 1997, analysts have viewed CSR strategies as creating value and reducing uncertainty about future cash flows and profitability. As a consequence, in recent years, the analysts have issued more favorable ratings to companies that have sustainability strategies in place. Finally, a number of stock exchanges, including NASDAQ, Brazil and Singapore,²⁰ among others, have announced that they encourage companies listed on their exchanges to publish annual sustainability reports. Similarly, the Johannesburg Stock Exchange requires listed companies to produce an integrated report, which includes financial and sustainability disclosures, or explain why such a report cannot be made available.

Credibility of reporting is gaining in importance, with more than 50% of the sustainability reports globally receiving some form of independent third-party assurance. These trends will likely gain momentum as another trend takes hold. The IIRC is seeking to forge consensus on a new form of reporting to meet the needs of the 21st century. The IIRC has developed a draft framework and more than 80 companies from around the world have signed up to be part of the IIRC's pilot program business network. Similarly, the Global Reporting Initiative (GRI) provides all companies and organizations with a comprehensive sustainability reporting framework that is widely used around the world.

¹⁶ Ernst & Young, *How France's new sustainability reporting law impacts US companies*, 2012, [www.ey.com/Publication/vwLUAssets/Frances_sustainability_law_to_impact_US_companies/\\$File/How_Frances_new_sustainability_reporting_law.pdf](http://www.ey.com/Publication/vwLUAssets/Frances_sustainability_law_to_impact_US_companies/$File/How_Frances_new_sustainability_reporting_law.pdf).

¹⁷ Securities and Exchange Board of India, 2012, www.sebi.gov.in/cms/sebi_data/attachdocs/1344915990072.pdf.

¹⁸ Ernst & Young, *Six growing trends in corporate sustainability*, 2012.

¹⁹ Ioannou, Ioannis, and Serafeim, George, *The Consequences of Mandatory Corporate Sustainability Reporting*, Harvard Business School, 26 October 2012, www.hbs.edu/faculty/Pages/download.aspx?name=11-100.pdf.

²⁰ Singapore Exchange Guide to Sustainability Reporting for Listed Companies, www.rulebook.sgx.com/net_file_store/new_rulebooks/s/g/SGX_Sustainability_Reporting_Guide_and_Policy_Statement_2011.pdf.

Integrating Sustainability Into the Components of the COSO ERM Framework

The COSO ERM Framework builds on eight interrelated components to establish effective ERM. We believe that sustainability can, and should, be integrated into these components.

1. Internal Environment

The internal environment reflects the tone of an organization and how it considers and manages risk. It sets the stage for what is defined in the corporate risk appetite, as well as related activities and decisions. Internal environment considerations should not simply be a summary of the status quo. Rather, it is an opportunity to proactively align and drive the organization. The internal environment should be the actualization of leadership vision and strategic aspirations.

Although many organizations have an internalized set of assumptions that reflect the values and guidelines they use for their decision making, few have taken the step of defining their risk appetite. Formalizing the fundamental assumptions and preferences in the form of a risk appetite drives better alignment of risk and establishes a clear foundation for formulating practical risk tolerances.

When formulating or reviewing the enterprise-wide risk appetite, organizations should also establish their sustainability risk boundaries. For example, a basic scenario analysis which tests the acceptability of various sustainability impacts to the organization can help set the tone for what sustainability risks the organization should or should not accept. Other approaches, such as comparing stakeholder expectations to current sustainability strategies and exposures, can help set the management tone by indicating the weighting applied to various considerations and potential impacts.

Organizations should also evaluate whether business sustainability should have its own strategy or be a part of the larger picture. We advocate that sustainability should be an embedded consideration in all organizational strategies and tactics rather than a stand-alone initiative. However, each company's decision on this aspect will weigh heavily on the internal tone of its ERM efforts as it pertains to sustainability. Ideally, this should occur when an organization creates or updates the organizational strategy and related tactical initiatives. This aligns initiatives and work steps which, in turn, helps mitigate risk and reduce costs. For those organizations that only update their overall strategy on a periodic basis (e.g., every five years), it may be prudent to develop a sustainability strategy with the intent of integrating it into the overall organizational strategy during the next period of strategy update and renewal.

This requires considerable coordination to ensure that the sustainability strategy is not developed in isolation and then simply "tacked on" to the overall strategy.

In addition to thinking about sustainability in the context of the internal environment, organizations may also wish to consider the external environment. Although not explicitly called out in this area of the COSO ERM Framework, external scanning is essential to truly connect a company's internal environment to the world in which it operates. This is especially important relative to sustainability to accommodate a full range of business models and more fully account for the interaction and interdependencies of internal and external forces.

2. Objective Setting

All ERM programs need to start with the basis of organizational objectives as the backdrop for risk considerations and management activities. This doesn't change when considering sustainability objectives.

Incorporating sustainability considerations broadens the range of possible risks that can impact organizational objectives. It can also serve to align potential exposures with the risk appetite and highlight risks associated with chosen strategies and pursuits.

3. Event (Risk) Identification

Sustainability should be top-of-mind when considering risk identification as a whole, but particularly when comparing sustainability risks and opportunities against the full spectrum of a company's risk universe and specific profile. At this level, sustainability can pose a higher-level impact, which subsequently defines how the organization evaluates the risks and opportunities.

Organizations need to evaluate all risk exposures relative to potential sustainability issues, as well as how those sustainability issues may impact other risks present within the organization. Organizations can then prioritize the issues within traditional considerations of impact and probability.

Most risk identification scales include three to five impact dimensions, which are graduated from low (minimal) impact to high (catastrophic) impact. Organizations can integrate sustainability impacts into this scale to expand awareness and prioritize risks. For example, sustainability can be a component of identifying operational risk objectives by considering the type and level of effects sustainability events could present.

To gain a comprehensive view of the potential, possible and likely sustainability threats and challenges to an organization's objectives, organizations should bring together both sustainability subject matter experts as well as the operational and strategic business content experts. Sustainability knowledge experts can identify and articulate interdependencies, unintended consequences and nonintuitive impacts stemming from social, environmental and economic considerations that often do not come to light in a traditional approach.

4. Risk Assessment

Most organizations include a risk root cause and sensitivity analysis to understand the drivers and pathways of organizational risks. Because of the changing nature of company value perceptions, sustainability also provides an increased ability to further analyze risk by enabling a range of potential value impairment estimates tied to the changing perceptions of an organization. For example, by tracking reputational impacts linked to sustainability missteps (yours or another company's), an organization can build a database that enables correlations and scenario modeling relative to stock impacts, top line revenue impairments and even market dynamics. This is an area that is rapidly developing and provides a valuable dimension to risk assessments.

However, it is important to note that sustainability discussions related to materiality can become complex very quickly. Often, there are a number of engaged stakeholders who want to influence which risks the organization should prioritize. In addition, it can be hard for organizations to accurately measure the impact a risk has on its sustainability initiatives. For example, an organization that treats the community in which it operates, or its employees, poorly, could expose itself to operations, financial and reputation risks.

Because sustainability concerns extend beyond financial impacts, organizations would do well to also evaluate directional impacts. These may include the eventual impact actions or activities that do not present themselves as a discrete event, such as ignoring an emerging stakeholder group — the risk that those stakeholders gain influence over consumer sentiment and ultimately brand value.

5. Risk Response

As noted earlier, risk responses should be tied to the drivers of risk and anchored in what is an acceptable range of solutions. Sustainability factors that form the core of an organization's values can help frame what will or won't serve as an acceptable risk response, and why.

For example, if a key sustainability precept is protecting cultural history, artifacts or sites where it operates, then risk responses likely include production capacity issues, limitations on facility footprint or building height. Such self-imposed risk responses can significantly impact facility design, but can also provide positive impacts on how the market views the organization.

In addition to specific action planning, organizations should consider these factors when designing business cases or making investment decisions. For example, as an extension of the ERM process, all business cases may incorporate a section, or suite of questions that probe the potential sustainability impacts of the investment. Accordingly, a well-designed set of leading questions can enable management to identify and address potentially overlooked linkages and unintended consequences.

6. Control Activities

Sustainability resources, the controller's office, operations and other relevant stakeholders can work closely together to develop policies and procedures that effectively execute risk responses. It is also important that the sustainability function collaborate with a wide range of stakeholders who thoroughly understand the risks and opportunities being addressed. Control activities should not be defined in a vacuum. Once internal controls are identified and implemented, they require continuous measurement, monitoring and evaluation to ensure effectiveness.

Internal audit and other control monitoring functions within an organization (e.g., legal, compliance or safety) can also perform audits to evaluate the effectiveness of sustainability practices, communication protocols and reporting initiatives. These audits enable the organization to obtain an independent analysis of the design and operating effectiveness of sustainability initiatives. They can also provide valuable recommendations to improve initiatives or activities based on emerging trends within and outside the industry.

7. Information and Communication

Information and communication are critical factors for managing risks and opportunities, particularly those associated with sustainability. We have already discussed the importance of communicating clearly and truthfully to avoid reputation risks. This same rule applies when communicating sustainability performance to investors and analysts through sustainability reporting.

Stakeholders within the sustainability ecosystem expect organizations to not only share their successes, but also their failures or areas of improvement. This expectation creates an element of reputational risk in the short term. However, in the long term, this risk is often outweighed by the benefits. These benefits include: better measurement of the organization’s triple bottom line performance, greater stakeholder trust, improved risk management and increased operational efficiency. Many of these benefits are derived from the internal processes and controls organizations put in place to help them collect, store and analyze financial and non-financial key performance indicators (KPI). Obtaining real-time, quality data on such issues as GHG emissions, water use and supply chain activities can help organizations enhance decision making, while reducing risks and enhancing opportunities.

To help companies avoid making deceptive “green” claims, the Federal Trade Commission (FTC) has adopted revised Guides for the Use of Environmental Marketing Claims (known as the Green Guides) under Section 5 of the FTC Act. In particular, the revision considers how terms such as compostable, degradable, ozone-safe or ozone-friendly, recyclable, recycled content and free-of should be used.²¹

Choosing *not* to report on sustainability, by contrast, can increase reputation risks or limit opportunities. Organizations that do not release sustainability information may appear less transparent than competitors that do, and come across as laggards even if they are not. Furthermore, those that report incompletely, or with insufficient rigor, may find that if reporting becomes mandatory and standards are tightened, glaring discrepancies might appear between past reports and newer ones.

Internally, sustainability reporting is critical to decision making. It validates risk response effectiveness and overall sustainability performance. It can also identify changes to the risk environment, upon which business units can take action, and it can reflect changes to the organization’s overall risk profile.

8. Monitoring

To ensure that an organization is achieving its objectives, staying within its risk tolerance threshold and satisfying stakeholders, it should constantly monitor and evaluate the sustainability activities it undertakes. Questions organizations should be asking as part of their measurement, monitoring and evaluation activities include:

- Are activities or processes aligned to the corporate strategy?
- Are they being executed in such a way to enable the business to better achieve its strategic objectives?
- Are activities adding value in terms of risk awareness and understanding?
- Are they agile enough to respond to changes in the risk environment as issues arise?

One approach organizations use to keep track of how well they are doing in their sustainability objective is the use of balanced scorecards. Using key risk indicators, organizations can plan, measure and monitor their sustainability risk management at each level of the organization. Management can then communicate this information using executive dashboards to senior executives and the board.

In the end, the effectiveness of monitoring approaches lies in the timeliness, integrity and transparency of the results, as well as what is done with the results to manage sustainability initiatives and mitigate the corresponding risks. Having a scorecard alone doesn’t alleviate management’s responsibilities for monitoring sustainability performance. Rather, the scorecard should enable management to make decisions on how to improve performance and achieve a competitive advantage in the marketplace.

Sample Balanced Sustainability Scorecard	
Sustainability Performance	Sustainability Risk
Develop new green products or services	Stakeholder backlash or accusations of “greenwashing” if product or service not truly green or green enough
Move operations to low-cost geography	Increased exposure to political instability, employee dissatisfaction, negative brand impact from exporting jobs
Use of conflict minerals in product development and manufacture	Compliance risk for non-disclosure, negative consumer reaction, poor analyst ratings
Incomplete or non-existent sustainability reporting	Consumer boycott, poor analyst ratings, negative impact on share price

²¹ “Ernst & Young, *The three S’s of environmental marketing: What the revisions to the FTC Green Guides mean for “green” marketing*, 2012.

Seven Tips for Raising Sustainability Awareness in the Organization

Managing sustainability risk is not the responsibility of one function, nor should it be a stand-alone proposition. Sustainability is relevant to all parts of the business, which is why it is so important that it forms a fundamental part of the organization's vision and strategy. However, it is not just a top level initiative. Sustainability must permeate organizational thinking from the boardroom and executive suite to the shop floor. It needs to be integrated into division, business unit and operations planning and activities to be truly effective.

We have outlined some very specific considerations relative to all aspects of the COSO ERM Framework. For organizations still struggling to make sustainability a higher priority at the executive level, we offer seven steps to initiate a sustainability approach.

1. Get leadership involved. Managing sustainability risk needs leadership support from the beginning. Educate them on the importance of embedding sustainability into the corporate strategy and get them involved by making them accountable. Get them to help in defining what the sustainability journey may look like, what the stakes are and considering major milestones, as well as the ultimate destination. It is often helpful to designate a leadership sustainability champion(s) to help communicate the tone from the top and ensure the sustainability perspective is communicated in all leadership forums.

2. Engage stakeholders. Consumer groups, communities, investors, analysts and employees are vital sources of sustainability engagement. They will all have ideas that can enhance the company's sustainability journey. Employee involvement is particularly important in ensuring that sustainability gets embedded into the organization's culture. It is important to both understand what stakeholders and shareholders want and for companies to help drive the thinking forward in this area.

3. Integrate sustainability into the corporate strategy from the start. Organizations should not talk about having a sustainability strategy that is separate from the corporate strategy. They should talk about having strategic sustainability initiatives that are embedded into the corporate strategy.

4. Identify and then assess materiality of risks. Prioritize risks based on materiality. The more impact a risk has on the bottom line, the more quickly it should be addressed. Non-financial risks that may not easily connect to a dollar value should still be quantified. Just because there isn't a financial number attached to the risk doesn't mean it's not material to a company's operation and financial performance.

5. Look for quick wins. Look for results early and often to accelerate the sustainability journey, get much-needed buy-in from the business and the organization's employees, and show investors and analysts that sustainability is a strategic priority for the organization.

6. Be open and transparent. Communicate the good, the bad and the ugly of your sustainability efforts and what your plans are for improvement. Any attempt to hide or obfuscate your plans can result in significant brand damage that may take considerable time and money to rectify.

7. Choose the right measurement tools. We suggest using a balanced scorecard approach, but organizations should choose whichever monitoring and reporting tools they think will best measure the organization's progress, create value and enhance investor confidence.

In addition to a balanced scorecard, organizations may want to consider adapting the tools the organization is already using to measure other risk management efforts and report results to senior executives and the board using executive dashboards.

Conclusion: Managing Risk for a Sustainable Future

In a recent Ernst & Young report, *Turning risk into results*, we found that organizations with more mature risk management practices outperform their peers financially.²² Top-performing companies, from a risk maturity perspective, implemented on average twice as many of the key risk capabilities as those in the lowest-performing group.²³ In addition, companies in the top 20% of risk maturity generated three times the level of EBITDA as those in the bottom 20%.²⁴ We believe that embedding sustainability into the organization's ERM program offers a clear opportunity to increase the effectiveness of risk management practices and improve business performance.

Additionally, according to another recent Ernst & Young publication, *Leading corporate sustainability issues in the 2012 proxy season*, institutional investors increasingly believe that an organization's social and environmental policies correlate strongly with its risk management strategy — and ultimately its financial performance.²⁵

Organizations that choose to embed sustainability into a COSO-based risk management program can achieve the following competitive advantages:

- **Alignment of sustainability risk appetite to the organization's corporate strategy and the new world view of company value.** Having a holistic view of sustainability risk that looks across the entire enterprise enables organizations to do a better job of anticipating and responding to issues as they arise.
- **Expanded visibility and insights relative to the complexity of today's business environment.** Embedding sustainability into an organization's ERM framework enables the sustainability function to gain valuable insights regarding the sustainability risks the organization faces and the materiality of those risks. These are insights the sustainability function can then share with management and the board so that they have a clear understanding of the sustainability risks relative to the complexity of the business environment.

- **Stronger linkage of company values and non-financial impacts to the organization's risk management program.** Identifying sustainability risks and opportunities can be challenging. However, organizations that understand how to link them to their value drivers are better able to understand the impacts on the business in non-financial ways.
- **Better ability to manage strategic and operational performance.** Organizations can create competitive advantage by managing sustainability risk to improve business performance, spur innovation and boost bottom-line results. Companies that conceive their products or services through a sustainability lens will attract funding from external investors and boost stakeholder confidence. Sustainability as part of the value proposition is also becoming as relevant to market capitalization as innovation or R&D.
- **Improved deployment of capital.** Organizations that have used the COSO ERM Framework to embed sustainability risk management practices have better opportunities to allocate capital more effectively — in ways that maximize capital efficiency or that send the right messages to stakeholders based on the organization's corporate values and strategy, but in all ways enable the organization to reach its sustainability and, more importantly, its corporate objectives.

Customers expect it, employees demand it and shareholders rely on it. In just a few short years, sustainability has gone from a feel-good initiative to a strategic imperative. Momentum is building for a more integrated approach to sustainability and the risks that it poses. By incorporating these risks into COSO's ERM Framework, organizations will be able to gain a complete view of where they are on their sustainability journey — and how to best capture value as they go.

To continue the discussion about how your organization can integrate sustainability into its ERM program, please visit www.ey.com/climatechange.

²² Ernst & Young, *Turning risk into results: How leading companies use risk management to fuel better performance*, 2012

²³ Ibid.

²⁴ Ibid.

²⁵ Ernst & Young, *Leading corporate sustainability issues in the 2012 proxy season*, 2012.

About COSO

Originally formed in 1985, COSO is a joint initiative of five private sector organizations and is dedicated to providing thought leadership through the development of frameworks and guidance on enterprise risk management (ERM), internal control, and fraud deterrence. COSO's supporting organizations are the Institute of Internal Auditors (IIA), the American Accounting Association (AAA), the American Institute of Certified Public Accountants (AICPA), Financial Executives International (FEI), and the Institute of Management Accountants (IMA).



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