Sustainability Framework 2.0
Professional Accountants as Integrators
IFAC's mission is to serve the public interest by:

- contributing to the development, adoption, and implementation of high-quality international standards and guidance;
- contributing to the development of strong professional accountancy organizations and accounting firms, and to high-quality practices by professional accountants;
- promoting the value of professional accountants worldwide; and
- speaking out on public interest issues where the accountancy profession's expertise is most relevant.

The PAIB Committee serves IFAC member bodies and the more than one million professional accountants worldwide who work in commerce, industry, financial services, the public sector, education, and the not-for-profit sector. Its aim is to promote and contribute to the value of professional accountants in business. To achieve this objective, its activities focus on:

- Increasing awareness of the important roles professional accountants play in creating, enabling, preserving, and reporting value for organizations and their stakeholders; and
- Supporting member bodies in enhancing the competence of their members to fulfill those roles. This is achieved by facilitating the communication and sharing of good practices and ideas.
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The recognition governments and many organizations have given to the importance of sustainability and sustainable development is beginning to change business culture and society. The global challenge is to ensure that organizations develop sustainably to reverse the previous erosion of natural resources, and to improve their environmental, social, and financial performance. This requires radical changes in the way they do business and the way we live our lives.

From an environmental and social perspective, sustainability issues are transforming the competitive landscape, forcing organizations to change the way they think about products, technologies, processes, and business models. From a financial perspective, the primacy of shareholders as owners is giving way to an enlightened — Mervyn King, Chairman, King Committee on Corporate Governance and Deputy Chairman, International Integrated Reporting Committee

Overview

The recognition governments and many organizations have given to the importance of sustainability and sustainable development is beginning to change business culture and society. The global challenge is to ensure that organizations develop sustainably to reverse the previous erosion of natural resources, and to improve their environmental, social, and financial performance. This requires radical changes in the way they do business and the way we live our lives.

From an environmental and social perspective, sustainability issues are transforming the competitive landscape, forcing organizations to change the way they think about products, technologies, processes, and business models. From a financial perspective, the primacy of shareholders as owners is giving way to an enlightened
view of maximizing wealth creation that incorporates wider stakeholder perspectives and issues into decision making. Long-term sustainable value creation requires responsible organizations to direct their strategies and operations to achieving sustainable economic, social, and environmental performance. Achieving a sustainable future is only possible if organizations recognize the role that they can and need to play. Effective action by the accountancy profession and professional accountants to better integrate and account for sustainability is an essential part of that role. Now in its second edition, the IFAC Sustainability Framework (the Framework) primarily targets professional accountants working in commerce, industry, financial services, education, and the public and not-for-profit sectors. IFAC strongly believes that these professional accountants can influence the way organizations integrate sustainability into their mission, goals and objectives, strategies, management and operations, definitions of success, and stakeholder communications. Professional accountants in all types of organization have a significant role in:

- challenging conventional assumptions of doing business, identifying risks, and seizing opportunities;
- integrating sustainability issues into strategy, operations, and reporting;
- redefining success in the context of achieving sustainable value creation;
- establishing appropriate performance goals and targets;
- encouraging and rewarding the right behaviors; and
- ensuring that the necessary information, analysis, and insights are available to support decision making.

Updates Featured in the Second Edition

Since the first edition of the Framework was published in 2009, progress has been made on spreading awareness and gaining recognition that sustainability is an essential part of that role. Now in its second edition, the IFAC Sustainability Framework (the Framework) primarily targets professional accountants working in commerce, industry, financial services, education, and the public and not-for-profit sectors. IFAC strongly believes that these professional accountants can influence the way organizations integrate sustainability into their mission, goals and objectives, strategies, management and operations, definitions of success, and stakeholder communications. Professional accountants in all types of organization have a significant role in:

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Creation is only achievable when organizations direct their strategies and operations toward achieving sustainable economic, social, and environmental performance. Several national corporate governance reform efforts are using the language of sustainability, stakeholder governance, and encouraging governing boards to take a longer-term view of performance. For example, the philosophy of the stakeholder inclusive King Code on Corporate Governance for South Africa revolves around leadership, sustainability, and corporate citizenship. Similarly, the latest version of the UK's Corporate Governance Code also includes sustainable success of an entity over the longer term as a key component of effective board practice.

Organizations are responding. The 2010 United Nations Global Compact–Accenture CEO Study found that of the vast majority of CEOs see sustainability as important to their company's future success in spite of economic difficulties. However, significant challenges remain for organizations, including integrating social and environmental (along with financial) factors into an organization's way of doing business in all the core elements of the organization, and across the supply chain. Another challenge is engaging small- and medium-sized entities (SMEs). In most countries, SMEs account for a sizeable portion of private sector employment and gross domestic product. With regard to environmental and social issues, SME impacts are considerable, and therefore have vast potential to contribute to sustainable economies.

The integration of social and environmental factors is critical if organizations are to gain the trust of stakeholders and the wider public. To reinforce its importance, this new edition of the Framework extends the theme of integration—from a business strategy and operational perspective to that of an integrated reporting perspective. Integrated reporting is emerging as a new theme and initiative, much interest and support having been shown by standard setters, organizations, professional associations, NGOs, and others in the development of the International Integrated Reporting Committee. Integrating sustainability issues into business strategy and operations is
now covered in more depth, and with additional examples that reflect new thinking. The reporting perspective has been updated to provide guidance on how to improve stakeholder communications, based on sustainability reporting and providing an integrated view of environmental, social, and financial performance. The integration of sustainability information with mainstream financial reporting will increasingly be critical to maintaining the trust of customers and investors.

The Three Dimensions of Sustainability

Sustainability has three important dimensions: (a) economic viability, (b) social responsibility, and (c) environmental responsibility. While trade-offs can occur between these dimensions, they are interconnected in various ways. For example, being socially and environmentally responsible (toward employees, communities, and other stakeholders), leads to enhanced trust, and, therefore, makes good business sense. Social and environmental responsibility cannot stand in isolation from economic viability. Organizations must continue to provide products and services that people want in order to generate profits, growth, and new jobs. While pursuing a commercial imperative, organizations must also take into account their social and environmental impact as part of ensuring that they generate added value for an organization and its stakeholders.

Competent and Versatile: Connecting Professional Accountants to Sustainability

Accountants to Sustainability

The Framework complements the IFAC PAIB Committee’s Consultation Paper, Competent and Versatile: How Professional Accountants in Business Drive Sustainable Organizational Success. This paper broadly categorizes professional accountants as creators, enablers, preservers, and reporters of sustainable value for their organizations. It defines the principal expectations of professional accountants in business as derived from the activities they will need to perform to support the development of sustainable organizational success. It highlights how an accountant’s professional background and orientation equip them with the necessary qualities to support their contribution, and particularly to act as integrators by incorporating sustainability factors into their organizational strategy, operations, and reporting. This will allow organizations to simultaneously deliver improved business performance and to contribute to a better world.

Competent and Versatile also clearly highlights that the role of professional accountants is more than simply that of preparers or assurers of financial and sustainability reports. More than one-half of all professional accountants globally work in organizations and are adapting to a world in which sustainability is the key to long-term organizational performance. The Framework helps professional accountants to understand how, in their diverse roles, they can influence change. In clearly defining the different facets of sustainability and corporate responsibility, the Framework can help professional accountants grasp all the important aspects of sustainability that they may encounter, directly or indirectly, and that will be important to their organizations.

Establishing the Role of Professional Accountants and the Finance Function

The Framework will provide professional accountants with an opportunity to consider themselves as knowledgeable change agents. Professional accountants are well positioned to help organizations interpret sustainability issues in a relevant way for their organizations, and to integrate those issues into the way they do business.

Although developing a sustainable organization is a multi-disciplinary responsibility, the finance function needs to be clear on its role in providing and supporting sustainability leadership for several reasons:

- The finance function is well placed to influence behavior and outcomes through incorporating sustainability considerations into strategies and plans, business cases, capital expenditure decisions, and into performance management and costing systems.
- Integrated sustainability management involves managing opportunity and risk, measuring and managing performance, and...
providing insight and analysis to support decision making. This plays to the strengths of professional accountants working in finance functions and offers opportunities to provide higher value business partnering.

- Improving the quality of stakeholder communications and the reporting of sustainability information and how it connects to an organization’s strategy and operations requires the same rigor as the process of financial reporting. Materiality, relevance, comparability, accuracy, and completeness continue to be essential qualitative characteristics of information. Professional accountants understand the need for, and how to implement quality data and robust systems to capture, maintain, and report performance. They also have the project management skills needed to put such systems in place, applying appropriate processes and controls.

To rise to the challenge, professional accountants, on an individual level, will need to understand how sustainability does or might affect their role, and to identify and utilize the continuing professional development resources available from their own professional body, IFAC, and other sources, such as His Royal Highness The Prince of Wales’ Accounting for Sustainability Project. Continuing education will help accountants learn more about the applied aspects of sustainability and determine approaches to organizational improvement and transformation. Accountants working in audit and advisory roles, particularly in SMEs, can consider how they could embrace sustainability issues (using the Framework as a starting point) to add value to their client service/advisory role. Importantly, when acting in a public interest-related reporting or advisory capacity, it might be necessary to consider whether sustainability issues have been properly addressed and disclosed.

Using the Framework

The IFAC Sustainability Framework consolidates the important aspects of embedding sustainability into the DNA of an organization and can be applied to entities of all sizes and complexities.

So many information sources cover various aspects of sustainability and sustainable development that it has created information overload. Many accountants therefore find it very difficult to get a coherent view of all the various perspectives of this topic that organizations embracing sustainable development must understand.

The second edition of the Framework addresses three perspectives (rather than four in the first edition) in bringing together all the critical areas required to successfully manage a sustainable organization. These perspectives are business strategy, operational, and reporting. Organizations that have successfully embraced sustainable development have usually taken actions in all three areas. Combining the two separate previous sections on reporting for investors and wider stakeholders into one section emphasizes the importance of an integrated view of reporting.

The Framework is divided into three parts: one for each perspective. Each part is divided into sections (see the Table of Contents), each of which presents a key theme and context. Each section ends with “Key Considerations for Professional Accountants,” which outlines actionable items that accountants can consider to successfully implement that aspect of sustainability into their organization’s strategy, operations, or reporting.

Specific areas of the Framework may be more relevant to particular groups of professional accountants. For example, accountants working in senior management levels might be more focused on the business strategy perspective, although all accountants should be mindful that the overall long-term sustainable organizational success and the impact of other specific activities to help embed sustainability factors depends upon leadership and strategic-level actions and performance. Professional accountants working in performance management-related roles (including planning, budgeting, performance measurement, and roles such as business/financial analyst) may direct their attention to the operational perspective. Professional accountants responsible for preparing business, financial, sustainability, or integrated reports, or involved in providing audit and assurance, might find the reporting perspective of most use.
The Framework provides many examples of good practice, so that professional accountants can easily seek more detailed information on areas of particular interest.

From the business strategy perspective, the framework emphasizes the importance of adopting a strategic approach, so that sustainability is integrated into vision and leadership, strategic planning, objectives, goals, and targets, as well as incorporated into governance, accountability arrangements, and risk management.

The operational perspective focuses on how an organization can deliver on its strategy and specific sustainable development objectives and targets. It presents a full spectrum of management and management accounting activities to support higher-quality information, which leads to more-informed decision making and can help support the choices an organization needs to make to chart a more sustainable path. This perspective covers how organizations can achieve relatively simple quick wins to improve energy efficiency and reduce waste, calculate a carbon footprint, and implement sustainability and environmental accounting, integrated management control systems, and performance measurement and KPIs.

The reporting perspective includes key considerations on how accountants can help improve the usefulness and relevance of their organization’s external communications, including developing a reporting strategy to help achieve integrated business reporting.

Professional accountants should understand (a) the importance of engagement with an expanded group of stakeholders in considering an organization’s long-term carbon footprint, (b) its strategic importance for the organization and how the organization intends to take action, (c) the information required to support informed decision making (such as deciding how to implement changes in operational processes or new technologies that will enable a reduction in carbon emissions), and (d) the external reporting of carbon emissions in various external communications.

We hope the IFAC Sustainability Framework will help the accountancy profession to determine gaps where additional guidance is needed to further support professional accountants. We welcome your feedback on how the Framework presents (a) the field of sustainability, (b) the particular role of professional accountants in facilitating and supporting sustainability, and (c) its integration into the strategy, operations, and reporting of an organization. Please send feedback to stathisgould@ifac.org.
1.0 Introduction

The role of leadership and business strategy is to promote the integration of sustainability issues at a strategic level, so that they are embedded in organizational development covering strategy, planning, enterprise risk management, and operations. The importance of tone at the top is best captured by the King Code of Corporate Governance for South Africa, which specifically encourages the integration of governance and sustainability into strategy, operations, and reporting of an organization. The philosophy of the King code revolves around leadership, sustainability and corporate citizenship. Responsible leaders direct company strategies and operations with a view to achieving sustainable economic, social and environmental performance (see IFAC's interview with Mervyn King).

— William Clay Ford, Jr.
The IFAC publication, *Competent and Versatile: How Professional Accountants in Business Drive Sustainable Organizational Success*, considers that the major attributes of successful organizations derive from effective and respected leadership, which in turn enables coherent and focused strategy and execution. Effective leadership relies on a deep understanding of customer and stakeholder needs, the organization’s capabilities to generate the required products and services, as well as the opportunities and threats that stem from its competitive environment. Above all, effective leadership and strategy focuses on sustainable value creation over the long term. Successful organizations integrate sustainable development into the way an organization does business so as to ensure the creation of long-term sustainable economic growth.

Thinking about sustainability issues strategically is an opportunity for organizations to establish or re-establish the “why” of sustainability and taking social and environmental stewardship seriously. This will involve the governing body and senior managers articulating and promoting the benefits and perhaps using a language that works in the context of the organization. Terms like sustainability, corporate social responsibility, and climate change can be interpreted in various ways and be seen as an additional cost to an organization. Organizations can find it easier to integrate sustainability where there is a clear understanding of its meaning, and how it relates to the organization and drives long-term organizational success.

The business strategy perspective covers the critical driving factors and activities that help organizations and their professional accountants to embed sustainability. These include:

- defining and clarifying the terminology that an organization has decided to use (sustainability, corporate responsibility, or corporate social responsibility) and what it means in relation to the organization;
- establishing leadership, vision, values, and behaviors;
- ensuring appropriate governance structures are in place to strengthen implementation, monitoring, and accountability;
- setting goals and targets;
- integrating risk management and assessment; and
- engaging suppliers.

Organizations that have successfully embedded sustainability from a strategic perspective tend to be those that also convert increased sustainability performance into commercial advantage. This is particularly the case when dealing with specific issues such as climate change that can present strategic risks and opportunities. Taking a strategic perspective helps an organization to develop an awareness of its sustainability risks and opportunities, foster a commitment to deal with these, and to manage difficult choices and trade-offs that might have to be made between financial, environmental or social performance. A strategic perspective also helps to provide a systematic approach to ensuring checks and balances, and identifying and developing the skills required to address sustainability issues.
level, a clear definition is a precursor to helping an organization engage in sustainable strategies and activities.

1.1 Defining Sustainability and Sustainable Development

The notion of sustainability is rooted in the wider concept of sustainable development. Many definitions of sustainability and sustainable development exist, but arguably the foremost is from the Brundtland Report, which is used by many governments and organizations:

Sustainable development is development that meets the needs of current generations without compromising the ability of future generations to meet their own needs.4

This report also implored the present generation to take immediate action to avert the risk of irreversible ecological damage. Although the definition of sustainable development is broad, the report valuably points out that:

Sustainable development is not a fixed state of harmony, but rather a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development, and institutional change are made consistent with future as well as present needs.5

Sustainable development in these terms can be seen as a global aspiration. The use of the Brundtland definition by many organizations in their management and reporting on sustainable development and CSR signals a widespread consensus on the central role organizations have in ensuring future generations can meet their own needs. It evidences an acceptance that sustainable development requires the political will of governments, organizations, and communities.

This definition also requires organizations to take into account the wider and longer-term consequences of decisions. This is the route to achieving long-term sustainable value for investors and stakeholders, and involves considering the impact of economic activities—things bought, investments made, waste and pollution generated—on the natural and human resources on which they depend, to avoid irreparable damage to the productive capacity of these resources. Practically, this requires

— Tomorrow’s Company

KEY THEME Establishing an understanding and definition of sustainability that helps to ensure that an organization is both socially and environmentally responsible at the same time as being economically viable. Developing a strong business case to highlight what sustainable development means for an organization, and how improved social and environmental performance can translate into enhanced business performance, will contribute to a better understanding of the benefits that might be achieved with a more holistic business approach.

CONTEXT Understanding and defining sustainability is possible on two levels. On a macro level, a widely accepted definition of sustainable development provides a context for understanding what sustainability means for society and economies. At an organizational level, a clear definition is a precursor to helping an organization engage in sustainable strategies and activities.
Identifying a Business Case Requires Defining Sustainability in Relation to its Relevance to the Organization

Despite growing awareness by media, consumers, and investors, companies’ relative inaction in this area may stem from their uncertainty about what “sustainability” means in practical terms, according to an article from the McKinsey Quarterly. Overall, 20 percent of executives say their companies do not have a clear interpretation of sustainability, and among those that do, the definition varies depending on the economic sector, managing governance issues, and social issues. Fifty-six percent of all respondents define sustainability in two or more ways.6

Establishing a business case involves identifying the key sustainability issues and how to deal with them as part of an organization’s strategy and performance management systems. It is an opportunity to align sustainability issues with strategy, and is the start of a systematic process for managing social and environmental impacts.

The strength and focus of a sustainability business case will vary across organizations. Many different business cases exist for managing sustainability issues, and these will be organization/industry-specific. Therefore, approaches depend on the business operations that are pursued, the markets in which an organization is active, the country of origin, and the size of an organization. Developing and reviewing a business case over time involves a systematic process covering several steps, including (a) understanding an organization’s significant impacts on the environment, society, and the economy, and the related opportunities and risks, and (b) identifying stakeholder issues. In formulating a business case, there are three important considerations: the scope of the business case, a broad approach to defining sustainability, and establishing the financial impact.

The scope of the business case:

A business case can be organization-wide to help inform strategic decisions by including specific elements that can be developed by specific parts of an organization, thus helping employees to assess and understand the impact of sustainable development.

A broad approach to defining sustainability helps organizations to think widely about their contribution to society and economies: The economic impact on a large multi-national company can be in terms of employee compensation and benefits, taxation, economic impact of global expansion, enabling global commerce, dividends to shareholders, and charitable contributions.

For example, the article “The Next Question: Does CSR work?” from The Economist’s 2008 special report on corporate social responsibility refers to the joint Oxfam and Unilever study of the economic impact of Unilever’s operations in Indonesia.7 This showed how the company had “supported the equivalent of 300,000 full-time jobs across its entire business, created a total value of at least $630 million and contributed $130 million a year in taxes to the Indonesian government. The lesson for companies is that they have been far too defensive about their contribution to society.”
Key Considerations for Professional Accountants

Create awareness of how the finance function can get involved in establishing a business case. Professional accountants could be involved in any of the following steps:

- Determining the sustainability-related pressures and expectations, for example, by identifying specific issues of importance to the organization and those that are impacted by operations; this would encompass the organization’s environmental footprint and its contributions to the communities in which it operates (including its direct/indirect economic impact, improvements to quality of life, etc.);
- Identifying significant environmental and social issues, and how materiality testing, measurement, reporting, and verification of these issues will be applied and;
- Assessing the benefits and business case of embedding sustainability and the risks of failure, for example, assessing and measuring social benefits (e.g., staff well-being), environmental benefits (e.g., through reduced resource consumption such as energy use), and operational benefits (e.g., reduced operational costs and technological innovation). Finance can work more closely with operations to evaluate each step along the organization’s value chain to identify risks and opportunities and their potential financial implications (e.g., fines/penalties for non-compliance with environmental regulations or savings associated with localized sourcing of materials).

Ensure clarity on uses of the business case. A business case is a very useful tool for promoting and communicating commitment to sustainable development (for external audiences), but a more detailed business case and implementation plan might be necessary to define and deliver organizational commitments to sustainable development strategies, principles, values, and policies.

Focus the business case on linking sustainability to strategy and the impacts of organizational activity on society and the environment. The business case can show how an organization is moving beyond compliance and regulation to gaining competitive advantages and competitive advantage.
advantage by exploiting opportunities and using resources more efficiently. A constructive approach to sustainable development is observable in organizations that work with sustainability issues to generate added value by enhancing their reputation and competitive position. A business case can also refer to regulatory pressure for change, which can in some cases be the deciding factor for embarking on sustainability initiatives.

A business case evolves as the business environment changes. It is, therefore, important to avoid thinking about the business case in a static sense. For example, technology is changing quickly, making it easier to deal with some sustainability issues. The costs and benefits associated with sustainability also change continuously, and the benefits can extend over long-time horizons, which make it difficult to quantify potential benefits.

Identifying significant, material, and relevant environmental and social issues. To effectively engage and connect to environmental and social issues, organizations need an appropriate analysis of an organization’s sustainability and sustainable development issues. This involves identifying and understanding relevant issues by establishing facts and other information available in the public domain, and from analyzing the competitive environment. An example is Nexen’s 2009 Sustainability Report, Responsible Energy Development, which analyzes various sustainability issues, including the relative importance of these issues to stakeholders and to the company (see diagram on next page).

Understanding sustainability issues and their relationship to a particular organization is an important precursor to establishing an approach to dealing with them. The presence of a formal and/or informal process for monitoring the emergence of environmental and social facts and developments, opinions, and analysis (e.g., public opinion, employee/supplier views and attitudes, etc.) will help to ensure that an organization keeps abreast of developments, anticipates influences, and frames them in a way that can be appropriately considered and managed by an organization. For example, an organization might decide to proactively track (a) the evolution of biomass energy technologies and their performance in renewable energy markets, and (b) key policy mechanisms that are shaping their near-term prospects.

**Sustainability Issues Analysis**

To help guide content development for its 2009 Sustainability Report, Nexen Inc. undertook an analysis to better understand what sustainability issues matter most to the company and its stakeholders. This analysis included information gathered from an external advisory group, peer benchmarking, industry initiatives, global sustainability trends, interviews with employees, and research from stakeholder websites. The materiality analysis—shown here in quadrant format—was conducted by Stratos (www.stratos-sts.com) on behalf of Nexen.9

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9 Source: Nexen, 2009 Sustainability Report
Shell: Delivering on Our Commitment to Sustainable Development

The business case for sustainable development is becoming increasingly clear. Our commitment to contribute to sustainable development can be a significant factor in:

- Attracting and motivating employees
- Reducing costs through efficient use of materials and energy
- Reducing risks to both new investments and on-going activities
- Anticipating new markets and developing business portfolios
- Influencing product and service innovation
- Attracting more loyal customers
- Enhancing our reputation

Each of these factors is essential in remaining competitive in the marketplace and can also deliver long-lasting benefits to society.¹⁰

— Shell Chemicals

We need to make sure corporate governance defines the mandatory boundaries, but then—at the same time—it needs to provide space for entrepreneurial behavior and there are three overarching principles:

- Focus on the longer term;
- Focus on the real and sustainable values; and
- All stakeholders need to be considered.¹¹

— Joe Kaeser, CFO of Siemens

1.2 Vision and Leadership

KEY THEME Integrating a more sustainable approach into the way an organization does business requires change and leadership from senior management.

CONTEXT By having a clear, sustainable vision and demonstrating leadership, managers and professional accountants can significantly change the way organizations operate. Vision and leadership are arguably the most important catalysts of change, and it is a long-held belief that vision and leadership—and the cultural changes they bring about—distinguish successful organizations from their less successful counterparts. This certainly applies to delivering a sustainable business model.

A sustainable vision helps to ensure that an organization looks at its business through a new lens, to ensure that sustainability forms part of its mission, goals and objectives, and strategy. The sustainability lens reveals the world through the eyes of its stakeholders, and
The scope and objective of leadership will also vary among organizations. Although some organizations might seek to become more socially responsible themselves, and in the process adhere to society's current values, others might choose to, and be in a position to, change the rules of the game and shape society's future values. There is room for both. Large multinational organizations, as microcosms of society, can choose a progressive path that raises standards above current regulatory and legal requirements. They are arguably in a better position to do so than governments. For an example, see Siemens leadership program Fit4 2010, which focuses on sustainably enhancing competitiveness and profitable growth.

Professional accountants in CFO and other executive positions are increasingly placed in organizations to be partners or co-pilots in developing and executing sustainable growth strategies. This requires professional accountants to use their knowledge and leadership skills to integrate sustainability into the strategy, management, operations, and reporting of their organization, with the aim of achieving long-term sustainable performance.
Key Considerations for Professional Accountants

A strategic approach to sustainability helps to identify a range of competitive strategies. Professional accountants on a governing body (board) or on a management team are charged with developing long-term growth strategies. Making strategic choices involves asking questions, such as the following:

Is there a path to first mover advantage? Taking a lead position in the market typically arises from having the appropriate mechanisms for providing stakeholder and industry insights, and social and economic trends. To effectively engage and connect to environmental and social issues, organizations need an appropriate analysis of an organization and its interface with sustainability issues.

Can we collaborate with others, such as supply chain partners, or even competitors, to enhance sustainable performance? Collaboration can work well within industries. For example, the Electronics Industry, Code of Conduct involved large companies such as IBM, HP, and Dell, working in partnership with manufacturers, to develop an industry code of conduct for global electronics supply chains to improve working and environmental conditions. Walmart’s work with its suppliers is highlighted in section 1.6, “Engagement of Suppliers.”

How do we respond to emerging sustainability trends and legislation, including the development of market mechanisms such as emissions trading schemes or carbon taxes? Emissions trading and legislation, such as the European Community Directive on Waste Electrical and Electronic Equipment, and government policy, can all create opportunities and challenges. These should be considered and priorities for action identified.

How do we change risk to opportunity? In addition to securing the trust of society and customers, sustainability issues often present opportunities. For an increasing number of organizations, sustainability-related product and service lines form significant revenue streams. Therefore, strategic planning discussions at the board and senior management level should involve considering the upside of improving sustainability performance with new products and services. For example, General Electric has generated revenues of around $16 billion in 2009 from products and services relating to its Ecomagination initiative. Siemens’ 2009 Annual Report is titled How Can We Ensure Sustainability While Generating Profitable Growth? and focuses on its path to delivering sustainable solutions to today’s challenges. The Danish Commerce and Companies Agency has established The Ideas Compass, which is a website where SMEs can find inspiration to innovate and evolve. The focus of this website is on CSR-driven innovation—an innovation process focusing on current social and environmental needs, which gives organizations an opportunity to develop sustainable products or services.

Values guide behaviors and decisions. Effective leadership complements a values-based program and code of ethics or conduct to promote an organization’s (a) underlying values, (b) commitment to employees, (c) standards for doing business, and (d) relationship with wider society. Values are extremely important, and many companies have demonstrated leadership and positive change through developing and implementing values-based programs and codes of conduct or ethics. Setting out and embedding a values-based code of conduct is critical in helping employees deal with the complexity of decisions an organization faces, and can help organizations to effectively manage supply chains to expand globally (for more information, see IFAC’s International Good Practice Guidance, Defining and Developing an Effective Code of Conduct for Organizations).

Integration of sustainability into the key business drivers requires leadership and ownership within the governing body and at all management levels. Integration of sustainability into the way an organization manages and perceives itself requires ownership at the governing body level (the board). Ideally, the chief executive officer champions (a) the integration of sustainability into strategic discussions and subsequent steps, and (b) specific sustainability initiatives.

Integration of sustainability into the interconnected business drivers (mission/vision, goals and objectives, values, strategy, operations, and reporting) helps to ensure that:

- sustainability is approached more from a performance-based rather than a compliance-based perspective; and
- sustainability is properly treated as an important strategic issue that forms an integral part of the board’s efforts to secure sustainable value generation for the organization’s stakeholders.

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- sustainability is approached more from a performance-based rather than a compliance-based perspective; and
- sustainability is properly treated as an important strategic issue that forms an integral part of the board’s efforts to secure sustainable value generation for the organization’s stakeholders.
Organizations embracing sustainability at the senior management level and integrating it in their strategic planning typically move beyond focusing on short-term results that please impatient investors and stakeholders. Such organizations tend to have more success in employing their long-term strategy in a wider context that attaches importance to social, environmental, and economic impacts. This has consequential benefits to the business of attracting and retaining talent. Integration of sustainability into the organization’s vision is usefully exemplified by Unilever, which views its future business direction and performance as being synonymous with sustainable development.

Managerial and operational structures deliver the vision and strategy and ensure accountability and ownership. The way that sustainability performance is implemented in the managerial and operational structures of an organization will depend on its size and nature. Organizational structures and incentives need to facilitate linking strategy with specific operational actions so that they support long-term sustainable performance. Key questions to help decide on the most effective governance structures include:

- Does sustainability (or specific sustainability initiatives) need an individual board member as an identifiable champion?
- Is a separate subcommittee of the governing body needed to provide coordination and direction to sustainability activities? If so, does it report to the governing body or to another committee, such as the audit committee?
- To what extent do the Board’s Audit and Risk Committees (if present) engage with issues of sustainability formally or informally?
- How are sustainability issues championed and coordinated at a management level? Is a management leadership team required, and if so, what should be its membership?
- Who is responsible for strategic development as opposed to implementation?
- How are sustainability initiatives coordinated across all functions (e.g., sales, marketing and brand, product development, supply chain, facilities, procurement, and human resources)?

Implementing Sustainability: The Role of Leadership and Organizational Culture

How leading corporations integrate economic, social, and environmental impacts into day-to-day management decision making, based on a study supported by IMA’s Foundation for Applied Research, was featured in an April 2010 article in Strategic Finance magazine. The research focused on four companies, Nike, Proctor and Gamble, the Home Depot, and Nissan North America, and investigated how managers make trade-offs and simultaneously manage social, environmental, and financial performance.

The article noted the difference between hard and soft implementation systems. Hard systems are (a) the formal systems that include structure and performance evaluation, and (b) incentive systems that motivate employee behavior. Soft systems are the informal systems such as organizational culture, leadership, and people. The latter nurture a company’s drive for sustainability. Although sensitive to stakeholder concerns and impacts, these leading companies are committed internally to improving corporate sustainability performance. Although generally considered a significant tool to implement sustainability and align the corporation’s interests, formal implementation systems have a secondary role in implementing sustainability programs successfully.

All four companies (a) incorporate sustainability issues in their corporate strategies, (b) have specific sustainability strategies and aligned organizational structures, and (c) have in place performance measurement systems with some social and environmental metrics. But leadership and organizational culture are the most crucial determinants in successfully managing the various trade-offs that middle managers face when they try to manage social, environmental, and financial performance simultaneously.10

— Strategic Finance, April 2010
1.3 Stakeholder Engagement

**Key Theme** Stakeholder engagement has emerged as a vital tool to develop an understanding of what sustainability means for organizations, and how it can contribute to value creation and the viability of their operations. Failure to identify and engage with stakeholders is likely to lead to poor performance by (a) hurting customer satisfaction and perceptions, (b) adversely affecting employee motivation and morale, (c) damaging relationships in the supply chain, and (d) possibly compromising an organization’s reputation with the wider community. The quality of sustainability reporting also depends on constructive stakeholder engagement.

**Context** Stakeholder engagement is a process for informing and making decisions in conjunction with different stakeholder groups. Discussions with stakeholders help to highlight particular interests and concerns, and can broadly take place on two levels: organization (internal) stakeholder-specific issues, or macro-level engagements covering major societal concerns. Organizations with highly developed stakeholder engagement tend to be better at anticipating issues and dealing with them proactively. They are then in a position to report on how they have dealt (or not as the case may be) with stakeholders’ interests and expectations. One of the Global Reporting Initiative (GRI) reporting principles (for defining content) featured in its G3 Sustainability Reporting Guidelines is stakeholder inclusiveness:

*The reporting organization should identify its stakeholders and explain in the report how it has responded to their reasonable expectations and interests.*

Where organizations align social, environmental, and economic performance with strategic aims and objectives, rather than simply react to external pressure, stakeholder engagement can lead to broad business and sustainable development benefits that clearly outweigh the effort required. Potential benefits of integrating stakeholder engagement at the strategic level include pooling of resources that can help all parties to gain insights and knowledge, solve problems, and reach goals and targets that none of them could reach alone. Stakeholder engagement can also bring dilemmas and pose challenges on how to manage the trade-off between stakeholder expectations. Organizations require a process and criteria for managing these trade-offs, and for ensuring that they are both profitable and sustainable.

The 2008 KPMG International Survey of Corporate Responsibility Reporting includes an analysis of the level of stakeholder engagement. The survey covers the Global Fortune 250 (G250) and the 100 largest companies by revenue (N100) in 22 countries. Many G250 companies engage in both informal and structured forms of dialogue with stakeholders. Fifty-four percent reported that they engaged in informal stakeholder dialogue, whereas 62 percent say they conduct formal or structured stakeholder engagement. The N100 are slightly less likely to engage, with 35 percent involved in informal dialogues and 42 percent taking structured approaches to stakeholder relations.

In their corporate responsibility reports, 65 percent of G250 companies align social, environmental, and economic performance with strategic aims and objectives, rather than simply react to external pressure, stakeholder engagement can lead to broad business and sustainable development benefits that clearly outweigh the effort required. Potential benefits of integrating stakeholder engagement at the strategic level include pooling of resources that can help all parties to gain insights and knowledge, solve problems, and reach goals and targets that none of them could reach alone. Stakeholder engagement can also bring dilemmas and pose challenges on how to manage the trade-off between stakeholder expectations. Organizations require a process and criteria for managing these trade-offs, and for ensuring that they are both profitable and sustainable.

In 2008, Daimler launched its Stakeholder Dialogue initiative, in which the company gathered representatives of all its key stakeholders, including non-government organizations, investor groups, and executives, and asked them what sustainability issues were most important to them. In 2009, 80 external stakeholders and 40 Daimler executives took part in the Dialogue. The issues discussed— as discussed by the company’s stakeholders—were divided into five groups: environment, employees, human rights, supply chain, and community relations.

There is a clear connection between the elements of stakeholder dialogue, sustainability reporting, and performance issues. “You need to balance them to be credible in the long term,” said Wolfram Heger, Head of Corporate Social Responsibility Policies and Reporting at Daimler. In their corporate responsibility reports, 65 percent of G250 companies align social, environmental, and economic performance with strategic aims and objectives, rather than simply react to external pressure, stakeholder engagement can lead to broad business and sustainable development benefits that clearly outweigh the effort required. Potential benefits of integrating stakeholder engagement at the strategic level include pooling of resources that can help all parties to gain insights and knowledge, solve problems, and reach goals and targets that none of them could reach alone. Stakeholder engagement can also bring dilemmas and pose challenges on how to manage the trade-off between stakeholder expectations. Organizations require a process and criteria for managing these trade-offs, and for ensuring that they are both profitable and sustainable.

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Key Considerations for Professional Accountants

Reinforce the importance of stakeholder engagement. A structured approach to engagement is as an opportunity to (a) identify all the sustainability issues and responsibilities of the organization; (b) systematically analyze the organization’s impact upon (and influence exerted by) stakeholders; and (c) determine the organization’s key opportunity and risk areas. Above all, working in partnership to act sustainably, and to ensure that sustainable development is built into relationships with partners and others in the value chain, helps to demonstrate how an organization is embedding sustainability within its business.

Stakeholder engagement can also be used to reverse reputational damage and to start a new journey. For example, in the late 1990s, the Australian banking sector was under siege from media, trade unions, and the community because of branch closures, particularly in rural Australia, and new fee-charging regimes. Westpac, a large Australian bank, was under immense pressure arising from protests at various Westpac branches and offices because of the bank’s connections to companies mining uranium in a world heritage-listed national park located on indigenous aboriginal land. In response, Westpac redefined its strategic positioning by linking value creation to stakeholder engagement. Sustainability emerged as a key strategic thrust, and the “squashed tomato report” emerged—so-called because the image of a squashed tomato was used as a symbol to illustrate the organization’s “fresh” approach to stakeholder relations.19

Establish a systematic and carefully planned approach to entering a dialogue with stakeholders. UNEP’s 2005 Stakeholder Engagement Manual (see “Five-Stage Approach to Stakeholder Engagement”) provides extensive guidance, taking organizations through basic steps and considerations in planning and developing stakeholder engagement. In addition to UNEP’s Manual, AccountAbility’s AA1000 Stakeholder Engagement Standard (SES) provides a principles-based, open-source framework for stakeholder engagement.20 The framework provides a systematic approach to engagement covering the following steps: (a) identify stakeholders; (b) identify material issues; (c) determine and define engagement strategy, objective,
and scope; (d) establish engagement plan and implementation schedule; (e) determine ways of engaging with stakeholders; (f) build and strengthen capacity; (g) engage with stakeholders in ways that increase understanding, learning, and improvement; (h) operationalize, internalize, and communicate learning; (i) measure engagement performance; and (j) assess, re-map, and redefine.

Some organizations base their stakeholder engagement process on UNEP’s Stakeholder Engagement Manual. For example, in its 2010 Sustainability Report, the 3M Company provides a detailed description of its corporate sustainability stakeholder engagement process, based on the UNEP approach (see page 33 of their report).

In its Sustainability Report 2009, MTR, responsible for Hong Kong’s mass transit railway, provides insight into its “discipline of engagement,” in which it identifies and prioritizes its stakeholders in relation to how they affect MTR’s business sustainability over time. In its 2009 Sustainability and Corporate Responsibility Report, Ericsson, a telecommunications company, summarizes its stakeholder engagement activities, including highlighting the key issues identified and how Ericsson is addressing these issues.

Stakeholder dialogue can help managers consider how best to deal with the trade-offs between economic, social, and environmental performance. The engagement process should lead to a resolution of the gaps between internal and external expectations. Stakeholder dialogue can focus on capturing expectations and highlighting the tensions that might occur between financial performance and achieving long-term sustainable organizational success. Such tensions arise in different guises, depending on the organization. Two interesting examples were featured in IFAC’s 2006 sustainability interviews, PAIBs: At the Heart of Sustainability? features interviews conducted by Robert Bruce, a leading accountancy journalist, with professional accountants operating in business throughout the world to seek their views on the role of professional accountants in business in sustainability:

A global sourcing development manager from Kingfisher plc, an international retailer, highlighted a conflict between the pressure of short-term business performance and sustainability: On tropical timber products it is difficult to get sustainable products at the same price as non-sustainable products. Well-managed forests harvest fewer trees each year, which can reduce their income so there are only limited supplies of Forest Stewardship Council certified timber. That pushes prices up. It is an issue of supply and demand, if our buyers are being pressured to increase profits and are being offered products cheaper, we still need to ensure that the source is acceptable to us.21

The former chief executive officer of Anglo American plc South Africa noted: For one of the largest mining companies in the world, this (sustainable development) is a complex issue. Mining involves depleting a natural resource—albeit most metals are highly recyclable, but we can pass the sustainability test through a trade-off between different types of capital. Although we are depleting one resource, we are promoting social benefits such as education, healthcare and community development, skills and capacities in our workforce, and, often, building physical infrastructure. The key challenge is how to create the tools to show how we are meeting this trade-off. It is a question of creating measures to gauge how successfully depletion and replacement are being balanced.22

Although there is not always a clear, sustainable development business case for every organization, the stakeholder engagement process can help determine (a) significant challenges and inconsistencies with current strategy, and (b) options for moving toward a more sustainable business model. See Michael Jensen’s paper Value Maximization, Stakeholder Theory, and the Corporate Objective Function for one perspective on the tensions that can be found between stakeholder and shareholder theory.

Ensure that ongoing stakeholder engagement initiatives are continuous, dynamic, and periodically reviewed. An important element of engagement is to demonstrate openness and transparency that can be achieved in part with continuous feedback. An example of being in a listening mode is to have ongoing dialogue with stakeholders. For example, the CEO of Timberland, an outdoor products manufacturer, hosts regular stakeholder engagement calls to inform, inspire, and engage others about Timberland’s Corporate Social Responsibility initiatives. As part of its annual sustainability reporting, Baxter Healthcare provides the opportunity for feedback on its sustainability programs and annual reporting via an online survey. Periodically,
Enlightened Value Maximization

In his paper, *Value Maximization, Stakeholder Theory, and the Corporate Objective Function*, Michael Jensen highlighted the challenges of dealing with the multiple objectives of different stakeholders. Although his work recognizes that the long-term market value of an organization cannot be achieved if an important constituency is ignored or mistreated, he discusses the need for a principled decision criterion that allows for stakeholder engagement and the pursuit of social welfare, but within the context of seeking to understand value and how to achieve it. Jensen coins the term enlightened value maximization, which uses much of the structure of stakeholder theory but accepts maximization of the long-run value of the firm as the criterion for making the requisite trade-offs among its stakeholders.23

— *Value Maximization, Stakeholder Theory, and the Corporate Objective Function*

an organization might also find it necessary to review its stakeholder engagement process, perhaps using the AA1000 Stakeholder Engagement Standard as a benchmark. A review can also help to identify the skills and competencies needed by employees to deliver an effective engagement process.

**Build the knowledge and professional skills needed to deal with the challenges of understanding and balancing stakeholder expectations.** Working with a range of stakeholders with different perspectives and various expectations can present complex dilemmas and challenges. Professional accountants should be positioned to work in multi-disciplinary teams to work through the challenges. International Education Standard 3, *Professional Skills and General Education* usefully sets out the key components of interpersonal and communication skills that all professional accountants should possess.24 These include the ability to: (a) work with others in a consultative process, to withstand and resolve conflict; (b) work in teams; (c) interact with culturally and intellectually diverse people; (d) negotiate acceptable solutions and agreements in professional situations; (e) work effectively in a cross-cultural setting; (f) present, discuss, report and defend views effectively through formal, informal, written and spoken communication; and (g) listen and read effectively, including a sensitivity to cultural and language differences.

The process of stakeholder identification and the current practice in this area is also usefully covered in the Institute of Chartered Accountants in England and Wales’ report *Sustainability: the role of accountants*.25 This also highlights the valuable role accountants can play in encouraging the effective engagement of stakeholders as well as the benefits and limitations of that engagement, and covers working with NGOs.
Five-Stage Approach to Stakeholder Engagement

UNEP’s two-volume 2005 Stakeholder Engagement Manual, volume 2 includes a practical five-stage approach to stakeholder engagement:

- Thinking strategically about engagement: consideration of strategic business objectives, how these relate to stakeholders and specific issues, and how to undertake an initial prioritization of stakeholders and issues for further analysis.
- Taking time to analyze and plan the engagement: introducing different levels of engagement, and guiding analysis of existing relationships, available resources and organizational constraints.
- Maintain and strengthen the capacities needed to engage effectively: addressing questions of internal and external competencies and capacities to engage, and providing guidance on how to ensure that all parties to an engagement are able to join and take part in it effectively.
- Engage with your stakeholders in ways that work: outlining different engagement techniques, and helping to design an approach that suits the needs of a specific situation.
- Take action and review the engagement: providing guidance on how to follow up on the outputs of engagement, and how to ensure that stakeholders feel assured regarding the quality of organizational efforts.

UNEP’s research on practitioners’ perspectives on stakeholder engagement (volume 1) revealed that corporate practitioners—whether already fully engaged or just beginning to explore the value of engagement—were looking for very practical guidance.26

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1.4 Goals and Target Setting

KEY THEME To develop qualitative and quantitative goals and targets to facilitate the delivery of high-level vision and strategy.

CONTEXT Establishing goals and setting targets (a) demonstrate a commitment to sustainable development, (b) help to ensure that sustainability is embedded in an organization’s activities, and, importantly, (c) demonstrate how an organization is doing. It is useful to have both broad organization-wide goals, perhaps promoted in the public domain (see “Reducing DuPont’s Carbon Footprint”), and specific targets and performance measures in an organization’s performance measurement framework. The development of quantified and time bound sustainability objectives is important to demonstrate organizational commitments and focus.

— Sustainability at Work, A Project by HRH The Prince of Wales
Key Considerations for Professional Accountants

Establish goals, targets, and performance measures. Goals and targets might be viewed as the same, although goals can be considered as high-level and specifically highlight objectives relating to sustainability performance. Targets and performance measures typically cascade to a lower level to measure an organization’s progress toward these goals. Organizations can also consider a broad set of qualitative and quantitative measures reflecting cultural, social, economic, and environmental issues, and subject these measures to frequent review.

Identify outcomes where possible. Performance measures can provide a fuller picture of performance where a mix of input, process, output, and outcome measures are used. Financial and sustainability performance is better understood where outcomes are tracked, not just outputs, so indicating the change that an action should bring about is necessary. Whereas outputs indicate if a project or activity has achieved its immediate purpose, outcomes show the final result to demonstrate whether the overall objective has been met. Therefore, outcomes lead to impacts, such as lower emissions, job creation, and enhanced reputation. Measures also need to focus on future direction and results, be realistic yet stretching, and be based on current performance and emerging trends.

Engage employees involved in executing strategy. A wider group of operational staff should participate in development of these measures to (a) ensure that they feel ownership, and (b) better ensure identification of key issues and opportunities. Both a top-down and bottom-up approach to establishing performance measures can foster the engagement of front-line employees.

Link to rewards. The benefits of linking executive remuneration to the goals and targets should be considered. The achievement of significant sustainability goals and targets are more likely where some part of senior management’s remuneration is aligned with these goals and targets. However, this is easier to achieve where management action and delivery against goals and targets are directly linked. In many cases, a company’s improved sustainability performance may be the result of collective, rather than individual, actions. In such cases, organization-wide rewards for the achievement of significant targets may be more appropriate.

Establish a baseline against which progress can be monitored. A baseline underpins the setting of goals, targets, and performance measures and, therefore, should be considered before they have been set. A target for the reduction in greenhouse gas emissions, for example, cannot be established without understanding an organization’s current emissions. A baseline is typically a particular year or an average over several years. A baseline might also need adjusting for significant changes to an organization’s structure, perhaps following from acquisition or restructuring. Establishing baselines is also useful for reporting purposes. Three years after launching Sustainability Ambitions 2012, a set of social and environmental targets, Lafarge, an international building materials company, reported the progress it had made toward meeting them. The Greenhouse Gas (GHG) Protocol Initiative’s Corporate Accounting and Reporting Standard summarizes the following baseline recalculation triggers:

- Structural changes in the reporting organization that have a significant impact on the company’s base year emissions;
- Changes in calculation methodology or improvements in the accuracy of emission factors or activity data that result in a significant impact on the base year emissions data; and
- Discovery of significant errors, or a number of cumulative errors, that are collectively significant.
Reducing DuPont’s Carbon Footprint

On its website, DuPont, an American chemical company, reports on progress made and sets sustainability targets for 2010 and 2015:

- **Greenhouse Gas Emissions:** Since 1990, DuPont has reduced its global greenhouse gas emissions measured as CO2 equivalents by 72%. Further reduce at least 15% from a base year of 2004. 2009 Progress: Reduced 21% since 2004.

- **Water Conservation:** Reduce water consumption by at least 30% at global sites that are located where the renewable freshwater supply is either scarce or stressed as determined by the United Nations analysis of river basins globally. For all other sites, we will hold water consumption flat on an absolute basis through the year 2015, offsetting any increased demand from production volume growth through conservation, reuse, and recycle practices. 2009 Progress: Reduced by 6% at sites in water scarce and stressed areas and 15% at all DuPont sites since 2004.

- **Fleet Fuel Efficiency:** 100% of the off-site fleet of cars and light trucks will represent the leading technologies for fuel efficiency and fossil fuel alternatives. 2009 Progress: 49% of U.S. vehicles are using leading technology.

- **Air Carcinogens:** Since 1990, DuPont has reduced its global air carcinogen emissions by 92%. Further reduce by at least 50% from a base year of 2004. 2009 Progress: Reduced 57% since 2004.

- **Independent Verification:** 100% of our global manufacturing sites will complete an independent third-party verification of the effectiveness of their environmental management goals and systems. 2009 Progress: 73% of sites are ISO 14001 certified. 20

— DuPont

1.5 Integration with Risk Management

Central to the requirements of enterprise governance is a clear relationship between the management of risk and the fulfillment of business objectives... It is this recognition of a performance-driven approach to risk management—one that is wholly aligned with the spirit of good enterprise governance—that has given rise to the concept of enterprise risk management. 21

— IFAC/CIMA, Enterprise Governance: Getting the Balance Right, February 2004

KEY THEME: Integrating sustainability issues into a rigorous and adaptive risk management approach that allows for the interpretation of opportunities, risk factors, and causation.

CONTEXT: Organizations that proactively identify and manage risks tend to be in a better position to seize opportunities. This applies to managing sustainable development opportunities and risks, which include environmental, social, and economic issues. These opportunities and risks are best considered as part of an existing risk strategy and approach, rather than as a newly created layer of risk management focusing specifically on sustainability issues. Integrating sustainable development opportunities and risks into an existing framework and strategy should...
allow for a better understanding of their relationship to an organization’s business goals and other activities. Sustainable development issues often inspire employees to consider the opportunities presented by these issues. A good measure of whether sustainable development is embedded into organizational operations and general good management is the extent to which an organization (a) astutely manages risks, attuned to social and environmental sensitivities, and (b) recognizes the opportunities for improving both its financial and sustainability performance.

The key aim of a performance-based enterprise risk management (ERM) process, such as the one espoused by the Committee of Sponsoring Organizations of the Treadway Commission in its 2004 Report, Enterprise Risk Management - Integrated Framework, and in the IFAC/CIMA 2004 report, Enterprise Governance: Getting the Balance Right, is improving an organization’s risk management by integrating strategic planning, operations management, and internal control. Through regular and ongoing communication with an organization’s key stakeholders, an ERM approach will facilitate coordination to provide a unified picture of risk for stakeholders. The IFAC/CIMA report defines the key steps required for developing an appropriate performance-focused approach for risk management at the board and executive management level. The steps that are outlined in the report include establishing (a) an acceptable risk appetite, (b) a risk management strategy, and (c) a risk management framework.

An ERM framework allows better management and responsiveness to risk factors that cover a range of issues and responsibility areas. Within an ERM framework, environmental and social opportunities and risks can be effectively incorporated into strategic and operational processes. This helps organizations to identify events relating to sustainability that are relevant to their objectives and to consider their response.

Key Considerations for Professional Accountants
Integrate sustainability issues into risk management and other management systems. Integration can be considered in various dimensions including:

- as part of an ERM framework, rather than as specific risks that are managed outside the existing risk management strategy and framework and related policies. Where an organization has specialists who manage aspects of their sustainability program, for example environmental or health and safety specialists, risks associated with these activities should be considered within the wider ERM framework. As with other risk types, specific managers and specialists can advise how to manage the risk, including whether to transfer some or all of it, how to minimize it, and/or how to maximize upside opportunities (the risk management hierarchy is covered below).

- as part of governance and management structures: Integrating sustainability issues into a risk management mindset and dialogue can be achieved in a number of structural ways. For example, G4S, an international security solutions group, established a CSR Committee that reports to the Audit Committee to ensure that its CSR strategy (a) remains a core part of overall strategy, and (b) is closely aligned to risk management, audit, and compliance. A non-executive director chairs the committee.

- as part of environmental or other management systems: For example, “PepsiCo’s Environmental Management System identifies environmental risks and ensures compliance with regulations and company standards by applying formal governance and auditing processes to environmental programs and systems. The company also incorporates sustainability criteria into a Capital Expenditure Filter that assesses all capital expenditure requests over $5 million. PepsiCo requires that all requests be accompanied by a review of related sustainability risks and opportunities to track the sustainability payback on capital spend and thus improving investment decisions over time.”

Part 1: Business Strategy Perspective 1.5 Integration with Risk Management
as part of participating in an emissions trading scheme. Carbon risk management will cover a range of risk areas, including:

- cash flow risks, such as increased expenditure on measures to reduce emissions, or to purchase allowances or as in cases where legislation is in place, on increased compliance costs where the organization fails to meet its emissions reduction targets;
- reputation risk, which may influence financial ratings and market capitalization; and
- capital cost risks, such as more stringent credit conditions as a result of increased credit risk.

Increasingly, some investors are factoring these carbon-related impacts, including risks to cash flow, creditworthiness, and reputation, into their estimates of future cash flow streams.

Gather information and assess cost benefit: To properly appraise and integrate sustainable development risks, an organization might need more information about those risks to allow it to compare them with other risks. The approach to managing and assessing these risks will depend on the quality of information on these risks. However, as part of developing a risk management strategy, it is also important to consider the resources required to obtain information, as there will be a point where the cost of obtaining information exceeds the benefit. For example, the cost of research required to assess the benefits of a reduction of environmental risk might outweigh the risk itself. For many service-based organizations with mostly Scope 2 greenhouse gas emissions (indirect GHG emissions from consumption of purchased electricity, heat, or steam), material sustainability issues and risks will mainly relate to (a) facilities and procurement, and (b) the cost of doing business, for example, air travel emissions.

Assess potential impact: After a risk profile is established, risks need to be measured for potential impact. This can involve a number of steps, including: (a) calculating the benefit and costs (including potential reputational impact) associated with each risk; (b) estimating the probability that a risk will materialize; and (c) determining the expected impact of each risk by multiplying potential cost and probability. In Chapter 7 of his 2008 book, Making Sustainability Work, Mark Epstein shows how measuring social and political risks can lead to their integration in ROI calculations.

Interpreting risk and causation: As with all types of risk (but perhaps more so with environmental risk), it can be challenging to interpret risk factors and causation. In his article, “Tensions in the Environment,” in the Financial Times Managing Risk series, Forest Reinhardt reinforces the importance of clear interpretations of environmental risk. For example, environmental risk is both the business risk that arises from social concern about the environment, and the public risk of damage to the environment and to public health and safety. The two interpretations are not the same. Either kind of risk can exist without the other, and although business risk is more relevant to an organization, public activists will be interested in the wider environmental risk. Professor Reinhardt states that: "Because ‘environmental risk’ encompasses so many different but interrelated risks, it is imperative that managers think precisely about the kind of risk that they are really trying to manage. Above all, managers need to bring to the job of environmental risk management the same analytical tools that would instinctively apply to other risk management problems. They need to understand the effects of various possible investments in the management of that risk, whether the investments are in risk-shifting, risk reduction or risk information. They must also understand how environmental risk management relates to the overall goals of the company.

Dealing with opportunity and risk: Consider a set of options for dealing with risk (see the diagram, “Risk Options”) that starts with a proactive approach as opposed to a reactive one. The first step, “risk to opportunity,” involves considering the opportunities that might arise from discussions on potential risks. It could be called an opportunity assessment. Organizations
may have potential revenue drivers to consider, for example, generating new revenue streams from low-carbon products, and new sources of income such as from carbon credits (in a carbon trading system). Many organizations have turned discussions on climate change risk into a dialogue on identifying opportunities to develop new products and services, and to enhance their market credibility. Subsequent risk management responses may include risk avoidance, mitigation, or decisions not to act. Investment opportunities with a climate change impact can be addressed by applying a shadow price for carbon or water.

The Sigma Project (Sustainability Integrated Guidelines for Management), launched by the UK Government in 1999, has useful guidance on many aspects of sustainability. The Sigma Guidelines Toolkit briefly explains common sustainability issues, including dealing with (sustainability) opportunity and risk, and can help management identify potential sources of sustainability risk.37

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1.6 Engagement of Suppliers

KEY THEME Working closely with suppliers to improve sustainability performance and procurement.

CONTEXT Sustainable procurement involves considering social and environmental factors alongside financial factors when deciding which product or service to procure. It also involves looking at the costs of a product or service over its whole lifespan, considering running costs, and disposal costs, as well as acquisition costs. Professional accountants are often well-positioned in organizations to influence purchasing policies and facilitate the implementation of sustainable procurement.

Pressure in the supply chain is a key driver of improving sustainability practices and...
performance. Retailers and producers increasingly expect suppliers to reduce the negative impacts of the components of products and services they provide. Suppliers are also increasingly subject to standards set by purchasing organizations for adherence to specified production criteria, particularly related to improving conditions for overseas workers and product quality. The media and consumers increasingly scrutinize the ethics of production in developing countries. Multi-national organizations, therefore, increasingly pay particular attention to their whole supply chains, and are sensitive to pressures to avoid pollution, social injustice, and environmental risk. Organizations in potentially high-impact industries, such as retailers and producers of household goods and textiles, are particularly focused on monitoring supply chain performance and pressing suppliers to adopt and implement environmental and social policy. Supplier surveys are now being used by some retailers as a first step in (a) understanding product carbon footprints, and (b) calculating and communicating a rating for every product based on the product’s environmental impact.

Various initiatives are leading the way in “greening” supply chains and may impact the strategies and plans of smaller organizations which supply larger ones, particularly to reduce the resource intensity of their products. These include Walmart’s Supplier Sustainability Index, the Sustainability Consortium, and the Carbon Disclosure Project (CDP) Supply Chain. Walmart’s Supplier Sustainability Index (the Index) was created to help drive its suppliers toward the production of more sustainable products and, in the process, bring greater transparency to its widespread supply chain.1 The long-term vision is that the Index will reflect the information generated from Walmart’s supply chain and be used to develop a product-level carbon calculation. As a first step toward a robust Index, Walmart has asked its suppliers to complete the Supplier Sustainability Assessment—a set of 15 questions that gauge how individual suppliers are dealing with sustainability. Supplier surveys assist organizations in assessing the maturity of their supply chain. The final step of the Index is to provide customers with product information in a simple, convenient, easy to understand manner so they can make choices and consume in a more sustainable way.

The Sustainability Consortium is an independent organization of diverse global participants, who collaborate to build a scientific foundation that will drive innovation to improve consumer product sustainability through all stages of a product’s life cycle. The goal of this group is to develop and share information and methods for calculating the carbon footprint of products.

The CDP Supply Chain is a global process for supply chain disclosure. The information gathered by the Carbon Disclosure Project (CDP) is used by senior management in over 40 of the largest organizations worldwide, such as Walmart, PepsiCo, and IBM. A primary aim of the supply chain program is to drive action on climate change among both purchasing companies and their suppliers.

Walmart has instructed its suppliers to report to the CDP. The Carbon Disclosure Project extends awareness of an organization’s carbon footprint, moving beyond the measurement of direct greenhouse gas emissions to include climate change risks and opportunities across the supply chain (see also section 3.3, “Narrative Reporting for Enhanced Transparency to Investors,” which refers to the Climate Disclosure Standards Board and its Climate Change Reporting Framework).
Key Considerations for Professional Accountants

The overriding importance of values and a risk-based perspective to guide decisions. As discussed in section 1.2, “Vision and Leadership,” values and a values-based code of conduct or ethics are crucial in guiding decision making throughout an organization, including its suppliers. This is particularly the case where decisions are made well beyond organizational boundaries and at remote sites.

To ensure alignment of central values and ethical codes, an organization’s risk management system should also cover the activities of suppliers. Mattel demonstrates clearly how challenging the task is, particularly in an organization with thousands of product lines. Its Global Manufacturing Principles for company-owned and contracted facilities provide a framework for its global manufacturing practices that require a range of sustainability-related considerations, such as fair treatment of employees. However, on a few occasions its suppliers failed on quality issues that led to some product recalls that are discussed and listed in its 2007 Global Citizenship Report.

Recognizing and minimizing risk in the supply chain is also an effective way to begin selecting, managing, and monitoring suppliers. A supplier screening process can be based on incorporating sustainability considerations and risks in the selection and contract negotiations process. It is also important to consider a process for assessing supplier sustainability risks and performance on a regular basis. Westpac, an Australian Bank, is a useful example of an organization taking a risk-based perspective to managing its supply chain by using a questionnaire as an additional sustainability screening process for higher risk and high spend suppliers.

Lars-Olle Larsson presents the following 3-step model for analyzing sustainability risks in the supply chain in his 2010 book:

1. By consolidating a country and sector analysis with a focus on CSR-related issues (including human rights, labor and, environmental policies) critical risks are identified.

2. Subsequently, by evaluating these risk areas according to the probability of their occurrence and their impact on organizational objectives, existing controls and processes established to deal with identified risks are mapped and evaluated. The result is a map of risks where those which have a high probability of occurrence, might affect the organization severely or are insufficiently managed by existing controls can be singled out and prioritized.

3. Establishing a contingency action plan, in the case of the above prioritized risks occurring. The plan of action sets the foundation for continued work with CSR-related risks in the purchasing process, for example, defining appraisal processes for monitoring and adherence.

Identify the opportunities associated with sustainable procurement. In addition to understanding the benefits of sustainable procurement (see “The Benefits of Sustainable Procurement”), and identifying a process and ownership, it will be important to spread awareness of sustainability procurement capability among staff, for example, through training and sharing best practices. Key considerations for sustainable procurement can be found at The Prince of Wales’s Accounting for Sustainability Project website.

Sustainable purchasing initiatives can be supported by various actions. For example, organizations (particularly large ones with supply chains across many borders) increasingly develop policies and standards for suppliers to follow. As examples, retailers will expect food suppliers to use more sustainable packaging, or toy manufacturers to implement certain quality standards in production and employment practices.

To improve public sector purchasing and to get the most out of the purchasing function, public institutions should (a) take a consolidated view of purchasing expenditures, (b) set high aspirations for change, (c) streamline buying processes, and (d) strengthen the purchasing organization.
Supplier monitoring and support is ongoing via periodic meetings and training, and with the consideration of collaborative opportunities. Periodic meetings with suppliers can foster relationships and lead to sharing of information, and can help suppliers to develop social and environmental management systems. Questionnaires and audits can be used to monitor the performance of suppliers against codes of conduct and supplier policies. Organizations may frequently inspect and monitor compliance with their codes of conduct/ethics through on-site visits.

In its 2009 Sustainability and Corporate Responsibility Report, Ericsson reported on the number of its supplier code of conduct audits and assessments, which almost doubled from 2008 to 2009. However, collaboration can extend beyond assessing compliance, for example, working with suppliers on product design. Timberland previously requested its designers to complete a environmental scorecard for their new products at each prototype stage. This approach divorced environmental considerations from the mainstream design process. The new approach is to integrate environmental metrics into the main design platform, providing real-time information to designers as they select materials. The developed software produces a total measure of the environmental impact of the designs and therefore encourages designers to consider the whole-life impact of the materials they select.42

In some cases, collaboration with suppliers can lead to ground-breaking initiatives. For example, MAS Intimates in Sri Lanka, a supplier of garments to Gap, Marks and Spencer, Nike, and Victoria’s Secret, among others, has worked strategically with some of its suppliers to help remedy social concerns that arise from the migration of workers (mainly female) from rural areas to work in factories and live in crowded hostels. MAS’s response was to build factories in rural areas near its potential workforce, to put money back into local communities, and provide support to employees, such as free meals and transport to factory sites, free medical care, and banking facilities. It has since extended this support to investing in local amenities, such as schools and hospitals. The funding for such investments has come from MAS and from some of its partners, such as Gap and Marks and Spencer. The MAS story is documented in an article in Financial Management magazine,43 published by the Chartered Institute of Management Accountants.

Consider a systematic process for supplier selection that is clear to all potential and current suppliers. This could involve (a) stating the expectations of suppliers (and associated terms of contract), (b) the training and audit regime for their operations, and (c) feedback to suppliers on their performance. It is also an opportunity to help suppliers understand the business benefits from investing in sustainable practices.

Audit and review of suppliers can involve a variety of measures, such as factory inspections and employee interviews. For example, it is important that Kimberly-Clark, the maker of Kleenex tissues and Scott paper towels, Sara Lee, a manufacturer of frozen foods; and Colgate-Palmolive does not knowingly use wood fiber that has been illegally harvested or sourced from forest areas requiring protection. Kimberly-Clark reviews the environmental and social practices followed by its wood fiber suppliers, and considers those practices when making its initial supplier selection and when they renew supplier agreements. Wood fiber suppliers are inspected periodically to verify compliance, and they are encouraged to seek independent certification.

Communicate how an organization builds relationships and does business with business partners and suppliers. An increasing number of organizations report on their procurement activities, through clear management commentary, either in their sustainability or annual report, or on their websites. Transparent reporting can show how an organization is approaching risks in the supply chain where the organization is clearly responsible for actions taken in parts of the supply chain that they do not own or directly control. A clear narrative can demonstrate commitment to developing close relationships with suppliers and transparency in supplier selection, and how to manage risks in the supply chain. The Ceres Roadmap for Sustainability calls for organizations to list their Tier 1 and 2 suppliers, and measures and disclose suppliers’ sustainability performance.
The Benefits of Sustainable Procurement

There are a number of organizational benefits to be derived from adopting a sustainable procurement policy, including the following:

- It can offer an opportunity to reduce costs, for example, by reducing energy demand by procuring more efficient boilers or through procuring products with a longer lifespan, for which replacement purchases have to be made less frequently.
- It can stimulate innovation in the marketplace and encourage new product development.
- Supply chains are a potential source of risk. Managing procurement sustainably can help organizations to mitigate these risks and protect their reputation.
- Procuring from a sustainable source helps ensure security of supply.
- It contributes to other organizational objectives, such as corporate social responsibility agendas.
- It helps organizations to comply with environmental law.
- Improving social, environmental, and economic conditions has wider health benefits for society.
2.0 Introduction

Management and accounting activities to improve sustainability performance

The operational perspective covers a range of management and management accounting activities to support and improve (a) an organization’s sustainability performance, and (b) its integration into management and operational activities. Traditional management practices tend to focus solely on the financial or economic outcome of operational activities. Integration or embedding sustainability considerations into business practice involves considering the social and environmental outcomes of activities in addition to their economic impacts. Leading organizations are bringing these factors into their decision-making processes.
with support from professional accountants. Management and operational activities, if performed without a strategic perspective, and particularly without leadership and conviction, will likely be fruitless. Equally, good motives and strategy are less effective without management action and performance management. The operational perspective focuses on those activities on which an organization depends to implement its strategy and fulfill its commitment to sustainability performance. The structure of this part of the Framework is based on what might be expected given the maturity of an organization, which is often related to its size, but can also be connected to other factors, such as whether it now chooses to move (a) from a compliance to a performance focus, (b) to a greater level of commitment to sustainability practices, and (c) to a greater degree of integration of sustainability issues. The steps in this section (shown in the diagram below) are not necessarily separate or distinct, but rather should be considered as iterative and dependant on each other.

The first issue covered is cutting costs by minimizing waste. Before considering the benefits of sustainability (and environmental) accounting, which help provide the information flows to support decision making and reporting, waste minimization is promoted as providing quick wins that every organization can consider to reduce costs and its carbon footprint. Waste minimization includes improving energy efficiency and reducing waste and water consumption. Organizations can do much to improve their environmental performance with simple and inexpensive measures, based on a better understanding of their patterns of consumption and applying simple controls.

Next is carbon footprinting. A more sophisticated approach to carbon accounting to calculate organizational carbon footprint can be used to (a) better manage greenhouse gas (GHG) emissions and make reductions over time, and (b) report the footprint to external stakeholders. The quality of carbon accounting will depend on the strength of an organization’s data collection processes and systems. The quality of decision making and reporting depends on improving the provision of information. Implementing more formalized approaches and processes, and applying sustainability and environmental accounting can help to provide the environmental, social, and financial information needed to support management and operational decisions. Environmental accounting ranges from simple adjustments to existing accounting systems to more integrated environmental management accounting practices that link conventional physical and monetary information systems.

In taking a pragmatic approach, this Framework discusses the key considerations of these approaches, considerations in which many professional accountants will be involved in their organizations. As well as clarifying the nature of sustainability and environmental accounting, this section covers important issues for professional accountants in business, such as (a) determining requirements for environmental and social information, (b) identifying, defining, and classifying costs in a useful way, and (c) using environmental,
social cost, and other non-financial information for decisions. The quality of the management and decision-making process is supported and reinforced by integrating management control systems, which is key for ensuring the alignment of sustainability performance with organizational objectives. A sustainability management system can complement an organization’s management control system to help define sustainability objectives and to ensure their delivery. However, it is crucial to integrate a sustainability management system into the overall internal control and management system. The final section focuses on the performance measurement activities of ensuring that initiatives are aligned to mission, goals and objectives, and strategy, and that performance can be clearly demonstrated. Performance measurement and evaluation fosters accountability for performance, and provides feedback on the impact of sustainability initiatives. This section emphasizes the importance of identifying and understanding the causal relationships between various measures and alternative actions, and their impact on financial and non-financial performance. It encourages the incorporation of social and environmental issues in existing performance measurement frameworks, such as the balanced scorecard.

Sustainability performance measures and KPIs help to monitor performance and to measure environmental, social, and economic impacts. A list of generally accepted sustainability KPIs is provided. However, the organizational context and strategy and sustainability objectives being pursued will determine the relevant measures and KPIs an organization should use.

Virtually any small business can improve its energy efficiency easily and cost-effectively, using the numerous resources that are available both from ENERGY STAR and a wide variety of other organizations. These resources are available to help you through the process of completing an upgrade. This process can be broken into major activities that are involved in carrying out an energy improvement project.

KEY THEME Clearly understanding the possibilities for quickly improving environmental performance. Improving environmental performance need not just involve complex plans and activities requiring significant investment. Organizations have many opportunities for quick wins through energy efficiency and waste minimization, to make an immediate positive impact on the environment, and to achieve efficiencies and cost savings.

CONTEXT This section deals with the quick wins that every organization can consider to reduce its carbon footprint. Subsequent sections consider a more formalized and expansive approach to carbon footprinting and sustainability accounting, in which the key considerations in this section are also relevant. For many governments, the only way to meet challenging targets for reducing greenhouse gas emissions will be to ensure
much higher energy efficiency and a shift to low carbon energy sources. Energy, waste, and water usage are significant business costs for most organizations. Implementing relatively simple and inexpensive measures to maximize savings in these areas (collectively known as waste minimization) involves:

- Implementing a systematic approach to monitoring and controlling usage and consumption; and
- Targeting investment, for example in energy-efficient equipment to improve energy efficiency, or in recycling facilities to re-use or reduce waste.

Initiatives that reduce environmental impacts also generally reduce operating costs. Professional accountants in business (PAIBs) have a significant role to play in promoting energy efficiency, minimizing waste (and improving materials use), and reducing water consumption, especially in smaller business contexts where such costs can total several percent of turnover. For example, accountants (particularly in smaller business contexts) can regularly review energy bills and take frequent meter readings to help operational managers track the use of energy, thereby helping them take control of energy costs. The adage, “what is measured gets done,” applies to waste and water management, and to cutting energy costs. It helps organizations to reduce their carbon footprint and boost profits relatively simply, by identifying the cost of waste and inefficiency and seizing the opportunities to reduce them. Increasingly, countries are using a blend of regulatory measures and economic incentives (or disincentives, as the case may be), to encourage organizations to reduce their environmental footprint. Introducing taxes and other economic incentives (which can take various forms) to promote sustainable activities are designed to internalize the cost of market distortions created by organizations (i.e., costs to society that previously did not appear in financial accounts). Examples include carbon taxes on the use of fossil fuels and waste disposal taxes. Organizations need to consider how green taxes and environmental regulation impact their operations and the cost of doing business. They should also be aware of incentives that present opportunities, such as the following:

- Green taxes or climate change levies on energy use provide incentives for reducing consumption. Carbon taxes are becoming more popular to encourage the reduction of emissions;
- Enhanced capital allowances can encourage the purchase of qualifying energy-efficient equipment;
- Tax credits or government grants for research and development can stimulate innovation, for example in developing renewable sources of energy;
- Legislation to promote better product designs and recycling: for example, the EU’s End-of-Life Vehicles Directive and the Waste Electrical and Electronic Equipment Directive improve the recycling of scrapped vehicles, and require producers of electrical equipment to pay for end-of-life collection of their products.

2.1 Cutting Costs by Minimizing Waste

Increasingly, countries are using a blend of regulatory measures and economic incentives (or disincentives, as the case may be), to encourage organizations to reduce their environmental footprint. Introducing taxes and other economic incentives (which can take various forms) to promote sustainable activities are designed to internalize the cost of market distortions created by organizations (i.e., costs to society that previously did not appear in financial accounts). Examples include carbon taxes on the use of fossil fuels and waste disposal taxes. Organizations need to consider how green taxes and environmental regulation impact their operations and the cost of doing business. They should also be aware of incentives that present opportunities, such as the following:

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- Legislation to promote better product designs and recycling: for example, the EU’s End-of-Life Vehicles Directive and the Waste Electrical and Electronic Equipment Directive improve the recycling of scrapped vehicles, and require producers of electrical equipment to pay for end-of-life collection of their products.
Key Considerations for Professional Accountants

ENERGY EFFICIENCY

Identifying large environmental costs that could be reduced. The general ledger provides a starting point for identifying which environmental costs to target. However, more detailed information can be obtained from (a) speaking to people in different functions such as operations, purchasing, sales, and marketing, and (b) analyzing bills, current processes and ways of working, invoices, and compliance costs.

Monetizing procedures for costs, savings, and revenues related to any business activities with a potential environmental impact. This helps to develop a business case for tackling these issues. Setting out to achieve greater efficiency is easier after environmental impacts have been identified and prioritized, then communicated (with their associated costs and potential revenues) to the organization.

Using measurement and targets and ensuring accountability. Electricity, gas, and other energy-related meters can be the most important tools in helping to identify opportunities to save energy. An analysis of energy consumption allows a review of energy consumption patterns, and will support quick wins to improve energy efficiency and investment decisions about whether, for example, more energy-efficient machinery can cut costs and improve bottom-line performance. The key to pursuing energy efficiency is making someone responsible and accountable for energy-saving initiatives. That person might be made responsible for reading meters, understanding patterns of consumption, keeping track of all bills, ensuring that employees know about the main areas of energy waste, and motivating them to change practices to save energy. It can also be useful to use targets as a means to changing behavior and usage. Once a baseline has been established, it is possible to analyze the data to identify inefficiencies and set targets for lower energy consumption.

Small (and no cost) changes can lower energy costs and reduce carbon emissions. Many jurisdictions have established government or government-sponsored agencies, such as the Carbon Trust in the UK or the Small Business Administration in the US to advise organizations on simple actions that lead directly to energy efficiencies, for example by switching equipment off when it is not being used, thus reducing lighting and heating costs. In many countries, organizations are further encouraged to reduce energy consumption and carbon emissions through taxes on energy use. Even where improved efficiency comes at a cost, payback periods can be short. For example, IBM has found that there is typically a lot of low-hanging fruit in making data centers more energy efficient. According to Steve Sams, Vice President of Facilities Services for IBM, “IBM has developed some very simple steps for CIOs to take that can help save 15% to 40% of their annual data center energy consumption with less than a two-year payback. For a typical 25,000-square-foot data center paying $0.12 per kilowatt hour for electricity, this can translate into as much as $1 million in annual energy savings.”

Spreading awareness. It is possible to support employees with energy training, motivation, and awareness events to focus their efforts on specific activities that can reduce energy consumption. This is particularly useful as part of implementing an environmental management system through adopting ISO 14001 (see section 2.4, “Integrated Management Control Systems”). This can also be done at multiple sites and reported on in annual financial reports. For example, some organizations report on the number of their manufacturing sites that have certified against ISO 14001.

WASTE AND WATER MINIMIZATION

Minimizing materials waste. This can be the most effective method of boosting resource productivity. As with energy efficiency, accountants can identify the cost of wasted materials and highlight opportunities to reduce their quantity. It is usually important to work closely with operational staff to understand materials usage and where most waste is generated. Although waste management does cover waste disposal (which is increasingly costly and subject to regulation in many countries), it is more
proactive to evaluate materials usage (including water consumption) as the first stage of waste minimization. The most effective action, if possible, is to change working procedures and processes to improve materials use and reduce waste. As a next step, waste can also be reused and recycled, thereby reducing the extent and cost of disposal. For example, reusing transport packaging can reduce packaging costs.

**Tracking physical accounting information.** Organizations that use materials to produce products can use a mass balance of physical inputs and outputs to help identify the amounts of materials purchased (or water consumed) during a year. They can then balance these against the amounts leaving the organization as products or waste, or stored on site.

**Reviewing and understanding the impact of legislation regarding waste.** Landfill taxes are used in some countries to reduce landfill and encourage recycling. Regulations governing waste packaging can be onerous and apply to all products used to contain and deliver goods, and recycling targets can sometimes be attached to their use.

**Changing processes.** As with energy use, water reduction involves understanding water use and wastage. Reducing water costs requires allocating consumption to activities and possibly requiring accountability, at a process level, for (a) identifying water-saving opportunities, (b) and changing processes to reduce consumption and maintain savings. Water use in a manufacturing and extraction-based organization can be costly, as water can be used in cleaning, cooling processes, processing, steam raising, and conveying materials.

Minimizing waste, and identifying and classifying environmentally related costs within a formalized environmental management accounting approach, are explored further in section 2.3, “Improving Information to Support Decisions and Reporting.”

Increasingly, organisations are disclosing information in relation to their carbon performance. Driven by increasing regulation and wider stakeholder expectations, mandatory and voluntary reporting activities are under way in both the public and private sector. As a minimum, disclosure may be that of greenhouse gas emissions but increasingly organisations are providing more qualitative information about climate risks and opportunities from both a mitigation and adaptation perspective as they review their business models for the impacts of climate change.10

—ACCA and KPMG, Carbon Measurement, Assurance, and Reporting, 2009

**2.2 Carbon Footprinting**

**KEY THEME** Using carbon accounting to calculate organizational carbon footprint in order to (a) manage GHG emissions and make reductions over time, (b) report the footprint accurately to external stakeholders, and (c) invest in lower energy technologies and more efficient methods of operating.

**CONTEXT** Calculating carbon footprint can be done for compliance or strategic advantage, and can be done for the organization or for specific products. Following the quick wins that can be implemented to secure energy efficiency and waste minimization, an organization might consider carbon footprinting as a next step in providing information on the impact of saving energy and minimizing waste. This information can be vital for internal purposes, guiding employees on possible actions to reduce the organization’s impact on climate change. Such actions may prove critical as larger organizations (e.g., retailers such as Walmart) will increasingly base
their procurement decisions on the carbon footprints of suppliers. Accurate emissions data will also be important when accurately reporting a carbon footprint to third parties, such as through participating in the carbon reporting initiative of the Climate Disclosure Project, or for other compliance purposes.

Establishing a carbon footprint for an organization, or for a product, can be a complex task, particularly if the carbon accounting approach is to encompass all material emissions stakeholders would consider relevant. In most jurisdictions, regulators and investor groups are demanding more accurate data, and the trend will increasingly be for emissions data to be as transparent as financial information.

The Carbon Trust’s Carbon Footprinting, The Next Step to Reducing Your Emissions usefully provides an introduction to measuring organizational and product carbon footprints. A survey report from the Chartered Institute of Management Accountants (CIMA), Accounting for Climate Change captures the stages of adoption in a sustainability journey. The diagram below from the report highlights the stages that an organization might go through, from understanding its carbon footprint to using this information for a carbon reduction program and for competitive advantage.

The CIMA report outlines the areas that finance is or could be involved in, such as carbon footprint calculation, carbon accounting, tracking climate change performance measures, integration of financial and climate change management information systems, and costing life cycle assessment calculations. Professional accountants in business and those in finance functions in the public sector are also increasingly expected to play a role in carbon management programs. For example, the UK’s National Health Service (responsible for a quarter of public sector emissions in England and 3.2 percent of the country’s total emissions) has set a challenging carbon reduction strategy. Finance directors and finance functions are expected to play a role in carbon management and establishing potential carbon saving projects.

A number of standards help to measure a carbon footprint, namely the Greenhouse Gas (GHG) Protocol (including sector supplements) and ISO 14064-1. Also, product footprint standards, such as PAS 2050 (UK standard) and a greenhouse gas protocol for product footprinting are currently under development. According to their website, “The Greenhouse Gas (GHG) Protocol is the most widely used international accounting tool for government and business leaders to understand, quantify, and manage greenhouse gas emissions.”

Stages of Adoption

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<thead>
<tr>
<th>Stages of Adoption</th>
<th>Description</th>
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<tbody>
<tr>
<td>LOW</td>
<td>Compliance/Regulation, Driving Obligated Activity</td>
</tr>
<tr>
<td>HIGH</td>
<td>Performance/Competitive Advantage</td>
</tr>
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— Source: CIMA, Accounting for Climate Change, February 2010

| Low hanging fruit: energy and waste measurement, reporting, benchmarking, employee engagement/education driving behavioral efforts |
| Investment in energy efficiency and renewable energy technologies, methods of operating, technologies driving supply chains |
| Investment in new and improved technology, industry leading operating techniques, collaboration to drive adoption through the value chain for GHG low carbon solutions |

2.2 Carbon Footprinting

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Part 2: Operational Perspective

2.2 Carbon Footprinting

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GHG Emissions

An organizational carbon footprint measures the direct and indirect GHG emissions arising from all activities across an organization. There are three scopes of emissions: Scope 1, representing direct emissions that result from activities within an organization’s control (e.g., company vehicles, process emissions); Scope 2, representing indirect emissions from any electricity, heat, or steam purchased or used; and Scope 3, representing any indirect emissions from sources outside the direct control of the organization (e.g., leased assets, franchising, outsourcing, production of purchased materials and use of products).

Similarly, ISO 14064 defines four categories of GHG emissions based on management’s control or influence over business activities: direct emissions, energy indirect emissions, other indirect emissions, and affected emissions.

Key Considerations for Professional Accountants

**Moving beyond a GHG inventory.** A carbon footprint (or GHG emissions inventory) measures the energy consumption of an organization’s activities and the associated GHG emissions (i.e., an organization calculates its Scope 1 or direct emissions, Scope 2 or electricity indirect emissions, and it may also choose to calculate its Scope 3 or other indirect emissions (see “GHG Emissions”). Although this provides an account of current carbon emissions, it does not provide a deeper analysis of why these emissions occurred and how they can be minimized. In the same way that activity-based costing reveals cost drivers and causation, modeling energy use and emissions, and linking it to resource consumption can provide greater insight into the decisions that need to be made to manage a carbon footprint and provide a GHG management plan. Replacing the “currency” of cost with other resources can provide the same insights about emissions, water, waste, or energy that have proven themselves invaluable to the cost accounting world. (For further information, see the white paper by SAS, *Best Practices in Carbon Footprint Modeling, Going beyond Inventories and Calculations*, and material flow cost accounting in section 2.3, “Improving Information to Support Decisions and Reporting.”)

**Determine how to manage carbon emissions data.** For relatively simple operations, spreadsheets offer considerable versatility by allowing individuals to readily sort and analyze collected information. However, for larger organizations, where data is derived from multiple sources, and multiple users require access, a more sophisticated approach might be needed. This might involve carbon management software, or adding elements to existing business warehousing information architecture that also allow data feeds from multiple sources (e.g., from external energy providers or from internal sources covering staff travel and purchasing, etc.). Such software can also solve a range of problems with using spreadsheets, such as reducing the likelihood of manual errors, providing an audit trail, and allowing easy access to, and interrogation of, the data by multiple users.

**Distinguish between boundaries, in terms of organizational and product footprints, and between entities in the supply chain.** The production process is part of the product life cycle, but would also be included in the calculation of the organizational footprint. The different boundaries of organizational and product footprints are illustrated in the diagram below (from Carbon Trust’s guide, *Carbon Footprinting, The Next Step to Reducing Your Emissions*). See also “Carbon Footprinting,” which highlights the basics of carbon footprinting and distinguishes between the organizational and product footprint.

Clearly defined boundaries for GHG emissions will help an organization to take action to measure or reduce its emissions.
Under the GHG Protocol, all organizational footprints must include Scope 1 and 2 emissions. Although there is flexibility when choosing which Scope 3 emissions to measure and report, an office- or service-based organization might consider including indirect emissions associated with services and products in its supply chain, so as not to understate its footprint. Because of their indirect nature, Scope 3 emissions can be easily omitted. However, it is important to determine whether such emissions, although out of the direct control of the organization, might materially impact the organization. The impact of emissions arising beyond the immediate organizational boundary could be strategic (e.g., affecting reputation), or operational. Measuring total emissions across the full supply chain will aid understanding of the risks and opportunities, although an organization might consider excluding indirect emissions whose measurement requires a disproportionate level of effort relative to their likely magnitude.

The developers of the GHG Protocol have a process in place for defining and finalizing a global standard to measure and track Scope 3 emissions, which is called Corporate Value Chain (Scope 3) Accounting and Reporting Standard. The initial draft of this standard was released in 2009, and subsequently a number of organizations have been testing it before the final standard is released.

Establish principles of a carbon audit report and the key issues to be disclosed in external reports for stakeholders. Defining key principles will help to ensure credible reporting and serve as a useful decision-making tool for management and other stakeholders. The following principles can be used to prepare a carbon audit report:

- **Relevance**: Includes emissions sources appropriate to the needs of the intended user
- **Completeness**: Includes all relevant GHG emissions and removals
- **Consistency**: Enables meaningful comparisons of GHG-related information
- **Accuracy**: Reduces bias and uncertainties as far as is practicable

Transparency: Discloses sufficient and appropriate GHG-related information to allow the intended user to make decisions with confidence.

In addition, baseline and targets should be disclosed. An historic baseline will demonstrate progress already made, but it is essential to disclose any assumptions and estimates that have been used to arrive at this historic picture; they may be based on less accurate information. It is also important to describe chosen boundaries and disclose assumptions. The backbone of a report on GHG emissions is a clear description of the scope of reporting, the methodology used, and any key assumptions used in making calculations.

The next step is to demonstrate an understanding of the risks and opportunities that climate change poses to the organization as a whole and, where possible, to quantify their financial impacts, as well as how the organization intends to deal with them. (See also section 3.3, “Narrative Reporting for Enhanced Transparency to Investors,” for information on the Climate Disclosure Standards Board’s Reporting Framework for climate change-related disclosure.)

Greenhouse gas inventory audit. An audit of a GHG inventory can help to verify the data and ensure the appropriateness of measurement controls. An audit can also provide useful feedback for improving the inventory process. An assurance engagement with respect to a GHG statement can include performing procedures to obtain evidence about (a) the quantification of emissions, and (b) the other information disclosed as part of the statement. The procedures selected depend on the preparer’s judgment, including the assessment of the risks of material misstatement in the GHG statement, due either to fraud or error. The International Auditing and Assurance Board is in the process of developing a standard on the assurance of a greenhouse gas statement.
CARBON FOOTPRINTING

Carbon footprint is the total emissions of carbon dioxide and its equivalents of other greenhouse gases for a defined system or activity. Businesses use carbon footprinting to calculate the carbon impact of their operations (including goods and services), and as a basis for a future carbon reduction strategy. A company that has an accurate picture of its carbon footprint is not only helping to ensure future compliance, but also enhancing its reputation for effective environmental management and transparency.

Methodology and definitions:

There are already many definitional issues when it comes to calculating carbon footprints. A checklist for carbon footprint basics includes: The standard reporting unit is tonnes of CO2 equivalent (tCO2e).

- Six main greenhouse gases for carbon footprint calculations are referred to in the chapter. Many of these have a “global warming potential” that is many times greater than that of CO2.
- The “boundary” or scope of a carbon footprint can be narrowly drawn for a specific activity (to consider only the emissions that arise directly from that activity), or broadly (including emissions indirectly associated with the activity).
- Whatever the boundary, the approach to calculating a carbon footprint follows the same approach: activity data x emissions factor x global warming potential = GHG emissions.
- There are several reputable sources for emission factors, including international bodies such as the United Nations’ Intergovernmental Panel on Climate Change, and national government departments such as the Department of the Environment, Food and Rural Affairs in the UK.

Developing the carbon footprint of an organization:

- STEP 1: Drawing the boundary—the Greenhouse Gas Accounting Protocol, drawn up by the World Business Council for Sustainable Development and the World Resources Institute, is the main international source of guidance on organizational carbon footprinting.
- STEP 2: Gather the data and apply emissions factors—after the boundary and scope of the footprint has been agreed to, it’s time to gather appropriate activity data (e.g., fuel use, miles flown, refrigerant leakage) and to apply the appropriate emissions factors and global warming potentials.

Developing the carbon footprint of a product:

Developing a product carbon footprint follows a similar pattern to that of an organization, and focuses on activity data x emissions factor. The main difference is that a life-cycle approach is taken, which calculates all of the potential greenhouse gas emissions associated with a product, process, or service activity, including, across its life-cycle: raw materials extraction, processing, manufacturing, use, and disposal. At each life cycle stage, natural resources are consumed and greenhouse gases are released into the atmosphere, leading to a carbon footprint. A product carbon footprint can be developed for each relevant activity at each stage of the lifecycle.

Managing Climate Risk, A Practical Guide for Business also includes chapters explaining how carbon markets are working, the EU emissions trading scheme, and the voluntary carbon market.

— Summarized from Charles Allison, Managing Climate Risk, A Practical Guide for Business, Chapter 29
2.3 Improving Information to Support Decisions and Reporting

KEY THEME  Improved social and environmental performance and transparency requires information flows to support the strategic and operational management of sustainability issues. The required environmental and social information to support management and operational decisions is not, however, often readily available, either being non-existent or limited to measuring liabilities for compliance purposes.

ContExT  Reducing external environmental and social impacts, whether through waste minimization and energy efficiency or by incorporating the values of ecosystems into decision making, requires a systematic effort for data and information gathering, and the deployment of appropriate accounting, costing, and valuation methods. Organizations that take understanding their impacts and integrating sustainability issues into decision making seriously need to take a systematic and more formal approach to ensuring the availability of useful information to support decisions on how to (a) manage their social and environmental impacts, and (b) enhance their social and environmental value added.

This section covers tools and methods that are applicable to various levels within an organization. Sustainability accounting is primarily based on extending the existing financial accounting framework. Investment appraisal techniques, full cost accounting, and environmental cost management can help to support management and operational decision making, as well as external reporting to stakeholders. Environmental management accounting and material flow cost accounting work mainly at a process level, and to some extent, will need to be embedded into information and operational processes and systems.

Accounting for a wider range of factors is sometimes referred to as sustainability accounting or environmental management accounting (EMA). Sustainability accounting is the engine driving the usefulness of sustainability and integrated reporting, and the strategic and operational management of sustainability issues. Despite this, there is no widely agreed methodology, and the language used for different approaches to sustainability accounting is not standardized. However, all forms of sustainability accounting have a common objective—to deliver better information to support sustainability initiatives and performance. The Sigma Sustainability Accounting Guide defines sustainability accounting as “the generation, analysis and use of monetized environmental, social and economically-related information in order to improve corporate environmental, social and economic performance.”

EMA is a narrower term focusing on environmental issues and broadly defined to be the identification, collection, analysis, and the use of two types of information for internal decision making:

— Professor Roger L. Burritt, International Accountant, February 2007
Physical information on the use, flows, and destinies of energy, water, and materials including wastes; and

Monetary information on environment-related costs, earnings, and savings.

In practice, EMA can be termed environmental accounting or environmental cost accounting, among other variations. However, organizations generally use EMA (or a variant) with a common purpose in mind—to improve information that supports management of their environmental and financial performance so as to improve environmental impacts, reduce costs, and enhance profits as well as organizational reputation. Material flow cost accounting builds on EMA to increase the transparency of material flows and to help ensure the cost of waste is identified.

This section primarily focuses on the key considerations in supporting management and operational decision making, although by extending conventional financial accounting to recognize sustainability impacts and performance, sustainability accounting can lead to the preparation of shadow accounts (representing the financial impact if an organization had been sustainable), which allow representation of a “sustainability position.”

The Sigma Sustainability Accounting Guide shows how moving from financial to sustainability accounting requires adjustment and extension of the primary statements in the following ways:

- Representation of the profit and loss account to show how sustainability-related costs and benefits can directly impact the bottom line;
- Extension of the profit and loss account to include the external costs and benefits to the environment, society, and the economy; benefits that are not traditionally taken into account; and
- Extension of the balance sheet to take a fuller account of the range of assets and shadow liabilities of an organization (a shadow liability is an indication of how much an organization has drawn on human, social and natural capitals to be able to perform its value creation).

A case study of this approach to sustainability accounting is available at Constructing Excellence. See “Environmental Accounting at the UK Environment Agency” for an example of an organization that is applying environmental accounting.

Environmental and sustainability accounting can be used separately or together as tools to ensure the measurement, in monetary terms, of environmental and social issues to help managers make decisions that achieve an organization’s goals and objectives.

Internal reporting systems should be capable of providing the necessary cost and usage information required to estimate the financial impact of sustainability issues that are to be reported externally.

Extending existing accounting/information systems to accommodate organizational plans for sustainable development can be a significant challenge. Information required to help organizations monetize (or internalize) indirect social and environmental externalities (e.g., around atmospheric emissions) is often found in functional silos outside the mainstream management information system, or not collected and therefore unavailable.
Environmental Accounting at the UK Environment Agency

Environmental management systems are not bolted on, ad hoc, fragmented, or decoupled, but are fundamental to the way in which the Environment Agency has been managed. A function within the Environmental Finance Team (also responsible for outward-looking activities) is EMA and integrating the Agency’s financial and environmental performance data throughout its financial systems and reports, both internally and externally. The Agency’s approach to EMA has been to use a systems approach—plan, do, check, and act—and involves:

- the integration of data requirements into management systems (including corporate planning, management and financial accounts, environmental monitoring, health and safety, and business planning);
- monitoring and reporting to management on in-year performance using management accounts and environmental monitoring;
- the production of a year-end performance report (utilizing a wide range of existing processes);
- ensuring that the output is as robust as possible by independent auditing, verification, and internal review;
- working with suppliers to provide environmental data in electronic form that allows the matching of environmentally significant cost and usage information; and
- publishing environmental accounting disclosures (budgets are published in the Agency’s Corporate Plan).

The Environment Agency’s environmental accounting practices have been built from the bottom, underpinned by (a) careful, robust data collection, (b) management and reporting at all relevant organizational levels, and (c) a focus on negative environmental impacts. The Agency concentrates on the rather unglamorous, but critical, end of the accounting cycle, and is working systematically to solve a number of problems (e.g., working with suppliers to provide physical details, breakdown of costs on invoices, capturing resource use in expense forms or department returns, educating staff in their environmental impact, etc.).

Key Considerations for Professional Accountants

Moving from a conformance- to an integrated performance-based view of accounting for sustainability impacts:

Conventional financial accounting and economic measurement do not capture all the consequences of economic actions. Therefore, it is necessary to develop an approach to identifying and accounting for externalities—costs and benefits that do not accrue directly to the organization and that are not included in the financial accounts. Recognizing and measuring the external impact of environmental and social costs and benefits can help to manage an organization’s wider impact on society and the environment. External costs arise from the actual and potential impacts of an organization on the environment and society, and are cost-free to an organization (as the rest of society carries the social or environmental cost in the longer term).

A conventional accounting system will typically recognize direct social and environmental liabilities that usually arise from legal and regulatory requirements (such as disability and flexible working time requirements, landfill costs and other environmental levies, legal and due diligence fees, and any fines and remediation costs), because these costs need to be measured for external reporting and compliance purposes (and therefore will be reflected in company accounts). However, sustainability accounting calls for organizations to consider the cost or benefit of its products, services, and operations (which are not mandated by law or regulation) outside the boundaries of the organization. For example, although a transport organization pays for the fuel required to support its fleet of vehicles, the effect of the resulting greenhouse gas emissions are felt by future society.

Some organizations use full cost accounting (FCA) to help to ensure that the consumption and use of resources are accounted for as part of the full cost of production, and that objective prices are placed on externalities caused by the impacts of organizational processes or outputs. FCA helps to capture external as well as internal costs and benefits of operational activities, for example externalizing the cost of emissions and waste, and capturing social benefits arising from local employment or health and safety practices.
Although there is little consensus on FCA methodology, it is generally recognized as an accounting approach that identifies external (environmental and social) costs and benefits associated with a particular activity, and incorporates this information in decision-making. FCA focuses on internalizing all environmental and social impacts, thereby revealing a full range of costs, including:

- conventional costs: including direct and indirect costs associated with a capital or revenue project;
- hidden costs: found in overheads and general accounts;
- liability costs: contingent liabilities not currently recognized in conventional accounts, such as future cleanup costs;
- (less) tangible costs: costs and benefits that may be assessable in financial terms and are likely to arise from improved sustainability management, such as loss/gain of goodwill, changing attitudes of stakeholders; and
- sustainability-focused (moving beyond compliance) costs: costs that would be incurred if a sustainability-focused approach was taken to a project or to organizational performance. Costs to ensure zero or near-zero negative environmental and social impacts or to create positive impacts could be estimated.

FCA has helped some organizations improve their understanding of social and environmental performance by highlighting where externalities can be reduced or eliminated (a) by the redesign of production processes, or (b) by organizations operating differently. There are potential strategic planning related benefits of undertaking FCA particularly in industries where externalities are likely to be imposed via regulation or taxation (e.g., a carbon tax). The development of the practice of FCA in organizations was explored in ACCA research in 2001, Full Cost Accounting—An Agenda for Action. The report reflects on the difficulties of applying FCA, and explains how, in general, those using FCA typically take a pragmatic approach and will need to make estimations and judgments, particularly around complex real world relationships. An example of putting FCA into effect is documented in research by the Chartered Institute of Management Accountants report, Accounting for Sustainable Development Performance.

Specifically in relation to biodiversity, protecting and sustaining the earth’s natural capital will ultimately depend on organizations incorporating the values of ecosystems into decision making. Demonstrating value in economic terms will help organizations in reaching decisions that consider the full costs and benefits of a proposed use of an ecosystem, rather than just those costs or values that enter markets in the form of private goods. See the Economics of Ecosystems and Biodiversity (TEEB) study, Mainstreaming the Economics of Nature, for more information on the valuation of nature, biodiversity, and ecosystem services. This report also includes reference to the international mining company, Rio Tinto, which has adopted net positive impact on biodiversity as a long-term goal.

Identifying, defining, and classifying costs to motivate desired activities and behaviors: Cost information is needed for decisions that might be strategic or operational affecting the organization or its sub-parts, such as a product or service line, or at a process level. A range of costing approaches can be used to uncover relevant costs and redefine existing recorded costs to distinguish between types of cost. This is particularly helpful when considering environmental issues. Conventional costs are costs of raw materials and energy that have environmental relevance. Potentially hidden costs are those that are captured by accounting systems, but then lose their identity in overheads. To be managed properly, environmental and social-related costs can be usefully assigned to processes or products that created the cost.

By allocating environmental costs to the products or processes that generate them, an organization can motivate managers and employees to find creative pollution-prevention alternatives that lower those costs and improve profitability. For example, Caterpillar’s East Peoria, Illinois, plant in the US no longer puts waste disposal costs into an overhead account; rather, the costs of waste disposal are allocated to responsible commodity groups, triggering efforts to improve the bottom line through pollution prevention (see also the US Environmental Protection Agency’s An Introduction to Environmental Accounting as a Business Management Tool: Key Concepts and Terms).
Using ABC/ABM for Identification and Measurement

An ABC/ABM approach allows for the identification and measurement of environmental and social costs by assigning them to activities, processes, products, or customers. The benefit of an ABC approach is that social and environmental costs relate to the activities that cause them, and formerly hidden expenses, such as the costs of (a) water treatment, energy, waste treatment, and disposal; and (b) training, are transparent and can be better managed. Environmental costs should be correctly attributed to both existing and past products so not to distort the economics of current product lines. As professional accountants in business review and analyze energy usage and environmental consumption, they could allocate environmental costs to existing products. Environmental costs can also be allocated to existing processes, and the products/services resulting from these processes should be assigned a share of the process-specific environmental costs.

Organizations can improve their understanding of environmental and social costs through their costing models and systems, using approaches such as (a) Activity-Based Costing (ABC)/Activity-Based Management (ABM) or alternatives such as Resource Consumption Accounting (RCA), (b) design for environment/life-cycle design and/or life-cycle assessment/life-cycle costing, or (c) FCA.

The process of reviewing consumption patterns and assigning environmental costs to products/services should also help to highlight the opportunities for improving processes for future products during their design and development stages. Life cycle costing and design is increasingly used as a planning tool to minimize the environmental impact of products and processes, by identifying all associated costs over a product’s lifetime and monetizing their impacts.

Many organizations define environment-related costs in the way that best suits their needs. The 2005 IFAC guidelines, Environmental Management Accounting, provide common environment-related cost categories that can help in resolving the issue of hidden environmental-related costs. Most of these cost categories have sub-categories more representative of traditional accounting, such as equipment depreciation, raw and auxiliary materials, operating materials, personnel, etc. Some organizations will collect environmental data as part of an environmental management system to meet ISO 14001, and this facilitates the implementation of EMA.

Working across organizational functions, particularly integrating accounting, procurement and operations: One of the greater challenges in implementing EMA will be to track physical accounting information, which is often not recorded, or not recorded in a way that reflects the real world flow of materials. To maximize material productivity and minimize waste, underlying material flows should ideally be visible before accounting for environmental costs. Professional accountants will typically need to work closely with operational managers and others to account for material amounts of energy, water, or other materials, and perhaps track physical information from suppliers and customers. Physical information provides an indication of the consumption of natural resources and generation of (negative) waste and emissions. This allows the development
of improvement measures to reduce such waste and emissions, as well as material and waste disposal costs. A cross-functional team implementing EMA may need to bring together designers, engineers, production managers, operational staff, environmental managers, and those involved in purchasing, as well as accountants.

The multi-disciplinary approach that is required is best highlighted by the use of an MFCA approach (see “The Benefits of Introducing Material Flow Cost Accounting”). The calculation and management of quantity and cost data for losses incurred in a manufacturing process will require the expert input of:

- operations on design, procurement, and production regarding the flow of materials and energy use throughout the organization;
- engineering and/or technical input on the material balance implications of processes;
- quality control on issues such as product reject frequency, causes, and rework activities;
- environmental management input on impacts, waste types, and waste management activities; and
- management accounting expertise on cost accounting data and practices.

The multi-disciplinary approach to implementing EMA may need to bring together designers, engineers, production managers, operational staff, environmental managers, and those involved in purchasing, as well as accountants.

The benefits of introducing Material Flow Cost Accounting

Some manufacturing-based organizations use MFCA to measure the flows and stocks of raw materials in a production process in both physical and monetary units. EMA highlights the costs of material losses and inefficiencies in a process by providing an understanding of the costs of material losses. Therefore, this approach helps to minimize the amount of input resources including energy, which leads to minimizing non-product emissions. In applying MFCA, all input materials flowing through production processes are traced and categorized as “product” or “material loss,” and both products and material loss are treated as “products” in the calculation, in which the costs are measured separately. The International Organization for Standardization is currently developing a standard for MFCA (ISO 14051), which should be available in late 2011.

Accountants can have a very important role to play in establishing and improving the underlying information systems in order to be able to actually monitor what materials enter an organization and the different production steps, and how much of this becomes a product or a so-called “non-product-output.” Accountants can assist in ensuring the accuracy, completeness, and comparability of physical data. On the input side, data from stock management and inventory records should be consistently collected in kilograms/pounds and losses on stock recorded separately. This information should regularly be cross-checked with data from production planning systems. On the output side, this data should be compared to production volumes, data from the outgoing store, and turnover. Typically in practice, this information is not consistently available and monitored. Usually, the loss percentages used for controlling do not reflect experience from the production plants and measured data from waste management.

Once the input side of the mass (material) balance for raw, auxiliary, packaging, and operating materials is established in a measurement...
of weight and monetary values (materials used for production or purchased, depending on information available), it is divided into the product output (production volume) and all other output, which by definition is the so-called non-product-output, containing all waste, air, and water emissions. At the same time, it contains all lost raw, auxiliary, and packaging materials and all operating materials, which by definition are not part of the product, as well as water and energy. MFCA also helps with carbon accounting and footprinting by providing the necessary financial information.

MFCA at Canon: According to the Canon Sustainability Report 2008, MFCA has enabled Canon to further reduce resources and energy waste. At a production level, MFCA allows the calculation and management of quantity and cost data for losses incurred in the manufacturing process. This model asserts the final shipped product of the manufacturing process as "positive products." The material costs associated with negative products, processing and waste treatment costs are determined as "negative product costs." Analyzing the quantity of negative products and reducing the number of negative products enables the reduction of our environmental burden and costs.

Canon began introducing MFCA at its manufacturing sites in Japan in 2001 and outside Japan in 2004. As of December 2007, MFCA was being used by a total of 15 sites in Japan and nine outside Japan. A joint MFCA project between Canon and its raw material suppliers was initiated in 2004, with both sides working to reduce environmental burden and costs.

The economic effect of these efforts at major manufacturing sites worldwide was ¥1.3 billion ($11.4 million) in 2007. As part of its promotion of MFCA, in November 2007 Japan’s Ministry of Economy, Trade and Industry (METI) proposed an international standardization of material flow-based cost accounting to the International Organization for Standardization (ISO). Aiming toward its standardization in 2011, we have been working in cooperation with METI to formulate this proposal based on our successful experience in applying MFCA.

Accounting for social costs and valuing social impacts: Social information flows needed to support sustainability initiatives and decisions can cover a range of areas, including (a) human rights, (b) labor practices, (c) society, and (d) product responsibility. Each of these areas contains many sub-areas. For example, labor practices include diversity and equal opportunity, employment, labor-management relations, occupational health and safety, and training and education. Where any of these issues are important to decision making, and where managers need to be motivated to take action, information flows, particularly on costs and resulting impact, should be explicitly required where possible.

It is possible to account for and measure social costs, although approaches tend to be well-developed only in some areas, such as labor practices. For example, health and safety performance is increasingly captured internally and reported externally. Many organizations collect information on occupational accidents (frequency, type, employee group, length of sickness) and analyze it in the context of working conditions. Some go a step further by examining the costs and benefits of health and safety measures and considering the consequences of health and safety initiatives. In an activity-based approach, the causal link between an event and its consequences can be tracked. For example, an accident can lead to (a) lost work time, (b) loss of short- and long-term assets and income, and (c) other costs, such as insurance premiums, all of which can be captured.

Such measurement is easier where the relevant costs and measures reside in accounting and information systems. However, few organizations account for external social impacts in monetary terms, and even fewer have modified the profit and loss account to draw out the costs and benefits of social policies and activities, including the values which drive the core business, which would otherwise remain hidden in the financial accounts.

In principle, the same approach to valuation could be applied to social impacts (as is the case for environmental impacts); for example, measures to prevent or avoid social costs are a form of avoidance cost. Where tracking environmental information and impacts (such as emissions) is largely scientifically based, considering the level of impact of social performance can be
complex. This can make establishing social information requirements, including for developing social accounts, particularly challenging. However, there is innovative work in this area. For example, the Forum for the Future has been involved in implementing sustainability accounting in an alcoholic drinks business (to provide a monetized measure of social cost) and applying a methodology to assess social return on investment in the retail sector. For additional information, see Accounting for the Bigger Picture - Driving Sustainable Performance Through Measurement from Forum for the Future, a UK-based sustainable development non-profit. The concepts of social value added and a pro forma social financial statement are explored in the Sigma Sustainability Accounting Guide.

Using environmental and social cost and other non-financial information for project appraisal and capital budgeting:
Where environmental and social costs and information are significant and relevant, integrating them with other relevant information in investment decisions enables an organization to better manage its environmental and social considerations and impacts. In particular, such information supports project appraisal and investment appraisal decisions in general. This involves assessing potential investments against economic criteria, but should also include all relevant environmental and social costs (see "PepsiCo"). For example, environmental factors can be paramount in determining the returns from an investment, e.g., site recovery costs, the cost of meeting legislation such as the EU's end-of-life directives, and various other compliance costs.

Sustainability factors and risks can be incorporated into a discounted cash flow model. Sustainability-related risks can be estimated and ranked, and expected costs incorporated into the appraisal in the form of cash flows. Longer-term scenarios can also be built into the appraisal and decision-making process, so that performance can be assessed against changing circumstances. Project appraisal, including for specific projects focused on achieving carbon reductions, can be subjected to the good practice principles in International Good Practice Guidance: Project Appraisal Using Discounted Cash Flow, An investment decision process should include identifying the potential consumption of natural resources and environmental assets such as water, and the environmental impacts such as pollution, for which it is responsible. A formalized and integrated approach to EMA will also make it easier to:
- quantify environmental costs;
- allocate and project environment costs and benefits;
- use appropriate financial indicators; and
- set reasonable time horizons that capture environmental benefits.

Environmental and social costs and other non-financial information for investment decisions can be used incrementally, first on a limited scale. Where data is hard to source, progress is possible by focusing on costs that are widely known or more easily established (some environmental factors, such as greenhouse gas emissions, energy consumption, and contingent environmental costs, can be easier to quantify) reserving more difficult estimates of cost and revenue for later discussion. Difficult-to-estimate costs and revenues can also be handled qualitatively, and in some instances an organization may judge it unnecessary to quantify them, for example where more easily measured costs justify the investment in cleaner technologies or better product design options.

Accountants will also be involved in project appraisal of environmental projects or “green technologies,” most likely as part of carbon reduction programs. Improving environmental performance may require new technologies and process adjustments with higher cost implications than for relatively simple waste minimization measures. As with other capital expenditures, options to (a) design cleaner products, (b) optimize processes, (c) use new technology, and (d) recover/re-use materials will require financial justification. A focus

Part 2: Operational Perspective

2.3 Improving Information to Support Decisions and Reporting

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on payback periods alone will be unhelpful. The net present value and overall lifecycle costs will be important inputs into decision making. Significant carbon-saving projects may have large net benefits, but may take many years to pay back. Therefore, it is necessary to take into account the costs and savings arising from a wider range of factors, such as enhancing reputation, employee motivation and commitment, and satisfying a wider range of stakeholders through improved environmental performance.

Organizations should also consider whether a lower discount (or hurdle) rate in a more sustainable project can be justified. For example, improving environmental and social performance might result in a reduction in the cost of equity if markets are seen to ultimately reward the organization with a lower cost of equity. Incentive schemes such as enhanced capital allowances, which some governments use to encourage businesses to invest in energy-efficient equipment, can also be incorporated into the appraisal.

PepsiCo

PepsiCo’s Environmental Management System identifies environmental risks, and ensures compliance with regulations and company standards by applying formal governance and auditing processes to environmental programs and systems. The company also incorporates sustainability criteria into a Capital Expenditure Filter that assesses all capital expenditure requests over $5 million. PepsiCo requires that all requests be accompanied by a review of related sustainability risks and opportunities to track the sustainability payback on capital spend, thus improving investment decisions over time.12

— The Ceres Roadmap for Sustainability

In conducting our business, acting sustainably means that, in all of our activities at every level within the company and in all corporate realms, we always take the ecological, social and ethical aspects of our actions into account.

All divisions of the business as well as the key areas affected are integrated into the Sustainability Management System of the Deutsche Bank. In this way, sustainable action is embedded within the entire company as a cross-functional function.

The board of directors of the Deutsche Bank carries the ultimate responsibility for sustainable action. The group compliance officer for the Sustainability Management System reports directly to the board within the framework of a bank-internal steering committee.13

— Deutsche Bank, Banking on Green

2.4 Integrated Management Control Systems

KEY THEME Developing integrated management and (internal) control systems to ensure alignment of sustainability performance to organizational objectives.

CONTEXT Management control systems (MCSs) introduce social and environmental issues into the organizational language and therefore help to embed them in the set of shared values and principles, and actions. They play a role at strategic, management, operational, and reporting levels. After an organization defines sustainable strategies and goals, MCSs cascade down an organization’s social, environmental, and financial targets and objectives in a way that is meaningful for managing local entities, business units, functions, and individuals. MCSs also support organizational learning by feeding up social, environmental, and financial performance information.
that is meaningful for controlling alignment of that performance with the overall organizational objectives. Therefore, MCSs help to ensure that goals and objectives are delivered, and support the widely used management (Deming) cycle steps: plan-do-check-act (PDCA).

A PDCA management and control system can be implemented in many forms with various terminologies. The article, “Cleaning Up,” from Strategic Finance magazine considers the Procter & Gamble Planning and Control System of Objectives-Goals-Strategies-Measures.64 The integration of social and environmental factors features at all stages and, as with strategic goals and objectives, the MCS should ensure that the organization achieves what it has set out to do in relation to sustainability performance. It should ensure that:

- opportunities and risks are identified, analyzed, and managed in the strategic planning process;
- sustainability goals, targets and/or objectives are established and clearly articulated and integrated into performance management (and cascaded down throughout the organization);
- lines of responsibility and accountability are clear;
- performance is measured and remedial actions are taken when necessary; and
- reporting is relevant and faithfully represented and useful to intended users (which might involve reporting on negative as well as positive performance).

A sustainability or (environmental) management system and assessment can complement (or be part of) an internal control system to help an organization (i) define its sustainability objectives and ensure their alignment to business objectives, (ii) identify sustainability challenges, risks, and opportunities, and factor their financial and other implications into decision making, and (iii) ensure that management and operational practices respond to these challenges, risks, and opportunities. The importance of a sustainability or environmental management system applies to all sectors. For example, it will be as important to a service-based organization, such as Deutsche Bank (see p. 99), as it might be to a manufacturing organization.

A starting point for many organizations is to introduce an environmental management system (EMS), as part of the overall MCS if one is in place, to systematically deal with environmental issues and questions, for example, covering water use, waste production and energy consumption. Organizations can make significant cost savings without EMS (see section 2.1, “Cutting Costs by Minimizing Waste”) but will most likely find that resource productivity improvements vastly improve when an EMS is implemented (as well as improving environmental risk management and collaboration with suppliers). The ISO 14000 family addresses various aspects of environmental management. The first two standards, ISO 14001:2004 and ISO 14004:2004, deal with EMS. ISO 14001:2004 establishes requirements for an EMS (including developing objectives, plans of action, and a clear division of responsibility), and ISO 14004:2004 gives general EMS guidelines. ISO has also published a standard to help organizations, and in particular SMEs, use a phased approach to implement an environmental management system. ISO 14005:2010 includes guidelines for the phased implementation of an environmental management system, including the use of environmental performance evaluation, and the maintenance and improvement of an environmental management system in order to meet the requirements of ISO 14001. (see “International Organization for Standardization: Standards Supporting Environmental Management Systems”).
Key Considerations for Professional Accountants

MCSs should incorporate specific activities that support sustainability goals and objectives into the organization’s overall management and control cycle. Many organizations find that the existence of a number of different management systems on different organizational aspects (such as health, safety, environment, and quality) can be inefficient and ineffective. The key to an effective PDCA management cycle is to incorporate social and environmental factors, as well as other relevant factors, into the day-to-day management and running of an organization. Therefore, although an organization might have identified separate sustainability policies and objectives, and (i) overall business goals and objectives, and (ii) the existing internal control and risk management approach, PDCA cycles can also be central to how an organization manages its sustainability performance. For example, Panasonic evolves its sustainability environmental management by nurturing capable personnel who can lead the implementation of environmental PDCA cycles, the implementation of which are overseen by a central Environmental Working Committee (see the Matsushita Environmental Data Book 2007).65 Honda takes a similar approach to ensuring the delivery of its environmental action plans.66

MCSs should ideally help to integrate social and environmental factors alongside financial and quality factors. The process of integration is made easier where management systems can be aligned and consolidated. For some organizations, the journey to integration has involved merging management systems. This helps to ensure EMS aligns with quality, financial, and cost management systems. For example, Sharp’s Environmental and Social Report 2007 describes their efforts to create accuracy and efficiency with an integrated management system by merging its strategic, environmental, and quality management systems. The integrated system operates as part of the strategic management system. In taking this approach, Sharp sought to achieve two benefits:

First, Sharp expects performance improvements and risk reductions in the form of reduced greenhouse gas emissions from business activities, as well as fewer defective goods. Second, by refocusing separate S-EMS (environmental management system) and QMS (quality management system) programs into activities aimed at achieving the same company-wide management objectives, Sharp is able to put its management resources where it needs them the most.67

Sharp introduced its strategic management system using the balanced scorecard method. The strategic management system breaks down company-wide organizational goals to the level of the individual in order to clarify the objectives of individual employees and specify their levels of achievement. Thus, individual employees are evaluated for how well they have contributed to corporate performance. The system helps employees make their objectives more practical and obtain results that are in line with company-wide strategies (see also section 2.5, “Performance Measures and KPIs”).

(Internal) control effectiveness depends on effective governance and risk management. Governance, risk management, and management control are all important instruments in achieving sustainability objectives. The effectiveness of an MCS is rooted in an organization’s corporate governance infrastructure and approach to risk management. Pirelli, for example, uses a “sustainable governance” approach that integrates sustainability with the various different aspects of company management.68 The company categorizes governance, internal control and organizational structure as sustainability tools so that they are clearly linked to the long-term viability and success of the company.

“To me, internal control is just one way of getting enterprise risk management to work. Internal control is a subset of governance and enterprise risk management. I would recommend having good governance and implementing enterprise risk management. The key is good governance,” noted John Fraser, Vice-President, Internal Audit and Chief Risk Officer at Hydro One Inc., the largest electricity delivery company in Ontario, Canada, in IFAC’s report, Internal Control from a Risk-Based Perspective.69

Setting out the role of internal auditing. There are many approaches and issues with auditing CSR programs and controls, and these are set out in The Institute of Internal Auditors Practice Guide.70 This Practice Guide highlights the importance of chief audit executives
(CAEs) and internal auditors understanding the various ways in which they can support management relating to CSR and sustainable
development. As part of the risk assessment and audit planning process, the CAE considers the CSR risks and whether to include all
or part of the processes in its audit universe and audit plans. The CAE also should also be aware of CSR issues in order to respond to
any special requests by the board or senior management. Management processes can be evaluated based on (risk management and)
internal control or quality management frameworks, such as the Committee of Sponsoring Organizations (COSO) or ISO (see “Internal
Control Frameworks and Guidance”).

Internal auditing can also help to ensure that the MCS is designed to facilitate continuous learning and allow challenge to conventional
wisdom. For example, although many organizations with an EMS frequently audit the systems to assess the degree of compliance
with ISO14001, they lose sight of whether it continues to be “fit for purpose,” and whether the right environmental and sustainability
opportunities and risks continue to be identified and managed. This is particularly the case with ISO 14001, as it emphasizes compliance
with legal and other requirements for environmental impacts.

Integrating sustainability (and particularly environmental) factors into financial processes, such as budgeting and forecasting.
The planning and budgeting process should identify planned objectives for spending, income, and sustainability related investments,
and help to monitor progress against objectives. The organization’s plans to fulfill its sustainability objectives must be backed up by the
necessary financial and other resources. For example, the following environmental factors might be reflected in a budget: spending on
energy; waste management and disposal; spending on environmental projects; costs of environmental purchasing and supplier audits;
provisions for bringing sites up to best practice; environmental capital spending; provisions for environmental business cases and EMS
implementation; and specialist reviews and advice.

Internal Control Frameworks and Guidance
Most jurisdictions with developed capital markets have codes of corporate governance that recommend that an organization
maintains a sound system of risk management and internal control to safeguard shareholders’ investments and the company’s
assets. Guidance on internal control and risk management is abundant, helping organizations to apply best practices and
comply with governance requirements (e.g., The Financial Reporting Council’s guidance on internal control (UK); and the
Committee of Sponsoring Organizations (COSO) guidance on internal control and enterprise risk management). Such
guidance helps to support similar themes:

- Effective and efficient operations;
- Reliable financial reporting;
- Compliance with standards, laws, and regulations; and
- A risk management approach that ensures a thorough and regular evaluation of the nature and extent of the risks to
  which an organization is exposed.

For definitions of risk management and internal control, see Global Survey on Risk Management and Internal Control:
Results, Analysis, and Proposed Next Steps.

These internal control frameworks should be incorporated by an organization into its normal management and governance
processes. It is not best practice to treat internal control as a separate exercise undertaken to meet regulatory requirements.
An integrated internal control framework, such as COSO’s Internal Control Framework, will help organizations to deliver on
both business and sustainability objectives, and to ensure reliable internal and external reporting.
International Organization for Standardization: Standards Supporting Environmental Management Systems

The International Organization for Standardization produces various standards covering environmental management systems (EMSs). These ISO standards provide the elements of an effective EMS that can: (a) be integrated with other management requirements, and (b) help organizations achieve environmental and economic goals. ISO 14001 is a management tool that enables an organization of any size or type to implement a systematic approach to setting environmental objectives and targets, to achieving them, and to demonstrating their achievement. This standard can be used for certification and/or self-declaration of an organization’s EMS, so that the requirements of the standard can be objectively audited. The standard includes internal audit requirements, so that an organization ensures the conduct of internal audits of the EMS at planned intervals to determine whether it has been properly implemented and maintained. The standard also requires a management review to ensure the continued suitability, adequacy, and effectiveness of the EMS.

ISO 14001 should also be considered in relation to ISO 9001:2000 (Quality Management Systems), and many large organizations expect their supply chain partners to certify against both international standards.

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2.5 Performance Measurement and KPIs

KEY THEME: Using strategic performance measurement systems, performance measures, and KPIs to ensure the delivery of strategic and sustainability-related objectives.

CONTEXT: Developing a list of performance metrics and KPIs is not difficult (see "Guidance on Performance Measures and KPIs"), but using them in an organizationally specific context, and ensuring that they are connected to organizational goals and strategy, can be challenging. Sustainability performance measures and KPIs help organizations (a) to track progress against sustainability goals, and (b) to ensure that they cover their environmental, social, and economic performance, especially when it is difficult to measure sustainable development directly. Before settling on performance measures and KPIs, it is necessary to understand how they are best used and incorporated into internal management processes and a strategic performance measurement system. Professional accountants in business might be involved in designing KPIs, including eco- and socio-efficiency indicators, and providing guidance on how to integrate sustainability factors and measures into strategic performance measurement systems.

A strategic performance measurement system helps to manage and deploy organizational resources in such a way as to deliver organizational objectives. Many strategic performance measurement systems have evolved to assist in this, such as the balanced scorecard, the tableau de bord, and the performance prism.23 Such systems can also be used to help implement social and environmental strategies, goals, and targets. Social and environmental factors and measures should be integrated into whichever system is used.

The balanced scorecard has probably been the most popular of the strategic performance measurement systems designed to help to align organizational activities and performance to strategy. The report by the Chartered Institute of Management Accountants, Effective Performance Management with the Balanced Scorecard, describes how a balanced scorecard has evolved from a widely used performance measurement tool to a broader approach used to facilitate strategy formulation and implementation.73 Its strength is two-fold. First, it helps to identify and understand causal relationships between the various actions that can be taken, and their impact on financial and non-financial performance, thereby contributing to consistency and alignment between the non-financial and financial measures.

Second, a balanced scorecard helps to measure the specific value drivers that underpin performance. This allows managers to test their hypotheses on what is driving organizational outcomes. Importantly, this then allows managers to use measures that are relevant to their organization and strategy rather than taking measures off-the-shelf. See "Using the Balanced Scorecard to Develop Strategy and Performance" for a simple example of a balanced scorecard strategy map, which can help when formulating a strategy and selecting key performance indicators.
Some organizations customize the balanced scorecard to fit with their culture and context, and approach to measuring performance. For example, the retailer Tesco developed a corporate steering wheel that includes corporate responsibility metrics:

We operate a balanced scorecard approach to managing the business that is known internally within the Group as our “Steering Wheel”. This unites the Group’s resources and in particular focuses the efforts of our staff around our customers, people, operations, finance and the community. Its prime focus is as a management tool for the Company so that there is appropriate balance in the tradeoffs that need to be made between the main levers of management—such as operations measures, financial measures, or delivery of customer metrics.74

The key elements of the steering wheel are shown in both Tesco’s Annual Report and Financial Statements 2010 and in its Corporate Responsibility Report.

Using the Balanced Scorecard to Develop Strategy and Performance Measurement

A critical component of the balanced scorecard is the interrelationship among the four quadrants, that is, how they are linked in a “cause-and-effect” sequence. For example, an organization might have in place the following enablers: (a) Product innovation in the form of bio-mimicry capability in order to develop innovative products; and (b) A comprehensive eco-efficiency audit.

The result is that the new bio-mimicry capability establishes a new line of eco-friendly products, and the eco-efficiency audit provides direction on how to improve existing processes, thereby resulting in cost savings to the organization.

The new eco-products meet customer demand, and the process improvements also assist in resolving customer issues through a combination of reduced cycle time and cost savings.

By resolving customer issues, the organization broadens its revenue base through new eco-products and improved returns gained through better operational efficiency. This example illustrates how a linkage may unfold within an organization, that is, how the initial investment in enablers leads to higher financial returns. Building a strategy map might help to articulate the linkages between various investments and activities.

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Example provided by Todd Scaletta, Vice President, Research and Innovation, CMA Canada
Key Considerations for Professional Accountants

Integrate sustainability measures where they have been identified as an important driver of strategy. Once an organization has embedded sustainability issues into its vision, mission, goals and objectives, and strategy, the integration of sustainability measures and indicators in a strategic performance measurement system is a natural next step. The way the strategic performance measurement system is developed, or modified, varies. Some organizations have modified their systems to ensure the prominence of social and environmental issues. Some users of the balanced scorecard (or variant—see Tesco example above) create a fifth, or additional, perspective of the scorecard (which supplements the standard four perspectives that are typically used, which cover financial, customer, internal business process, and learning and growth). This additional perspective could include social and environmental performance indicators that link to the organization’s measures in the other perspectives. However, an argument can also be made that the environment (or broader social factors, should they be important to an organization) are “themes” rather than perspectives, and that the danger of including them as additional perspectives is to lose visibility of the drivers of sustainability strategy and activity. Another approach is to integrate sustainability-related issues and measures into the existing balanced scorecard perspectives and, in some cases, to consider whether the perspectives can be usefully adapted to reflect their importance in driving sustainable organizational performance.

Whatever approach is adopted, the key to an effective performance measurement system that ensures the desired implementation of strategy is for measurement to:

- focus on the future, because the measures communicate to employees what managers think is important; and
- focus on delivering organizational strategy, by ensuring that it is reflected as a set of cause-and-effect relationships and activities that are drivers (e.g., lead indicators), and identified separately from the desired outcomes (e.g., lag indicators).

In practice, sustainability measures can often be disconnected from an organization’s strategy, which breeds cynicism and questioning of the relevance of sustainability measures. A probable reason for this is because sustainability is just now entering into the strategic missions of an increasing number of organizations. Therefore, a very close connection between the strategic planning process and the creation of the performance measurement system is needed to avoid a disconnect between the performance measurement system and the organization’s vision, leadership, and strategy (see Integrating Sustainability Measures into Strategic Performance Measurement Systems: An Empirical Study).

Judge how scientific cause-and-effect relationships between measures need to be to inform decisions. It might be interesting to know that an organization has increased its R&D spending by $300 million, but it is not useful information without a context and understanding of how this has affected the organization, including its social and economic performance. For example, an organization might relate this increased R&D investment to improved product design that reduced product cost, environmental impact through reducing toxic waste, and enhanced organizational reputation. This might then be related to a headline target on savings from environmental initiatives, which features in its external reporting.

Testing to see whether causal relationships exist between variables can help support decision making. However, it might be costly, and a cost-benefit analysis can help to determine whether it is worth the effort. For example, the changes in product design or operational processes to reduce carbon emissions may be immediately obvious, making it unnecessary to test the impact of changes in drivers of emissions, especially where testing is likely to be costly and the results are difficult to quantify with any accuracy. The picture of completeness of relationships between performance metrics and KPIs does not necessarily need to be foolproof if management believes that an activity affects a large part of an outcome that needs to be better managed.

Consider how sector or industry norms can influence KPI selection. KPIs will have particular significance, given the sector or industry in which an organization is operating. Identifying KPIs by sector can contribute to comparability among peer groups, and...
importantly help an organization avoid reporting extraneous KPIs that do not support investors in their decision making, or meet the needs of other stakeholders, such as regulators and consumers. Various industries have key sustainability impact factors that an organization might focus on in their reporting. The GRI sector supplements (a) capture issues essential to sustainability reporting in a specific sector, and (b) support the comparison of reporting organizations both within and across sectors. For example, typical sustainability issues, themes, and challenges in the telecommunication sector center on three key areas: internal operations (specific practices related to managing the organization’s facilities and infrastructure); providing access (approaches to ensuring equitable access to telecommunication products and services); and technology applications (indicators to cover the impacts of telecommunications products and services).

Develop and use eco-efficiency indicators to link monetary and physical information for decision making. Eco-efficiency relates to energy use, water use, contribution to global warming, and waste. It links monetary and physical information, so that an eco-efficiency indicator relates product or service value in terms of turnover (or profit) to the environmental impact of energy, materials, and water consumption, as well as volumes of waste and emissions. It is represented by the ratio of a monetary measure to a physical measure, and can be seen as the ratio of “value added” to “environmental impact added” per unit, where “environmental impact added” is equivalent to the sum of all environmental impacts that are generated by a product or activity. An example of an eco-measure is tonnes CO₂e (carbon dioxide equivalent) per unit of production or sales. Socio-efficiency can be seen as the ratio of “value added” to “social impact added,” where “social impact added” represents the sum of all negative social impacts originating from an organization or a particular product or process. Absolute changes in eco- or socio-efficiency measurement are also important to provide context to performance. It is possible to show improved efficiency at the same time as increasing the total output of GHG emissions.

Eco-efficiency indicators can help in the preparation of an eco-efficiency statement that depicts environmental and financial effects of transactions and activities, by grouping them into broader classes according to their environmental and financial characteristics. An eco-efficiency statement can have the following hierarchy:

- **Element**: the broad areas or groupings of financial and/or environmental issues of concern to stakeholders, e.g., contribution to global warming, energy requirement, waste, assets, liabilities, equity, income, and expense.
- **Item**: An item or group of items is information related to a specific element, e.g., a specific greenhouse gas, an energy source used, a type of waste, sales, or the cost of purchased goods and services.
- **Indicator**: is a specific measurement of an individual element that is used to track and demonstrate performance related to the element through recognizing and measuring items. A given element may have several indicators for different items.

An example of an eco-efficiency scoreboard is found on Unilever’s website.

Develop and use socio-efficiency indicators to better understand social impacts. Some organizations are also actively broadening their sustainability activities by using socio-efficiency indicators to understand social impacts, and, therefore, social performance. Selecting indicators is not necessarily difficult, but again, it is important for an organization to set out its business case, the social objectives, and value added it might seek to achieve, and how these relate to its goals and strategy. The chemical company BASF, for example, includes social responsibility data in its reporting, but within a “value-added statement” that shows what the company has created through its social responsibility activities, and as part of a wider CSR strategy.

Consider how to usefully present metrics and KPIs in internal and external reporting. One element of better presentation is the presentation (and form of reporting) itself, but another relates to providing context. For example, the total volume of wastewater generated each year might be better considered with an estimate of the total treatment costs of wastewater each year. If an estimate of the purchase value of raw materials lost in wastewater is included, the cost information may be compelling enough to trigger action to

Part 2: Operational Perspective

2.5 Performance Measurement and KPIs
reduce those costs, which often will also reduce environmental impact. In terms of internal management reporting, dashboards can be used to highlight key issues and trends. For example, the board of directors of Vancity, a member-owned financial institution, receives a monthly performance dashboard that includes data relating to financial performance, member experience, employee experience, and community leadership.76 The latter includes various components, including (a) member, employee, and public opinions on community and environmental performance, (b) total assets under management in community leadership products, and (c) progress against the company’s carbon-neutral commitment. Performance in these areas is measured against five-year targets.

In terms of the external reporting of KPIs, the Report Leadership project undertaken by the Chartered Institute of Management Accountants, PricewaterhouseCoopers, and Radley Yeldar recommends that a clear link should be made between strategic priorities and KPIs, and that they should be published together. In their generic annual report, KPIs are used in a way so that there is:

- a clear distinction between output measures and KPIs;
- an early mention of where the KPIs can be found;
- a clear link between strategy and KPIs, and a strategy progress statement giving the key measures of success for each strategic priority;
- a definition for each KPI, and prior year comparisons of performance and targets for the forthcoming year;
- disclosure on KPIs at both a group and segmented level (depending on data availability); and
- an explanation of the actions taken by management to improve/maintain its performance relating to each KPI.77

Guidance on Performance Measures and KPIs

Ultimately, the identification and selection of sustainability and ESG performance measures and KPIs is specific to the context of an organization and its industry. There are many sources of guidance on selecting and using performance measures and KPIs. In some jurisdictions, governments have provided guidance. In some cases, these are tied to the requirements for Management Commentary (MD&A) reporting. For example, in the UK, the Financial Conduct Authority has provided guidance on how to produce the latest guidance on environmental reporting: Environmental Key Performance Indicators: Reporting Guidelines for UK Business. The following list of guidance is not exhaustive:

- The World Business Council for Sustainable Development’s Guide to Integrating Sustainability and KPIs offers comprehensive guidance that can be tailored to individual organizations.
- The United Nations Conference on Trade and Development (UNCTAD) produced Guidance on Corporate Responsibility Indicators in Annual Reports. This includes a review of measurement methodology for selected indicators. Selected indicators include (a) trade, investment, and linkages, (b) employment creation and labor practices, (c) technology and human resource development, (d) health and safety, (e) government and community contributions, and (f) corruption.
- To improve comparability across organizations, various initiatives have started to help transform ESG information into consistent units and present that information in a more useful way for investors. On behalf of the German Federal Environment Ministry, and with contribution of leading sustainability investors/analysts, the most important Sustainable Development Key Performance Indicators (SD-KPIs) for the business development of SD industries in the next five years have been published as the SD-KPI Standard 2010-14. These industry-specific KPIs were compiled by the Ministry from surveys completed by SRI investment analysts. In September 2010, The European Federation of Financial Analysts Societies (EFFAS) and Society of Investment Professionals in Germany (DVFA) issued KPIs for ESG: A Guide for Financial Analysts on the Measurement of Responsible Corporate Performance. The KPIs for ten major industrial sectors and, within these, offer KPIs for 114 subsectors; some of the KPIs apply to all industries but many are sector-specific. It also offers basic principles for ESG reporting and recommendations for the presentation of ESG data and, in particular, the use of table formats.
- UNCTAD has also produced a guide for users and preparers of eco-efficiency indicators.

Part 2: Operational Perspective

2.5 Performance Measurement and KPIs
It is important to point out that we must avoid ending up with what could be referred to as ‘the silo effect’—with isolated, non-integrated and, often, ‘for show’ activities...we must avoid one-dimensional investigations and discussions, for example ‘We will receive an environmental certification’. The company must, instead, identify and understand the connections, focusing its strengths on improved performance, and must establish clear goals focusing on the actual stakeholders, not on framed certificates on a wall.44

— Lars-Olle Larsson, Partner, PwC

3.0 Introduction

External reporting by organizations has evolved over the years from providing financial statements and accompanying notes to the present day, where the trend is to provide an annual report, consisting of financial statements, some form of management commentary, some form of environment, social, and governance (ESG) performance data, and, particularly from many larger organizations, a separate report covering non-financial sustainability and corporate social responsibility disclosures. In addition, many jurisdictions, either by way of statute or listing rules, impose rules relating to continuous disclosure of information about specified events or matters that would be of concern to participants in the securities market. Jurisdictions likewise adopt different approaches to annual, half-year, and quarterly cycles of reporting.
This trend has been driven by a widespread recognition that high-quality reporting is an important driver of stakeholder trust and confidence in an organization. The continuous challenge for organizations is to provide the right mix of relevant, reliable, and understandable information based on the needs of their various stakeholders, such as investors and funders, as well as suppliers, customers, employees, NGOs, governments, and regulators.

Reporting challenges are various and widely discussed within and beyond the accountancy profession. A key challenge is that, in many jurisdictions, disclosures of non-financial and sustainability-related information have increased, but the analysis of what that information actually means for the organization, and its strategy, is often weak or insufficient. A comprehensive list of environmental or social disclosures, for example, provides little insight into the material impacts on an organization’s performance, and often clutters reporting and disclosure. Furthermore, there is some uncertainty and contention around how users interpret and apply the information to their assessments and decisions.

Recent IFAC research (available at www.ifac.org/frsc) conducted with various stakeholder groups of investors, regulators, directors, and auditors, highlighted that the social, environmental, and economic factors, as well as their interdependencies, need to be taken into account in assessing the overall performance of organizations. Therefore, organizations need to consider how best to integrate this information into their mainstream reporting. To do so, a more integrated and holistic business reporting framework, capable of consolidating the various social, environmental, and financial aspects of overall performance of organizations needs to be developed. According to UNCTAD’s report, Corporate Governance in the Wake of the Financial Crisis, “Several national corporate governance reform efforts are, for the first time, using the language of ‘sustainability’ and ‘stakeholder governance.’ There is a need to transform the concept of ‘sustainability’ into more concrete measures of corporate performance and to embed sustainability into a new model of ‘stakeholder governance.’”85 The latest edition of the stakeholder inclusive King Code of Governance for South Africa (King III), which was released in 2009, introduced the concept of integrated reporting.86 That code recommends as best practice the integration of economic, social, and environmental reporting — recording (a) how the company’s business has impacted positively and negatively on the community, and (b) how the company intends to enhance those positive aspects or eradicate or ameliorate the negative aspects in the year ahead. Therefore, integrated reporting is about showing the connections between external sustainability pressures and long-term organizational strategy. To demonstrate this connection, in addition to disclosing financial and economic matters, an organization and its management will have to show how they (a) recognize various ESG factors, and (b) direct their strategies and operations with a view to achieving sustainable social, environmental, and economic performance.

As organizations experiment and mature their sustainability reporting practices, typically using the Global Reporting Initiative’s Reporting Framework, they can start to consider how to adopt integrated reporting to improve their level of transparency and ensure useful reporting to various stakeholders. Professional accountants should position themselves more at the forefront of this trend to support their organizations in managing sustainability issues and reporting processes, and facilitating integrated reporting.

The Key Driving Forces of Improved Sustainability and Integrated Reporting

An ecosystem of stakeholders is driving sustainability, ESG, and integrated reporting. Reporting relevant sustainability or ESG issues is necessary to provide investors and other stakeholders with useful information highlighting sustainability impacts, risks, and opportunities. The pressure for organizations to improve their reporting of sustainability and ESG issues comes from regulators, stock exchanges, investors, data providers, and other stakeholders, such as supply chain partners, customers, and NGOs.

Regulators: There is a growing...
Part 3: Reporting Perspective

In many jurisdictions, securities regulators have recognized the need for organizations to disclose ESG issues that would be material to investors, and typically address:

- financial liabilities related to social environmental responsibilities;
- financial and operational effects of environmental protection requirements; and
- environmental policies and risk management.

Several countries require companies to adopt a wider stakeholder view and to provide more non-financial disclosures (see “Jurisdictional Requirements”).

Stock exchanges: Some exchanges, such as the Johannesburg Stock Exchange, require that all its listed companies provide a statement in their annual reports on how they have applied the principles set out in a corporate governance code. In the case of a South African company, this statement would relate to the extent of the company’s application of the King Code (the mandatory governance code for companies listed with the Johannesburg Stock Exchange), which calls for disclosures of a wide range of environmental, social, and governance issues, and the reasons for non-application with any of its principles. In addition to South Africa, some exchanges in East Asia have, or are considering, mandatory or voluntary annual social responsibility and sustainability reporting by listed companies (see the World Federation of Exchanges monthly newsletter). Whole or partially state-owned exchanges in many developing countries, such as the demutualized Bursa Malaysia, are finding it easier to reflect national government-sustainable development policies and agendas in their listing requirements. In August 2010, the Singapore Exchange issued Policy Statement on Sustainability Reporting, directed at encouraging SGX-listed companies to commit to sustainability practices and reporting.

Investors: Institutional investors are increasingly accepting an ownership responsibility to (a) promote good corporate governance and responsible business behavior, and (b) set out policies on engaging with companies on these issues. This is most visible when large institutional investors publicly express their expectations on company performance and sustainability issues. For example, Hermes Pensions Management in the UK states in its investment principles that a company’s primary consideration should be the generation of long-term shareholder value. However, the principles say, “This [value] should be based on appropriate financial disciplines, competitive advantage, and within a framework which is economically, ethically, and socially responsible and sustainable.” Investment institutions also support responsible business behavior in other ways, for example, by endorsing and agreeing to follow the United Nations’ Principles for Responsible Investment (an initiative of the UN Secretary-General’s, coordinated by the United Nations Environment Programme’s Finance Initiative (UNEP FI) and the UN Global Compact). Believing that environmental, social, and corporate governance issues can affect the performance of investment portfolios, 20 institutional investors from
Jurisdictional Requirements

- Australia: The Corporations Act 2001 Section 299(1)(f) requires directors’ reports to disclose if the entity’s operations are subject to any particular and significant environmental regulation and to give details of the entity’s performance.88

- Canada: The Canadian Securities Administrators’ 2010 Staff Notice 51-333 provides reporting guidance on environmental matters, including those related to air, land, water, and waste.89

- Denmark: CSR reporting is mandated for the country’s largest publicly listed companies, state-owned companies, and institutional investors. Companies are required to disclose certain CSR information in their annual financial reports; where there is no formal CSR policy in place, the lack of a policy must be explicitly stated.91

- France: Introduced in May 2001, the Nouvelles Régulations Économiques includes several articles related to social and environmental reporting and mandates all French corporations to report on their environmental and social performance.90

- UK: In the case of listed companies, directors are required, as part of the business review, to report on environmental issues, the company’s employees, and social and community matters. See the ICAEW’s website for more information on business review.

- USA: The SEC released guidance on climate risk disclosure in January 2010, after it had become clear that investors were not getting the climate information they needed in SEC filings.93

- The European Union (EU): The EU Accounts Modernization Directive requires the inclusion, in the directors’ report, of more non-financial information relevant to understanding the performance of the business and its year-end position.

- Sweden and China: Sustainability reporting has been mandated for all state-owned enterprises.
12 countries developed and signed these principles. Launched in April 2006, the principles have since provided a framework for investors to consider environmental, social, and corporate governance issues. There are now 882 signatories,† which include asset owners, investment managers, and professional service partners.

In 2009, the Asset Management Working Group of the UNEP FI issued a report titled Fiduciary Responsibility: Legal and Practical Aspects of Integrating Environmental, Social, and Governance Issues into Institutional Investment, which is furthering its objective of influencing the integration of ESG issues into investment policy and decision making. The Carbon Disclosure Project (CDP) is a not-for-profit organization formed to facilitate and promote an ongoing dialogue between institutional investors, purchasing organizations, and senior corporate management regarding the business implications of climate change. The authority of the CDP signatories has encouraged many organizations globally to report, measure, and manage their greenhouse gas emissions and climate change strategies.

Data providers: Market information providers such as Bloomberg, Thomson Reuters, and Goldman Sachs are providing platforms to display sustainability information (some with a GRI-compatible configuration). Bloomberg launched an ESG data service in 2009 to provide its clients and their financial analysts with access to their listing of publicly available ESG data. ASSET 4, purchased in November 2009 by Thomson Reuters, primarily provides ESG as well as financial data.

NGOs: Through their sustainability agendas, NGOs help to shape the role and activities of organizations. They can influence level of transparency, stakeholder engagement, and strategy. For example, through its work, Ceres encourages organizations to embed social and environmental challenges into core business practices.

How professional accountants and their organizations can facilitate improved reporting

The reporting perspective of this Framework considers how organizations can improve the usefulness of their external communications and reporting. The key sections cover:

- Developing a reporting strategy to enable high-quality reporting and disclosure that provides a complete picture of an organization’s performance for a range of stakeholders;
- Narrative reporting for enhanced transparency and closing the reporting gap that occurs when information that is important in running an organization is not captured in financial statements;
- Understanding and reconciling approaches to applying materiality to sustainability reporting; and
- Establishing an approach to external assurance and review that adds credibility to an organization’s reporting, and provides internal benefits such as helping to improve underlying reporting processes.

1 As of March 2, 2011
3.1 Developing an Organizational Reporting Strategy

KEY THEME: A reporting strategy that will yield a complete picture of an organization’s performance for a range of stakeholders is needed. This will involve using sustainability reporting frameworks and principles, such as GRI’s Reporting Framework, and ensuring that their use contributes to meaningful sustainability and integrated reporting.

Integrated reporting is a new paradigm in reporting that requires connecting an organization’s strategy, its financial performance, and its performance on environmental, social, and governance issues.

CONTEXT: Despite greater corporate responsibility reporting (see “Trends in Corporate Responsibility Reporting”), dissatisfaction with how information is presented and used in reports is widespread. The challenge is that information currently required under accounting standards and listing rules does not fully reflect material environmental and social factors, such as climate change, resource use, or human rights, despite the fundamental impact these factors have on an assessment of both the current and future performance of an organization. Where organizations disclose sustainability or ESG-related information, it can be sophisticated but too often presented in a disconnected way, so that its relationship to business strategy and financial performance is unclear.

Additionally, there is widespread criticism that reporting is becoming overly complex, not only in terms of what is required by accounting standards, but also in terms of how information is structured and presented (see IFAC’s Business Reporting Supply Chain Project).

Overcoming challenges in making reporting more useful can only be satisfactorily dealt with by organizations and their professional accountants where they adopt a structured and strategic approach to reporting, which involves breaking down functional silos within the organization so that sustainability and financial reporting processes are better aligned. The practical challenges are not insignificant, particularly where sustainability-related factors may impact the organization’s strategy and long-term performance. To reflect the importance of providing all stakeholders a true picture of performance, in addition to familiar terms such as sustainability reporting or CSR reporting, a new term has emerged as possibly presenting a new paradigm in reporting: integrated reporting.

The GRI’s recent survey among readers of financial reports found that readers of a report which disclosed how a company’s business had impacted the community and the environment in which it operated, including the financial aspects, had formed a more positive opinion about that company—and had more trust and confidence in the products and services of that company—than about a competitor that did not report on an integrated basis. So reporting on the essence of the business, the business itself, and its impact on society and the environment, has become absolutely critical.

— Mervyn King, Chair, King Committee on Corporate Governance and Deputy Chair, International Integrated Reporting Committee

Corporations that disclose sustainability or ESG-related information in a structured and strategic way may find that these factors have a significant impact on their financial performance.

[3] Count Me In: The Readers’ Take on Sustainability Reporting, 2008, Question 2


[5] Global Reporting Initiative (GRI), and [6] ensuring that various stakeholders and users receive the information they require in the form that they require it. It will also involve proactively influencing the mindset of investors and other stakeholders so they recognize how sustainability-related factors may impact the organization’s strategy and long-term performance. To reflect the importance of providing all stakeholders a true picture of performance, in addition to familiar terms such as sustainability reporting or CSR reporting, a new term has emerged as possibly presenting a new paradigm in reporting, integrated reporting.
Trends in Corporate Responsibility Reporting

The KPMG International Survey of Corporate Responsibility Reporting 2008 is a comprehensive look at the reporting trends in the world’s largest companies, shows corporate responsibility reporting (which covers all forms of sustainability reporting) is mainstream with nearly 80 percent of the largest 250 companies worldwide issuing reports. Of these, only 4 percent integrate corporate responsibility information into their annual reports. The survey also reveals good practices in corporate responsibility (sustainability) reporting and shows which reporting standards and guidelines are used by companies. More than three-quarters of the Global Fortune 250 and 69 percent of the largest companies in the world by revenue follow the GRI Sustainability Reporting Guidelines. However, only 16 percent quantified the value of corporate responsibility performance specifically for their analyst and investor stakeholders.

The following groups are currently developing visions and frameworks for integrated reporting:

- The International Integrated Reporting Committee (IIRC), established in 2010 by His Royal Highness The Prince of Wales’ Accounting for Sustainability Project and GRI, and with the support and involvement of IFAC. The IIRC is developing an overarching integrated reporting framework, including key principles setting out the scope and content to be covered by an integrated report.

- The Integrated Reporting Committee (IRC) of South Africa issued The Framework for Integrated Reporting and the Integrated Report, Discussion Paper in January 2011. The development of integrated reporting in South Africa is being driven by the requirements in the King Code on Corporate Governance mentioned earlier.

Other sources of information on integrated reporting include various activities by Robert Eccles (Harvard Business School) and Michael Krzus (Grant Thornton), who published the book One Report (see “One Report”). At the time of launching the second edition of this Framework, there was not a universal consensus on the nature of integrated reporting. The debate on integrated reporting can be followed in various places, including the joint IFAC and Accounting for Sustainability community website. Additionally, Harvard Business School has compiled the e-book The Landscape of Integrated Reporting, Reflections and Next Steps. This e-book, containing contributions from many different sources, includes some insights from organizations developing their integrated reporting approaches, such as Rabobank Group, Philips, Outokumpu, Marks and Spencer, Southwest Airlines, BASF, and Novo Nordisk (see “Novo Nordisk”).

What is so far evident from these examples is that integrated reporting can be applied by compiling one multi-stakeholder or investor-focused “integrated” report (which, in some cases, might be the annual report and accounts), supported by various other communication vehicles, such as the corporate website, to provide additional detail for specific user groups. The vision of the IRC of South Africa is that, "The integrated report is the..."
One Report

The book One Report advocates use of a single report that combines the financial and narrative information found in a company’s annual report with the non-financial and narrative information found in an organization’s CSR or sustainability report. Importantly, One Report is not presented to necessarily mean publishing only one report. Despite the recommendation that there should be one report that integrates the organization’s key financial and non-financial information, it does not preclude an organization from providing other information in various ways that is targeted to specific users.

Authors Robert Eccles and Michael Krzus argue that the use of one report eliminates the artificial and unhelpful analytical distinction between shareholders and other stakeholders. They suggest that a separate sustainability or CSR report can marginalize other stakeholders by putting non-financial information in a separate document, and it marginalizes the importance of non-financial information to shareholders. Shareholders cannot just focus on short-term profits; they need to understand that a company’s ability to earn profits over the long term will require investments that come at a short-term cost, or even value transfers that preserve its legitimacy and continued existence in order to earn profits in the future. Conversely, other stakeholders need to understand that companies need to make a profit in order to survive and grow.

organisation’s primary report. It could, however, be linked to more detailed reports and information, such as the annual financial statements, sustainability report, governance disclosure, etc. The detailed reports may be necessary in order to provide detailed information for specific user groups to facilitate deeper analysis of the organisation and comparability between peers, and to comply with statutory requirements. The reports should be made easily accessible to users, for example, through the organisation’s website.

Whatever the presentation, integrated reporting will involve ensuring:

- Various social, environmental, and financial aspects of the overall performance of the organization are clearly connected and the connections clearly explained. Of particular importance will be linking external sustainability pressures and challenges and the organizational strategy for dealing with them.
- Disclosure of environmental and social factors that affect the performance of an organization, including risks and opportunities, liabilities, costs, and KPIs indicating performance against goals and target.

Although an integrated reporting framework is being developed, and a consensus around the future of integrated reporting is being built, organizations can still consider (a) what an integrated reporting approach looks like, (b) how it can be achieved in the context of their history, culture, and dialogue with various stakeholders, and (c) the behavioral implications for their boards and management. With respect to the last, an important step forward will be for boards and management to be more attuned to the risk and opportunities arising from environmental and social factors, and how these impact the organization’s strategy and operations and are addressed in the external reporting process.

In developing a reporting strategy, organizations and professional accountants will need to consider a range of difficult questions and considerations that will not necessarily be solved by bringing together sustainability or CSR reports with mainstream annual reports. The credibility of integrated reporting will be as much a reflection of the maturity of an organization in regards to its management processes and the way
sustainability issues have been integrated into these. Where an organization has a well-developed and effective stakeholder engagement approach (see section 1.3, “Stakeholder Engagement”), it may better understand the sustainability issues related to its strategy and operations, and the risks and opportunities they present, their potential impacts, and how these can be managed.

The proposed Framework for Integrated Reporting and the Integrated Report from the IRC in South Africa identifies suggested elements to be included in the integrated report, a summary of which is provided at the end of this section. Following the key considerations set out below will help to avoid the risk of treating this as a checklist that might lead to valueless boilerplate reporting.

Sustainability reporting is also gaining traction in the public sector in some jurisdictions. A useful resource in relation to sustainability reporting in public sector organizations is the ACCA’s report, Sustainability Reporting Matters: What Are National Governments Doing About It?

Novo Nordisk continues the process to drive integration of the financial and non-financial perspectives to business and seeks to reflect this in its approach to inclusive reporting. Its approach takes its point of departure in current standards for mandatory financial reporting, and current guidelines for voluntary, non-financial reporting.

The aim is to drive business performance and enhance shareholder value by exploring the interactions between financial and non-financial objectives. This entails alignment of key priorities, target setting, and definition of key performance indicators, in consultations with internal and external stakeholders.

The external annual reporting consists of two publicly filed documents: the annual report, filed with the Danish Commerce and Companies Agency, and the Form 20-F Report, filed with the United States Securities and Exchange Commission.

Additional reporting online provides more background, context, and data. Many sections of the public filings contain references and links to information posted on the Company’s website. The annual report is designed to meet the information needs of shareholders, financial analysts, and other corporate stakeholders. The online reporting caters to those stakeholders who take a particular interest in specific topics, providing additional background and data, particularly in relation to sustainability issues.

— Novo Nordisk, “Reporting Strategy”
Key Considerations for Professional Accountants

Determine the range of users and their needs for various types of reports and disclosures. User needs should drive the scope and issues to be covered in reporting and how best to present financial and non-financial information. Potential users range from customers, suppliers, employees, communities, and capital providers, to analysts who might specialize in assessing social and environmental initiatives of organizations in their portfolio of ethical funds.

With an understanding of user needs, a reporting strategy can be developed. A reporting strategy might reflect that although an approach to integrated reporting will involve bringing together relevant financial and non-financial information in a connected way so as to provide a complete picture of environmental, social, and economic performance in the short and long term, providing an integrated report might not respond to all the information needs of various users. Various users could wish to be provided sustainability or ESG information in other formats, whether in additional separate report(s) in paper form, or on a corporate website (see “More than One Report?”). Therefore, a reporting strategy will likely (a) reflect that integrated reporting is a process that is more responsive to stakeholder needs, and (b) recognize all the communications channels that an organization might use to ensure transparency to various stakeholders.

With respect to investors, the 2010 United Nations Global Compact-Accenture CEO Study, A New Era of Sustainability, found that 86 percent of CEOs see accurate valuation by investors of sustainability in long-term investments as important to reaching a tipping point in sustainability. Therefore, developing a reporting strategy will involve a dialogue with investors to (a) educate them on what is material, particularly in terms of how environmental, social, and financial performance relate to each other and contribute to sustainable value creation, and (b) encourage them to consider those factors that affect cash flows and line items in the financial statements. According to the CEO study, which also involved conversations with the investor community, investors felt that organizations can take two principal actions: track the impact of sustainability on core metrics (such as revenue growth, cost reduction, risk management, and reputation), and become more proactive in shaping the attitudes and mindsets of investors. The latter will involve determining the nature of investor communication that is needed, including timing, presentation, and scope.

Project planning and management, and structured processes, will underpin a successful reporting regime. Developing a reporting strategy for sustainability and integrated reporting is a journey. The conversion to international financial reporting standards, it will need a high level roadmap and project plan that focuses on how processes and accountabilities need to be modified and designed. The journey to integrated reporting will likely take various steps and will improve with time. For many organizations, particularly those not listed on a stock exchange, the journey will most likely start with preparing a sustainability or CSR report.

Following the experience of producing sustainability reports for a number of years, HSBC now has a clear reporting strategy. The intended readership for the reports is a global audience of stakeholders with a professional interest in the issues. This multi-stakeholder view of its role in society is also carried through to HSBC’s website, which also gives the impression that sustainability is embedded into the company’s way of doing business. HSBC’s most recent sustainability reports are designed to complement the group’s annual report and accounts, and annual review. Although the majority of sustainability-related information is contained in the separate sustainability report, the annual report and accounts also contains details of the group’s sustainability activities that are considered to have the greatest relevance to the success of the company’s strategy.

Break down functional silos to facilitate effective integrated reporting. The quality of sustainability and integrated reporting hinges on the level of integration of management and operational processes within the organization. As mentioned earlier, it is necessary to ensure that sustainability factors form part of the organization’s mission, goals and objectives, strategy, and operations. At a reporting level, various parts of the organization need to interact more closely, especially the finance function and those involved in CSR, or sustainability teams as well as others involved in preparing disclosures, reports and communications. This greater collaboration and coordination within an organization can help to ensure that sustainability and financial reporting processes are better aligned, and that the data collection and reporting processes involving non-financial information can aspire to match that of financial information.

For many publicly listed companies, the challenge of integrated reporting might involve ensuring that reporting to the stock market is timely.
More Than One Report?

On a practical level, annual reports are typically getting too long and unwieldy. Therefore, an organization might choose to provide additional sustainability or ESG-related information in a separate sustainability or corporate responsibility report, or on a website. This is particularly the case where some users of sustainability reports might be seeking information on the wider economic impacts of the organization and how these are being managed, and what contribution is being made, for example, by:

- donations and community investments;
- infrastructure investments and services provided primarily for public benefit, e.g., better transport, health centers, schools, and social facilities;
- entry-level wage compared with local minimum wage;
- pension plan coverage amongst the workforce in different locations; and
- policy and practices regarding purchases from locally based suppliers and employment of personnel from local communities.

Some organizations, such as LEGO, purposely use a separate reporting document(s) to supplement the annual report and provide a readable and dynamic narrative of key focus areas, as requested in feedback from users. In LEGO’s case, in addition to an annual report, they publish The Progress Report, providing detailed information on the progress of the LEGO Group’s work in environmental, social, and governance areas, and The Brick, which is an annual magazine designed to supplement the annual report and progress report. It offers a view into the many ways in which the LEGO Group interacts with all its stakeholders and, in an easy-to-read way, it follows up on some of the data in the progress report. These additional reports are also targeted at current and prospective employees.

Including material and relevant sustainability-related performance and risk information at a time when data sources are fragmented and diverse and related reporting systems and tools are less automated. It is important to recognize that the transition to integrated reporting will not be achieved by most organizations in a single step. Working across functional boundaries and disciplines will help to:

- Ensure a connection between reporting elements. For example, in addition to reporting greenhouse gas emissions, it might also be useful to report on the climate change risks that the organization is managing and how these could develop and affect short or long term performance.
- Better understand and quantify externalities that the organization’s operations place on society. It then becomes possible to more confidently consider the effect of environmental and social impacts on financial results, and whether these impacts might reasonably be expected to influence investors’ decisions.

Use reporting frameworks and guidelines to help develop reporting processes and to ensure that all relevant sustainability information is disclosed. Professional accountants will need to depart from what is provided in current standards for mandatory financial reporting to support organizations in making the best choices on reporting strategy so that report(s) format, timing, content, and approach demonstrate transparency, credibility, relevance, and usefulness to various stakeholders. They will need to be familiar with reporting frameworks, such as the stakeholder-driven model developed and supported by the GRI, currently the de facto standard for sustainability reporting. The GRI Reporting Framework and guidelines are popular because of the structure they provide organizations when implementing sustainability reporting processes and defining indicators and measures.

The GRI Reporting Framework and guidelines offer (a) core content for reporting that is relevant to all types of organization, and (b) indicator protocols that advise on definition, scope, and compilation methods to help organizations to ensure a meaningful and comparable reporting on indicators. Sector supplements, including those for public agencies, also help organizations to navigate more deeply into sustainability reporting. The GRI has also published a “linkage” document showing how to use GRI’s G3 Guidelines for the UN Global Compact’s Communication on
Progress titled Making the Connection: The GRI Guidelines and the UNGC Communication on Progress. By linking the GRI G3 Guidelines to the ten principles of the Global Compact, Making the Connection assists companies in bridging the gap between the Communication on Progress and other sustainability reporting vehicles.

The Climate Disclosure Standards Board’s investor-focused Climate Change Reporting Framework is explained in section 3.3, “Narrative Reporting for Enhanced Transparency” of this Sustainability Framework. Many normative standards and codes developed by governments and other agencies can guide strategies, management systems, and reporting. The KPMG International Survey of Corporate Responsibility Reporting 2008 found that the most-used international frameworks by large companies were those by the UN Global Compact, the International Labour Organization Core Conventions, the Universal Declaration of Human Rights, and OECD Guidelines for Multinational Enterprises. For a comprehensive listing of approaches to sustainability reporting, refer to Carrots and Sticks—Promoting Transparency and Sustainability.

One framework for helping deliver integrated reporting is the Connected Reporting Framework, developed by His Royal Highness The Prince of Wales’ Accounting for Sustainability Project, designed to make better use of existing financial and non-financial information. The presentation of data unconnected to an organization’s strategy and targets makes it difficult for users to get a clear picture of social, environmental, and economic performance. To deal with this, the Connected Reporting Framework helps to connect internal management with external reporting. Three key elements of the framework are as follows:

- Connecting business strategy to sustainability: the identification of material sustainability issues and a description of how each of these impact on the organization’s strategic objectives.
- Key performance indicators and actions taken: the evaluation of action taken to address each material sustainability issue and the identification of KPIs to measure performance.
- The Connected Performance Report: a balanced assessment of progress against agreed targets and towards intended outcomes.101

Part 3: Reporting Perspective

For a “how to” guide and examples of its use in practice, refer to the connected reporting section of Accounting for Sustainability’s website. The Chartered Institute of Public Finance and Accountancy has also published Sustainability Reporting: A Public Services Perspective that shows the application of the Connected Reporting Framework in the UK’s public service organizations, and includes reporting examples.

Disclosing performance across the value supply chain. Where the activities of suppliers or partners potentially impact an organization, disclosures can explain the actions taken to manage environmental and social impacts across the whole value chain. As discussed in the strategic and operational parts of the IFAC Sustainability Framework, it is important to work closely with suppliers to improve sustainability performance throughout the supply chain, including those partners that maybe considered joint ventures and associates. Reporting beyond organizational boundaries involves taking into account risks arising from the operations of an associate organization, injury to contractors working on their site, or other failures on the part of third party contractors, which can influence an organization’s reputation (BP and the oil spill of 2010 being a high profile example of how safety and performance by contractors can affect the reputation and, potentially, license to operate). The GRI Boundary Protocol provides a framework for defining the boundary for sustainability reporting according to the intersection of two concepts: impact and control/influence. There is also an important link to risk management (see section 1.5, “Incorporation with Risk Management”), as a report boundary helps an organization understand and communicate which strategic risks and opportunities need to be managed, and the extent of its control or influence over them.

Meeting stakeholder needs in local markets. For organizations with international operations, an approach to addressing and reporting on local stakeholder issues needs to be considered. Although a central sustainability or CSR strategy might exist, local operating entities will need to respond to local issues and comply with local legislation. Therefore, some organizations, such as Vodafone, allow limited KPIs (in addition to global KPIs) of importance to local operations, and to local operational entities, to produce CSR reports that address local sustainability issues and challenges. Local teams are operational extensions of the global corporate responsibility team and have early involvement in the definition of the global strategy, policies, and programs.

The Discussion Paper is open for public comment until April 25, 2011. To track further developments, go to www.sustainabilitysa.org/Home.aspx.

To achieve the stated objectives of integrated reporting and the integrated report the Discussion Paper identifies suggested elements to be included in the integrated report (Section 3):

### Part 3: Reporting Perspective

#### Section 3.1. Developing an Organizational Reporting Strategy

A description of the **scope and boundary** of the integrated report.

A concise overview of the **organisation and its activities**, a statement of its business model describing the manner in which it currently creates value, and an overview of its governance structure.

A description of the **risks and opportunities** that are material to the organisation's current and anticipated activities.

These risks and opportunities are identified based on a review of financial, social, environmental, economic and governance issues and trends, an assessment of the organisation's material impacts on financial, social, economic and environmental systems, and a review of its relationships with key stakeholders.

#### Section 3.2.

A description of the **organisation’s strategic objectives** demonstrating how these have been informed by the risks and opportunities, including sustainability issues. The report should give an indication of the organisational competencies required to realise the strategic objectives, and a succinct list of the KPIs and KRIs (key risk indicator) that will track performance against the strategic objectives and competency requirements. This should cover the short-, medium- and long-term periods.

#### Section 3.3.

An account of the **organisation’s performance** in terms of its strategic objectives, its material social, environmental, economic and financial impacts, its KPIs and KRIs.

#### Section 3.4.

A statement of the organisation’s anticipated activities and **future performance objectives**, informed by its assessment of recent performance and understanding of societal trends and stakeholder expectations.

#### Section 3.5.

A statement of the organisation’s anticipated activities and **future performance objectives**, informed by its assessment of recent performance and understanding of societal trends and stakeholder expectations.

#### Section 3.6.

An account of the **organisation’s performance** in terms of its strategic objectives, its material social, environmental, economic and financial impacts, its KPIs and KRIs.

#### Section 3.7.

A brief **analytical commentary** that reflects the understanding of the organisation’s governing structure and executive team regarding the nature of the organisation’s current and anticipated performance in the context of the organisation’s strategic objectives. The organisation should report how it can improve its positive material impacts and how it can eradicate or ameliorate its negative material impacts.

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Specific considerations for sustainability reporting in small- and medium-sized entities (SMEs)

Outside of the larger organizations, sustainability reporting is generally less prevalent. SMEs account for a significant proportion of economic, social, and environmental performance, and yet appear to be off the radar screen. The main reasons are a combination of factors including:

Benefits of reporting—lack of awareness and, in turn, poor appreciation of the value to be had from sustainability reporting by SMEs, perhaps because the benefits have not been widely promoted or are only marginal. Furthermore, the benefits may be not be the same as they are for larger listed entities, which are expected to provide transparent stakeholder communications. The benefits to SMEs might relate more to improved business practices arising as a by-product of the process of reporting than the improved reputation that comes from being seen by external investors and other stakeholders as having managed social and environmental performance. The accountancy profession, particularly through small and medium practitioners and professional accountants in business, can do a better job of articulating and communicating to SMEs the benefits of sustainability management and reporting. In emerging markets, sustainability reporting might be seen as one of the important elements that enable SMEs to penetrate more highly regulated markets such as the European Union.

Costs of reporting—Most SMEs lack the systems and in-house expertise to establish the necessary processes and reporting systems in a cost-effective manner. In the same way that the IFRS for SMEs helps to simplify reporting for SMEs, a scalable sustainability reporting approach with a core set of requirements applicable to all entities (supplemented by a set of additional requirements for listed/public interest entities) might help tilt the balance of costs and benefits of reporting for SMEs. The development of inexpensive and effective software, particularly in the area of carbon accounting, might further help SMEs to better manage and report environmental impacts, such as greenhouse gas emissions. SMEs can begin with efficient reporting mechanisms to manage costs, such as reporting via the organization’s website.

The presentation of sustainability reporting might vary more with SMEs. It could take the form of newsletters to key stakeholders, especially for employees, or might be integrated into the organization’s website. For example, Seventh Generation (which won best SME report in the Ceres-ACCA North American Awards for Best Sustainability Reporting) provides Corporate Responsibility 2.0—an entirely web-based, interactive report (see also Green Impact’s analysis of this report). The GRI also has a useful resources webpage to help SMEs get started with their sustainability reporting.
3.2 Reflecting Sustainability Impacts in Financial Statements

KEY THEME Incorporating environmental and social issues into financial statements to support an organization’s stewardship role and to enable users to make more well-informed decisions regarding environmental and social impacts on assets, liabilities, income, and expenditures. Environmental matters are becoming significant to an increasing number of organizations and may, in certain circumstances, have a material impact on their financial statements. This is particularly true for environmental liabilities. These issues are of growing interest to the users of financial statements and other stakeholders. Hence the recognition, measurement, and disclosure of these matters is the responsibility of management.103

— ACCA and KPMG, Environmental Liabilities: Paying for the Past, Providing for the Future, 2002

Environmental rather than social issues tend to be the subject of recognition and measurement in financial statements. Accounting standards, therefore, typically treat environmental issues in several ways, including through valuation, provisions, and transparent presentation. Environmental matters are becoming significant to an increasing number of organizations and may, in certain circumstances, have a material impact on their financial statements. This is particularly true for environmental liabilities. These issues are of growing interest to the users of financial statements and other stakeholders. Hence the recognition, measurement, and disclosure of these matters is the responsibility of management.103 Environmental rather than social issues tend to be the subject of recognition and measurement in financial statements. Accounting standards, therefore, typically treat environmental issues in several ways, including through valuation, provisions, and transparent presentation.

Although financial statements typically do not currently reflect social issues, an environmental liability resulting from pollution of the environment would usually lead to a social impact that would be identified in risk management, and perhaps in wider narrative reporting in the annual report. Some social issues can be reflected in financial statements and wider business reporting, such as (a) poor health and safety standards for employees (which can result in litigation), (b) increased absenteeism (due to sickness), and (c) higher insurance costs. The importance of narrative reporting on significant social and environmental impacts is dealt with in the next section (section 3.3, “Narrative Reporting for Enhanced Transparency for Investors”).

Up to this point, the International Accounting Standards Board (IASB) has covered environmental and social accounting financial reporting issues in its mainstream standards. For example, both IAS 36 (impairment of assets) and IAS 37 (provisions and contingent liabilities) refer to environmental issues. However, financial statements are often criticized for underestimating environmental and social liabilities, especially those that lie in the future. This area is consequently under continuous review and scrutiny. Reporting requirements are likely to increase as schemes such as emissions trading and renewable energy certificates develop, and as views on accounting treatment change. It is also important to recognize that the credibility of sustainability data incorporated in financial statements is enhanced by an effective system of risk management and internal control that links sustainability matters with financial impacts.
Key Considerations for Professional Accountants

Establishing how to reflect environmental (and, where applicable, other sustainability-related) liabilities and costs in financial statements prepared under IFRSs. The valuation of tangible and intangible assets, including the measurement of inventories, can be affected by environmental impairment. In the case of tangible fixed assets, such as land, plant, and machinery, impairment often arises from an incident of contamination, physical damage, or non-compliance with environmental regulations. Intangible assets, which include greenhouse gas emission allowances, are subject to an impairment test on their carrying value if they exceed the amount recoverable from use or realization.

Provisions include possible liabilities that give rise to a provision, such as waste disposal, pollution, decommissioning, and restoration expenses. A provision is recognized when (a) an entity has a present obligation as a result of a past event, (b) it is probable that a transfer of economic benefits will be required to settle the obligation, and (c) a reliable estimate of the obligation can be made. The IASB is reviewing accounting standards on provisions. IASs relevant to environmental issues are described in "International Accounting Standards Relevant to Environmental Issues."

The Institute of Chartered Accountants in England and Wales (ICAEW) and the UK’s Environment Agency published Turning Questions into Answers: Environmental Issues and Annual Financial Reporting (2009), which provides guidance on how existing accounting and reporting can be capable of generating useful information about environmental performance. This guidance is helpful for preparers, auditors, and users of annual financial statements.

For updates on the IASB’s agenda in relation to Emissions Trading (and other general developments related to the IASB’s work plan), IASPLUS, maintained by Deloitte, is a useful online resource. The IAS PLUS update on emissions trading also comprehensively explains the history of the IASB’s discussions on emissions rights and trading, including a discussion in IFRIC 3 on Emission Rights, which was withdrawn in 2005. From 2008, the IASB and the US FASB have been working jointly to develop comprehensive guidance on accounting for emissions trading schemes. Accounting for emissions is also usefully explained in the article “Accounting for Emissions,” published in the Journal of Accountancy.105

Determining specific sustainability disclosure requirements under national securities regulations and Generally Accepted Accounting Principles (GAAP). Professional accountants should consult all the relevant accounting standards and applicable regulations, and, where necessary, keep abreast of trends and developments. Many jurisdictions have specific requirements for disclosing environmental information. For example, the US securities regulations require registered companies to disclose:

- the material costs of complying with environmental regulations in future years;
- the costs of remediating contaminated sites if a liability is likely to have been incurred, and its magnitude can be approximately estimated;
- other contingent liabilities arising from environmental exposures;
- involvement as a party in a legal proceeding about an environmental issue, especially with an agency of government; and
- any known trend or uncertainty involving environmental issues, including pending regulations that would materially affect the company’s business.

These requirements were reinforced by the SEC’s interpretive guidance on existing SEC disclosure requirements as they apply to business or legal developments relating to the issue of climate change—see the SEC’s press release, “SEC Issues Interpretive Guidance on Disclosure Related to Business or Legal Developments Regarding Climate Change.”

Part 3: Reporting Perspective 3.2 Reflecting Sustainability Impacts in Financial Statements
International Accounting Standards Relevant to Environmental Issues

**IAS 37, Provisions, Contingent Liabilities and Contingent Assets**
This standard is highly relevant to environmental issues and some social issues, covering contingent liabilities as possible or present obligations that arise from past events, neither of which were previously recognized. The standard defines provisions as liabilities of uncertain timing or amount, and gives guidance on how to make a provision. It is currently subject to review by the IASB—an update can be found at IAS PLUS.

**IAS 2, Inventories**
Companies in some industries, such as mining, may regard their infrastructure and waste materials as assets with a residual value. However, IAS 2 does not allow this, and a waste site should not be accounted for as an asset unless additional costs were incurred to convert the waste into a commercial item.

**IAS 16, Property, Plant and Equipment**
This standard addresses rehabilitation by stating that the cost of an item of property, plant, or equipment includes “the estimated cost of dismantling and removing the asset and restoring the site, to the extent that it is recognized as a provision under the statement on provisions, contingent liabilities, and contingent assets.” Rehabilitation costs include the cost of rehabilitating damage that incurred on initial acquisition and set-up of an asset, as well as damage incurred over its life. To the extent that damage is incurred in the initial set-up of an asset, the anticipated cost of restoring the site and removing the asset should be recognized as a provision, and as part of its cost. A provision for environmental rehabilitation costs resulting from damage caused during operation of the asset should be made when the damage is incurred. For tangible fixed assets, where impairment arises from an incident of contamination, physical damage, or non-compliance with environmental regulation, IAS 16 allows reduction of the carrying amounts to the value in use or realizable value.

**IAS 10, Events after the Balance Sheet Date**
Subsequent events may also be relevant to environmental issues. IAS 10 states that subsequent events cover both favorable and unfavorable events, including (a) those that provide evidence of conditions that existed at the balance sheet date, and (b) those that indicate conditions that arose after the balance sheet date.

**IAS 36, Impairment of Assets**
Where initial set-up and dismantling costs are included as part of the cost of an asset, and there is an indication that the asset may be impaired, the recoverable amount of the asset should be calculated under IAS 36.

**IAS 38, Intangible assets**
This standard provides for greenhouse gas emission allowances, which are subject to a test that measures impairment of their carrying value if they exceed the amount recoverable from use or realization.

**IAS 8, Accounting Policies, Changes in Accounting Estimates and Errors**
In some cases, a transparent presentation will require specific treatment of environmental issues. As with other items, environmental factors are reported in a way that reflects the substance of the transaction, determined by whether a transaction gives rise to new assets or liabilities. Exposures to inherent environmental risks is evidence that an entity has an asset. Where environmental issues have a material impact on the financial statements, for example, where an entity is involved in emissions trading, it is often necessary to disclose the accounting policy that was adopted. An entity should also disclose the accounting policy adopted in respect of provisions for site restoration and environmental rehabilitation.

**IFRS 3, Business Combinations**
This standard covers fair values in acquisition accounting, which require identifiable assets or liabilities acquired in a business combination to be measured at their fair value at the date of acquisition, a value that may need to reflect environmental impacts.

**IFRIC 1 (international interpretation), Changes in Existing Decommissioning, Restoration and Similar Liabilities**
This document contains guidance on accounting for changes in decommissioning, restoration, and similar liabilities that have previously been recognized both (a) as part of the cost of property, plant, and equipment under IAS 16 and (b) as a provision (liability) under IAS 37.

**IFRIC 6, Liabilities Arising from Participating in a Specific Market—Waste Electrical and Electronic Equipment**
This interpretation clarifies when certain producers of electrical goods are required to recognize a liability under IAS 37 for the cost of waste management relating to the decommissioning of waste electrical and electronic equipment supplied to private households.
For a list of FASB standards related to environmental financial reporting, see the Advanced Environmental Dimensions website. US GAAP offers an accounting framework for dealing with contingent liabilities arising from environmental contamination. FASB’s Financial Accounting Standard No.5, Accounting for Contingencies, stipulates the criteria for determining whether to accrue a contingent liability. The application of this standard is supported by FASB Interpretation No.14, Reasonable Estimation of the Amount of a Loss, which states that if a probable range of loss can be determined, the accrual should be for the most likely amount within that range (unless no amount is more likely than another, in which case the low end of the range can be used).

In 2005, FASB considered whether to add to its technical agenda a project on accounting and reporting for contingent environmental liabilities. Specifically, the Board considered whether (a) contingent environmental liabilities that meet the recognition criteria in paragraph eight of FASB Statement No.5 should be recognized at expected value, and (b) contingent environmental liabilities of a similar nature should be aggregated in assessing materiality. At that time, FASB decided not to add the project, primarily because a separate project to reconsider FASB’s conceptual framework might have resulted in changes to the accounting and reporting of contingent liabilities. FASB’s consideration of the issue is recorded in the board notes from March 2005. FASB has since taken several actions to change accounting principles and disclosure requirements applicable to loss contingencies, but none have progressed.

The paper, Corporate Environmental Disclosure Policy, published by the American Bar Association, examines the factors influencing corporate environmental disclosure policy, and explains important advances in environmental risk transfer, accounting principles, and financial analysis, and discusses the policy implications of these developments.

A specific challenge for management is to ensure that accounting estimates do not materially understatement the expenditure that will ultimately be required to resolve environmental liabilities. To make informed decisions, professional accountants will need to involve multiple disciplines, such as health, environment, engineering, legal, and government regulation. Guidance provided by US GAAP cannot systematically determine the level of certainty needed to disclose and/or recognize a liability. A process using informed and consistent judgment is needed for organizations to be confident that they are reporting their environmental responsibility fairly.

In Canada, the Canadian Securities Administrators issued CSA Staff Notice 51-333, Environmental Reporting Guidance to provide reporting issuers with guidance on determining continuous disclosure requirements relating to environmental matters under securities legislation. “The release of this guidance is a clear signal to report issuers: effective disclosure on environmental matters is a mandate, not an option,” according to a Deloitte report that outlines key insights from the CSA guidance.

Considering additional information and disclosure to improve transparency on environmental performance. Some organizations have further improved their reporting on environmental performance by voluntarily disclosing a broader set of financial and non-financial information. The presentation can take various formats. For example, Baxter Healthcare produces Environmental Financial Statements (EFS) that provide a better picture of environmental performance than the balance sheet or income statement. Since 1993, Baxter Healthcare’s Environment, Health, and Safety function has issued annual EFS, which detail the environmental revenues and costs, and, therefore, the financial impact on the company of its environmental actions from preceding years and demonstrate the value of proactive environmental management to senior leadership and external stakeholders.

In Japan, the Environmental Accounting Guidelines issued by the Ministry of the Environment, for which the Japanese Institute of Certified Public Accountants offers support developing and revising, encourage organizations to include separate statements to reflect environmental cost and environmental performance in their sustainability reports. For example, Ricoh presents a table showing (a) the monetary effect on environmental conservation and environmental impact, as well as (b) environmental costs and revenues in its sustainability report.

Water scarcity is a problem in many countries, and water accounting reports are beginning to play a vital role in facilitating economic, social, and environmental decisions based on assessments of water policies, water management, water allocations, and water delivery.
For example, as a response to the general concerns about the scarcity of water in existing dams, the Australian Federal Government set up the National Water Initiative.

One of the projects the Initiative was tasked with is the creation of a framework that will help provide more accurate data about water in Australia. The Water Accounting Standards Board developed this project, and issued the Water Accounting Conceptual Framework in June 2009, to help prepare General Purpose Water Accounting Reports. The approach is a method that accountants can recognize as analogous to general purpose financial reporting. Corporate Water Reporting, A Study of the Australian Food, Beverage, and Tobacco Sector is the second component of a three-part research project being sponsored by CPA Australia. This study examines current external water reporting practices of a group of large water-consuming organizations in order to consider how such disclosures might reflect those internal pressures to develop increasingly sophisticated water management systems.

For reporting to be of value, organizations should consider complementing water usage and related measures and KPIs with information on how water consumption has been, and will be, reduced. For example, Blue Scope Steel provides clear indications on their website of how water consumption has declined in recent years and how that has been achieved.

Determining materiality in the context of what information management believes is important for investors to make informed financial decisions about an organization. Preparers and report issuers need to be able to clearly define and apply materiality concepts and thresholds to ensure an organization’s sustainability performance is transparent and understandable. Materiality of an item in financial statements is normally determined by reference to its size, nature, and circumstances. Although the materiality of an environmental or social risk can be interpreted in relation to its potential impact on the financial statements, materiality in relation to a broader view of sustainability performance will affect how it is reported and disclosed outside the financial statements. In the case of an environmental or social factor, there can also be an impact on an organization’s reputation, which becomes key in determining materiality and highlights the need for supplementary narrative reporting. Narrative reporting and determining materiality are covered in the next two sections.

**Accounting doesn’t do things too well sometimes and that is why the narrative statement is going to be so important in addition to the raw facts...**

My view is that financial accounting should show things in the raw, warts and all, and narrative reporting should say: ‘Now, let me explain this to you.’... Getting people to do that properly [deliver management commentary that is meaningful], without just boilerplate, will be tough. It is going to be one of the big challenges for the accounting profession.**

— Sir David Tweedie, Chair of the International Accounting Standards Board**

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**3.3 Narrative Reporting for Enhanced Transparency to Investors**

**KEY THEME** Using narrative reporting to provide greater transparency on business performance and to ensure that sustainability-related disclosures are useful to investors.

**CONTEXT** Narrative reporting supplements and complements financial information by providing insights into an organization’s performance that financial statements may not provide. Explaining how operations and sustainability objectives are related to each other, and how non-financial performance affects organizational strategies and performance, can best be achieved with supporting narrative disclosures.

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Narrative reporting comprises information provided outside the financial statements that assists in interpreting a complete set of financial statements or improves users’ ability to make efficient economic decisions.

Narrative disclosures are often provided within a structured management commentary (MC), although narrative reporting can refer to all financial and non-financial reporting not included in the financial statements or accompanying notes that informs investors on business performance.

The IASB’s IFRS Practice Statement on management commentary, released in 2010, defines the purpose of management commentary:

Management commentary should provide users of financial statements with integrated information that provides a context for the related financial statements. Such information explains management’s view not only about what has happened, including both positive and negative circumstances, but also why it has happened and what the implications are for the entity’s future.116

The Practice Statement outlines the principles for preparing MC. Management commentary prepared in accordance with this guidance can help users of financial reports to assess the performance of the entity and the actions of its management relative to stated strategies and plans for progress. That type of commentary may help users of financial reports to understand, for example:

- the entity’s risk exposures, its strategies for managing risks, and the effectiveness of those strategies;
- how resources that are not presented in the financial statements could affect the entity’s operations; and
- how non-financial factors have influenced the information presented in the financial statements.

In developing its commentary, management should bear in mind the principles that underpin decision-useful MC. Commentary that is aligned with those principles can help to:

- provide management’s view of the entity’s performance, position, and development;
- supplement information presented in the financial statements; and
- provide an orientation to the future.

In different jurisdictions, MC is referred to as operating and financial review, business review, management discussion and analysis (MD&A), or management reporting. Many jurisdictions have issued guidance for the narrative reporting that accompanies financial statements. Typically, organizations will need to disclose (a) environmental matters, (b) information about its employees, and (c) social/community issues, where these issues relate to commitments, events, risks, or uncertainties that an organization reasonably believes will materially affect its strategy and future performance. The MC will typically be the main source of information about significant environmental and social impacts and principal risks and uncertainties facing the organization.

Narrative reporting is a key opportunity to provide a management view of current and prospective performance, and, to this end, might be viewed as a good starting point for integrated reporting. The PricewaterhouseCoopers 2007 survey of the Fortune Global 500 companies’ narrative reporting found that the best reporters were companies providing relatively more contextual and non-financial information about their performance and prospects.

Narrative reporting helps enhance transparency because it cuts through the complexity and partial opacity of today’s financial reporting. Its relevance for sustainability issues is that it is an opportunity to improve non-financial reporting on environmental and social performance, and therefore provide evidence that management recognizes both (a) the strategic importance of sustainability, and (b) how risk/opportunities may translate into future impacts on financial reports and statements. Therefore, there needs to be a clear link between its sustainability and financial performance, a discussion of the wider benefits of sustainability-related activities and investments, and efforts to increase the measurability of non-financial targets for sustainability.
Although disclosure about the financial impact of sustainability issues, including climate change, might be included in financial statements, additional disclosure in narrative reporting (either in MD&A, or more generally) provides management with an opportunity to explain the context in which sustainability issues have impacted, or may impact, financial conditions and results. In addition to discussing environmental and strategic issues, and matters concerning opportunity and risk, narrative reporting might further explain:

- environmental liabilities and related critical accounting estimates;
- disclosures about contingent environmental liabilities, whether or not disclosed in financial statements;
- asset retirement obligations, including site remediation costs and liabilities;
- financial and operational effects of environmental protection requirements; and
- environmental policies fundamental to operations.

Narrative disclosures might also include non-organizational specific information associated with revenue generating activities, including carbon prices, carbon taxes, and subsidies for the organization’s investment in, and use of, renewable energy sources. See “Disclosure About the Financial Impact of Climate Change and Other Environmental Issues” for a checklist of potential disclosure items.

The Climate Disclosure Standards Board’s Climate Change Reporting Framework (CCRF) provides requirements regarding how climate-change-related disclosures can be determined, prepared, and presented (see “Investor-Oriented Information on Climate Change Issues”). An advantage of this framework is its use of the principles of financial reporting that allow environmental reporting to be developed with a familiar vocabulary and tested approach. Using the CCRF is an important step to integrating information related to climate change with mainstream annual reports.

Investor-Oriented Information on Climate Change Issues

The World Economic Forum created the Climate Disclosure Standards Board (CDSB) at their 2007 annual meeting to respond to calls from corporations and financial markets to address global warming, and the associated growth of climate change information collection and reporting initiatives. CDSB was formed to support, harmonize, and strengthen climate-change-related reporting initiatives and standards already in existence, by sharing and improving best practices through the use of a single consistent framework for disclosure in mainstream reports. The Climate Change Reporting Framework (CCRF) Edition 1.0 was launched in September 2010.117

IFAC has been involved with CDSB to develop the CCRF. The requirements of the CCRF are designed (a) to encourage a harmonized approach to the preparation of climate-change-related disclosures that complement financial statements and (b) to inform investors what management views as the most important climate-change-related issues, including those affecting the organization’s strategy, economic performance, and prospects. The CCRF does not provide guidance on accounting for, or valuing in, financial statements, the financial implications of climate change, or of mitigation and adaptation activities. For the purposes of categorizing GHG emissions, the CCRF adopts the approach used in the GHG Protocol (see section 2.2, “Carbon Footprinting”).

The CCRF emphasizes the importance of reporting information in a place and in such a way as to explain the links between the organization’s strategic, operations, and climate change impacts. The Framework states that, except where regulatory requirements prescribe otherwise, disclosures should be made in, or cross-referenced to, the management commentary section of the mainstream financial report. Cross-referencing to information in other documents or locations should be used to avoid duplication, to keep the length of disclosures manageable, and to provide contextual information. However, disclosures that cross-ref to information in other documents should include sufficient contextual information and detail to satisfy the characteristic of understandability.

— Climate Disclosure Standards Board
Unfortunately, the current situation is that disclosures in MC and MD&A are often criticized for providing only superficial (boilerplate) explanations and too much positive spin. The key considerations below are focused on enhancing the usefulness of MC reporting. These are generic, and can apply to narrative reporting more generally. Good practice examples of narrative reporting, and corporate reporting more generally, are found at PricewaterhouseCoopers’ Corporate Reporting website, which examines common themes emerging around narrative reporting.

Enhanced narrative reporting is of importance to investors. Increasingly institutional investors are taking into consideration the manner in which portfolio companies’ management of environmental, social responsibility, and governance issues can impact the development of the value of the funds they manage. As new research emerges (for example, in February 2011, Mercer’s Responsible Investment team launched Climate Change Scenarios—Implications for Strategic Asset Allocation, warning that climate change could increase investment portfolio risk by 10 percent over the next 20 years), there is an increased awareness that these issues can expand the possibility of good, long-term returns, while reducing the risks in the investment. The quality of disclosures, particularly around climate change issues, are important to many institutional investors—especially to active investors with a mandate to invest in organizations that seek to mitigate greenhouse gas emissions. Such investors highly regard qualitative information about organizational environmental programs and how management identifies and addresses environmental and reputational risks.

An organization’s agenda for managing and integrating sustainability issues is also more effectively conveyed by narrative reporting, supplemented by investor relations activities, rather than by the process of completing survey information for the many social investment research and ratings firms, which work on behalf of institutionally managed assets in socially screened funds and portfolios. (Survey fatigue has in part been addressed by the SRI World Group, a provider of social investing and corporate social responsibility information. Their OneReport is a web-based sustainability reporting tool that enables companies to centralize reporting to investment research firms and the GRI.)

The Ceres report, Disclosing Climate Risks: A Guide for Corporate Executives, Attorneys & Directors, discusses the improvement of disclosure of climate-related risks and opportunities. Developed with input from its 90-plus member Investor Network on Climate Risk, which includes investors, environmental organizations, and other public interest groups, the report highlights that the quality of overall disclosure is still less than satisfactory, and provides examples of good-quality disclosure in financial filings by organizations including Chequita Brands International, Siemens, Rio Tinto, AES, and Xcel Energy. These examples can be applied to narrative reporting and disclosure in MC.
Disclosure About the Financial Impact of Climate Change and Other Environmental Issues

General questions that management might consider when deciding what to disclose:

- Have we identified all climate change and other environmental issues that our company faces?
- Have we identified all critical accounting estimates related to climate change and other environmental issues, and collected all necessary information for disclosure?
- Have we determined which climate change and other environmental issues are material and therefore require disclosure?
- Have we assessed materiality in qualitative as well as quantitative terms?
- Have we documented and communicated internally how we have determined materiality regarding the impact of climate change and other environmental issues on financial performance?
- Have we focused on the potential impact of climate change and other environmental issues on our longer-term financial condition as well as shorter-term performance?
- Have we presented disclosures about climate change and other environmental issues in plain language, with candour and without jargon?
- From period to period, is there comparability and consistency in MD&A disclosures about climate change and other environmental issues?

— Canadian Performance Reporting Board, Building a Better MD&A, 1st edition, 2005
Ensuring a forward-looking orientation. An annual report will incorporate both past performance and prospective events. The MC and narrative discussion provides an opportunity for management to express its perspective on the direction of the organization. This allows investors to assess the strategies of an organization and the likelihood that those strategies will be successful. MC provides an opportunity to highlight those strategies, goals, and targets related to sustainability matters, and how they impact performance, currently and in the future. Management can also use the MC to explain how they are changing their strategy in response to a changing risk profile. For example, in relation to climate change, an MC can help organizations with significant environmental risk exposure to provide contextual information that cannot be effectively captured in financial statements. Such narrative reporting complements the historical information required by users to make economic decisions.

Prospective narrative in relation to sustainability factors that could be incorporated into an MC includes:

- strategy, in terms of both specific strategies to deal with sustainability issues and how changes in the environment (whether competitive or regulatory) impact on the strategy;
- goals and targets and associated KPIs (see section 1.4, “Goals and Target Setting”);
- principal risks and opportunities, and how the strategy relates (or will be modified) in relation to these;
- quantification of financial impacts; and
- links between remuneration and incentives of employees to deliver desired strategy and targets.

In relation to climate change reporting, the CDSB’s CCRF is invaluable in helping to disclose important climate-change-related issues, including those affecting the organization’s strategy, economic performance, and prospects. The CCRF also usefully provides guidance on how to ensure that the disclosure of performance measures and indicators can be made useful.

The quality of reporting is connected to an organization’s process of performance management, measurement, and performance reporting. As far as possible, systems and processes used to provide information for internal decision making should be integrated into external business reporting. Data and information collected internally should therefore be managed in a way that satisfies both internal and external reporting needs. The information needs of directors—and the management information used routinely—is broadly similar to those of investors, differing only in the level of detail required. Moving to this desired state requires communication between those responsible for sustainability and operational issues and those responsible for the accounting function, so that financial implications are understood and appropriately reported. Obtaining estimates on financial impacts can require engagement of specialists, such as environmental advisers and engineers. Management will also need to consider its approach to reporting management information that it believes is sensitive because of competitive reasons. One option is to disclose the nature of the information and the reason for withholding more detail.
3.4 Determining Materiality

KEY THEME: Understanding and reconciling approaches to applying materiality to sustainability and integrated reporting.

CONTEXT: The materiality concept is well established in financial reporting, although its application has not always been without controversy. The principle of materiality also guides the audit process, and is therefore defined in the International Standard for Assurance Engagements (ISAE) 3000 (see Part II of the IAASB Handbook), as well as in AccountAbility’s Guidance Note on the Principles of Materiality, Completeness and Responsiveness as They Relate to the AA1000 Assurance Standard (see p. 11).

The latter standard is a generally applicable standard for assessing, attesting to, and strengthening the credibility and quality of organizations’ sustainability reporting as covered in the next section. Materiality, as a vital filter for organizations to use in their sustainability and integrated reporting, helps organizations to decide on the relevant issues to disclose for the benefit of stakeholders. User perception of materiality can differ between users, preparers, and auditors because of their differing motivations. A key challenge is to decide whether to differentiate materiality thresholds that are applied to wider sustainability reporting (separate from the mainstream annual or integrated report) from the thresholds used for reporting information focused on investors.

There is guidance on the application of materiality to a wider stakeholder perspective to support sustainability reporting. The Global Reporting Initiative’s (GRI) Sustainability Reporting Guidelines, Version 3.0 (G3) define materiality in relation to reporting:

The information in a report should cover topics and indicators that reflect the organization’s significant economic, environmental, and social impacts, or that would substantively influence the assessments and decisions of stakeholders.122

In addition, the G3 Guidelines define relevant topics and indicators:

Organizations are faced with a wide range of topics on which it could report. Relevant topics and indicators are those that may reasonably be considered important for reflecting the organization’s economic, environmental, and social impacts, or influencing the decisions of stakeholders, and, therefore, potentially merit inclusion in the report. Materiality is the threshold at which an issue or indicator becomes sufficiently important that it should be reported. Beyond this threshold, not all material topics will be of equal importance and the emphasis within a report should reflect the relative priority of these material topics and indicators.123

Materiality, in the context of sustainability reporting, means relevance to a wider range of impacts and stakeholders. Furthermore, materiality for sustainability reporting is not limited to sustainability topics that have a significant financial impact on the organization. Therefore,
materiality in relation to wider sustainability reporting is not the same as it is for financial reporting. This has implications for deciding on what sustainability-related information should be included in mainstream financial reporting, such as the annual report and accounts.

In terms of IFRSs, information is material if its omission or misstatement could influence the economic decisions of users that are based on the financial statements. Materiality depends on the nature and amount of the item, judged in the particular circumstances of its omission or misstatement. Given the pervasive nature of materiality, it is difficult to consider the concept outside of its relation to the qualitative characteristics of relevance and faithful representation. Materiality is therefore a screen or filter used to determine whether information is sufficiently significant to influence the decisions of users in the context of the entity as a whole, rather than as a qualitative characteristic of decision-useful financial information. There can be uncertainty about the application of the definition of materiality. On the one hand, the market price test for materiality can be interpreted to mean that information would need to move the stock price within a short period of time of its disclosure to be deemed material. On the other hand, sustainability and ESG factors may have longer-term implications. Furthermore, the cumulative effect of environmental and social impacts does not necessarily neatly fit into an annual reporting cycle. For example, an environmental spill may give rise to specific cleanup costs that are reflected in the financial statements. However, the spill may also affect corporate reputation, which may impact longer-term financial performance, but in a way that cannot easily be estimated or quantified.

Applying materiality thresholds to integrated reporting is still under debate (see “Defining Materiality in Relation to Integrated Reporting and the Integrated Report”). A materiality threshold for integrated reporting could be viewed as the point at which an issue or measure becomes sufficiently important to report in terms of its link to the organization’s strategy and its risk parameters. Beyond this threshold, not all material issues will be of equal importance, and reporting will need to reflect their relative importance. However, a pragmatic approach is to take the view that materiality does not necessarily lead to mentioning or not mentioning a particular factor, but perhaps to communicating different information in different ways. For example, British Telecom (BT), a communications services company, conducts a materiality process to determine which of many issues should be reflected in its sustainability reporting. The materiality, or significance, of individual corporate responsibility risks and opportunities is a key factor in deciding which sustainability strategies and actions are included in BT’s external reports. The relative materiality of each type of sustainability issue is determined systematically each year, through plotting on a graph the internal BT view on its significance against an external stakeholder perspective of its importance. BT’s 2010 Sustainability Review shows the chart and states that it reports on its most material issues in its Sustainability Review and online (on its Sustainability Report website). Increasingly to enhance transparency, some organizations report their materiality criteria and processes, particularly as it relates to their corporate responsibility strategies and reporting, such as BT and Outokumpu (see Outokumpu’s annual report). To avoid concerns about how material issues are identified and selected for reporting, an organization can also usefully explain why issues that are often considered relevant to its sector or location have not been identified as material. The process of identifying materiality might include a review and response to each of the criteria set out above.

Defining Materiality in Relation to Integrated Reporting and the Integrated Report

Materiality needs to be considered at three levels:

1. Are all the ‘right things’ being reported?
2. Are these ‘right things’ being reported accurately? What level of error or omission in the data would influence the assessments and decisions of stakeholders and the organisation? In this instance, the level of materiality is different across issues and even within a particular issue it may be different across sectors.
3. Is the organisation being responsive to the legitimate interests and expectations of its key stakeholders (sometimes referred to as stakeholder inclusiveness)? The organisation needs to explain in the (integrated) report how the key stakeholders’ legitimate interests and expectations are being addressed.\(^{26}\)

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Key Considerations for Professional Accountants

In defining report content, materiality should be considered along with the need for other important information characteristics. These characteristics include completeness, accuracy, comparability, timeliness, clarity, and reliability. Sometimes trade-offs exist between characteristics, and sometimes they are closely related. For example, reliability and materiality are connected because the reliability of information and processes used to prepare a report help to establish the quality and materiality of the information. Information that is capable of making a difference in the assessments and decisions of stakeholders is relevant, even if some users choose not to take advantage of it or are already aware of it from other sources. It should also be considered how these characteristics are applied in the context of wider reporting, for example, to ensure the consistency of information between printed reports and what is placed on corporate websites.

Accountability for materiality thresholds and judgments. Materiality thresholds may be agreed upon between management and an assurance provider. However, management, rather than the assurance provider, should determine the materiality tests and thresholds, although agreement may be subsequently reached with the assurance provider on the threshold and definition used. An organization’s governance arrangements can (a) explicitly state where the responsibility for materiality decisions lies, and (b) recognize that although stakeholders will participate in and influence the determination of materiality, it is the organization’s management that has responsibility and accountability for the final decision.

Furthermore, management should be transparent regarding judgments and assumptions, particularly in determining whether a sustainability factor might grow in its potential impact over time. This might include a discussion of the probability that a commitment, event or uncertainty will occur, and the anticipated magnitude of its effect. A decision will also need to be made as to whether the disclosure of a specific matter is reasonable. Materiality might also be affected by emerging government policy or legal and regulatory factors, such as regulations on carbon emissions, which force organizations to disclose certain...
measurements and indicators.

Linking the determination of materiality to strategy, risk management, and sector benchmarks. Decisions on materiality are made and supported by discussions and decisions made on (a) key organizational values, policies, strategies, targets, and goals, (b) the interests and expectations of stakeholders uncovered in stakeholder relations, and (c) identification of significant risks and opportunities. The determination of materiality should not be divorced from these activities, especially if the organization is to avoid gathering data on irrelevant issues. An organization’s eco-efficiency measurements and related internal performance indicators will also provide an important basis for measurements included in external reporting. With respect to climate change issues, “publicly traded companies should determine materiality by engaging in a systematic analysis of climate change’s impacts—both positive and negative—across the enterprise,” according to a recently published Ceres report, Disclosing Climate Risks: A Guide for Corporate Executives, Attorneys & Directors.126

Materiality testing can also apply to the sustainability issues that potentially apply to the sector in which an organization operates (see section 2.5, “Performance Measurement and KPIs”). From Transparency to Performance, Industry-Based Sustainability Reporting on Key Issues, published by the Initiative for Responsible Investment (IRI), a project at the Hauser Center for Non-Profit Organizations at the Harvard Kennedy School of Government, proposes a method for identifying sector-specific key performance indicators relating to the social and environmental impacts of US corporations. This publication encourages the adoption of sustainability reporting in the United States and complements the work of the GRI.

Determining a process for resolving different expectations regarding materiality. Agreement on materiality is not always straightforward, as stakeholders can have a different perspective and set of concerns that are not easily reconcilable with the organization’s mission, goals and objectives, and strategy. One way of dealing with these different materiality expectations is to disclose information used by external stakeholders that differs from the information used internally for day-to-day management purposes. The former information can support (a) assessments or decision making by stakeholders, or (b) engagement with stakeholders that can result in actions that would significantly influence performance, or address key topics of stakeholder concern.

Where information is reported can help (a) to reinforce materiality criteria, and (b) to keep the length of disclosures manageable (particularly where the application of materiality might vary between reporting for wider stakeholders from investors). Users should be able to find the information they need, and the level of detail should not obscure material and relevant information. The main annual or integrated report can be linked to more detail to provide additional information for specific user groups via information and communication technologies—such as the Internet, websites, databases, and XBRL.

As detailed in the CDSB’s Climate Change Reporting Framework,14 information should be reported in a place and in such a way as to explain the links between the organization’s strategy, operations, and climate change impacts. Disclosures should be made in or cross-referenced to/from the management commentary section of the mainstream financial report. This will help to ensure that material aspects are highlighted for investors. Cross-referencing to information in other documents or locations can then be used to avoid duplication and over disclosure. It should also be noted that materiality is a moving target, especially as the demand for climate change-related information grows and regulatory frameworks develop around the world—meaning that information about climate change may be prepared by reference to multiple rules, coefficients, and definitions of materiality.

The Climate Change Reporting Framework’s interpretation of the meaning of materiality is based on that of the IASB, but the Framework goes on to consider the issues in applying materiality in relation to climate change impacts (see pages 16-18 of the Framework).
3.5 External Review and Assurance of Sustainability Disclosures

KEY THEME Establishing an approach to external assurance that adds credibility to an organization’s reporting and provides internal benefits, such as helping to improve underlying reporting processes.

CONTEXT Where sustainability disclosures are included in a document that includes the audited financial statements, International Standards on Auditing (ISA 720) requires the auditor of those financial statements to read those disclosures to identify material inconsistencies with the audited financial statements. Further, where environmental or social risks are likely to have an impact on the financial statements, a financial statement auditor may choose to evaluate the design and implementation of environmental and social controls.

But more broadly, when sustainability disclosures are included in a separate report, or additional assurance is desired, a stand-alone external assurance engagement can contribute significantly to the quality, credibility, and reliability of disclosures. Assurance processes can also provide reporting organizations with a means of enhancing the quality of sustainability-related information, whether it includes governance, social, ethical, or environmental disclosures. Many organizations report that the external assurance process helps to improve their own internal processes and confidence in their sustainability reporting. This is certainly supported by UPS (see “UPS’s Approach to Assurance”) and the findings of the KPMG International Survey of Corporate Responsibility Reporting 2008, which highlighted an increase in the number and proportion of reports with external assurance in both the Global Fortune 250 companies and the top 100 companies.

The KPMG survey shows variations in the scope of the assurance engagement and the approach and methodologies used. In large companies, the use of International Standard on Assurance Engagements (ISAE) 3000, Assurance Engagements Other than Audits or Reviews of Historical Financial Information, is predominant, particularly as it is used by accounting firms undertaking corporate responsibility assurance if there is no national alternative. ISAE 3000 and the related International Framework for Assurance Engagements are currently being revised and updated by the International Auditing and Assurance Standards Board (IAASB). Now in its second edition (2008), the standard AA1000AS, issued by AccountAbility, has also increasingly been used.

External review, verification, or external assurance are terms often used interchangeably. Assurance has a more formal connotation, and is usually used when referring to an assurance process that follows professional standards for assurance. An assurance process also usually leads to auditors providing an assurance report that accompanies the sustainability report. It is also important to recognize that assurance is an iterative process. For
example, the guidance supporting the use of AA1000AS states that report preparer(s) will often make changes that respond to the preliminary findings of the assurance provider. Assurance can be an ongoing process that takes place while information is gathered, and during report preparation and completion. While AA1000AS focuses on the quality of reporting processes with a specific focus on sustainability assurance, ISAE 3000 more broadly focuses on assurance procedures for non-financial reporting. The high and moderate levels of assurance in AA1000AS are intended to be consistent with the reasonable and limited assurance levels established by ISAE 3000. A limited assurance engagement provides a lower level of assurance, and therefore increased residual risk.

ISAE 3000 does not provide specific guidance for the assurance of carbon disclosures, but the IAASB is addressing this with its proposed standard, ISAE 3410, Assurance Engagements on Greenhouse Gas Statements, which covers both reasonable and limited assurance engagements and was released as an exposure draft in January 2011. The International Organization for Standardization’s ISO 14064-3:2006 also specifies principles and requirements and provides guidance for those conducting or managing the validation and/or verification of greenhouse gas assertions.

The choice of assurance standard or guidance, and of the service provider, is an important one for organizations and assurance providers. The KPMG International Survey of Corporate Responsibility Reporting 2005 found that the use of AA1000 and ISAE3000 resulted in different types of audit statements. On the one hand, AA1000 tended to result in a narrative statement highlighting the strengths and weaknesses of a report’s content, as well as the organization’s underlying financial management systems and their responsiveness to stakeholder concerns. On the other hand, ISAE3000 placed greater emphasis on the limitations and weaknesses of organizational reporting. As the scope and quality of reporting evolves, so does assurance. From an organizational perspective, the quality of the assurance of sustainability reporting can be influenced by (a) service provider independence and competency, (b) business understanding, and (c) appreciation of users’ expectations.

There are difficulties in providing assurance on sustainability reporting where an organization has not used a standard, defined reporting framework, such as the GRI or CDSB Reporting Frameworks. Where organizations do not use such frameworks, assurance providers will find it more difficult to comment on, for example, the completeness of reporting. GRI also uses a system where the users of its framework can self-declare the extent to which G3 guidelines have been used in their sustainability reporting. There are three levels of application of the GRI guidelines, and organizations can disclose the level of application as well as whether the report has been externally assured. Reporting organizations have adopted a variety of strategies for enhancing the credibility and quality of sustainability reports. An appropriate approach will depend on various factors, including (a) the size of an organization, (b) the demands of its stakeholders, and (c) the provisions of reporting guidelines for preparers. For example, GRI encourages the independent assurance of sustainability reports, and the development of standards and guidelines for the assurance process to be followed by assurance providers. While independent assurance of a sustainability report is not a requirement for GRI reporting, the GRI Guidelines advocate certain criteria for when external assurance is used, including that it:

- is conducted by groups or individuals external to the organization who are demonstrably competent in both the subject matter and assurance practices;
- is implemented in a manner that is systematic, documented, evidence-based, and characterized by defined procedures;
- assesses whether the report provides a reasonable and balanced presentation of performance, taking into consideration the veracity of data in a report as well as the overall selection of content;
- utilizes groups or individuals to conduct the assurance who are not unduly limited by their relationship with the organization or its stakeholders to reach and publish an independent and impartial conclusion on the report.
assesses the extent to which the report preparer has applied relevant criteria (such as the GRI Reporting Framework) in the course of reaching its conclusions; and

results in an opinion or set of conclusions that is publicly available in written form, and a statement from the assurance provider on their relationship to the report preparer.128

Although the most common and rigorous approach is the use of an independent external assurance provider, there are other approaches to reviewing and assuring sustainability information and reports, such as by using stakeholder panels.

Lastly, it should also be noted that independent assurance complements internal control activities, including internal audit where it is available, in ensuring that reported information is relevant, reliable, and complete. In itself, external assurance is not intended to verify how effectively an organization is managing its sustainability performance, but rather to enhance trust in an organization’s sustainability reporting, which depends first and foremost on effective internal management and control.

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Part 3: Reporting Perspective

UPS’s Approach to Assurance

US-based logistics company UPS began reporting sustainability data in 2003 (when it reported its 2002 information). In 2010, UPS hired its external auditor, Deloitte, to provide assurance on its sustainability report. “As is the case with accounting, third party assurance and the value it brings to one’s credibility is not a “nice to have”—it is necessary,” asserts Steve Leffin, director, global sustainability, for UPS.

The assurance process, which lasted roughly six months, benefits UPS’ sustainability process in three ways, Leffin reports. First, it serves as an ‘internal lever’ by confirming the importance of sustainability reporting throughout the global organization. Second, the third-party review fortifies the credibility of UPS’ annual sustainability report by verifying the accuracy of the numbers and the meaning of the efforts they represent. Third, by working closely with Deloitte’s auditors during the process, UPS managers have the opportunity to expand their own sustainability knowledge.

UPS chose Deloitte based on their subject matter competency and the quality of the long-term relationship between the two companies—“not on price,” Leffin emphasizes. UPS’ sustainability reporting process (and report, which currently appears separately from the company’s annual report) adheres to the Global Reporting Initiative (GRI) Reporting Framework. In all, more than 2 million lines of enterprise data are analyzed during the creation of the report. At a high level, the key steps in the UPS’ assurance process include the following:

- Setting the scope: UPS’ sustainability team and Deloitte’s auditors held roughly two months of discussions before the audit began to identify priority areas the assurance process should address. Deloitte’s team initiated the discussion by reviewing UPS’ previous sustainability report and identifying questions it would ask regarding how certain figures were produced.

US-based logistics company UPS began reporting sustainability data in 2003 (when it reported its 2002 information). In 2010, UPS hired its external auditor, Deloitte, to provide assurance on its sustainability report. “As is the case with accounting, third party assurance and the value it brings to one’s credibility is not a “nice to have”—it is necessary,” asserts Steve Leffin, director, global sustainability, for UPS.

The assurance process, which lasted roughly six months, benefits UPS’ sustainability process in three ways, Leffin reports. First, it serves as an ‘internal lever’ by confirming the importance of sustainability reporting throughout the global organization. Second, the third-party review fortifies the credibility of UPS’ annual sustainability report by verifying the accuracy of the numbers and the meaning of the efforts they represent. Third, by working closely with Deloitte’s auditors during the process, UPS managers have the opportunity to expand their own sustainability knowledge.

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Once the major questions (i.e., priority areas) and scope were finalized, Deloitte auditors ventured into various business and functional areas—human resources to address social issues, for example—to conduct their work. The environmental-related components of the sustainability auditing plan are largely based on the general ledger (GL), Leffin notes. Auditors look at the costs associated with energy and then interview UPS managers responsible for managing and tracking those costs and energy outputs. Review of the environmental data included ‘engineer to engineer’ discussions in addition to analysing the cost and energy usage information maintained in financial systems.

Deloitte produces a traditional dashboard populated with red, green, and yellow ratings that identify which areas and issues require further inquiry and follow-up discussions with UPS. ‘If our auditors have issues or they want more information,’ Leffin says, ‘they document those issues and then we have periodic reviews… We work together to get them the content they need to have the confidence they require to sign off at the end of the day. That’s the process.’

Judging from the results so far, this process works quite well. UPS intends to make this assurance effort an annual investment largely because of the credibility the assurance adds to the annual sustainability report.

‘Our investor relations group no longer lets us release the sustainability report during a quiet period. That’s good news because it confirms the material nature of our sustainability report’s content.’

Steve Leffin, Director of Global Sustainability, UPS

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Key Considerations for Professional Accountants

The quality of external assurance is directly linked to stakeholder inclusiveness. (See section 1.3, “Stakeholder Engagement”) Consideration of stakeholder needs helps define what issues are of the most interest to stakeholders (and, therefore, for what activities and processes assurance might be desirable), and confirm the identity of the primary users of the report for assurance purposes. The scope and extent of external assurance can be usefully discussed with stakeholders. An external assurance process can provide evidence of (a) the issues on which stakeholders seek assurance and, more widely, (b) the process of stakeholder engagement. Assurance providers need to consider how their role takes into account the needs of stakeholders, other than merely shareholders, and how this influences their approach to the assurance engagement and their assurance report.

Clarifying the purpose and scope of the assurance. The scope of an assurance engagement and subsequent assurance report will reflect what an organization wishes to gain from the external assurance process. A more extensive assurance process can lead to inclusion of recommendations in the assurance that might be of great value to the organization and its stakeholders. The scope of assurance can be considered in various dimensions. Firstly, it is necessary to establish the scope of the assurance process. It can include data (is it accurate and complete?), systems (are the systems for collecting data and managing performance appropriate?), content decisions (is the scope of reported information adequate?), compliance (is the organization meeting its obligations and complying with regulation and standards?), and wider commentary (how the organization thinks it is doing). Secondly, the areas of performance to be included in the engagement need to be established—for example, social, environmental, and economic. Thirdly, the boundary of organizations included in the engagement needs to be established. It can (a) be organization-wide (usually required for comprehensive sustainability reporting), or (b) cover specific organizational units, product level assurance, and/or the need to include supplier audits.
The choice of service provider. Involving an independent third party assurance provider can be the best way to achieve credibility in reporting. The standards taken for granted with financial assurance, such as independence and appropriate skills, are equally as important for sustainability reporting. Minimum requirements for independence and impartiality are set out for the accountancy profession in the Code of Ethics for Professional Accountants, which provides independence requirements. Assurance providers should also be demonstrably competent in both assurance skills and techniques, and the subject matter. An assurance provider from within the accountancy profession will also use the standards established by the IAASB in addition to other standards they think are appropriate.

Establishing the type of engagement. Several levels of engagement with third parties are possible. Some may not have the rigor of a formal assurance engagement by an accounting firm, but can help to improve the credibility of sustainability management and performance, and complement a more formal assurance process, such as the following examples:

- Independent external experts (often NGOs) can undertake a review to identify and highlight possibilities for improvement, based on an analysis of a sustainability report. Sometimes titled a “challenger report,” such an approach, popular in German-speaking Europe, can help signal that an independent third party has collaborated in supporting improvement.

- A group of stakeholders can review sustainability reporting or provide support to effective sustainability assurance. Often referred to as stakeholder panels, these can be a useful mechanism, particularly for those new to sustainability reporting, for testing the materiality of reported issues with key stakeholders. As a result, this mechanism improves the selection of issues for disclosure. Some organizations internalize the findings of stakeholder panels so that the report of the panel is written from the organization’s perspective. A good example of this approach is Nexen, which invites a diverse group of stakeholders to review and provide comments on the content of its sustainability report. (The Nexen sustainability report includes an advisory group review statement on pages 44-45.) A stakeholder panel approach does not obviate the use of formal assurance from an accounting firm. Nexen’s advisory group statement is followed by the independent assurance report.130

Enhancing the assurance statement. An assurance statement might usefully show how the assurance process is helping an organization improve its reporting and performance. An assurance statement can be enhanced by including information about the nature and source of assurance criteria used, and relevant standards and procedures followed in the audit. Awards programs, such as the ACCA’s Sustainability Reporting Awards, which recognize and reward innovative approaches to communicate corporate performance, have typically found that the assurance statement does not include, or refer to, recommendations for improving reporting, either from a content, accuracy, or internal systems/processes perspective. To supplement the assurance statement, a stakeholder advisory panel (as used by Nexen and described above), can make specific recommendations for improving sustainability reporting and meeting stakeholder expectations.

There are other challenges. According to research in Australia, there is a variety of terminology used by ASX 100 assurance providers in labeling assurance statements, which exacerbates the problem of identifying the actual level of assurance provided.131 Furthermore, the diminished comparability of assurance statements is compounded by a lack of consistent objectives across engagements and assurance providers.


43 Ruth Prickett, “Uplift and support: corporate social responsibility is not an attribute that most people would associate with the garment industry supply chain, but Sri Lankan company SAS Intimates is working hard to change preconceptions,” Financial Management, May 2008, 22, http://findarticles.com/p/articles/mi_m0JQT/is_2008_May/ai_n25436197/.


70 The Institute of Internal Auditors, Environmental and Social Report (Altamonte Springs, US, 2010), www.theiia.org/
75 Global Reporting Initiative, Sector Supplements for the G2 Guidelines (Amsterdam, 2008), www.globalreporting.org/reporting/framework/g2/reporting/g2_sector_supplements.
76 Vanchy, Sustainability Integration Case Study (Vancouver, Canada, 2010), www.stratos-sts.com/documents/SI_Report_Case_Study_Vanchy.pdf.


123 Ibid.


