



The Evolution of Accountability

Sustainability Reporting for Accountants







The Association of Accountants and Financial Professionals in Business

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About the Authors

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Executive Summary

Sustainability is emerging as a key issue in executive suites around the world. Since the 1960s environmentalists have been concerned with the impact of economic growth and the increasingly rapid use of the world's resources. In recent years, these concerns have increased because of the impact of greenhouse gases, caused by the burning of fossil fuels, on global warming. Energy demands continue to increase as emerging economies expand and energy costs continue to grow significantly as a cost of doing business. Following the adoption of the United Nations Framework Convention on Climate Change starting in 1992, which was signed by the U.S. in 1994, a group of CEOs from global organizations joined together as the World Business Council on Sustainable Development to provide a business-driven perspective toward responding to the challenges posed by concerns over this U.N. direction. They believed that business needed to change and become more accountable and transparent to a broader base of stakeholders.

While more formal recognition of the environmental consequences of economic growth and consumption was developing, some proponents were beginning to develop thinking around a broader framework for corporate accountability including, but not limited to, environmental impacts. This concept, attributed to John Elkington,² is referred to as the Triple Bottom Line (TBL) and incorporates traditional financial performance and accountability to shareholders, as well as broader accountability through both environmental and social impacts. Social accountability to stakeholders has been attributed to work started by Ben and Jerry's that led to their report of the "Independent Social Auditor" published in 1989 relative to their business activities in 1988. Social aspects of corporate performance have been heightened by a wide variety of issues

including responsibility to the workforce and the community in areas such as employment stability, safety, work conditions, and the opportunity to voice their concerns about employment issues—in particular responsibility to those employed in countries outside North America. The behavior of subcontractors is considered by the public as an extension to these considerations. These concerns also extend to the impact of the products and services an organization produces in areas such as safety to the public.

Business reputations and their value to share-holders can be significantly impacted when negative environmental or social issues are identified. In many cases these issues can be as important as failure to achieve targeted earnings and ensure the protection of shareholders' tangible assets. Investors today are adopting due diligence approaches that extend beyond financial performance and include Socially Responsible Investment (SRI) criteria. In its 2005 Annual Report, the Social Investment Forum indicated that SRI-based assets in the U.S. alone have grown from \$639 billion in 1995 to \$2.29 trillion in 2005 and continue to grow at approximately four times the level of non-SRI-based investments.

New organizations are developing frameworks for reporting sustainability performance. Over one thousand organizations today, including an increasing number of major U.S. corporations, are using a framework developed by the Global Reporting Initiative (GRI) as a basis for publishing annual reports on sustainability.

The accounting profession is also seeking ways to participate more fully in this developing area. Efforts have been underway for some years to expand annual reporting to include some level of quantification of social or environmental impacts. The International Federation of Accountants (IFAC) is active in developing guidelines for the profession to use worldwide. The U.K.-based Association of Chartered Certified Accountants (ACCA) has been presenting annual awards internationally, including those presented since 2002 in conjunction with CERES, for the best sustainability reports in North America. In addition, ACCA has been a leading developer of a

^{1 &}quot;Assessing the Impact of Societal Issues," McKinsey, September 2007.

² John Elkington, founder of "SustainAbility," 1987.



framework for integration of financial performance reporting with sustainability aspects, through the SIGMA project.

The message is clear—sustainability is an issue that business is addressing. From *internal* aspects (driven by an expanding perspective for risk management in areas such as reputation, financing, and cost containment) to *external* aspects (accountants expressing opinions on annual sustainability reports published by organizations in a manner similar to annual financial statements), frameworks for reports are emerging and professional accountants are becoming involved.

This guideline identifies the key aspects of reporting for organizations embracing sustainability, and how these might be organized, structured, maintained, and monitored for effectiveness. It shows how a number of existing initiatives such as the Baldrige award for excellence and the Balanced Scorecard approach are developing aspects of the need for broader-based performance monitoring and how the Committee of Sponsoring Organizations (COSO) framework and risk assessment for internal controls required to meet SOX 404 requirements align and support such sustainability considerations. Aspects such as the efforts of AICPA through its Enhanced Business Reporting consortium are also discussed. This SMA also links sustainability with the management of intangible assets that play a significant role in sustainability, particularly in areas such as brand, reputation, and innovation.

Finally, the efforts underway in the U.S. are placed in a global context of initiatives, which, in many cases, are already supported by a growing number of U.S.-based organizations. While not providing a complete set of best practices, this statement provides a framework for organizations to recognize the issues and stand prepared to move forward as the need increases from external transparency demands as well as internal awareness and accountability.

Key Words

Sustainability; Sustainable Development; Environment; Environmental Management; Intangibles; Intangible Assets; Corporate Reporting; Corporate Social Responsibility.

Introduction

Today's growing demand for greater accountability from corporate organizations can best be understood by placing the discussion in an historical context. The world changed in 1929. Investors demanded that more disclosure be made of financial information by public companies and, as a result, then-U.S. President Franklin Roosevelt signed into law the Securities Act of 1933 and the Securities Exchange Act of 1934, which created the Securities and Exchange Commission (SEC). Prior to this time, financial reporting, as well as auditing, was a newly emerging practice, in many cases adopted voluntarily by what were then seen as progressive organizations, including United States Steel Corporation, General Motors, DuPont, and others. These developments led to the creation of early versions of "generally accepted principles" upon which financial reporting would be based.

It is reported that there was quite a high level of outcry against these new mandated standards and the "intrusion of government into the regulation of private enterprises"—albeit ones that had for many years been selling securities to the public. Even organizations that had been making voluntary disclosure and conducting audits felt uncomfortable that these standards were now mandated. The 1929 crash came at a time when the industrialization of America was in full swing, creating a situation where the governance frameworks of the past were no longer adequate to meet public expectations for disclosure in the emerging economy. The public pressured politicians for change and the result was a major re-engineering of the frameworks and rules that surrounded private sector business investment, accountability, compliance, and reporting. These



changes have continued to be developed, revised, and updated since that time and have led to the governance frameworks that exist today. As the world has continued to change, new approaches and rules have been developed to contain the merging realities of an increasingly complex economic and social model.

By the late 1980s and into the 1990s, it was becoming apparent that another series of changes was taking place. Globalization was expanding, aided by the rapid advancement of technology. Organizations were facing growing competition from emerging economies and were downsizing and streamlining, resulting in significant changes to decision making and internal controls. Yet again the frameworks for corporate governance were creaking under the strains of trying to provide adequate transparency and accountability in a world where the existing frameworks were no longer adequate. This problem was further exacerbated by the growth in nonreported intangible assets that formed a growing part of shareholder value yet were excluded from corporate accountability and reporting. In many cases, concerns were raised that boards were not exercising adequate oversight and were unaware of the types of risks that their organizations faced. This concern also extended to the adequacy of internal controls that organizations had in place through which risks were being managed.

A key example of the controls issue was the unethical practice of paying bribes, which led to the enactment of the Foreign Corrupt Practices Act in the mid-1970s that criminalized transnational bribery. The private sector responded to this legislation with the creation of the Treadway Commission in 1985. This led to the formation of COSO (Committee of Sponsoring Organizations), which developed and released an Integrated Framework for the assessment of internal controls, including risk assessment, in 1992.

While these actions started to focus business attention on improving internal controls, the scope of application often remained limited and business conduct issues continued to occur. Problems

included unethical conduct by senior managers in areas such as compensation planning (in particular around bonuses, incentives, and share options) and fraud by individuals such as corporate analysts in recommending stocks that they would personally benefit from, as well as misappropriation of funds by investment advisors.

In the 1990s, an increasing number of American organizations dealt with mounting cost pressures by outsourcing some of their operations to less developed countries, particularly organizations whose labor costs in North America were no longer competitive. Examples would include the garment industry, both clothing and footwear; computer support, such as software development and call centers; electronic assembly; and general areas of business support such as "help desks" and other call centers. In more recent years, this has led to a growing movement to outsource significant portions of all aspects of manufacturing and even includes the outsourcing of accounting and other "back office" processes. Internal controls had to be capable of monitoring the conduct of subcontractors in distant countries where working conditions might be significantly different from those considered "normal" or "ethical" in North America. New types of scandals arose which, in some cases, had a significant impact on organizations' overall reputation, directly impacting their global revenues and share prices. Examples include the use of child labor, harsh treatment of employees for performance issues, limitations on the right to express working conditions problems to management, and limitations on any rights for collective organization.

The general public's attitude toward the products and services that an organization sells has also been changing as overall social values evolve. Examples include the pioneering work of Ralph Nader in bringing accountability to the automotive industry through issues such as the Ford Pinto accident record. These types of issues have continued and remain a concern for the public, which asks, "To what degree is an organization responsible and accountable for the impact that its products and services have on the society that uses them?" The impact on both Ford and Firestone from the Explor-



er "roll over" problem was significant on product sales. Activism toward organizations in the tobacco industry has grown as the link between the use and promotion of tobacco and higher rates of death and health care costs has been established. The conduct of mining companies within the communities where they operate has come under scrutiny as apparent lapses in safety standards have been reported. Investors in these organizations today want to know the impact of the business on the public—they want transparency into the social impact of their activities. Without this their investment risk increases. Boards also need such information, because to provide effective oversight requires that these types of risks be identified and that controls be implemented.

Changing social expectations related to the environment are also emerging as a key part of the issue. There are also external factors driving the need for change. Whether one agrees or disagrees with the various arguments about global warming, there is no question that growing global populations are putting an increasing demand on scarce natural resources. This is driving demand and prices up and forcing organizations to consider more effective cost management strategies aimed at conservation and substitution. Public attitudes toward resource management are also changing. Examples would include:

- requiring replanting of harvested forests;
- laws requiring polluters to remain responsible for their pollution even after releasing ownership of land and property;
- concerns over the use of packaging and the impact on landfill of waste being generated;
- focus on recycling and the degree to which products are biodegradable or can be re-used or recycled (the 3R initiatives—reduce, reuse, recycle);
- concern over pollution, both controlled and non-controlled;
- growing concerns over healthcare and its costs—and the impact that pollution and lifestyles are having on driving these costs up;
- the impact of fossil-fuelled transportation

- in terms of energy consumption as well as the generation of greenhouse gases from exhaust; and
- the use of carcinogens in products such as lead paint in children's toys.

Many scandals have heightened public awareness of environmental and social issues over the last 20 years. Reported environmental problems such as the Three Mile Island nuclear accident in 1979; the contamination caused by the Sydney Tar Ponds in Nova Scotia, Canada, in 1982; the Bhopal disaster in the Indian State of Madhya Pradesh in 1984 that killed between 2,500 and 5,000 people; the 1989 Chernobyl nuclear accident in the Ukraine; the Exxon Valdez spill in 1989 off Alaska; the release of cyanide, heavy metals, and acid into the Alamosa River, Colorado, from the Summitville mine in the early 1990s; and the spilling of 440,000 gallons of oil into San Francisco Bay from Shell's Martinez refinery in 1998. All of these have been widely reported and each one has the dual impact of damaging the organization's reputation in the marketplace and impacting investors, as well as significantly adding to operating costs or, in the worst cases, destroying the business entirely. All of these situations plus many others have been reported globally This has led the public on a global basis to start questioning the behavior of corporations and even governments toward the environment, and asking, "What responsibility should corporations and others be taking?" The message is clear—whenever and wherever the event occurs it will come to the attention of the public.

Progressive organizations have already recognized that the general public, including investors, is paying more attention to these issues. Clothing companies that manufacture in less developed countries have developed and implemented standards and audit suppliers' performance. Resource companies pay greater attention to their environmental impact. Financial organizations consider the social impact of their investment strategies.



Efforts to try and accommodate social and environmental reporting into corporate accountability have met with some degree of resistance. Most efforts today are voluntary and driven by an organization's belief that being a "good corporate citizen" can have a positive impact on its goodwill through sustaining brand and reputation. However, investors, in particular large fund managers such as CALP-ERS, are beginning to expect their clients to address such areas. A key example is the developing importance of the Carbon Disclosure Project (CDP), which represents 315 institutional investors representing \$41 trillion in funds.

Organizational responses include both internal and external initiatives. Management accountants will typically focus more on the need to address a broad base of performance measurement through focusing in areas such as multidimensional performance reporting (for example, using concepts such as the Balanced Scorecard initiative). On a broader basis all accountants need to consider the implications of transparency and disclosure externally, as they impact the perceptions and assessment of risk by the lending community, as well as the potential impact on stated or intrinsic goodwill.

Overall, sustainability addresses the need for an organization to respond to changing social expectations of public and private institutions. The traditional focus on financial performance and disclosure has been enough in the past, but today an organization's "worth" can change significantly based on nonfinancial behavior. It is the role of accountants to ensure that these impacts are identified and quantified where possible for both management attention as well as investor transparency.

The management accountant who fails to identify the factors contributing to the sustainability of the organization is not providing management with a full picture of the organization's value or of the breadth of risks that need to be addressed in maintaining and enhancing the organization's value. Lack of such visibility in the worst case can lead to increased external risks and operating costs—the unplanned loss of reputation and, potentially,

decisions by the public to not buy shares in the organization and/or no longer support its products or services. In addition, the depletion of intangible assets can ultimately lead to a decline in financial performance—remembering that financial results are, at the end of the day, lagging indicators of the day-to-day activities of people, processes, and the interactions that occur with suppliers, customers, and third parties.

Scope

This Statement of Management Accounting (SMA) is addressed to financial and management professionals who are seeking insight and understanding of the broad concepts of sustainability and how these should and will become part of the focus on accountability in the future. The concepts and approaches outlined in this SMA are universal and will apply:

- a. to public and private sector organizations;
- b. to profit and not-for-profit organizations;
- c. to large and small organizations;
- d. to service, knowledge-based, and manufacturing organizations; and
- e. within the U.S. and globally.

This SMA addresses the concept of expanding corporate accountability and reporting to include economic, environmental, and social aspects. This approach is currently included within the framework of corporate social responsibility (CSR). It can also be referred to as the triple bottom line, as well as accounting for financial capital, natural capital, and social capital. Financial reporting in this context complements existing requirements defined within various national and international standards, companies' acts, and securities legislation, and does not in any way diminish or replace such requirements.

This SMA covers the building blocks of developing and the understanding of, and a framework



for, managing organizational sustainability, through the following sections and topics:

- How we arrived at this point—a discussion of the evolution that has led to changed expectations for corporate accountability.
- How others are responding—a review
 of existing initiatives that are taking place
 nationally and internationally that suggest
 the importance of addressing this issue
- How to develop and apply a reporting framework—an overview of the reporting expectations for economic, environmental, and social factors and how a comprehensive and relevant reporting framework might be developed
- The value and benefits in responding to these changing expectations—a selection of suggested reasons why organizations might invest the time and resources required to respond to these emerging expectations, including some examples of potential benefits.
- Sustainability and the profession—a discussion of emerging aspects that will directly affect accountants and accounting organizations, together with a review of how such initiatives align with actions being taken within the profession
- A glossary at the end of the SMA provides an outline of some of the key terms used in sustainability.

Readers should be aware that accounting is a field that has the potential to create major change and as such is a profession that is constantly changing, growing, and developing. In addition, accountants can and should be leaders in bringing emerging issues to the attention of management and in continually exploring the degree to which traditional financial disclosure provides adequate transparency externally. Failure to provide this may result in the depletion of organizational value. Professional management accountants should use this document as a starting point for their journey and develop further reference sources as the subject matures.

Evolution of the Sustainability Issue

We have seen that corporate reporting change occurs as society evolves and the expectations of the public evolve. Business constantly monitors the expectations of its client base and its investors and those who fail to respond to the required and expected changes either go out of business or are unable to raise investment. Politicians respond by monitoring social expectations and introducing, modifying, or repealing legislation to support or mandate changes. The factors leading to the need for change develop in many different ways. In the last 30 years, these changes have been dramatic and have converged to form the basis of a growing demand for broader corporate governance and transparency.

Risk Management Concerns

In the late 1970s and through the 1980s, significant concerns were being raised about risk management within public and private sector organizations. These were in response to surprises and scandals in corporate conduct such as Barings Bank, BCCI, the Butcher Brothers and United American Bank, Orange County "Value at Risk" disclosures, other savings and loan issues, and many, many more. In most advanced economies this led to the creation of committees or commissions that were to look at corporate risk management and disclosure and recommend changes. Examples include Treadway (U.S.), Cadbury (U.K.), and CoCo (Canada). Most results required changes to the listing and disclosure requirements of public corporations, such as the assessments of board conduct against recommended best practices. At the same time, public sector organizations also strengthened their internal control focus and management accountability structures in areas such as risk management. The most recent statutory change is the introduction of the Sarbanes Oxley Act (SOX).



Environmental Management Concerns

Environmentalists have been concerned since the 1960s with the impact of economic growth and the increasingly rapid use of the world's resources. Much of this concern was identified in *The Limits to Growth*³ in 1972, which forecasted that, given current trends in population growth and availability of resources, the world would "run out" of many major commodities, including oil, within 70 years. Overall, in both business and academic circles this report was met with some degree of skepticism.

In recent years these concerns have changed. The reporting of a growing number of significant environmental accidents has been reinforced by the emerging focus on global warming linked to greenhouse gases, which are caused by burning fossil fuels. The United Nations responded by developing the United Nations Framework Convention on Climate Change starting in 1992, which was signed by the U.S. in 1994. Since then, environmental management has been a growing area of public awareness and attention to which progressive organizations have responded. In Europe and selected other countries, legislators went further in mandating disclosure of environmental performance measures in the annual reports of public organizations. These changes have resulted in greater public awareness and a shift in public opinion toward increased concern around environmental conduct.

An additional driver to the environmental aspects has been energy demands that continue to increase as emerging economies grow. Energy costs increase significantly as a cost of doing business. This has led to the price of oil exceeding \$100/barrel and potentially increasing as reserves fail to meet replacement requirements. This has reinforced the desire in business to focus on energy savings driven by bottom-line financial costs.

Social Accountability Concerns

Social accountability is not a new issue. Leading organizations such as Johnson & Johnson have em

3 The Limits to Growth, Meadows et al., 1972.

braced responsibility to "...customers, employees, the community, and stockholders" for many years.

The work started by Ben and Jerry's that led to their report of the "Independent Social Auditor," published in 1989 relative to their business activities in 1988, is a later example. Recent business problems in other organizations, related to such issues as the use of child labor, concerns over food health, and the use of dangerous materials such as lead paint in children's toys, has increased the public's concern over business conduct as a member of the society within which they operate, and has created a growing level of skepticism about corporate conduct and responsibility.

While some industries were forced to introduce improvements through legislation such as OSHA, many have always followed socially responsible strategies because it was "just good business." Mining and forestry organizations that invested significant resources in establishing and supporting communities for their workers, including educational and medical facilities, are an example. As trade became more globalized and global communications improved, the public has developed a greater awareness of the inequities that existed outside of the U.S., and between different societies. Examples include the outcry against child labor practices of subcontractors working for clothing and footwear companies in the less developed world.

In addition, globalization also changed the practices of organizations based in the U.S. in terms of their conduct within American society. Responding to the impact of globally priced commodities such as steel, U.S. industries shut down many facilities across the country, creating "hollowed out" communities with high unemployment. Global competition in industries such as automobiles (and, some also believe, continuing unfair trade practices)

⁴ See history of Johnson & Johnson Credo, published on company website: http://www.jnj.com/wps/wcm/connect/eebe2400496f21778a59f-b03eabf3a7e/Johnson-and-Johnson Credo.pdf?MOD=AJPERES&useDefaultText= 1&useDefaultDesc=1

have resulted in the continued downsizing of traditional automobile communities such as Detroit and resulting levels of significant structural unemployment. The driver for lower domestic pricing in the retail sector has resulted in large retailers sourcing an increasing volume of manufactured products from countries such as China, resulting in the loss of jobs in the U.S. In addition, in order to remain competitive, local retailers and manufacturers have also sought to limit wages and reduce employee benefits. Many have focused financial investment purely on business needs and curtailed social and community spending in once traditional areas such as sports facilities and others.

While all of these can be considered the natural economic effects of a free enterprise economy, they have brought the issue of social accountability of public organizations into the public arena. Increasingly, the question has been raised about corporations' responsibility to the society within which they operate.

The movie The Corporation (and the companion book The Corporation: The Pathological Pursuit of Profit and Power⁵) raises significant questions around the roles, responsibilities, and accountabilities of incorporated organizations and "persons." The film received critical acclaim and was yet another instigator of discussion and debate on corporate conduct featuring many well known commentators on corporate behavior.

The Growing Role of Intangibles

Parallel to growing concerns over the environment and social conduct, organizational value is increasingly centered on and growing around intangible assets. This is an important contributor to the debate as reporting of many intangibles and their impact on shareholders' value is growing. Losses in areas such as reputation and brand values due to behavioral problems have wiped billions of dollars from shareholders' value (much in the same way

as undisclosed financial issues created major surprises for investors at the time of the Great Crash of 1929). The Global Intangible Tracker published in December 20066 revealed that the value of the top 5,000 globally-traded organizations in 25 countries had a total enterprise value of \$36.2 trillion. Of this total, only \$18.3 trillion, or 50.6%, was subject to financial reporting disclosure—\$14.0 trillion being tangible assets and \$4.3 being disclosed (using generally accepted accounting standards) intangibles. The remaining \$17.9 trillion was "undisclosed value." What is more revealing is that intangibles had grown from \$6.0 trillion in 2001 to \$22.2 trillion by 2005. Some appreciation of shareholders' perspective on transparency and disclosure of this level of "worth" can be revealed by the impact of financial write-offs in these areas. Between January 2001 and June 2006, the top 20 global write-downs of intangibles due to impairment totaled approximately \$253 billion. Using the application of accounting standards, the accounting profession has failed to develop approaches for inclusion of many of these intangibles in financial reporting, unless they meet limited and rigid criteria or events cause the mandatory inclusion of goodwill, when an organization that possesses such assets and receives consideration for these when a merger or acquisition takes place and such consideration has to be accounted for in the acquiring organization's balance sheet.

Merging Forces for Change

The convergence of concerns over risk management, the environment, social conduct, and changed aspects of organizational value has created the "perfect storm" for changes to corporate accountability, transparency, and disclosure. Many of these issues have started to focus business attention on improving inter-

⁵ The Corporation, by Joel Bakan, published 2004.

^{6 &}quot;Global Intangible Tracker—An Annual Review of the World's Intangible Value," December 2006, Brand Finance.



nal controls; however, the scope of application often remained limited and business conduct issues continued to occur: misstatements of corporate earnings and over-statement of assets, significant and erroneous financial decisions made by individuals without adequate oversight and control resulting in massive corporate write-downs and losses, extensive write-downs of goodwill in technology and other "intangible" knowledge-based organizations, and declining share values. All of these added to a growing discontent that corporate governance was "out of control," but, more importantly, created an environment where the public's level of trust and belief in corporate conduct was at a low point.

Again, many scandals have heightened public awareness of these issues over the last 20 years or so. All of these events impact the public's perception of corporate conduct and, with the effectiveness of global communications, it no longer matters where the event occurs—it is part of corporate conduct. Not only has the world in which public and private organizations operate changed, so has the level of trust between those inside such organizations and those outside.

Importance of Reporting and Accountability—Who Cares?

Following the adoption of the United Nations Framework Convention on Climate Change in 1992 and the U.S. signature in 1994, a group of CEOs from global organizations emerged as the World Business Council on Sustainable Development to provide a business-driven perspective on responding to the challenges posed by concerns over sustainability. These CEOs believed that business needed to respond to public concerns and to start changing and becoming more accountable and transparent to a broader base of stakeholders. It had become apparent to these executives that corporations could no longer use (and

abuse) natural resources without accountability for the longerterm impacts of their actions. Even the much respected Economist magazine identified in an editorial that the unrecognized "cost" of using such natural resources was estimated at over \$23 trillion per year on a global basis.

The importance of environmental and social accountability is demonstrated by a growing number of national and international initiatives that were also gathering momentum in the early 1990s. In 1993, the European Community introduced the voluntary Eco-Management and Audit Scheme (EMAS) to assist companies in developing a framework for environmental accountability and management. This Scheme focused on the development of performance measures for environmental aspects and impacts and has since become an element of public company reporting requirements within the European Union. In 1996, the International Standards Organization issued its first management standard for an Environmental Management System (EMS) to help organizations address environmental performance in their organizations. Over 120,000 organizations worldwide are now registered as being compliant with this standard. In many cases, buyers are requiring compliance as part of supplier selection in order to obtain assurance that their suppliers are environmentally responsible. Since 2003, any tier 1 supplier to General Motors had to certify compliance with an acceptable environmental management system as a condition of supplier qualification.

In the social arena, following the problems that Nike encountered with child labor, the SA8000 standard was developed by the International Labor Organization and modeled on the framework of an ISO standard. This standard was issued in 1997 as an approach to helping organizations carrying out work in less developed countries assess the way in which such organizations



were managed so as to identify and eliminate unacceptable social working conditions. This standard covers child labor, forced labor, health and safety, freedom of association, discrimination, discipline, working hours, compensation, and management systems. As of September 2007, 1,461 facilities in 65 countries, representing approximately 676,000 employees, had been certified. This voluntary standard embraces previously developed conventions such as the United Nations Convention on the Rights of the Child, ILO conventions, and the Universal Declaration of Human Rights. In 2000, the United Nations developed the Global Compact as a series of ten principles by which companies would strive to work in order to uphold such initiatives as the U.N. Declaration of Human Rights and others. These principles cover the key areas of human rights, labor standards, environment, and anti-corruption. While this initiative only requires voluntary reporting, it has attracted participation from 5,000 participants, including 3,700 businesses in 120 countries around the world.

Collective efforts have been developing to create a more integrated framework for the developing areas of environmental and social accountability. In 1997, the Global Reporting Initiative (GRI) was founded as part of CERES and UNEP, and in mid-2002 was established as a non-profit entity. GRI has been actively involved in developing a series of guidelines that are increasingly adopted by those reporting environmental, social, and economic performance. There are currently over 20,000 stakeholders in over 80 countries and over 2,000 reporting entities globally use some portion of the GRI framework. Participants include over 60 U.S. organizations such as Baxter International, Alcoa, Dell, General Electric, Proctor and Gamble, SC Johnson, and Dow Chemical. In addition to the GRI framework, the U.K.-based ACCA has been active in a project called SIGMA, aimed at developing a comprehensive reporting framework based on organizations' accountability for five factors of capital

management: natural capital, social capital, manufactured capital, human capital, and financial capital. In addition, ACCA, in conjunction with CERES, has been operating an award scheme for best practices in environmental and sustainability reporting for several years in North America and other areas around the world.

Investors have also been active in addressing expectations for expanded corporate accountability. Socially Responsible Investing (SRI) has been an emerging force within the investment community. Spurred by such factors as rising institutional investor interest, growing demand for climate-related renewable energy alternatives, concerns about the Sudan humanitarian crisis, and the emergence of new products, SRI in the United States is now growing at a much faster pace than the broader universe of all investment assets under professional management, according to the new edition of the Report on Socially Responsible Investing Trends in the United States published by the non-profit Social Investment Forum (SIF). The report found that, from 2005 to 2007, SRI assets increased more than 18% while all investment assets under management edged up by less than 3%.

The report identifies \$2.71 trillion in total assets under management using one or more of the three core SRI strategies: screening, shareholder advocacy, and community investing. In the past two years, social investing has enjoyed healthy growth from the \$2.29 trillion documented in the 2005 Trends report. Today, nearly oneout of every nine dollars under professional management in the United States today is involved in socially responsible investing—11% of the \$25.1 trillion in total assets under management tracked in Nelson Information's Directory of Investment Managers.

Together these trends would appear to indicate a growing momentum driving a shift in public reporting and accountability. Bob



Willard⁷ describes these events as the "perfect storm" of market forces starting to drive changes in corporate accountability. Changes are being driven by both stakeholder convergence of interests and a series of five core areas of change, as shown.

Thus, the drivers for responding to these changes come from several sources.8 First, the accounting profession will be unable to address the growth of intangibles because the definition of an intangible asset as currently written precludes balance sheet recognition. Second, there are other organizations that are beginning to move into the corporate governance, accountability, and reporting arena, seeking to address the broader issues of sustainability. Third, while the accounting profession as a whole continues to focus on reporting that falls within the framework of standards other than intangibles, there is a growing recognition that the profession must be involved in the way ahead—albeit in a manner that falls "outside the box" of traditional compliance and reporting frameworks (the work of IFAC as well as the ACCA would be good examples of practical approaches to this). Finally and most importantly, these issues fall solidly in the area of management accounting. Addressing sustainability will have direct implications on the cost structure of an organization, offering both challenges and opportunities; in addition, the breadth of a management accountant's work extends beyond compliance to addressing the ability of the organization to sustain itself into the future considering all aspects of risk.

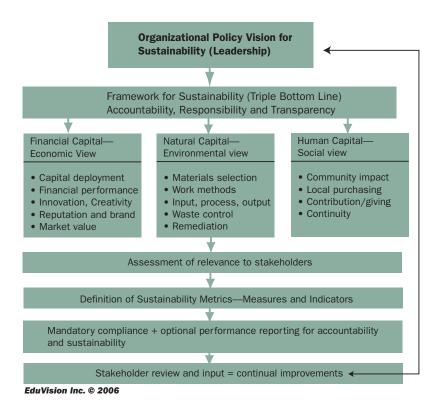
Stakeholder Activism	Drivers of Change
Consumer activism	Climate change
Shareholder activism owners)	Pollution and result- ing
NGO activism	Backlash to global- ization
Political activism (impact on govern- ments)	Energy shortages and costs
Investor activism (capital markets)	Diminishing trust in large institutions

Building a Framework for Sustainability

While there is yet no consensus on standards to address sustainability, the debate has resulted in a number of recommended approaches and frameworks. Other than those driven by legislated compliance such as designated organizations in Denmark, Netherlands, U.K., and France, there are no defined mandatory standards, and most work has focused on establishing a series of "best practices" that organizations can select from to build their own customized approaches. Thus the focus has been on a non-prescriptive approach that leaves the reporting organization extensive leeway in determining what to report, how to report it, and to what degree verification and third-party assurance are to be utilized. For example, the well known and possibly most extensively applied approach developed by GRI often forms the basis against which many organizations compare their own unique reports. GRI is cited as the base and then certain

⁷ The Next Sustainability Wave, by Bob Willard, p. 89.
8 See IAS 38 "Intangible Asset" as being an identifiable monetary asset without substance, "...controlled by the enterprise..." and "...from which future benefits (inflows of cash or other assets) are expected..."

Exhibit 1



aspects of the framework are chosen by the reporting entity as the relevant areas for accountability.

There is, however, a degree of commonality in the approaches being taken. Readers are referred to many of the available books that deal with the approach in more detail. In early 2008, examples of relevant titles would be *Making Sustainability Work*, by Marc J. Epstein; *Beyond Good Company*, by Googins, Mirvis, and Rochlin; and *The Next Sustainability Wave* (Building Boardroom Buy-in), by Bob Willard. In addition, the GRI framework should be reviewed and referenced.

The schematic in Exhibit 1 illustrates a conceptual framework and the steps required to embark upon developing a response for sustainability reporting. While not reflecting any particular approach, this framework depicts the key steps in moving forward.

This model illustrates some foundational aspects of developing a response to sustainability reporting, including the following aspects that

will each be further developed in this section:

- The need for a company-wide approach to the subject, including a policy supported by active and engaged leadership;
- Development of a framework for sustainability and the definition of segments that address each of the three aspects—economic, environmental, and social;
- Identification and engagement with ke stakeholders to ensure that the framewor adopted is relevant and comprehensive;
- Development of relevant, verifiable, anmeasurable metrics (measures and indicators) through which each sustainability factor can be monitored;
- Alignment of the accountability framework so that it meets statutory requirements as well as stakeholder expectations and industry "norms"; and
- A process of continual review and development of both the framework and the component parts to create a "learning" system and approach.



This type of framework is developing and emerging. Readers should additionally research as a minimum the approach defined by Marc Epstein⁹ as well as the AA1000 standard developed by Accountability and the G3 guidelines developed by the Global Reporting Initiative.

Leadership and Policy Development

Commitment to expanded accountability is a serious undertaking that will require a commitment of resources and extend transparency of corporate performance. Before any organization starts the process, the scope of commitment must be presented to and approved by the board or those responsible for corporate oversight. A key aspect of this will be the development of a policy statement outlining the organization's approach to sustainability. As in any such statement, the words must be capable of conversion into behavior that will be judged by the stakeholders and public at large and seen as being in alignment. Aspects to be considered in developing a sustainability policy might include:

- a clear definition of the stakeholders considered and addressed:
- positive alignment between sustainability and the organization's values;
- linkage between sustainability and the organization's business mission and plans.

Examples of such policies can be found in the many published reports available through the Corporate Register. 10 Once the policy has been established, it must be broadly disseminated to all stakeholders, including employees; this requires committed and active leadership at all levels within the organization. Leadership is required to convert the sustainability policy to practice throughout the organization. To be effective, sustainability must be woven through every aspect of the organization's planning, work execution, reporting, and ac-

- 9 Marc J. Epstein, Making Sustainability Work.
- 10 The Corporate Register—repository of Corporate Sustainability reports:

http://www.corporateregister.com

countability. Policy is critical to development of the next steps, as it answers the question, "How far do we want to go in reporting and disclosure?" In this way, policy creates a basis for the context of the sustainability report. If an organization fails to take a broadbased and reflective approach to its disclosure, it may be faced with a response that sees the final product as being "tokenism." Thus, the time spent in setting policy must include searching consideration of the context within which the organization operates and a clear understanding of the breadth of its relationship within its operational context.

Development of the Sustainability Framework

There are two core steps that must be included in this stage of the process. First is the development of an understanding as to who the key "extended" stakeholders might be that should be considered for an expanded approach to accountability; second, the development of a series of measures or indicators that might address the issues and concerns of such stakeholders. Consultation with key stakeholders as well as input from industry associations and groups can help support this process.

Who Are My Stakeholders?

Identification of stakeholders has much in common with management approaches such as TQM (Total Quality Management), excellence awards (Baldrige), and the implementation of international standards such as ISO 9001 and ISO 14001 (Quality and Environmental). Analysis takes an "outside-in" view of the organization and asks the question, "As an organization, whom do we have an effect on, and who are we affected by?" Organizations should utilize stakeholder identification work that already exists as well as extending analysis to the media, industry groups, peer organizations, and trade associations. What is critical to understand is that in many situations this will be an iterative approach. At each step in the process



Definition of Stakeholder "Those who affect and/or could be affected by an organization's activities, products or services and associated performance.

organizations will learn to include or decrease stakeholder representation. In addition, some method of assessing relative importance for later inclusion must be considered. Development of an assessment matrix or grid that plots level of influence on stakeholder assessments that lead to decision making against the significance level of economic, environmental, and social impacts might provide assistance. Stakeholder identification and prioritization is a key step in moving ahead, as it creates the basis for then determining what areas should be included within the basis for performance accountability.

What Do My Stakeholders Need to Know?

Stakeholders' information needs for effective decision making cover a broad spectrum and no framework or standard can define what these should be. The driving principles that apply to all aspects of items to be reported will typically include aspects such as:

reported provide a reasonable and appropriate depiction of those aspects of corporate conduct that are relevant and material? As an example, from an environmental perspective, tools such as "aspect and impact" assessments that look at every aspect of an organization's inputs (for example, raw materials), processing steps (for example, energy use, waste generated, pollutants created), and outputs (for example, finished product or service as well as by-products, waste, effluents, and so forth) can help in determining what should be included and addressed.

 Balance. Does the information reported provide a realistic assessment and includeitems that are both positive and negative in terms of the organization's performance? This concerns the need to address transparency in terms of an unbiased approach to reporting; consideration of the ability to achieve balance is a critical aspect to consider when setting a policy. If an aspect is

critical and performance is bad, the organization's commitment to both disclosure and action becomes an important factor to be dealt with.

- Perspective. Is the information included capable of being placed in a realistic perspective? In order to achieve a positive response to this question, performance should be capable of comparison to some types of either baseline or normative levels. The availability of industry-wide benchmarks would be a good example of an aspect that might be considered.
- Accuracy. Can data related to this dimension of reporting be determined with a reasonable level of accuracy? While quantitative data (such as traditional financial reporting) is easier to deal with, a proportion of the accountabilities to be reported might be qualitative in nature. In this case, the ability to establish standards that deal with the process of data collection and evaluation will need to be closely considered. What range of normal deviation is acceptable and at what level does the information become meaningless?
- Availability. In order to be effective, performance reporting must present information in a timely manner. Thus, the chosen measurable criteria must be capable of extraction and use in a timely manner from whatever the source. If the material fails to meet the timeliness aspect, the contribution to stakeholder assessment and decision making will become marginal and will detract from the value of the reporting.



- Presentation. Are the metrics chosen capable of presentation in a manner that provides clarity? Taking an outside-in view of the organization requires not only that disclosure of the data from a stakeholder's perspective be understood, but that the purpose for which it is required is also appreciated.
- Quality. Is the material being collected, analyzed, and presented in a way that can be examined to ensure quality and substantiate material accuracy? Organizations that have developed broad-based risk management frameworks, such as the development of a COSO framework to assess and report under SOX 404, will find a strong parallel here. Internal controls that address defined aspects of organizational risk such as environmental and social issues should be subjected to the same consideration as those relative to monetary risk, including the ability to monitor performance.

Finally, in developing all aspects of disclosure, consideration should be given to overall materiality and the "boundaries" of reporting. Initial efforts to build a sustainability reporting approach should best start with ensuring that the "critical view" becomes the initial bias and that these efforts are then added to, as experience and time allow, the development of meaningful measures and indicators. Without some type of process to focus on such critical few, the danger will be that efforts become dissipated, the quality of the initiative declines, resources are inadequate to the task, and the resulting disclosures fall short of developing the desired level of credibility.

Considerations when determining the breadth of reporting should include the extent of control exercised by the reporting entity together with the relative impact of the performance aspects being considered. High impact/high control must make the report, whereas

low control/low impact would probably be cut from the aspects to be reported. All of these factors will then be applied to the development of relevant indicators or measures for each of the three key areas of economic, environmental, and social reporting.

Economic Aspects

Economic performance reporting within a framework for sustainability might be confused with financial reporting but, as students of accounting all learned at an early stage, accountants and economists see financial information from a different perspective. Economic reporting in no way replaces or invalidates traditional financial statements, but should be viewed as supplementing and complementing such information. Financial managers involved in the creation of economic sustainability reporting may wish to consider the context, importance, and relevance of intangible aspects of financial value. The SIGMA project developed in the U.K. with the involvement of the Association of Chartered Certified Accountants provides an excellent concept that is relevant here, in their approach to the consideration of "capital" within the sustainability reporting framework. They define "capital" under five categories that reflect the triple bottom line (economic, environmental, and social), but present it within an alternative framework. In this way, the broader aspects of the total investment—whether or not it is tangible and whether or not the entity is required to pay consideration for its use—are included in its operational accountability and thus its sustainability.

Economic performance indicators will provide a perspective on the organization's economic impact on the society within which it operates. Typical aspects might include the overall value added, generated, and re-distributed to stakeholders, including mandatory and voluntary disbursements. For stakeholders,

		Economic	Environmental	Social	Tangible asset accountability	Intangible and non- reported
Natural capital	The environment		X			Х
Social capital	Social relationships and structures			X		X
Human capital	People	Х				Х
Manufac- tured capital	Fixed assets	Х			×	
Financial capital	Profit and loss, sales, shares, cash, etc.	Х			Х	

this might include the economic benefits to the community of local purchasing activities; investments in community activities; payments for health care to local providers; total remuneration paid to employees living in the community; taxes (direct and indirect) paid within the community; contribution to employment in the community through hiring practices; and working through advanced educational institutions and similar economic aspects.

If intangibles were also included, value might be created through the identification and segregation of operating expenses committed to building infrastructure and organizational mass for sustainability. This might include training and education costs; development of process improvements and employee engagement and involvement; reporting related to seniority, retention, and retirement practices. Investments in other sustainable activities include building supplier and client relationships to ensure competitive advantage and thus building a sustainable business.

(In some cases this might even extend to "profit foregone" to build intangibles.) Finally, the economic aspects should also include the financial implications of sustainability investing in areas such as innovation and creativity, especially in addressing environmental (and even social) aspects of the organization's impact within the community. A key aspect of extending economic aspects beyond the core of commitments to community and societal well-being will be heavily impacted by considerations not only of stakeholder relevance and materiality but, importantly, by the impact of disclosing such information on competitive advantage.

Environmental Aspects

The environmental impacts of sustainability vary across a wide spectrum of organizations, from heavily natural-resource-based organizations to banks and less natural-resource-intensive organizations. Some industries have been developing environmental strategies for



Exhibit 2

The ISO 14001 standard requires that a [community or] organization put in place and implement a series of practices and procedures that, when taken together, result in an environmental management system. ISO 14001 is not a technical standard and as such does not in any way replace technical requirements embodied in statutes or regulations. It also does not set prescribed standards of performance for organizations. The major requirements of an EMS under ISO 14001 include:

- A policy statement that includes commitments to prevention of pollution, continual improvement of the EMS leading to improvements in overall environmental performance, and compliance with all applicable statutory and regulatory requirements.
- Identification of all aspects of the community organization's activities, products, and services that could have a significant impact on the environment, including those that are not regulated.
- Setting performance objectives and targets for the management system

- that link back to the three commitments established in the community or organization's policy (that is, prevention of pollution, continual improvement, and compliance).
- Implementing the EMS to meet these objectives. This includes activities such as training of employees, establishing work instructions and practices, and establishing the actual metrics by which the objectives and targets will be measured.
- Establishing a program to periodically audit the operation of the EMS.
- Checking and taking corrective and preventive actions when deviations from the EMS occur, including periodically evaluating the organization's compliance with applicable regulatory requirements.
- Undertaking periodic reviews of the EMS by top management to ensure its continuing performance and making adjustments to it, as necessary.

years—especially in the case of U.S.-based multinationals faced with the much more onerous mandatory reporting of environmental compliance in countries outside the U.S. The management accountant will need to first understand the environmental risk profile for the organization and use this as a starting point for developing environmental policies and strategies; such policies will be a blend of ensuring mandatory compliance while at the same time moving the organization ahead with

a number of discretionary board-approved strategies. While there are many environmental management consultants available to help an organization conduct an environmental assessment, some organizations may have their own staff available. The environmental assessment should be modeled around a framework such as that called for in the ISO 14001 Environmental Management System Standard available



from ANSI.¹¹ A good outline of the requirements for an ISO 14001-based EMS is provided on the website of the EPA.¹² (see Exhibit 2).

The second requirement is what provides the basis for an environmental assessment and is often referred to as an "aspects and impacts" assessment. Using this tool, the management accountant can identify each and every aspect of an organization's activities that has an effect on the environment as a whole. Typically, an organization's environmental impact areas would include its effect on both living and non-living natural systems (ecosystems) including land, water, and air. Examples might include:I selection of raw materials, including issues such as impact of extraction and production, availability of supply, and operational impact of use (for example, hazardous materials);

- creation of all planned waste streams, whether from manufacturing or support services and their associated internal and external disposal costs;
- creation of unplanned waste and by-products, such as emissions into the air and water;
- impact of processes and indirect materials being used on employees' health and the workplace;
- transportation costs of all types at all levels of both the supply stream and the output (sales and distribution streams); and
- impact of design and operation of the organization's products and services on those who buy and use them and third parties.

For the management accountant, the focus of traditional risk assessment would have been on ensuring compliance with regulatory organizations such as the EPA, minimizing the risks of any noncompliance that would result in fines,

- 11 ANSI—American National Standards Institute, http://www.ansi.org.
- 12 EPA—Environmental Protection Agency, http://www.epa.gov/OWM/iso14001/isofaq.htm.

penalties, and legal actions, and reducing costs when such items became significant. In today's business climate the management accountant needs to expand the horizon and consider opportunities such as:

- limiting the impact of (mandatory and voluntary) noncompliance where such results would cause a loss in reputation and brand value;
- cost avoidance in areas such as the internal costs of handling and managing toxic materials, hazardous waste, and other supplies;
- minimizing healthcare costs through elimination of negative workplace consequences of environmental aspects;
- reducing waste levels (scrap, excess byproducts, etc.) through implementing quality initiatives, and extending this to reduction in printing costs and other support areas;
- reducing (escalating) waste disposal costs (both external, such as transportation and disposal fees, and internal, such as materials handling labor costs) through recycling initiatives (and including the creation of new business opportunities through using byproducts);
- reducing product liability risks (and possible insurance coverage and legal costs) through focusing on environmental impacts from the products or services, as part of the product design management process;
- reducing indirect costs through capital investments in areas such as waste-water reduction, electrical reduction (lights, motors, controls, improved housekeeping), oil and gas reduction, and others;
- reducing liabilities for remediation through improved site management (for example, resource- and real-estate-based organizations);
- implementation of modified working practices such as allowing employees to work at home (reduces use of transportation), using technology instead of traveling,



- and creating and transmitting documents electronically to avoid use of paper; and
- facilities changes through better space utilization and implementation of passive heating and other improved facility management approaches.

Not all of these will work in all situations, but in most organizations opportunities exist to achieve the joint goals of operating in a more environmentally sensitive way as well as saving expenses. In particular, environmental strategies should focus on future costs avoidance. It is becoming evident that the costs involved in many areas linked to the environment are increasing:

- Oil has escalated significantly in recent years, passing the \$100 per barrel mark and heading seemingly ever higher. Oil has a pervasive impact on most other costs—in particular the supply stream in the transportation area—but also in chemicals, plastics, fertilizers and many others.
- Water is in short supply in several states, and is becoming the subject of much concern for availability as a result of global warming, as over 66% of the U.S. water supply comes from groundwater. The price of use will escalate as availability decreases.
- The cost of generating new electrical power continues to increase; few hydroelectric opportunities exist, and alternative sources such as nuclear are plagued by planning delays, and power from renewable sources such as geothermal, wind, solar, and others is currently more expensive; in addition delays in construction of transmission lines further leaves supply at a higher risk.

Management accountants should be in the forefront of understanding the environmental impacts of their organization's behavior; corporate organizations are a powerful force in impacting

a society's overall well-being and success. Rifken (2003, Chapter 3) discusses the relationship between energy and societal well-being and makes it clear that from an environmental perspective many organizations are operating on borrowed time (Ashida et al., 2003). Compliance with mandatory requirements is imperative; setting discretionary policies that recognize both the changing societal impacts of environmental concern as well as the existing costs and risks, and the added risk of future price escalations and resources availability, make this an imperative for the management accountant.

Social Aspects

The area of social impacts is one where policies may already exist, including full compliance with any labor and workplace laws, such as OSHA and other requirements, and state labor laws. In addition, progressive organizations may have already established programs that look at issues such as strategies for maximizing the use of local suppliers when goods and services are being purchased, involvement with the community, including not just politicians but the public stakeholders living in the areas around the organization's operations, and guidelines for corporate giving—whether in terms of cash, goods and services, or allowing time off with or without pay for staff to work on local community projects such as building social housing through Habitat for Humanity and other causes.

The evolving issue for the management accountant here is the degree to which strategies in this area contribute to the overall effectiveness of the organization's management of day-to-day activities, as well as ensuring that cycle times requiring local, state, or federal approvals for permits and other issues proceed in the most expeditious way possible. Of course this area must be also considered in the light of ethical management, where the focus must be on living within a defined ethical management

framework yet having policies in place that ensure effective communications and understanding with external third parties.

Social performance is of particular interest to the management accountant when the organization is operating outside its national base such as the U.S. No one can fail to forget the devastating impact that allegations of child labor abuses by Nike had on its share price and reputation, resulting in customers deciding not to do business with the company. Work practices in different countries may vary, but issues and problems may be communicated very rapidly through the media and impact the parent company in a very short space of time—creating risks and negative impacts again on brand, reputation, and through share prices and revenue levels.

Social impact deals with the effect that the organization has on the social systems within which it operates. This typically includes labor and management practices, approaches to human rights, and activities within and impacts upon the surrounding community, including both its day-to-day activities as well as the longer-term effect of its products. One can see that a degree of overlap exists between these areas when an environmental-oriented "cause" can have a society-based impact. Specific areas for attention would include:

- compliance with all laws and regulations affecting labor, plus abiding by internationally accepted standards and guidelines¹³ where the local laws fall short of what an organization may deem minimum practice;
- focusing on provision of an adequate level of education and training for employees, including areas such as safety;
- 13 Examples might include "United Nations Universal Declaration on Human Rights" and its protocols, and the "ILO (International Labor Organization) Declaration on Fundamental Principles and Rights at Work," and using the SA 8000 standard for Social Accountability.

- meeting requirements and policies on use of minority workers and levels of compliancewith regulations such as EEO legislation as well as levels beyond the minimum;
- levels of local purchasing and other investment activities involving the community;
- approaches to areas such as non-discrimination, freedom of association, right to work, how employee grievances and complaints are dealt with, and how community rights are respected (for example, involvement of community leaders in planning, and ongoing communications);
- how anti-corruption practices are handled and how the organization ensures that its power within the community is balanced;
 and
- the impact of the organization's operations, products, and services on the community, including their health and safety, labeling consideration, marketing communications, and recognition of individual privacy expectations.

For the management accountant, this area may appear nothing more than ensuring that the human resources area (or his or her own management of this area in a smaller organization) is compliant with the law. However, it extends further if effective policies in this area are to contribute to the "triple bottom line." Failure to deal with these issues can, over time, create a negative reputation of the organization within the community, as well as impact the organization's employees, who may see such practices and be negatively impacted—employees favor working for a "good corporate citizen" most of the time. Such practices can also contribute toward a more positive reputation in the wider community of customers, suppliers, local politicians, and others whose actions have the potential to create a positive or negative impact on the organization's activities. In the worst situations, organizations can face social unrest that can bring local opera-



tions to a halt, or even face physicalviolence to its staff members.

Examples where policies toward the community have acted to guide an organization's approach to issues and problems would include the "Credo" used by Johnson & Johnson that clearly guided its decisions as to how the Tylenol tampering problem in 1982 was handled. Even though over \$100 million worth of product was involved, a complete recall was issued within seven days of the first event. One could compare this to both historic and more recent situations in the automotive industry, in which even though deaths from "apparent" product problems were being reported, the response was slow and defensive in nature. The negative impact on J&J's reputation dissipated quickly and the company was praised by the media because it was seen to have acted "socially responsibly," while the reputations of others were left tarnished, their lawyers remained in court and, in some cases, the organizations failed to ever really recover and fully regain their reputations. The financial or economic bottom line impact is but one of three impacts that affect the sustainability of the organization; failure to address environmental and social impacts will, over time, result in negative

"Business leaders must be involved in the sociopolitical debate not only because their companies have so much to add but also because they have a strategic interest in doing so. Social and political forces, after all, can alter an industry's strategic landscape fundamentally; they can torpedo the reputations of businesses that have been caught unawares and are seen as being culpable."

—McKinsey Quarterly #2 2006, "Business in Society," pp. 20-32.

fiscal impacts through customers and investors changing their own behavior in response to the conduct of the organization—thus depleting the intangible capital of the organization.

Social impacts and the whole area of corporate social responsibility is becoming a mainstream business issue. Verschoor (2006) states that "good corporate citizenship is a fundamental best practice" and backs this up with statements from the 2005 study, "The State of Corporate Citizenship in the U.S.: Business Perspectives in 2005," and with a number of statistics that show that employees (as well as society at large) see this as an important consideration. It also shows that the traditional approach of Freidman (1993), that the sole responsibility of a corporation is to the shareholder, is no longer supported by 83% of business managers. McKinsey and Company, in its Second Quarter Review of 2006, titled the entire issue "Business in Society" and focused on areas such as the importance of an organization being attractive in order to secure the talent that it needs for the future—both from employees and also from other third party partners. This article also discussed whom the effective organization needs to recognize such changes and adapt to their new reality, demonstrating that failure to do so can significantly reduce corporate value through loss of reputation and goodwill. A later article (McKinsey Quarterly Survey, p. 33) goes on to discuss the impact of key strategic business changes that are taking place and identifies how these are areas of concern for business executives—at the top being job losses and off-shoring. A management accountant faced with providing analysis and support for such management decisions should ensure that his or her risk assessment and due diligence include aspects outside the direct financial area and take account of broader issues such as social and environmental impacts.

Exhibit 3

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Process assets	 Costs/transaction of key processes (using ABC/RCA) Energy costs/unit or per transaction Waste created by process Cycle times of key processes, especially those aligned with competitive advantage Defect-free performance of processes (for example, percent quality levels) On-time performance of key processes
Client relationships asset	 Client and satisfaction levels (regular simple survey of intangibles), in particular questions related to safety, ease of use Client satisfaction with key process performance outcomes (delivery, etc.) Complaints, returns, warranty costs, and other trends Percent of business through referral and/or percent of sales as repeat business Client turnover rates and client average length of relationship Percent of business conducted with key clients (using stratification approaches)
Supplier relationship asset	 Supplier satisfaction surveys Transportation costs/ input costs Percent of business from key suppliers Improvements in costs, cycle time, quality from key suppliers Administrative cost savings from supplier partnering initiatives Actual supplier performance (timeliness, accuracy, other compliance) Direct unit cost savings from supplier partnering (composite of above)
Employee relationships	 Asset value—tenure/turnover/qualifications/level of education & training Conversion impact—attitudes from survey, levels of motivation Outcomes—number of innovations/suggestions (product and process); cost savings from suggestions; responses from client
Brand assets	 Interbrand survey data (large organization) or independent review and valuation Market surveys of brand recognition Sub-results from client surveys on recognition/reputation



Reporting Methods

One of the greatest challenges the management accountant will face is creating metrics that provide insight into an organization's performance in the nonfinancial areas of the triple bottom line. Important in these deliberations will be the recognition that traditional financial metrics of "certainty" may not be practical to apply and therefore developing trends and indicators may better support performance reporting.

Monitoring and Measuring IntangiblesKaplan and Norton (1996) have gone some

way toward opening up this discussion with the recognition of the need for metrics in areas such as process, client relationships, and learning and growth, and the balanced scorecard proposed by them can be a good starting point for broader performance indicators. The following table presents some suggested areas where metrics might be developed for some intangibles that could have linkages to sustainability considerations: Stewart (1997) provides some excellent examples of approaches to intangible valuation similar to those above; however, also included is an example of how financial reporting may be restated in nontraditional ways using SEMA Group (currently part of the International IT Group Atos Origin), whose approach was to expense traditional technology assets (computers, and so on, as they are of no value without people to use them) and capitalize portions of their labor costs based on the creation of longer-term value rather than production of day-to-day revenues. One could see how the efforts of the workforce in developing processes, supply chains, systems, clients, innovations, and other intangibles could arguably fall into this category. Becker, Huselid, and Ulrich (2001) also discuss specific examples related to the development of an HR scorecard that exceeds the suggestions identified above. Fitzenz (2000) also discusses aspects of calculating ROI from HR investment in terms of determining the economic value of employee performance.

In a number of situations, M&A activity has created significant pools of goodwill that represent the crystallized value of intangibles at the point in time of the transaction. The problem in this area for management accountants is that statutory accountability and compliance are dealt with through the approach of an impairment test; however, this approach is essentially flawed for a number of reasons. First, it becomes increasingly difficult to determine impairment as intangibles are combined in a merged entity; second, intangibles were not created at the time of the transaction—they had life and value before and after; and third, all values of goodwill should be capable of some level of decomposition down to their individual elements for the asset and evaluation of sustainability. The management accountant should be focused on developing a valuation model that allows for metrics to be created that provide the equivalent of a "deemed intangible" value, from which ongoing enhancement or depletion can be assessed. Some audit organizations, as well as members of organizations such as the Business Valuation Association and the American Society of Appraisers, have developed approaches that attempt to create such value models. As an example, a management accountant may determine that a customer base turns over at a certain rate and, therefore, once average margins are known, the future value of discounted cash flows from this client base has a certain "worth." Using this data, a recalculation can be done quarterly or annually that looks at average margin rates and client turnover rates and determines whether the value of the asset is increasing or decreasing Willard (2002) has brought together seven cases where focusing on sustainability can be linked to bottom-line benefits for the organization. Lynch (1993), in one of a number of books published



around this time related to the benefits of creating business alliances, discusses at some length the challenges of creating payback calculations for investments being made in supply chains—however, the arguments clearly demonstrate the importance of looking at strategic and longer-term benefits rather than focusing on supplier management with a purely short-term cost/unit focus.

Standfield (2002) is a leading global specialist in the area of measurement for intangibles in the knowledge-based economy, and has created a number of standards that can be used for the identification, evaluation, and monitoring of the impacts of the economic aspects of intangibles in a business. In Standfield's work, the major focus is on the ability of an organization to know and understand the underutilized potential that may exist from intangibles related particularly to the people aspects of the organization. These intangibles are directly shown to be the driver of competitive advantage in areas such as time to market, innovation, and other key aspects of an organization's capacity to perform. These capacities are those that ultimately create the basis for the difference between book and market value of an organization. Approaches to building reporting frameworks and developing metrics are beginning to evolve and these are discussed in the next section.

Monitoring and Measuring Environmental and Social Impacts

Organizations usually develop measures in these categories relative to their specific aspects of organizational impact and materiality. High-level conceptual guidance can be gained from considering research work such as the Environmental Performance Measurement Project report published in 2005 and produced by the Center for International Earth Science Information Network (CIESIN) at Columbia University and the World Economic Forum, and the 1998 report of the Global Environmental Management Initiative (Washington, D.C.) that outlines best practices at a selection of organizations.

The GRI framework also provides a wide range of alternatives that can be used as a basis for performance measurement and is probably one of the best summarized and focused studies of what could be selected (the GRI guidelines having been updated as recently as 2006 and, together with the sector guidelines, provide a comprehensive collation of current reporting concepts). Individual organizations, even if they do not provide an integrated and comprehensive sustainability report that covers the breadth of the triple bottom line, will probably have a variety of nonfinancial measures being used for both internal management and board reporting purposes. The management accountant would be advised to bring together a team of interdisciplinary representatives to assess these existing measures in the interest of providing the basis for such a comprehensive report and to avoid "reinventing the wheel." This team would then consider the broad-based concepts outlined in the three impact areas of sustainability and position the existing indicators in their categories (recognizing that some may fit in more than one impact area). The team should then identify further areas where either initiatives are underway where there are no existing measures, or areas that should be addressed—as an example, through using the environmental assessment as a base. This would provide three categories—existing measures that can be adopted; initiatives where measures need to be developed but "narrative" can initially be used; and areas where no initiatives or measures are yet available. This will form the game plan to move forward with a broad-based sustainability reporting framework.

Reviews of publicly available reports (a great example are the reports available on the Corporate Register website) of organizations currently providing broad-based annual sustainability reports are also leading opportunities to identify potential measures and indicators. The following selected examples show the variety of metrics being used. First, in the environmental impact area:



Exhibit 4

Reducing water usage in production	Usage per \$1,000 sales generatedProgress against goal of 40% reduction to base (2002)	Abbott AMD
Reducing greenhouse gas emissions	 Absolute emissions in pounds Reduce energy use in KwH by 30% against base year Metric Tons Emission/million barrels oil processed Fuel efficiency of vehicles produced and sold Air emissions in Kg/MwH (by type of emission) 	Abbott AMD Chevron Ford/GM Wisconsin Energy
Reducing waste (from processes)	 Tons of waste sent to landfill/\$1M in sales (Absolute) office paper recycled Hazardous waste metric tons/\$B of sales 	Anheuser-Busch Citigroup Motorola
Recovery and recycling	(Absolute) levels of recovery of parts at end of life Percentage of equivalent sales in reuse & recycling Percentage of waste re-used or recycled	Dell Hewlett Packard Proctor & Gamble
Environmental impact	 Tons/Equivalent trees saved by using 100% recycled paper Energy produced from renewal energy sources MwH 	Dell Wisconsin Energy
Product development	R&D \$ investment in Eco based R&D activity	General Electric
Environmental compliance	Number of noncompliances, for example, number of NOVs; amount of penalties paid; number of noncompliances through inspections; number of accidental releases	Johnson & Johnson

Exhibit 5

Absolute number of courses delivered	Abbott
Highlights of employee opinion results	GE
Employee turnover rates/also rates by diversity	Wisconsin Energy
Number of employees in flexible work programs	Talisman Energy
Lost time injury rate/1,000 employees	Anheuser-Busch
	Chevron
Number of plants scoring >8 on fire protection audits	Proctor & Gamble
Growth in microfinancing as proportion of business	Citigroup
Corporate contributions (in dollars) to community	Ford
Cash \$ and equivalent products & services given	Hewlett Packard
Giving in absolute dollars/year	Wisconsin Energy
Problems/100 cars in first 3 months	Ford
# reports to Office of Ethics & compliance # terminations (& other actions) based on ethics	Motorola Motorola
% of invoices paid later versus contract terms	Wisconsin Energy
	Employee turnover rates/also rates by diversity Number of employees in flexible work programs Lost time injury rate/1,000 employees Motor vehicle crashes/1M miles driven Number of plants scoring >8 on fire protection audits Growth in microfinancing as proportion of business Corporate contributions (in dollars) to community Cash \$ and equivalent products & services given Giving in absolute dollars/year Problems/100 cars in first 3 months # reports to Office of Ethics & compliance # terminations (& other actions) based on ethics

The same sources can be used to review social impact metrics, and examples here might include the following:

For further details, readers should access either the GRI website directly—
http://www.globalreporting.org/Home—or
The Corporate Register where reports can be viewed in their entirety:
http://www.corporateregister.com



Note that these examples are extracted to show the types of indicators being used and do not reference the validity or quality of the measures or the organizations that are using them; they are illustrative of actual examples only. In addition, while the examples given come from specific reports, other reports do or may contain the same or equivalent information. What can be seen from the examples given is that many measures are consistent with the types of internal reporting that organizations have used in the past. This demonstrates the importance of starting a sustainability reporting initiative that is currently tracked and then over time moving to fill the gaps. In addition, organizations will have a natural response to select those measures for which performance is shown to be good; however, for longterm effectiveness, the right measures should be the primary consideration, which will then drive marketplace and stakeholder credibility and sources of action by the organization to improve performance in the most material and important areas.

Benefits from Being Accountable

Progressive organizations have already responded to the growing demand for sustainability, especially in areas where public attention and has been focused on previous issues and problems. Mining and resource organizations have been expanding their reporting for many years to include environmental aspects of their performance. Organizations such as The Gap and Levi Strauss publish broad-based public accountability statements of how they select, manage, and measure their subcontractors. A growing number of organizations are also active in developing corporate awareness in these areas of conduct. Examples are the work that the Novartis Foundation does in using its knowledge and wealth to address Third World medical issues, and the work of charities like the Gates Foundation.

Efforts to try to accommodate social and environmental reporting into corporate accountability have led to the evolution of the triple bottom line that expresses performance under social, environmental, and economic aspects. While economic aspects include traditional financial performance, a broader framework for corporate sustainability might well include both financial data prepared according to GAAP as well as the broad range of corporate assets that fall outside this framework. This would include accountability for an organization's intrinsic investment in its people, processes, and relationships that form a core component of its capacity to operate and yet do not appear as assets on a balance sheet (the exception being when a sale/purchase has been completed and consideration has been attributed to the excess over book value determined to be the "goodwill" involved). Such approaches are beginning to emerge as leaders in the triple bottom line theory strive to enhance their reporting models. How an organization responds to changing public expectations has a great deal to do with its perceived level of "social responsibility." Management accountants need to be very aware of what the drivers are for public thinking and how these are changing, because an organization's "brand value" will be impacted

Sustainability, in the corporate sense, is more than an environmental issue or maintaining a good brand image through effective PR; it is the ability of the organization to know, understand, and consider all the factors that impact its value and drive its ability to continue to operate into the future. A board of directors is not representing the shareholders if it fails to consider the impact of social and environmental factors as well as the (economic) tangibles and intangibles that contribute to this ability to sustain the enterprise; therefore, a board that

by either positive or negative perceptions.

holder's ultimate investment.

This value forms a key part of an organization's

intangible worth and thus the value of a share-

relies on financial data alone might be missing key elements of information needed to carry out its responsibility.

Likewise, the management accountant who fails to identify the factors contributing to the sustainability of the organization is not providing management with a full picture of both the organization's value and the breadth of risks that need to be addressed in maintaining and enhancing that value. Lack of such visibility in the worst case can lead to increased external risks and operating costs—the unplanned loss of reputation and, potentially, decisions by the public to not buy shares in the organization and/or no longer support its products or services. In addition, the depletion of intangible assets can ultimately lead to a decline in financial performance, remembering that financial results are, at the end of the day, lagging indicators of the day-today activities of people, processes, and the interactions that occur with suppliers, customers, and other third parties.

It is worth noting that large managers of investment funds and their advisors, such as CALPERS, have already moved toward an investment strategy that includes assessing target organizations on both their traditional financial performance and their approach to the broader issues of sustainability through an approach called socially responsible investment (SRI).

Societal Impacts of Sustainability

The first area of intangibles related to financial and economic sustainability, which has been discussed in this SMA, should not be a major revelation to management accountants. After all, these intangibles are, in fact, "just good business" in a knowledge-based society in which intellectual capital is becoming more critical; the two other areas—environmental impacts and societal impacts—move the management accountant outside of the traditional areas of comfort. These are aspects in which concerns usually relate more to the "costs of

compliance" with mandatory requirements than the "benefits of opportunities" that could arise. The progressive management accountant, like the progressive CEO, will recognize that as society shifts its behavior and expectations, so will public and private organizations have to modify the ways that they do business.

Moving forward, the management accountant is going to be faced with creating a balance between achieving cost-effective compliance when legislators respond to the public's concerns by creating new laws, and implementing optional and discretionary actions that, while not mandatory, will serve to demonstrate that business recognizes and is responding to the changing expectations. In so doing, the management accountant will reduce the risk of intangibles—such as brand name and reputation—being tarnished or reduced in value by the perception that an organization is a good or bad corporate citizen. Additionally, as changing demographics bring a new generation into the workforce and the "baby boomer" generation retires, organizations will be faced with a shift to an environment in which there is a shortage of key skills required to operate and potential employees are now in a seller's rather than a buyer's market. In this situation, management accountants want to ensure that, as a risk-reduction strategy to make their organizations more appealing to the potential employees they wish to attract, they create both a public and a private image that presents an organizational profile making them an attractive place to work. In this way, progressive organizations use these shifts and their responses to them as a competitive advantage in attracting the best workers. Such factors are already starting to show up when surveys of "America's Most Admired Companies"14 are published.

The advantage of establishing good social and environmental policies will also impact an organization's ability to raise capital, as more

¹⁴ See Fortune magazine review conducted on an annual basis.



lenders and money managers look beyond just financial performance and balance sheet risk toward the impact of environmental and societal risks faced by a potential investment candidate. SRI¹⁵ is no longer a fringe approach, and is being adopted by an increasing number of investors in the U.S and abroad (AICPA 2003). By 1999, over two trillion dollars in U.S. investments were being placed using SRI approaches (Social Investment Forum, 1999 Trend Report).

Finally, an organization that puts in place policies that address environmental and societal issues creates a potential competitive advantage when seeking out customers and markets. Clients who buy the organization's products and services want to be doing business with a supplier that has put into place positive and progressive practices.

Aspects and Impacts on Accounting Profession

The Future of Performance Reporting

Sustainability as a topic has been gaining recognition since the 1990s and was given a kickstart in business by the creation of the World Business Council on Sustainable Development. With the involvement of several major CEOs around the world, this organization was instrumental in developing what has become one of the leading frameworks for sustainability reporting. It can be expected that, like accounting standards that have evolved over time, frameworks for sustainability will also continue to develop as organizations start learning and applying the principles and decide through this how progress should be measured in an effective way.

In the U.S. it appears that adoption of sustainability as a concept has been more cautious than in other areas around the world. As in many new initiatives, the great concern is and will continue to be the degree to which such expansion of the scope of accountability

15 See SRI website at http://www.socialinvest.org Natio

becomes one more burden that might reduce further competitiveness. Adopting this type of framework is more challenging where organizations are currently impacted by the reporting requirements under Sarbanes Oxley. This cautious approach is consistent with the U.S. adoption of many global initiatives—be it the more recent and continuing debate about global warming and the need for radical changes in the way resources are managed and used, or in areas such as the standards developed by global organizations such as ISO¹⁶ While adoption of management standards such as ISO 9001 (Quality Management) and ISO 14001 (Environmental Management) have gradually become more visible in both business and the not-for-profit sector in the U.S., efforts to develop standards in areas such as Health and Safety have been resisted on the belief that an adequate level of mandatory legislation is already in place and additional requirements are not needed. In Europe, both at the national as well as the European Union level, legislation has been enacted that requires mandatory reporting of environmental performance, and areas of control extend to more stringent rules on the disposal of waste of all kinds, control of packaging materials being used, requirements for disposability of products at the end of their life cycle, and many others. This type of legislation has caused organizations to embed programs that not only ensure compliance with such legislation but also extend into discretionary areas to protect themselves against being seen as having a poor social performance record.

While this disparity between the U.S. and other countries exists, another further development is underway in which the U.S. is represented. This is the creation of a new ISO standard designated ISO 26000, which will provide a base guideline to help companies, government agencies, and others toward rec-

¹⁶ ISO—International Standards Organization, Geneva, where the U.S. is represented by ANSI (American National Standards Institute).



ognition and accountability for sustainability. This standard is designated for completion by the end of 2008.

The accounting profession has a role to play in contributing to the business understanding of sustainability and focusing beyond the adoption of standards for their own sake, to a perspective where connections can be made between nonfinancial reporting, financial value, and the sustainable worth of the entity. If the sustainability initiatives cannot be adopted on the basis of good business practice, then the probability is that adoption will only come when solid facts about the conduct of organizations in an environmental and social context become proven, and politicians respond to social pressures to limit the behavior of such organizations through mandatory legislation.

The work of organizations such as the Enhanced Business Reporting (EBR) Consortium can be looked to for further guidance in this area. Its strategy, shown to the right, clearly indicates that a market-driven solution is better than a legislated one.

This approach is consistent with the more marketbased and less government-interventionist approach of the U.S. economy. The EBR Consortium has also clearly stated its focus through the problem definition that states . . .

Research shows that 25% of an entity's market value can be attributed to accounting book value. The remaining 75% of market value is based upon value drivers not fully communicated through the existing GAAP model. Research also tells us that less then 25% of the measures generally associated with surveyed industry sectors are published in formal filings.

This mandate complements the approach taken in this SMA where the focus includes both value attributed to external performance in areas of environmental and social activity and the critically important area of intangible asset values that contribute a large portion

We are driving towards a marketdriven solution instead of a regulated solution because we believe that market collaboration is the best way forward. The Enhanced Business Reporting Consortium provides an opportunity for market participants to demonstrate commitment to hold themselves responsible and accountable for the quality of information provided to, and used by, the capital markets.

> —Strategy Section from the EBR Consortium Strategy, Mission and Objectives

of the gap between book and market values. Critical to the understanding and adoption of sustainability is the ability to link positive environmental and social activity to the value of intangibles such as brand, reputation, and workforce management and optimization and, through this, create an enhanced view of the worth of the entity. Some interesting work in creating financial linkages with environmental performance has been conducted by Yachnin & Associates¹⁷ in a pilot program called the sdEffect,™ in which formulae have been developed that, as an example, translate areas such as reductions in emissions into share value increments. This pilot study focused on using published sustainability reports of five mining companies and was targeted at closing the gap between good social responsibility practices as reported and the desire of the investment community to have traditional financial metrics that can in some way attribute value to such activities from an investor viewpoint.

¹⁷ Yachnin & Associates, Sustainable Investment Group Ltd. See http://www.sdeffect.com



Global Models for Sustainability Reporting

Two examples will be given of the work being conducted to develop a broad-based framework for reporting and accountability in the areas of sustainable development.

First is the Global Reporting Initiative or GRI: Currently over one thousand organizations globally are moving to adopt elements of this framework. In the last five years, the list of U.S.-based organizations using this framework, as reported by the Corporate Register, ¹⁸ has exceeded 100, with over 60 currently reporting in 2006. In a number of cases, organizations have been using the framework for several years—examples include Abbott Laboratories, Citigroup, Dell, Ford Motor Company, Hewlett-Packard, Intel, Johnson & Johnson, Motorola, Proctor and Gamble, SC Johnson, Dow Chemical, Wisconsin Energy, and others.

The GRI framework provides a nonprescriptive approach through which organizations are guided in developing performance reporting that is relevant for their own business. Users are provided with concepts on how to develop what is to be reported, including issues such as materiality, and are provided with a framework for what are called standard disclosures, supported by a series of sector or industry guides. These currently include financial services, logistics, transportation, mining and metals, public agency, tour operator, telecommunications, and automotive. The framework then provides support on how to collect and report information, including guidance on what areas should be included in each sector—economic. environmental, and social—together with ideas as to what types of performance metrics can be developed.

The guidelines identify and discuss how core aspects of organizational activity might be incorporated and embrace the five areas of capital. These core aspects are leadership and visioncreation, planning, delivery and monitoring, and review and reporting.

Summary of Reporting

Sustainability reporting is in its infancy. While some organizations, especially those engaged in environmentally sensitive areas (such as mining and other resource organizations and those with significant interests in international operations), are leading the way, many are either ignoring the issues, have not yet made a start, or are trying to figure out what to do, how to do it, and how to take action in a way that

The second framework that has been developed is called SIGMA. While reflecting similar approaches to the GRI framework, SIGMA was a joint development of BSI (British Standards Institute) and AccountAbility, 19 and provides more of a series of guidelines than an actual reporting framework. The SIGMA guiding principles have two core elements: First, they provide a holistic approach to the management of five differenttypes of capital that reflect an organization's overall wealth; second, they provide a framework for developing reporting transparency to stakeholders and for required levels of mandatory compliance. The five levels of capital provide a framework that embraces the economic, environmental, and social impacts that have been discussed in this paper and include natural capital (the environment); social capital (social relationships and structures); human capital (people); manufactured capital (fixed assets); and financial capital (profit and loss, sales, shares, cash, etc.).

¹⁸ Corporate Register acts as repository for those voluntarily filing copies of annual sustainability reports where the GRI framework has been adopted at some level (others may have completed reports but not filed copies).

¹⁹ AccountAbility is an international membershipbased organization committed to enhancing the performance of organizations and to developing the competencies of individuals in social and ethical accountability and sustainable development



adds value. Management accountants have a responsibility to those whom they support with professional advice to address the sustainability of the enterprises within which they operate by understanding the implications of nontraditionally-measured assets, liabilities, and income that form the basis of an organization's worth and wealth in the 21st century economy. Shepherd (2005) argues that enactment of legislation such as Sarbanes Oxley scratches the surface of governance and accountability for the new age, and accountants must find approaches and methods that extend accountability beyond accountingbased reporting to broad-based performance reporting that is holistic in its reach. He demonstrates that many aspects of this change are already taking place and tools such as international management standards, models for management excellence (such as Baldrige), and reporting systems such as the balanced scorecard all play a part in this evolution.

Sustainability reporting should continue to evolve so that the information provided by and supported by management accountants adds value to the understanding of managers and shareholders, as well as stakeholders, as they strive to assess the opportunities, risks, and effective stewardship of the worth, value, and potential of the enterprises with which they interact on a day-to-day basis. Reliance on traditional data with its requirements to comply with GAAP creates a widening gulf that brings with it the risk that the accounting profession will become better and better at reporting what is less and less relevant in a knowledgebased economy and, in the worst case, provide less warning of impending declines in organizational worth.

Acronyms

ACCA Activity-Based Costing
ACCA Association of Chartered
Certified Accountants (U.K.)
AICPA American Institute of Certified

Public Accountants

ANSI American National Standards

Institute

AOL America On Line

CALPERS California Public Employees-

Retirement System

CERES National network of investors,

environmental organizations and other public interest groups who work with interest

groups in sustainability

CIV Calculated Intangible Value-

Committee of Sponsoring
Organizations (originally the

Treadway Commission)

CSR Corporate Social

coso

Responsibility

DJSWI Dow Jones Sustainable World

Indexes

EBR Enhanced Business Report-

ing—committee established by the AICPA to investigate potential improvements to

business reporting

EEO(C) Equal Employment Opportu-

nity (Commission)

EMS Environmental Management

System

EPA Environmental Protection

Agency

ERM(S) Enterprise Risk Management

(System); may also be used for Environmental Risk Man-

agement

EU European Union—Suprana-

tional and intergovernmental union developed from the Treaty on European Union in 1992 (Maastricht Treaty)

GRI Global Reporting Initiative

IFAC International Federation

of Accountants

IIMSI International Intangible Man-

agement Standards Institute



ILO International Labor Organization ISO International Organi-

zation for Standardization

ISO 9001 ISO Standard for Quality

Management

ISO 14001 ISO Standard for Environmen-

tal Management

ISO 26000 ISO Standard for Corporate

Social Responsibility (in devel-

opment 2007)

KM Knowledge ManagementM&A Merger and AcquisitionNIST National Institute of Stan-

dards and Technology
Occupational Safety & Health

Administration

RCA Resource Consumption

OSHA

SEC

Accounting

\$A8000 Social Accountability Stan-

dard developed by ILO Securities and Exchange

Commission

SIGMA In this report refers to the

SIGMA framework for governance and accountability developed by the BSI and AccountAbility; can also refer to Sigma—the eighteenth letter of the Greek alphabet; also for statistical relevance and derivative used for process improvement named the 6

Sigma program

SRI Socially Responsible Investing

/Investment

WBCSD World Business Council on

Sustainable Development

Glossary of Terms

BALDRIGE The Baldrige Model or criteria is the U.S.-based model for organizational excellence that organizations adopt as a basis of continual improvement; used as the basis for evaluation of the Baldrige

award (see NIST website)

CLIMATE CHANGE Term used interchangeably with global warming; denotes the scientific evidence based changes in the global climate

CONSERVATION The controlled use and protection of natural resources

CORPORATE REGISTER Repository of annual reports related to sustainability where examples can be found of organizations that have linked to using the GRI framework

CORPORATE SOCIAL RESPONSIBILITY A

concept that serves as a basis for organizations wishing to take into account environmental and social issues in their activities and to consider their inter-relationships with all stakeholders on a voluntary basis

DIVERSITY In dealing with human relationships, the term means consideration of people of all genders and ages, as well as different cultures, nationalities, religions, skin colors, and ethnic and social groups

DOW JONES SUSTAINABLE WORLD INDEX

Index that is created by Dow Jones and tracks the performance of the leading 300 companies in the field of sustainability

ECO-LABELING A method used to label products that identifies what level of environmental impact their production and use has created

EMISSIONS Releases from organizations or products that may negatively impact the air such as factory emissions, vehicle emissions)

EMISSION TRADING A process that allows organizations creating levels of emissions in excess of a specified allowable target to buy credits from other organizations that are emitting below such targets (process of trading)

ENVIRONMENTAL AUDIT Review by an independent auditor of compliance with directives and internal procedures; would typically include compliance with required legislation; may also be part of an environmental assessment



ENVIRONMENTAL MANAGEMENT

SYSTEM A framework that allows management to set policies and establish procedures and processes through which environmental aspects of its business operations are considered and integrated into day-to-day management

- FOSSIL FUELS Fuels that come directly or indirectly from the compressed remains of ancient vegetation and animals; typically is used when referring to coal, natural gas, crude oil
- **FULL COST ACCOUNTING** The process of collecting and presenting information for decision making that considers economic, environmental, and social factors
- GOOD CORPORATE CITIZEN Corporate citizenship refers to everything that an organization does for society outside its actual business activities; an organization's attempts to behave in a positive and responsible way toward all those communities within which it operates
- **HAZARDOUS WASTE** Waste that because of its state requires special handling, before, during, and after creation
- INTANGIBLE (ASSETS) Nonmonetary assets that cannot be seen, touched, or exactly physically measured and which are created over time and through human effort; intangibles form a core component of intellectual capital (see below)
- INTELLECTUAL CAPITAL Various meanings have been used, but in this document refers to the broad range of human and nonhuman capabilities, excluding tangibles such as property, plant, and equipment, that create an organization's capacity to function; also often used in IT management context
- **KNOWLEDGE MANAGEMENT** A range of practices used by organizations to identify, create, manage, represent, distribute, share, and employ knowledge as an asset

- **LIFE CYCLE DESIGN** An approach to developing products and systems that considers the total costs and impacts "from inception to disposal;" forms the base of Life Cycle Costing
- **RECYCLE** The ability to take things at the end of their useful life and convert them back into original items (example would be the practice by XEROX of using "remanufactured parts")
- **REHABILITATION** The recovery of specific ecosystems to their original state after degradation has taken place due to human or natural events; also referred to as remediation
- **REMEDIATION** The recovery of specific ecosystems to their original state after degradation has taken place due to human or natural events; also referred to as rehabilitation
- **SOCIALLY RESPONSIBLE INVESTING** An approach to investment risk management and due diligence that takes into account both financial as well as environmental and social impacts
- **STEWARDSHIP** Caring for land and other natural types of beneficial resources to pass on to future generations
- **STAKEHOLDERS** Individuals or groups of individuals that have an impact on or are impacted by the affairs of an organization; stakeholders may influence and/or be impacted by the decisions of an organization
- sustainability Activities and approaches that maintain or increase added value without creating long-term threats to economic, environmental, or social systems; sustainability typically seeks to create sustainable development (note that sustainability is an aspect included within the Baldrige criteria)



- ment that meets the needs of present generations without compromising the ability of future generations to meet their own needs (United Nations definition)
- **TRIPLE BOTTOM LINE** An approach used that involves measuring the economic, environmental, and social performance of an organization or a project
- **VALUE CHAIN** Depicts the steps involved within an organization that add value— usually in the context of providing an output of products or services that third parties purchase for financial consideration

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- American National Standards Institute (ANSI) http://www.ansi.org where standards including those compliant with the ISO
- International series of standards can be purchased The Corporate Register—repository of Sustainability Reports linked with GRI and others— http://www.corporateregister.com
- Global Reporting Initiative—develops and disseminates globally applicable guidelines that many reporting entities use or reference as a base for preparing their CSR report: http://www.globalreporting.org/Home