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# Sustainability Reporting

*Getting Started*

Second Edition

**Gwendolen B. White**



BUSINESS EXPERT PRESS

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*Sustainability Reporting: Getting Started, Second Edition*

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## **Abstract**

Sustainability reporting provides nonfinancial and financial indicators of an organization's environmental, economic, and social dimensions of its operations. The globalization of corporations and widely publicized corporate misdeeds (e.g., Nike's child labor problems) have increased public scrutiny of corporate behavior. As pressure grows from a variety of stakeholders (e.g., investors, creditors, customers, and NGOs) for corporate transparency, sustainability reports provide vital information to meet the demand for disclosures about environmental, economic, and social impacts. In addition to addressing stakeholders' demands, this reporting enhances internal decision-making. Managers are better able to assess risks, monitor company resources, establish competitive advantage, create employee loyalty, and engage stakeholders.

This book is intended for MBA students, executives, and managers who want to learn about the value of sustainability reporting. In this book, the reader will discover the internal and external benefits of sustainability reporting, the basics of existing reporting frameworks, and the reaction of the investment community. Detailed examples of sustainability metrics from numerous organizations are provided to illustrate the Global Reporting Initiative Sustainability Reporting Guidelines. This book will enable readers to assess how reporting can add value for his or her own organization.

## **Keywords**

Corporate social responsibility, CSR, sustainability reporting



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# Preface

My interest in sustainability reporting comes from being witness to the many detrimental effects of human activity on the natural world. When I was growing up in the 1950s and 1960s on the island of Okinawa, Japan, I spent a lot of time with my family on some of the most beautiful and pristine beaches in the world. Plastic bottles and bags did not exist on the beaches of Okinawa; that has changed. In 2013, on less than a mile of an Okinawan beach, 134 pounds of washed-up trash were collected.<sup>1</sup> There is considerable plastic debris floating currently in the Pacific Ocean. Recent scientific research on 192 coastal countries found that in 2010, between 4.8 and 12.7 million metric tons of plastic entered the oceans.<sup>2</sup> This plastic does not biodegrade but breaks into smaller and smaller pieces that pose substantial problems for marine life and the oceans' ecosystems. Chemical pollutants and rising water temperatures are having drastic effects on the oceans' food chain. Coral reefs are dying all over the globe; healthy coral reefs are essential for sustaining fish. Sea mammals are contaminated with pesticides, polychlorinated biphenyl (PCB), and flame-retardants. Killer whales are now considered to be the most toxic creatures in the Arctic. What is all of this doing to humans?

The destructive effects that I have seen in my lifetime are quite disturbing. It is urgent that the causes of these effects be addressed so that current and future generations can prosper on Earth. Business practices in the last century have been a major contributor to the problems facing life on the planet. It is important for people to understand the problems caused by human activity, but it is equally important to understand what can be done to address these issues. As an author and speaker, I have had the opportunity to explain the connection between business practices and their impacts on people, profits, and the planet and to explain ways to improve business practices. I wrote this book to help explain how sustainability reporting can be useful in helping organizations achieve a more sustainable approach to their operations and the natural environment.



# Acknowledgments

I would like to thank Michael and Alicia for all their support and inspiration.



## CHAPTER 1

# What Is Sustainability Reporting?

### What Does Sustainable Mean?

In the world of business, “sustainable” is frequently used to describe the process of conducting business in ways that protect Earth and its inhabitants from irreparable damage caused by human activities. The irreparable damage to the environment has direct economic and social consequences for the present and future generations. Over the last century, people have used much of Earth’s resources with little regard for their use by future generations. As the world population expands (7.3 billion in 2015), meeting the wants (e.g., automobiles, televisions, computers) and needs (e.g., clean air and water, food) of the world’s population is becoming a more difficult problem.<sup>1</sup> According to the Global Footprint Network,

Today humanity uses the equivalent of 1.5 planets to provide the resources we use and absorb our waste. This means it now takes the Earth one year and six months to regenerate what we use in a year. Moderate UN scenarios suggest that if current population and consumption trends continue, by the 2030s, we will need the equivalent of two Earths to support us. And of course, we only have one.<sup>2</sup>

The most commonly cited definition of sustainable addresses the need to consider how we live today and the implications for the future. It comes from the final report by the United Nations World Commission on Environment and Development Conditions. In this report, *Our Common Future*, the commission coined the following definition: “Sustainable

development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”<sup>3</sup>

By the early 1980s, there was growing evidence of worldwide environmental damage caused by human activity. To investigate the extent of the problem, the Secretary General of the United Nations created the World Commission on Environment and Development in 1983. Gro Harlem Brundtland, the prime minister of Norway (1981–1986), directed the group that became known as the Brundtland Commission. Under her direction, the commission took on the task of researching environmental and economic issues by traveling to all parts of the world and interviewing thousands of people: farmers, industrialists, tribal and indigenous people, government leaders, scientists, and experts. They found a strong international interconnection between ecology and economics. People all over the world expressed considerable concern for damage to the environment and its effects on their lives. In the Brundtland Commission’s final report, it is clear that sustainable development is important to the future fortunes of nations and individuals. The commission concluded that countries and *businesses* have to be involved in the solutions. They have to work together to address the pressing problems of human population growth and development. Their efforts must be aimed at reducing the effects of human activities on the environment to protect it for future generations.

Scientists around the world have been documenting damage to the environment for over 20 years. To assess the scientific evidence in a systematic fashion, the World Meteorological Organization and the United Nations Environmental Programme created the Intergovernmental Panel on Climate Change (IPCC); its charge was to provide an objective source of information about climate change. The IPCC is a scientific body, and its reports are based on evidence from within the scientific community. Contributions come from experts in all regions of the world and all relevant disciplines. Experts and governments review and approve the committee’s reports, adding credibility to its findings. After 17 years of study, the committee concluded, “Warming of the climate system is unequivocal, as is now evident from observations of increases in global average air and ocean temperatures, widespread melting of snow and ice and rising global average sea level.”<sup>4</sup> Rising sea levels are endangering low-lying

coastal communities and their economies. The IPCC also forecasted the effects of climate change on specific regions. In the northern latitudes, warmer temperatures will mean less snow and therefore less fresh water from melted snow. The reduction in fresh water will affect agricultural, industrial, and human needs. The damage to and depletion of fresh water supplies have profound consequences for businesses in the present and future.

The undeveloped and developed regions of the world have suffered environmental damage caused by humans. Overexploitation of resources has occurred at all stages of economic development. In undeveloped countries of the world, people living in poverty are using Earth's resources in unsustainable ways. Trees are cut for cooking fuel but are not replanted. Deforestation of the rain forests to grow crops has exposed thin topsoil to erosion. Once erosion occurs, the land is unusable for growing food or regrowing the rainforest. Many hundreds of acres of rainforest have disappeared and so has the biodiversity that they supported. This is a definite loss for humans because much of the world's medicines come from plants in the world's rainforests.

In developed countries, technology that has improved living standards comes at a cost to the environment. The use of fossil fuels to supply energy to factories has been quite damaging to the air, water, and land. The burning of coal releases not only carbon dioxide (CO<sub>2</sub>) but also dangerous pollutants such as mercury. Mercury that is released from the burning of coal falls on the land and in rivers. Fish in these rivers have become contaminated and unsuitable for human consumption. The disposal of industrial waste through either direct dumping into streams and oceans or agricultural chemical runoff has affected aquatic ecosystems. As freshwater streams and lakes are polluted, the supply of essential fresh water is greatly reduced. When local water is polluted, the cost of acquiring clean water from farther distances becomes prohibitive for the local communities.

The oceans have also suffered from human activity. Overfishing has reduced the wild fish populations substantially. By 2011, approximately 61 percent of the world's fisheries were fully fished.<sup>5</sup> This means these resources are being fished at their maximum sustainable limits. Another 28 percent of the world's fisheries were overexploited, depleted,



or recovering from depletion. In the short or medium term, their production cannot be expanded and more declines are likely. The loss of fish would mean substantial economic losses around the world. Coral reefs have also suffered damage from human activity. The reef fish are dependent on healthy coral to survive, and reef fish provide food and attract tourists to many areas worldwide. Annual revenues from fishing are nearly \$240 billion.<sup>6</sup> Research has shown that coral reefs also lessen the devastating effects of tsunamis as they come ashore.<sup>7</sup>

In developed countries, technology has hastened the overexploitation of resources because it allows for a faster extraction of natural resources and higher short-term profits. Too often the externalities (e.g., cost of postconsumer waste, air pollution) are not included in the cost of goods. Without the inclusion of externalities, it may appear that a company is profitable, but in fact the product costs are greatly understated. The economic consequences of environmental degradation are becoming more evident as reports of climate change gain acceptability. Companies, governments, and citizens are becoming increasingly aware of the interconnectedness of environmental, economic, and social issues that confront the planet. It has become evident that the quality of life on Earth is at stake now and will be in the future. Citizens worldwide are responding to the unsustainable business practices by demanding more corrective action from governments and businesses. Many businesses, governments, and citizens' groups have begun to respond in positive ways.

## What Is Corporate Sustainability and Who Cares?

*Corporate sustainability is a business approach that creates long-term shareholder value by embracing opportunities and managing risks derived from economic, environmental and social developments.<sup>8</sup>*

—Dow Jones Sustainability Indexes (2015)

*The continual improvement of business operations to ensure long-term resources availability through environmental, socially sensitive, and transparent performance as it relates to consumers, business partners, and the community.*

—Deloitte (2007)

*While corporate sustainability recognizes that corporate growth and profitability are important, it also requires the corporation to pursue societal goals, specifically those relating to sustainable development—environmental protection, social justice and equity, and economic development.*<sup>9</sup>

—Mel Wilson, Senior Manager of Sustainability Practice,  
PwC (2003)

The definitions of corporate sustainability have in common the long-term focus on an organization's environmental, economic, and social impacts. Another key aspect is the interactive effect of environmental, economical, and social dimensions. Companies' actions affect a wide range of individuals, groups, and countries. Because the impacts affect everyday life for people around the world, long-term corporate sustainability is important to the sustainability of the world economy and society.<sup>10</sup> The movement to incorporate sustainability into business practices is a response not only to counter the negative environmental effects of industrial and commercial activity but also to evaluate the economic and social effects of industrial and global population growth. The globalization of business operations and occurrences of financial frauds have increased the public's scrutiny of corporations. The pressure for corporations to reassure the public of their good behavior has increased. As businesses have extended their reach around the world, these organizations are paying attention to their stakeholders as well as their stockholders. Business managers are beginning to see that this approach to conducting business has to become a part of the strategy for their entire company in order to prosper in the future.

Individuals, nations, and businesses are responding to the warning signs that human activities are depleting and damaging many vital natural resources that support human life. There is increased demand for all organizations to be more transparent in how they treat the environment, how they govern themselves, how they treat their employees, and how they treat their communities. Corporate sustainability has become such a major issue that the big four international accounting firms (KPMG, Deloitte, Ernst & Young, and PricewaterhouseCoopers [PwC]) are

devoting substantial resources to assist their clients. These accounting firms are becoming key players in sustainability-related services and are undertaking surveys to determine the level and quality of sustainability reporting activity. Examples of their work include the KPMG Survey of Corporate Responsibility Reporting, the Deloitte CFO Survey: Sustainability and the CFO, PwC's Sustainability CEO Survey, and Ernst & Young's Six Growing Trends in Corporate Sustainability.

### **Who Cares?**

A *stakeholder* is anyone that is affected by a company's economic, environmental, and social activities. Common examples of stakeholders are employees, lenders, investors, customers, suppliers, governments, and communities. The relationship between stakeholders and companies can be a mutually rewarding one.<sup>11</sup> Companies depend on their stakeholders to succeed, and stakeholders rely on the companies for something in return. Although each group of stakeholders has a different relationship with the company, their mutually beneficial relationship is a driving force for sustainability.

Companies want motivated and dependable workers who will work ethically, carefully, and honestly. In return, employees expect to be paid fair wages, provided appropriate work tools, and trained to do their work. Employees that are satisfied with working conditions and the ethical conduct of their employer are more likely to work to their full potential. If companies do not provide what workers expect, it will be more difficult to attract and motivate workers to do their best for the business. Even if working conditions are not optimal, many workers stay in their jobs but at a cost to the company. Workers who remain are likely to be less motivated to work in the best interests of the company. They may reciprocate the company's attitude: "If they don't care, why should I?" Reduced productivity, reduced work quality, lengthy strikes, and other disruptive labor actions are often the consequences of worker dissatisfaction.

A company's relationship with its investors and lenders is critical to obtaining affordable funds for operations and expansion. Companies want a long-term, stable relationship with investors and lenders. To build this relationship, companies have to show that they have effective and

ethical managers. The company's governance system needs to be in place and working. In turn, investors and lenders want their investments to be in going concerns with a profitable return. The more transparent a company's efforts are to achieve good management, ethical behavior, and profitability, the better it is for all parties.

Suppliers and companies that they supply have a symbiotic relationship. They need each other to generate revenues and to stay in business. In order to maintain a vibrant relationship, each must meet the other's needs. Without safe and good quality products delivered on time and at the desired location, companies cannot satisfy their own customers' demands. Suppliers need to offer fair prices and appropriate redress for faulty products for companies to return. By the same token, companies need to provide customers with the same commitments—fair prices and appropriate responses to complaints. To maintain a long-term, mutually advantageous relationship, neither a supplier nor a company should abuse their economic power.

Governments and communities are important stakeholders in that they provide companies with the authority to operate. Governments need companies to pay taxes in order to provide services such as fire protection, a police force, and water and sewer management. Adequate fire and police protection reduces risks from physical damage. These services are part of what companies expect in order to conduct business in a safe environment. Adequate water and sewer systems are necessary for health reasons. Governments can provide a stable legal system that provides companies with an orderly approach to conducting business. For communities, companies provide payroll funds that add to the local economy. This includes pay for workers, local suppliers, and contractors. To maintain a good relationship with communities, companies often donate resources (e.g., funds, time, products) to local charitable organizations, schools, and hospitals. Companies also must be good citizens by avoiding pollution of the local environment. If pollution does occur, the company must respond quickly to problems that they create.

A company's impacts on stakeholders can be positive or negative. The *economic dimension* of sustainability is how stakeholders are affected in a material, financial way. Wal-Mart, the largest retailer in the world, with 11,000 retail units in 27 countries, provides a good example of the

positive economic impacts of a company's operations.<sup>12</sup> Wal-Mart has become such a dominant force in the retailer market that evidence of the company's impacts is readily available. When Wal-Mart opens a new store in a community, all members of the community become stakeholders. On the positive side, Wal-Mart's strategy of price leadership continues to be a successful strategy for its customers and investors. For consumers seeking low-priced goods, the company provides a low-cost option for their customers. For stockholders seeking a growth stock, Wal-Mart's performance in growth and profit has been quite good in recent years. In the company's fiscal year, which ended January 31, 2014, net sales totaled \$473 billion, a \$7.5 billion increase over 2013 sales.<sup>13</sup> The financial impact on stockholders was an earnings per share of \$4.85 for fiscal year 2014. In February 2015, the company announced its 41st consecutive annual dividend increase to \$1.92 a share.<sup>14</sup> The company planned to open 385 to 425 new retail units in 2015.<sup>15</sup> The construction and opening of new stores creates jobs. Wal-Mart employs approximately 2.2 million people worldwide.<sup>16</sup> This statistic alone illustrates that the company's total payroll has a significant economic impact worldwide.

Negative economic impacts can be seen when companies monopolize an industry by unfairly driving out competitors and illegally fixing prices within the industry. These impacts are detrimental because they result in lost financial opportunities for those who have had to pay too much for a product or service. When U.S. industrialization began to accelerate after the American Civil War, many industrialists (e.g., Cornelius Vanderbilt, Andrew Carnegie, John D. Rockefeller, J. P. Morgan) of the time in the railroad, steel, oil, and communications industries established monopolies. The industrialists acquired and suppressed their competitors often by engaging in unfair business practices. Without strong competitors or antitrust laws, they could control various markets essential to the entire economy. A good example is the monopolistic activities of Standard Oil Trust in the late 1800s. In 1882, John D. Rockefeller established the Standard Oil Trust, which controlled more than 90 percent of the oil-refining capacity and most of the oil-marketing facilities in the United States. In an attempt to reduce the power of monopolistic companies, the U.S. Congress countered these monopolies with antitrust legislation. The Sherman Antitrust Act (1890) was enacted to limit monopolies, and

the Clayton Act (1911) allowed individuals to sue companies for injuries to business or property from actions covered under the antitrust laws. In 1909, the federal government filed suit against Standard Oil under the Sherman Antitrust Act for sustaining a monopoly and interfering with interstate commerce. The company was accused of raising prices for its customers in markets without competition and lowering prices below cost to suppress existing competitors. In addition, the company was charged with obtaining illegal rate reductions from the railroad industry. In 1911, the U.S. Supreme Court ordered Standard Oil to be split into 34 separate companies with different boards of directors.

Negative economic impacts of companies that harm fair competition continue to be a problem. Since the enactment of the Sherman Antitrust Act in 1911, the U.S. Department of Justice (DOJ) has prosecuted companies that engage in monopolistic behavior such as illegal price fixing and other activities that exclude competitors through illegal means. The DOJ's mission for the last six decades has been "to promote and protect the competitive process—and the American economy—through the enforcement of the antitrust laws."<sup>17</sup> Between 2001 and 2009, the Antitrust Division of the DOJ collected more than \$3.5 billion in criminal fines from more than 120 corporations and 160 individuals in their criminal antitrust prosecutions.<sup>18</sup> Among the corporations prosecuted during this period was Samsung Electronics, a manufacturer of dynamic random access memory (DRAM). Samsung and its U.S. subsidiary pleaded guilty and were sentenced to pay \$300 million in fines for their involvement in an international DRAM price-fixing conspiracy in 2005. Between 2009 and 2015, over \$4.9 billion in criminal fines were collected in the 365 criminal cases filed.<sup>19</sup> Among these cases was the London Inter Bank Offered Rate investigation. A conviction against Rabobank resulted in a collection of \$325 million in fines for manipulating interest rates.

The *social dimension* of sustainability is about companies' social impacts on employees and communities. Workers are at the core of an organization, and how it treats its workers with regard to compensation, safety, and training has direct effects on their well-being. The positive side to this dimension involves organizations providing fair wages, safe work environments (e.g., protective gear, adequate ventilation), and appropriate job training. The positive impacts on the community

would be where the organization contributes workers' time, money, or products to support the needs of the community. To illustrate, Baxter International Inc., manufacturer of medical equipment, pharmaceuticals, and biotechnology, donated \$34.29 million in products along with \$27.9 million in cash in 2013 to communities around the world.<sup>20</sup> Baxter also responds to victims in need after natural disasters such as earthquakes by donating medicines and supplies.

Some negative social impacts would be a disregard for the well-being of workers. For example, violation of workers' rights has been a consistent legal issue for Wal-Mart. In December 2008, Wal-Mart settled 63 wage-and-hour lawsuits in federal and state jurisdictions in 42 states and agreed to pay between \$352 and \$640 million to workers for a variety of illegal tactics.<sup>21</sup> These tactics included erasing workers' time from time cards, forcing employees to work off the clock without pay, and denying workers lunch and other breaks that were guaranteed by state laws or promised by the company. In December 2014, the National Labor Relations Board ruled that California Wal-Mart managers disciplined illegally employees for striking and threatened unlawfully a store closure if employees joined together to seek higher pay.<sup>22</sup> By violating workers' rights over the years, it has cost Wal-Mart in dollars and negative publicity.

Another direct social impact on employees and communities has been Wal-Mart's approach to employee health care benefits. The company had required their full-time workers to wait six months to be eligible for health care benefits and part-time workers to wait two years. Workers were responsible for 33 percent of the premiums, which ranged from \$30 a month for an individual to \$230 for a family. If workers were eligible for health care insurance coverage, their premiums were expensive relative to their wages. There are several examples of the social consequences of Wal-Mart's health care policy that demonstrate the social impact on not only the company's workers but also the surrounding communities. In Georgia, officials discovered that in the state's health program for children, taxpayers were funding close to \$10 million annually for more than 10,000 children of Wal-Mart's employees.<sup>23</sup> In another state, a North Carolina hospital found that of 1,900 patients self-described as Wal-Mart employees, 16 percent had no insurance at all and 31 percent were on Medicaid. Taxpayers in California were funding the health care costs of

uninsured Wal-Mart workers in the annual amount of \$32 million.<sup>24</sup> In response to growing criticism, the company changed its health care policy. Full-time employees waited 6 months to become eligible for health care coverage, and part-time workers waited 1 year.<sup>25</sup> Benefits for part-time workers did not last. By 2014, citing its efforts to cut rising health care expenses, Wal-Mart eliminated health care insurance coverage for 30,000 of its part-time employees.<sup>26</sup>

Consistent reports of Wal-Mart's mistreatment of workers have taken their toll. One consequence is that labor unions have supported boycotts of its stores: "The criticism stung, but more important, it began to affect the bottom line. Between 2000 and late 2005, Wal-Mart's stock fell 27 percent."<sup>27</sup> The lawsuits and negative news stories have been costly in financial and public relations terms. The legal expenses are the most obvious financial cost. In addition, Wal-Mart has engaged in an expensive public relations campaign to repair its reputation and counter the public image that the company mistreats its workers. These negative social impacts are connected directly to the financial impact.

The *environmental dimension* of sustainability is the third component of sustainability. Stakeholders that are affected by the environmental impacts of a company include consumers, suppliers, neighbors, and government agencies. Wal-Mart stores affect the environment in many ways. Because of its size, Wal-Mart's operations have profound positive and negative effects on the environment. When Wal-Mart decides to engage in proenvironmental behavior that reduces the company's costs, the decisions have dramatic positive environmental effects all over the world. Wal-Mart installed compact fluorescent light bulbs (CFLs) in ceiling fan displays in their stores to reduce their energy costs and promote the sale of CFLs to the public. The CFLs consume 75 percent less energy than a traditional incandescent bulb and last from five to seven years. The energy cost savings to Wal-Mart is \$7 million a year. In 2005, the company set a goal of selling 100 million CFLs by the end of 2007. This goal was met by the middle of 2007, and by the end of 2008, the total sales of CFLs had reached over 137 million. In addition, Wal-Mart claimed that the use of the over 137 million bulbs would prevent the release of 25 million tons of carbon dioxide or the equivalent of removing 1 million cars from the road.<sup>28</sup> In 2014, the company announced plans



to install LED ceiling lighting fixtures for new supercenter stores in the United States, stores in Asia and Latin America, and in Asda stores (a U.K. subsidiary of Wal-Mart).<sup>29</sup> Over 10 years, these fixtures are estimated to save 620 million kWh. To complement this energy efficiency, the company's goal is to have 100 percent of its energy for its buildings supplied by renewable sources. Wal-Mart is investing in its own solar and wind projects along with contracts from renewable energy providers that supply power purchase agreements. The company buys renewable sourced energy at a fixed rate over a 10 to 15 year contract. By 2014, renewable energy constituted 24 percent of its energy source.<sup>30</sup> Wal-Mart expects that because of its size it will be a driving force in increasing the supply of renewable energy.

Another way that Wal-Mart saves costs is from the efficient use of energy in its semitrailer trucks. The company installed auxiliary-power systems in its fleet so that drivers can shut off their engines and still run their air conditioners to cool the products.<sup>31</sup> Wal-Mart saves \$25 million in energy costs every year along with a 100,000-ton-a-year reduction in greenhouse gases (GHGs) from these trucks. The company estimates this reduction to be the equivalent of taking 20,000 cars off the roads. Suppliers are also affected by a company's environmental decisions and actions. For example, in 2009 Wal-Mart launched The Sustainability Index in a collaborative effort with The Sustainability Consortium. The Sustainability Index provides a tool to track the sustainability of products all along the supply chain. As part of its efforts to reduce GHG emissions in its supply chain, Wal-Mart in partnership with the Environmental Defense Fund used the Sustainability Index to get cooperation from its supply chain and eliminated 7.575 million metric tons of GHG by the end of 2013.<sup>32</sup>

On the negative side, Wal-Mart's practices across the country have been in violation of federal and state environmental acts. In May 2013, Wal-Mart agreed to pay nearly \$82 million in fines for improperly dumping hazardous waste in California and Missouri.<sup>33</sup> Beginning in 2003, California Wal-Mart workers had thrown bleach and fertilizer into the garbage or local sewer systems instead of treating them as hazardous waste materials. In Missouri, damaged returned goods such as pesticides were mixed with other products and prepared for resale without required

proper registration or labeling. In the end, Wal-Mart pleaded guilty to charges for six counts of violating the Clean Water Act in California and one count of violating a federal law against pesticide disposal in Missouri. Although the individual fines may not have a material financial impact on the company, the repeated negative publicity damages its reputation.

## **What Is Corporate Sustainability Accounting and Reporting?**

*Sustainability accounting* refers to information management and accounting methods that are designed to make and provide high-quality information to assist an organization in becoming sustainable.<sup>34</sup> Sustainability accounting systems provide managers with relevant information to strive toward sustainable development. Sustainability reporting provides users with economic, social and environmental impacts to help manage change toward sustainable development.<sup>35</sup> Any type of organization—profit, government, nonprofit—regardless of its product (a tangible product or a service) can measure and report its impacts. Government agencies, service, and nonprofit organizations have impacts on the environment through their use of paper, energy, and transportation. Sustainability accounting information is useful for both external and internal users. For external users, sustainability reports provide a more transparent view of a company's environmental, economic, and social impacts. Stakeholders can gauge companies' sustainable activity in a specific period and over time. If a sustainability report provides information about a company's annual emission of GHGs, stakeholders can evaluate these reports to assess the company's progress toward lowering emissions. For internal users, sustainability reports assist the company in identifying and managing the full range of corporate sustainability impacts from processes, products, services, and activities.<sup>36</sup>

The environmental dimension encompasses the reporting of an organization's material impacts on the air, water, and land. For a manufacturing firm, the assessment of impacts should include the entire life cycle of the product from development to final disposition. In the product development stage, design decisions concerning the choice of raw materials and production processes can save costs and reduce a firm's

environmental risks. For example, Interface Inc., an international carpet and upholstery manufacturer, designs carpet tiles that use compostable raw materials. Interface Inc.'s concern for the environment covers not only the raw materials but also the installation and disposition of the carpet tiles. The company developed a line of carpet tiles called Tac Tiles that would adhere without glue. The carpet system is designed so that the tiles adhere together rather than to the subfloor. The system floats above the floor; adhesives with volatile organic compounds have been eliminated. Interface Inc.'s cost savings occur with raw materials and the reduced risk of environmental damage. Another advantage of carpet tiles is that they allow for easy replacement of only worn tiles rather than the entire carpet in a room. By reporting the type and quantity of raw materials purchased, GHG emitted, water used, and solid wastes generated, organizations can measure and exert control over the negative impacts they may cause during the design and production of their products. These evaluations can help organizations choose potentially less costly alternatives that pollute the environment. Raw materials with toxic ingredients carry the risks of spills and improper discharges into the environment. These spills are dangerous for people and natural resources in the surrounding communities. In addition to the physical danger and damage, legal fines for spills and the resulting cleanup are costly. These costs and liabilities can affect a company's profits.

In the *social dimension* of sustainability reporting, an organization reports its impacts on its employees (human rights and labor practices), consumers (product responsibility), and society in general (community contributions). Nike is famous for its sports equipment and apparel and for its use of contractors that employed children in the 1990s. After the revelation that child labor was used to manufacture its products, Nike faced a public relations nightmare. Since that time, the company has made it a mission to eliminate the use of child labor and to monitor its suppliers' factories. After many years of public criticism, Nike became the first business to disclose the names and locations of its entire supply chain, including the names and locations of more than 700 factories that produce its products. This disclosure was included in the company's corporate responsibility report.<sup>37</sup>

In the *economic dimension* of sustainability reporting, an organization reports its material financial impacts on communities, employees, governments, charities, and others directly affected by its operations. HP, producer of computer hardware and software products, is a case in point as it reported in its 2014 Living Progress Report net revenues of \$111.5 billion, which 65 percent comes from outside the U.S. borders.<sup>38</sup> HP's workforce consists of 302,000 employees across the world. It also disclosed where its economic impacts from purchasing affect its value chain by revealing the amounts spent with its U.S. suppliers categorized by small, minority-owned, women-owned, and veteran-owned businesses.

### ***History of Reporting***

Since the 1960s, investors have been demanding more than financial information to make investment decisions. Sustainability reporting is part of a long history of investors' investment strategies that include evaluation of both nonfinancial and financial performance. Socially responsible investing is an example of nonfinancial information being used to determine the desirability of particular investments. As a protest against the Vietnam War in the 1960s, many investors rejected funding weapons-manufacturing firms. In addition to rejecting profits from weapons, many people sought to avoid companies that produced or promoted physically or psychologically harmful products and services such as tobacco, alcohol, and gambling.

During the last half of the 20th century, the detrimental effects of environmental pollution motivated many people to take action against those responsible. Evidence of the dangers of air and water pollution was becoming widely available. The visible smog in large cities was due to the increase in automotive traffic and industrial activity. Industrial air pollution from manufacturing processes and the burning of coal increased as businesses expanded. In October 1948, an air pollution disaster killed 12 people and sickened thousands of people and animals in Donora and Webster, Pennsylvania. Smoke from burning coal and emissions (sulfur oxide, carbon monoxide, and particulates) from a zinc smelter and steel mill were trapped in a valley in southwest Pennsylvania. A temperature

inversion caused the polluted air to stay over this area for five days. Fifty more people died in the month following the disaster; many survivors were ill for years and died premature deaths.<sup>39</sup> Reaction to this disaster resulted in the enactment of air pollution legislation in the 1960s and 1970s. Rachel Carson's book *Silent Spring*, published in 1962, brought to public view that the pesticides being used all over the United States had not been evaluated for human and animal safety. Her book and testimony before Congress were instrumental in the establishment of the U.S. Environmental Protection Agency in 1970. Evidence of the dangers of air and water pollution was becoming widely available. In 1969, the Cuyahoga River in Cleveland, Ohio, caught fire from an oil slick and debris that had collected in a bend of the river.<sup>40</sup> The fire lasted only 30 minutes, but pictures of the fire with a huge column of black smoke were dramatic and widely distributed. Because fire on a river is an unexpected sight, publicized images had a powerful impact. The images of the fire became a symbol of water pollution problems in the United States. In fact, the fire in 1969 on the Cuyahoga was only one among many on the river over a century. There had been river fires in other industrial states such as New York, Michigan, and Maryland. Publicity of industrial pollution and public awareness of growing pollution of air, land, and water played a role in the passing of the federal environmental laws in the 1970s. These laws changed how lawsuits against companies could be initiated by greatly expanding the enforcement powers of federal government and the public. Some of the statutes encouraged suits from citizens and enabled attorneys to recover their fees from the federal government.<sup>41</sup> In the 1980s, companies that had caused major environmental disasters were motivated to produce environmental reports to counter negative publicity.

By the 1990s, the globalization of business entities drew attention to the impacts that large corporations had around the world. News reports of poor working conditions, the use of child labor, and corruption had many companies on the defensive. To counter the public's negative perceptions of big business, many large companies began to engage with their stakeholders and to issue corporate responsibility reports. More sustainability reports surfaced because companies began to see the benefits of engaging with their stakeholders. For most companies, their reputation is considered a resource that takes many years to build and a short time

to lose. It was better to be proactive with stakeholders rather than risk having to react to bad publicity.

Many companies have incorporated sustainable development into their strategy because top management believes that it is the right thing to do. Interface Inc. is a prime example. Ray Anderson, the company's founder, recalls that his company did not pay serious attention to its use of Earth's resources or the damage being inflicted by the company's production processes in its first 21 years in business.<sup>42</sup> The carpet industry was heavily dependent on petroleum for its raw materials, which were not environmentally friendly in terms of production or postconsumer disposal. The company's approach was to obey necessary laws and regulations and stay focused on growing the business. Anderson was personally inspired when he read *The Ecology of Commerce* by Paul Hawkins. In 1994, Anderson changed the company's business model from one that only took from the earth to one that is restorative. Anderson realized that his company's successful transformation could inspire and influence others, so in 1998, he published an account of his epiphany in his book *Mid-Course Correction*.<sup>43</sup> Even in retirement, he continued to give speeches worldwide and write other books about the urgent need for businesses to become sustainable. He had made achieving sustainability not only his company's mission but also a personal one to teach others about its urgency.

Companies have discovered that publicizing their positive social and environmental behavior has financial rewards. They can better manage their costs and attract attention to their positive behavior. As more investors learn about the positive results of sustainable development, they are eager to reward companies for protecting the environment, human rights, and animal rights. Many companies realize that working within environmental laws and going beyond compliance were more cost effective than not. These benefits are more than anecdotal. In 2014, a systematic examination of 190 academic research studies showed that companies with active sustainability business practices had better economic results; this was true for both operational and investment performance.<sup>44</sup>



## CHAPTER 2

# Why Should an Organization Report on Sustainability?

Sustainability reporting is not a legal requirement in many countries, but there are many important reasons to do it. Organizations can use their reports to help determine if their operations are reaching a more sustainable level. How they use these reports depends on several factors. In the normal course of operations, organizations select relevant information for decision making based on their mission, strategy, and organizational form. The organizational form (e.g., public or private companies, nonprofit organizations, government agencies) often influences how information is used. In privately held companies that choose to become more sustainable for ethical reasons, sustainability reporting can assist them in their efforts. If sustainable development becomes a part of their mission and strategy, the companies can use sustainability accounting and reporting as a managerial tool to assess their progress. It can be incorporated into other nonfinancial management systems such as the balanced scorecard to help align business operations to the mission and strategy of the organization. Sustainability reporting is also relevant for nonprofits and governmental agencies that are committed to sustainable development. These groups may be even more inclined to show by example that they are behaving in sustainable ways. This can be especially helpful to better manage resources in times of budgetary constraints. As more countries pass climate change legislation, sustainability reporting can help organizations comply with these laws. By the end of 2014, 99 countries, which produced 93 percent of the world emissions, had passed 804 climate change laws.<sup>1</sup> The enactment of these laws has doubled every five years since 1997. For public companies, sustainability reporting is useful not only for internal communication of progress toward sustainable development but also for external communication. All organizations can



use their reports to help determine if their performance is reaching a more sustainable level, which benefits everyone.

## Internal Benefits

### *Unifying Internal Management*

As organizations seek to address sustainable development, one benefit is establishing a unifying approach to management. When organizations incorporate sustainability into their mission and strategy, they have the opportunity to link the entire organization's activities to this theme. For example, Interface Inc. has made sustainability a major theme of its business. Its mission, Achieving Mission Zero, is dedicated to sustainability: "Our promise [is] to eliminate any negative impact Interface Inc. has on the environment by 2020."<sup>2</sup> To fulfill this mission, the company continually improves its products and processes to reduce its environmental and social impacts. Its approach is to foster a culture of innovation that permeates the entire company. By incorporating life-cycle analysis into the management of its products' development, production, and disposal, the company has devised an interesting model for its carpet tiles. When portions of the carpet become worn, Interface Inc. replaces only those tiles. In this way, Interface Inc. has control over the disposal of its used product. Instead of going to the landfill, the worn tiles are either remanufactured or, in some cases, composted. In 2014, 49 percent of Interface's raw materials were from recycled or renewable sources.<sup>3</sup> The carpet that can be composted is made from a corn-based material (polylactic acid), hemp, flax, and wool.

Many performance indicators for sustainability are nonfinancial and can be adapted to a particular organization. The use of a sustainability balanced scorecard is one way of linking an organization's strategy to its activities and ensuring that environmental, social, and economic dimensions are covered.<sup>4</sup> This adaptation of the balanced scorecard created by Kaplan and Norton is based on cause-and-effect relationships that tie sustainable development measures to the organization's overall strategy for sustainable development.<sup>5</sup> The four perspectives of the balanced scorecard—financial, customer, learning and development, and

internal business processes—can be designed to incorporate a sustainable development strategy. It could serve as a planning tool to determine a sustainable strategy and a strategy map to implement it. One of the proposed advantages is better internal acceptance of the sustainable strategy.

## Operational Benefits

Improving operations is one benefit of sustainability reporting. Major improvements can come from focusing on *energy, materials, and water*. *Energy* use has a major environmental impact, and improving energy efficiency can be a significant cost savings. There are many ways to identify where energy use can be reduced. Looking at accounting information can help to identify energy costs. Evaluating the details of various invoices, processes, and compliance costs is also a useful approach.<sup>6</sup> Energy usage meters should be analyzed for energy consumption patterns and ways to reduce consumption. As a means to assure accountability, an employee should be assigned responsibility for energy reduction initiatives. In addition, employees in the different business functions (sales, marketing, operations, and purchasing) can provide valuable information about energy use in their respective areas. In effect, this approach puts the spotlight on energy consumption patterns that need improvement and the cost savings from improving those patterns.

If an organization is unable to conduct energy audits and institute cost-saving initiatives, management should consider engaging an energy service company (ESCO) to perform this function. An ESCO provides energy efficiency and other services where performance contracting is a major part its services business.<sup>7</sup> The U.S. ESCO industry began in the 1970s as a response to the oil shortages of the time. The industry grew at 20 percent a year from 1990 to 2000 and slowed down to a 3 percent growth rate from 2001 to 2004. The slowdown was due to a variety of factors, such as industry consolidation, the Enron scandal, and the expiration of federal legislation affecting the industry. The industry has come back and increased 9 percent a year from 2009 to 2011 and is expected to continue to grow. In terms of revenues, the industry earned \$6 billion in 2013, and in 2020, the revenues were estimated to be

\$11 to \$15 billion.<sup>8</sup> According to the National Association of Energy Service Companies, ESCOs not only save energy costs for clients, but they also contribute to the U.S. economy by creating new jobs within ESCOs, through contractors, and in other indirect supporting roles. ESCOs are businesses that usually assume the role of project developers for projects intended to increase energy efficiency and decrease maintenance costs. These companies develop and install energy-efficient projects for their clients. Examples often include high-efficiency heating and cooling systems, high-efficiency lights, and centralized energy management systems. Because many of these projects involve a substantial initial cost for their clients, ESCOs often secure financing from third parties (e.g., banks). The clients also benefit from performance contracting that is a critical part of the energy efficiency business. Performance contracting requires that the ESCO provide costs savings for their clients in order to be compensated for their work. Their fees are contingent on how much they save their clients. Energy savings are usually directly tracked as part of the monitoring and verification system that is based on approved engineering protocols.

Energy savings can also be obtained by recapturing waste heat from manufacturing plants, utility companies, and university power generators. There are several companies that have found this business to be profitable. Recycled Energy Development (RED) is one that provides this service. The company is able to produce both heat and energy from energy that is wasted from industrial facilities or other large institutions. In a factory, the heat or steam produced in a manufacturing process can power a factory's electrical needs. Since 1986, Turbosteam, a wholly owned subsidiary of RED, has set up over 180 energy capturing systems. The company estimates a reduction in CO<sub>2</sub> emissions of more than 4 million tons with energy savings to its clients well over \$200 million.<sup>9</sup> Thermal energy is another source of power. For example, excess heat from the production of steel can be captured and put to another use. Numerous industries—chemical, wood, petroleum, food processing, pulp and paper, textile, automotive, and lumber milling and drying—have found this approach to be advantageous. Institutions such as colleges, hospitals, military bases, prisons, and municipal steam plants have benefited from

this technology. A few of Turbosteam's customers include Wright-Patterson Air Force Base, Carnegie-Mellon University, and Kimberly-Clark.

For manufacturing firms, managers have the opportunity to systematically assess what *materials* they are using and how they are processed. They should seek to replace raw materials that are not sustainable. This includes substituting nonhazardous materials in place of hazardous ones. This action can reduce waste and risks. Waste reduction cuts down on disposal risks. If the eliminated waste is from hazardous materials, the rewards are twofold—elimination of expensive hazardous waste disposal and elimination of the potential liability from spills. Improving the efficient use of resources can increase productivity. Time spent on disposing of wasted resources can be more effectively used in the production process. As a result, cycle times can be reduced. Attention to improving production processes can lead to innovations in the product or processes. New technologies can be developed or acquired to improve production. Waste reduction with sustainable materials should also be a priority.

*Water* usage is another environmental concern with substantial cost implications for companies. Fresh water is a scarce resource that needs protection from waste and contamination. Evaluating water use and reducing its use can cut costs. Organizations pay for both the use and disposal of water. As a means to conserve water, many car washes have instituted systems that reclaim their rinse water to be reused in the initial wash cycle. In some systems, all water is reused by reverse osmosis, where solid materials are removed by a filter. If the water cannot be reused in car washing, it can be used in landscape irrigation. Another way that water can be conserved is through a routine evaluation of the equipment and system. Water valves and nozzles should be checked for leaks and wear. In the example of the car wash, timers can shut off the spraying of rinse water in between cars. The conveyor system can be set up to allow more time to recapture the rinse water as it drips from the cars. The car wash can acquire high-efficiency washers to clean towels and can create rules for efficient use, such as only running full loads. In general, water efficiency can be obtained by small measures. At relatively minor costs, companies can install flow regulators on faucets, waterless urinals, and water-efficient

toilets. Growing native plants that are tolerant of local weather conditions reduces landscape watering.

### ***Financial Rewards***

Direct cost savings from more efficient uses of materials can result in financial rewards. One approach to efficient use of raw materials is a closed-loop manufacturing system where the same materials are constantly recycled in the system. Some manufacturing processes can be designed to recapture chemicals that are used in production. In the 20th century, most manufacturers followed the “cradle to grave” model where the end of a product’s life was at a landfill. In an era of mass production and consumption by billions of people, this model is not sustainable. The closed-loop system is often described as a “cradle to cradle” system. If closed-loop systems are designed properly, very little material escapes into the environment. What does escape is in quantities that can be absorbed by the natural environment without damaging it. If materials cannot be recaptured or scrap cannot be avoided, innovative ways to utilize waste materials in the production process can save costs. Scrap materials can be the source of additional revenue by selling it to other companies as is or making new products. An example would be a drapery manufacturer that uses scraps or seconds to make paint drop cloths to be sold in paint or hardware stores. Disposal costs are reduced, and revenues are increased. Financial rewards occur also when companies prevent the violation of environmental laws. “Compliance-only” is a short-run strategy that is not cost effective. Legal fees and fines can be reduced when a proactive approach is instituted. A proactive approach leads to a much less confrontational relationship with regulators.

### ***Organizational Rewards***

Organizational rewards can be obtained from sustainability reporting because it provides a framework of accountability that can be used to implement an integrative strategy of sustainability.<sup>10</sup> This enables an organization to integrate long-term economic, environmental, and social

aspects in its business strategies while maintaining its brands and keeping competitive. The integrative strategy should include the participation of all employees in the effort to achieve sustainability. Employee satisfaction is likely to rise when the entire organization is working toward sustainability. Workers want to work for a company they believe is doing the right things for the environment and society. They are more motivated to act in the best interests of the company if they believe that the company is doing good things. Working conditions also affect workers' productivity. Workers need to feel respected and protected from harm. Safe working conditions, protection of human rights, and appropriate job training are among the activities that can help a company become more sustainable. This long-term approach to doing business provides a stable work environment that is less likely to have high employee turnover. Companies that perform well on sustainability dimensions can attract talented people.

Sustainability reporting provides managers with a better tool for sustainability risk management. The report describes the company's sustainability risks, sustainability efforts, and risk-control systems. The sustainability risks that companies face include damage to the ecosystems (ocean, fresh water, forests, land, air), climate change, and resulting lawsuits. In order to prepare the report, companies have to gather the information that can help set benchmarks.<sup>11</sup> This information is useful for setting and achieving internal goals along with providing information to compare to the progress of other companies.

## External Benefits

An organization that seeks to become more sustainable for ethical reasons can set an example for other organizations. It can be recognized for its leadership by taking an active role in promoting sustainability through its actions. In addition, the organization can influence the development of standards for reporting and support platforms for engagement in sustainability efforts for others. Interface Inc. has assumed this position as a leader in sustainability. It declares it is committed to sharing its approach with other companies. It is actively using its innovations in sustainable manufacturing to inspire others to do the same.

Enhancing an organization's *reputation* is one of the major benefits of sustainability reporting. Reputation and brand value are intangible assets that bring the value of a company above the value of its physical assets. As companies establish the quality of their products and services, stakeholders come to view the company as trustworthy. This trust can be enhanced when the company engages its shareholders and reports how it is protecting the environment, its workers, and its financial health.

The *financial* benefits of sustainable development come from a variety of sources. A better-managed company has better access to investor capital. Investors will view sustainable companies as more attractive if the companies are concerned about the environment, employees, customers, and economic criteria. In a quest to be sustainable, organizations can develop new markets for their innovative processes or products that address sustainability issues. In striving to become sustainable, companies can create processes that could be marketed to other companies. The risk of ignoring sustainable development can be a loss of competitive edge. Competitors that can make the same products at a lower price and in an environmentally and socially friendly way are more apt to have a loyal customer base in the long run. They also are less likely to have environmental compliance problems.

Sustainability reporting encourages engagement with *stakeholders*. Communication with stakeholders allows interested parties to express their interests in and expectations of the organization. Organizations can use this opportunity to improve their relationship with their stakeholders. For the organization, a dialogue with stakeholders can help it address corporate governance, product safety, economic risks and opportunities, human rights, labor rights, and environmental protection. Reporting on the dialogue and the effects of this communication provides transparency that is critical to achieving trust with stakeholders. Governance is enhanced because the organization must provide details about how it protects against corruption and conflicts of interest. The organization has the opportunity to examine its anticorruption policies and ways to improve them. By publicly disclosing their policies and practices, organization officials can be held accountable for adherence to their policies. Discussions about product safety can help an organization examine its systemwide approach to safety, which affects both

workers and consumers. Workers and consumers can weigh in with their concerns. Investors can incorporate information from these reports into their investment analyses of the organization's risks and opportunities. Sustainability reporting can reveal how well the organization is poised to assess and address the risks that they face. Organizations can provide their sustainability progress to external rating groups to provide external assessment of their performance. Awards for sustainability reports enable an organization to be rewarded for the quality of their reports and performance. Public recognition adds greatly to their reputation.

### **Risks of Ignoring Sustainability**

There are several risks of ignoring sustainable development. One important risk is that of missing the opportunity to do the right thing for people and the planet. With many serious worldwide problems such as climate change, depletion of resources, and poverty, organizations are in a unique position to do something to mitigate their contribution to these problems. Putting off finding solutions to these problems to another generation may be too late. A quote attributed to Rabbi Hillel, influential Jewish scholar of the first century, seems apt: "If I am not for myself, then who will be for me? And if I am only for myself, then what am I? And if not now, when?"<sup>12</sup>

There also are the tangible risks that organizations confront on a daily basis. In industrial accidents, the loss of human health and lives are tragic events. Without safety precautions to prevent such tragedies, organizations are taking a large risk. When environmental accidents occur, they can result in medical costs, cleanup costs, and legal fines that are sometimes substantial. Public relations problems associated with environmental damage can be costly. If companies are sued, the legal fees and damage awards could be large. Another risk of ignoring sustainable development is failing to comply with federal regulations. Failing to comply can result in substantial fines and negative publicity. Companies' reputations are often hurt by the revelation of their lack of compliance. Negative news stories are hard to overcome. News reports often refer to a company's past environmental or social problems when discussing a current event.



The cost to repair the environmental damage can exceed the costs of prevention and monitoring. The grounding of the Exxon Valdez on Prince William Sound, Alaska, on March 24, 1989, demonstrates the huge cost of environmental damage. Eleven million gallons of crude oil spilled into the ocean along 1,200 miles of Alaska's coast. As the tanker was leaving Prudhoe Bay, Captain Joseph Hazelwood was intoxicated and let an inexperienced pilot navigate the tanker through a difficult passage of the bay. One of the issues in the case was that Exxon had knowledge of the captain's history of alcohol abuse. Cleanup efforts did little to stop the environmental damage to wildlife and their habitat. Crude oil can still be found on the beaches of Alaska's coastline. Cleanup costs for Exxon were \$3.4 billion along with compensatory damages of \$507 million paid to 33,000 Native Alaskans, landowners, and commercial fisherman. The environmental damage has lasted for over 20 years and has had a profound negative effect on the fisheries. The fishing industry (commercial and sport) has suffered a severe economic downturn.

Twenty years after the accident, the case for punitive damages was still in the courts. Thirty-three thousand commercial fishermen, landowners, and others whose livelihoods were harmed by the spill filed suit against Exxon for punitive damages of \$5 billion. In 1994, a jury in Anchorage awarded \$5 billion in damages to the plaintiffs, but a federal appeals court reduced the award to \$2.5 billion in 2006.<sup>13</sup> The case went to the U.S. Supreme Court, and on June 28, 2008, they ruled that ExxonMobil should be held accountable for approximately \$500 million. The Court ruled in ExxonMobil's favor by substantially reducing the punitive damage award, but the company incurred legal expenses and negative publicity for over 20 years.

Another risk of ignoring sustainability is inadequate disclosure of environmental risks and the resulting litigation threat. The risks and damage from climate change are significant. Major weather events (i.e., severe local storms, flooding, drought, tropical cyclones) in the U.S. have been increasing between 1980 and 2014. There have been 178 disasters each costing over \$1 billion in damage and costs; the total exceeds \$1 trillion.<sup>14</sup> Tropical cyclones make up 47.4 percent of the damage. Severe weather events disrupt businesses and affect investors' risks. Companies are required by the Securities and Exchange Commission (SEC)

to disclose their environmental risks in published financial statements. The disclosure involves information regarding climate change issues and potential material financial costs and liabilities from a company's environmental damage.<sup>15</sup> SEC regulation S-K 101 requires information on compliance with environmental laws and their material effects on earnings, competitive position, and capital expenditures. A good example is a company with facilities in European Union countries where greenhouse gas emission controls are required to meet various countries' environmental regulations. Expenditures for these controls are likely to be material and would have to be disclosed. Another SEC requirement, S-K 103, is the disclosure of legal proceedings involving environmental and health issues. S-K 103 states that any climate change litigation against individual companies must be disclosed. Proceedings that are pending or potential claims under administrative or judicial proceedings are to be included. S-K 303 requires a disclosure in a company's financial statements titled Management Discussion and Analysis that includes major trends, events, or uncertainties that are known to the company as potentially having a material effect on its financial condition. In an SEC Interpretive Release (17 C. F. 11989), this has been interpreted to include environmental trends and uncertainties. In 2010, as a response to a formal request by investors representing \$1.2 trillion in assets, the SEC issued an interpretive guidance document to clarify what was defined as material climate-related information in an effort to improve climate change reporting.<sup>16</sup>

Another risk of ignoring sustainable development is the danger of allowing human rights abuses to persist in an organization. Human rights abuses hurt individuals and society. The tolerance of abuse diminishes the moral fabric of society. For an organization, it can have a pernicious effect on everyone connected with it. In addition, the revelation of abuses can hurt a company's reputation and future business prospects. This was the case with Nike, the sportswear and equipment corporation. In the 1990s, the company hired contractors that employed child laborers in Pakistan and Cambodia to manufacture its sportswear and equipment. When this information was revealed, public reaction was negative. Many consumers boycotted Nike's products, and the company has had to work to win back its customers' trust. Nike suffered the consequences of what its suppliers were doing. As a result, Nike publishes periodic sustainability

reports in part to report how it is managing its human rights issues and to restore trust with its stakeholders. The company wants to be judged on its actions, not on perceptions. Nike's management considers transparency to be essential to rebuilding trust. Management continues to work to counter the perception that child labor is used in manufacturing its products. To that end, Nike was one of the first companies in the sports clothing industry to publish the locations of over 700 of its contracted factories.<sup>17</sup>

Competitive advantage can be lost if a company does not engage in sustainable behavior. If other companies are producing products with fewer resources and in more environmentally friendly ways, then companies that do not are at a disadvantage. Increased costs along with reduced profit margins can prevent companies from expanding and developing new products. Companies behaving in sustainable ways are able to use their sustainably innovative products and processes as a means to differentiate themselves from their competitors.

## CHAPTER 3

# How to Report on Sustainability

*Large and small companies alike have recognized that more effective management of stakeholder impacts and relationships is critical to success. The question of whether or why they should pay attention to issues of social and environmental responsibility is no longer up for discussion. The challenge is how.*

—Epstein (2008a)

U.S. law does not require companies to produce sustainability reports, but increasing numbers of companies are publishing these reports. Although generally accepted accounting and reporting principles for sustainability do not exist, corporate sustainability reports are frequently prepared using criteria determined by external organizations or by the company's internal guidelines. There are guidelines available for companies to use to engage in sustainable development and reporting. The International Federation of Accountants (IFAC) Sustainability Framework, the Global Reporting Initiative (GRI), the Integrated Reporting (<IR>) Framework, and Sustainability Accounting Standards Board (SASB) are discussed in this chapter.

### IFAC Sustainability Framework

IFAC is a global organization that works to promote high-quality practices in the accountancy profession. IFAC members and associates are for the most part national professional accountancy bodies. There are 2.5 million accountants from a variety of specialties such as public practice, industry, business, government, and academia represented in IFAC. Its independent standard-setting boards (International Auditing and Assurance

Standards Board, International Accounting Education Standards Board, International Ethics Standards Board for Accountants, and International Public Sector Accounting Standards Board) issue international standards on education and public sector accounting, ethics, auditing, and assurance.

The members of IFAC have concluded that accountants need to be more active in promoting sustainability as a long-term approach to business performance. To support this view and help accountants understand the different aspects of sustainability, the organization has issued its Sustainability Framework 2.0. The organization's framework for sustainable development has three interacting perspectives—business strategy, operational, and reporting.<sup>1</sup> The business strategy perspective focuses on a strategic approach such that sustainability is part of the vision and leadership, strategic goals, targets, discussions, and objectives. Sustainable development is combined with risk management, governance, and accountability. The strategic approach to sustainability is a way to cover all aspects of the organization. Rather than being an addition to the organization, sustainability has to become an integral part of it at all levels.

The operational perspective involves how organizations can meet strategic goals that incorporate sustainable development. This perspective covers all areas of performance and change management in pursuit of sustainable development. Because it often takes effort and time for organizations to achieve long-term sustainable development, the internal perspective offers guidance in achieving some ways to achieve quick and simple rewards in the short term. Efforts to achieve waste and energy reduction are prime examples of some short-term gains.

The reporting perspective takes the long term into consideration by the incorporation of some systematic issues. It recognizes the importance of improving the flow of relevant information to decision makers who need to make choices regarding the environmental and social dimensions of the business. Incorporating environmental and social aspects into the existing accounting and reporting system becomes an essential step. For example, the establishment of an environmental management accounting system would focus on the environmental impacts and costs of operations.

## GRI Sustainability Reporting Guidelines

The reporting guidelines of the GRI are the most widely used voluntary guidelines.<sup>2</sup>

The GRI is an international independent organization that helps businesses, governments, and other organizations understand and communicate the impact of business on critical sustainability issues such as climate change, human rights, corruption and many others.<sup>3</sup>

This organization began in 1997 with the intention of improving sustainability reporting, and the GRI criteria are poised to be the basis for generally accepted reporting standards. The GRI is collaborative in its approach to establishing guidelines. Many groups (businesses, accounting regulatory bodies, nonprofit organizations, investor organizations, and trade unions) are involved in creating ones that are globally accepted. In response to feedback from its stakeholders, in 2013, the GRI released the G4 Reporting Framework—its fourth comprehensive set of reporting guidelines. A sustainability report is a report published by a company or organization that describes the economic, environmental, and social impacts caused by its daily activities. The report also discloses the organization's values and governance model, and connects its strategy and its commitment to a sustainable global economy.

The GRI instituted a governance change in 2015 that separated its standard-setting activities from all other organizational activities. The separate governance structure for standard-setting includes a Global Sustainability Standards Board, a Due Process Oversight Committee, and an Independent Appointments Committee. In addition, an independent public funding base for standards activities was established and is separate from funding of other organizational activities.

GRI sustainability reporting guidelines have two major components—*reporting principles* and *standard disclosures*. The reporting principles consist of *principles for defining report content* and *principles for defining report quality*. Identifying report content is based on an organization's activities, impacts, and relevant expectations of its stakeholders. In determining

report content, the principles for guidance include stakeholder inclusiveness, sustainability context, materiality, and completeness. Report quality relies on balance, comparability, accuracy, timeliness, clarity, and reliability.

## Defining Report Content

The four components to defining content are stakeholder inclusiveness, sustainability context, materiality, and completeness. To know what is important to stakeholders, stakeholders and their reasonable expectations and interests need to be identified. The process of identifying, contacting, and engaging stakeholders should be documented in order to disclose this information in the report. Sustainability context is a consideration of the organization's sustainability performance at local, national, and global levels. For some organizations that operate within one country, their impacts may be limited to a local or national context. Determining materiality refers to determining what matters are important in achieving an organization's goals and managing its impact on society; a report should focus on material topics to better inform stakeholders. Both internal and external factors play a role in determining if a topic is material. The internal factors are based on the organization's mission and strategy. The external factors are related to how important the topic is to its stakeholders. The last component, completeness, refers to whether the material topics covered in the report are sufficient to represent the organization's economic, environmental, and social effects so that stakeholders can assess its performance. This involves the scope (range of topics), boundary (internal and external), and time (events within reporting period).

### *Quality*

The quality of a report is defined by the attributes of balance, comparability, accuracy, timeliness, clarity, and reliability. Balance promotes the reporting of both positive and negative indicators of sustainability so that stakeholders can see the organization's overall performance. Omitting the disclosure of an increase in emissions would harm the credibility of the report.

An illustration is a manufacturer of cement that expanded its production facilities and increased production without incorporating energy efficient processes and equipment; one would expect to see a reported increase in emissions. Omitting the increase from its report would affect stakeholders' ability to assess the company's actual environmental performance. To be useful to readers interested in performance trends over time and across organizations, the comparability attribute encourages consistent application of reporting presentations. This enables the comparison to benchmarks that are useful for improving performance. Because these reports will be used for decision making, they need to be reasonably accurate and in sufficient detail to assess performance. The threshold of accuracy needed may depend on the type of information and its intended use. For example, while the accuracy of qualitative information depends on how it is presented (e.g., detail, clarity, balance), the accuracy of quantitative information depends on measurement techniques and bases for calculation or underlying assumptions for estimates. Timeliness refers to publishing reports on a regular basis so stakeholders can have information with which to make decisions in a timely manner. Dated information loses relevance for current decisions. In addition to timeliness, the report needs to be clear; in other words, it should be understandable and accessible to stakeholders. This involves providing a level of information that is not overburdened with needless detail but at the same time aggregated in a manner that is user-friendly. The last attribute of quality, reliability, refers to whether the information in the report can be evaluated for its materiality and quality. This attribute has important implications for how the information is identified, measured, recorded, compiled, and disclosed. A good question to ask is whether the report can be examined to establish its accuracy.

## Standard Disclosures

There are two types of disclosures. They are *general standard disclosures* and *specific standard disclosures*. The general disclosures include *strategy and analysis, organizational profile, identified material aspects and boundaries,*



*stakeholder engagement, report profile, governance, and ethics and integrity.* The specific disclosures include *disclosures on management approach and indicators.* Organizations can report at one of two levels, which are core and comprehensive. The core level requires general standard disclosures and only one indicator for each material aspect. Organizations just beginning to report usually select the core level. The comprehensive level includes more detail in the governance sections of the general standard disclosures. In addition, all indicators in a material aspect must be reported. Examples of disclosures from companies that have sustainability reports using the GRI G4 guidelines are presented in the following discussion.

*General disclosures* are sometimes referred to as the “front” matter. In essence, these general disclosures lay the foundation for what and why specific disclosures are made. Strategy and analysis represent a high-level summary of the organization’s relationship to sustainability. In this summary, the CEO or chairman issues a statement regarding the organization’s overall vision and strategy for the short, medium and long terms along with key impacts, risks, and opportunities. For example, in 2013, United Parcel Service (UPS), the world’s largest package delivery company and supply chain management solution provider, published in its sustainability report such a statement from Scott Davis, chairman and chief executive officer. In the statement, he discussed the challenge of meeting the needs of an ever expanding global population into the mission and vision of UPS.<sup>4</sup> He acknowledged the role that UPS plays in the world economy with its job creation and business facilitation; this is coupled with the need to deliver packages as efficiently as possible to lessen the company’s environmental impacts. Because transporting packages is highly dependent on the use of planes and trucks, most of its environmental impacts are from greenhouse gas (GHG) emissions. Reducing these emissions is key to the company’s future success. UPS set emission reduction targets and evaluated them with its transportation intensity index, which is a comprehensive measure of its GHG emissions efficiency. Davis also remarked on the company’s contributions to society by revealing the number of employee volunteer hours and assistance with global humanitarian shipments.

The organizational profile provides a description of the organization’s characteristics such as its name, location, legal brands, products or services,

supply chain, and the scale of operations. In its 2014 sustainability report, MillerCoors, a joint venture of SABMiller plc and Molson Coors Brewing Company, disclosed the location of its headquarters in Chicago along with the names and locations of its eight breweries in the United States.<sup>5</sup> As part of the organizational profile, MillerCoors describes throughout its report ways in which sustainable supply chain management is an essential part of its operations. To reduce its environmental impacts, the report provided explanations of its ongoing sustainability initiatives with farmers, package manufacturers, and transportation providers. In particular, MillerCoors works with its barley growers to determine and help implement best practices for water and soil conservation. To illustrate scale of operations, the company reports to be the second largest beer manufacturer in the United States; earning nearly \$8.97 billion in 2013 in total revenues, MillerCoors' sales accounted for 30 percent of the beer sales in the United States and Puerto Rico.

Disclosures under identified material aspects and boundaries explain how an organization determines the report content and what the material aspects are within the boundaries declared for the report. Companies can take numerous approaches in determining report content. For example, UPS in its 2013 sustainability report took a multifaceted approach. In consultation with Business for Social Responsibility, a nonprofit organization specializing in CSR, UPS examined multiple sustainability reporting frameworks and interviewed stakeholder representatives and members of their management committee along with a variety of governmental and nongovernmental agencies, investors, and academics. As a result, over 50 issues were selected and categorized into broader topics such as GHG emissions and climate change. After final consultations and categorizations, senior leaders approved a list of material aspects that were disclosed in its sustainability report. Among the top issues were customer privacy, labor relations, energy, emissions and fuel supply, and management of third-party representatives.

Stakeholder engagement is a summary of the organization's stakeholder engagement process. Although the GRI G4 standards do not prescribe procedures for stakeholder engagement, they recommend that the process be based on systematic or generally accepted approaches. As a consequence, each organization can determine its own process in order

to understand its stakeholders' information needs. Accor, an international hospitality group, and Nestlé, a multinational food and beverage company, illustrate different methods of engagement. Accor operates hotels in over 90 countries with the stated commitment to nurturing fair and equitable stakeholder relations.<sup>6</sup> The company described its engagement process as one that is set up to evolve with time. In 2013, it identified its stakeholders with the support of corporate departments to determine the best type of dialogue needed to assess material topics. Based on what it learned in 2013, the company studied its leading stakeholders along with their key issues for inclusion in its 2014 report. The results from its stakeholder study was depicted as a map of major stakeholders and how they share in the financial value created by the company. To illustrate, at the top of the map Accor's customers (companies, travel agencies, individual guests, and groups) were shown as having contributed 90 percent of its revenues. Customers' major issues were listed as satisfaction, attentiveness, loyalty, appeal, innovation, and responsible tourism. Nestlé, by contrast, has been holding annual stakeholder forums in different international locations (Geneva, Washington DC, Kuala Lumpur, New Delhi, Nairobi) since it began its sustainability reporting in 2007. In 2014, the company cohosted one forum with the United Nations Conference on Trade and Development in Switzerland and convened two others in London and Jakarta, where representatives from academia, NGOs, industry associations, government, and international bodies attended. Nestlé's senior management participated in these forums.<sup>7</sup>

The report profile provides information about the reporting period, cycle, the content index, and assurance. As an example, Nestlé's 2014 sustainability reporting period covered its global operations (wholly owned companies and subsidiaries) for the year ended December 31, 2014. Because organizations can choose the order and style of presentation in their reports, the GRI content index is a necessary component that allows readers to find specific indicators. Nestlé put its GRI content index near the end of the report where the company chose to indicate its reporting cycle. Although not required, the GRI recommends external assurance as a means to provide internal and external readers with a level of confidence about the quality of the information provided. GRI G4 guidelines stipulate that reporting companies need to indicate whether and what

parts of the report have been assured. In its report, Nestlé identifies its external assurance provider as Bureau Veritas, a global nonfinancial audit and certification company, and indicates where the independent assurance statement can be found in its report.

Governance disclosures reflect an organization's governance structures and composition as a means to describe the workings of the highest governance body. This includes how the body is created and structured to support the organization's mission along with how the mission is connected to economic, environmental, and social dimensions. These disclosures are an overview of how the governance body sets the organization's mission, values, and strategy. In addition, the body's competencies and performance evaluation are described along with its role in risk management. Because the report is about the organization's sustainability, the organization needs to disclose the governance body's role in sustainability reporting and in evaluating economic, environmental, and social performance. Remuneration and incentives disclosures focus on policies created to support the aligning of the strategic goals of the organization with the interests of the stakeholders coupled with attracting, motivating, and retaining governing board members, senior executives, and employees. Weyerhaeuser, an international forest products company and producer of softwood lumber, pulp, and paper and packaging products, provided governance disclosures its 2014 sustainability report.<sup>8</sup> Details about the organization's governing board structure, responsibilities, remuneration, and incentives as they relate to sustainability are included in the report and referenced to the company's proxy statement. Weyerhaeuser also disclosed its ratio (19:1) of highest base salary to median base salary.

Ethics and integrity disclosures are an overview of an organization's ethics culture. These disclosures describe an organization's values, principles, standards, and norms in addition to the internal and external mechanisms for addressing unethical or unlawful behavior. In its report, Weyerhaeuser referred to its company code of ethics, which can be accessed on its website. The eighth edition of the code provides standards of conduct that cover international business conduct, intellectual property, safety, human rights, anti-trust laws, antibribery laws, and conflicts of interest along with other topics. All employees were reported to have attended regular ethics trainings, and those in specific roles were

required to complete a certificate of compliance. Disclosures about mechanisms for addressing unethical or unlawful behavior include avenues for seeking advice and reporting issues regarding unethical or unlawful behavior and matters of integrity. In addressing its mechanisms, Weyerhaeuser referred to its Ethics and Business Conduct Charter, which defines the accountabilities, roles, and responsibilities regarding ethics and business conduct in the company. In addition, the company reported providing an anonymous hotline administered by an independent third party for employees to seek advice and report relevant matters.

*Specific standard disclosures* include management approach and specific indicators. *Management approach* provides information about how an organization identifies, analyzes, and responds to its economic, environmental, and social impacts. Organizations can provide a generic disclosure that covers how an organization manages a wide variety of impacts along with specific discussion of how particular topics (e.g., labor) are managed. UPS's management approach for each of its material topics was disclosed in great detail throughout the report. For example, to explain how it managed labor issues, UPS described who in top management was responsible and how various matters were managed. The report revealed that John McDevitt, a member of the management committee and senior vice president of human resources and senior vice president of human resources and labor relations was charged with the responsibility for executing human resources policies and management approach. In addition, specific labor issues were presented to explain the organization's goals and performance, employee training and awareness, monitoring and follow-up, listening to employees, and external stakeholder feedback.

*Specific standard indicators* are reported under three categories economic, environmental, and social dimensions, which are further refined into aspects (or topics). Each organization determines the aspects that are material or important to its operations. There are four *economic aspects*, which are economic performance, market presence, indirect impacts, and procurement practices. The 13 *environmental aspects* include materials, energy, water, biodiversity, emissions, effluents and waste, products and services, compliance, transport, overall (total environmental expenditures and investments), supplier environmental assessment, and environmental grievance mechanisms. The social category is the only one organized by

subcategories. In total, there are 48 *social aspects* organized under the subcategories, which are labor practices and decent work, human rights, society, and product responsibility. Indicators are disclosures or metrics under each aspect.

*Economic aspects* (economic performance, market presence, indirect impacts, and procurement practices) focus on how an organization affects the economic conditions of its stakeholders and the economic systems at local, national, and global levels. Although information may be compiled from the organization's audited financial statements, these indicators are not primarily about its financial condition (assets, liabilities, and equities).

The nine economic performance indicators are labeled EC1 through EC9. These include direct economic value generated and distributed (EC1), financial implications and other risks and opportunities for the organization's activities due to climate change (EC2), coverage of the organization's defined benefit plan obligations (EC3), and financial assistance received from government (EC4). In its 2013 sustainability report, UPS presented its economic performance by reporting that it generated \$55.4 billion in revenues and that it distributed \$48.4 billion. Included in the distributions were \$28.6 billion in compensation and benefits for full-time and part-time employees and \$4.3 billion in taxes. UPS stated that its main economic risk due to climate change is a regulatory one. It expects that worldwide regulations to limit GHG emissions will increase for companies in the transportation sector; increased regulations are expected to result in increased taxes and fees. UPS sees this also as an opportunity to compete more effectively based on their proven abilities to manage and mitigate GHG emissions. For full coverage of its pension obligations, the company directed readers to its financial statements. Although it did not receive direct financial assistance from the government, UPS reported that it participated in public-private partnerships that involved tax incentives.

Market presence indicators cover ratios of standard entry level wage by gender compared to local minimum wage at significant locations of operation (EC5) and the proportion of senior management hired from the local community at significant locations of operation (EC6). The ratios of entry level wage to the local minimum are intended to demonstrate how an organization affects the economic well-being of employees and

also the competitiveness of the organization's wages in various regions. Abertis, a Spanish company specializing in the management of toll roads and terrestrial and satellite telecommunication infrastructures, reported in its 2014 sustainability report that the ratios between the organization's minimum salary and the minimum local salary were 151.7 percent for men and 215.5 percent for women.<sup>9</sup> The company disclosed also the ratios categorized by its two services, toll roads and telecommunications, and by countries of operations. In Table 3.1, ratios for men and women by country are presented, and in Table 3.2, ratios for men and women by division and location are provided.

Hiring senior executives from local communities helps both local economies and the organization; the local economy is likely to prosper while the organization is likely to better understand the communities in which it operates. Abertis reported that 93 percent of its executives were hired locally in all countries except at its headquarters in Spain where 100 percent were local hires.

Indirect economic impacts indicators are based on an organization's development and impact of infrastructure investments and services (EC7) and significant indirect economic impact, including the extent of

**Table 3.1 Abertis starting salary to minimum local salary—  
toll roads<sup>10</sup>**

Country	Men	Women
Brazil	120.1%	123.2%
France	101.4%	101.4%
Spain	159.6%	161.9%
Chile	100.0%	100.0%
Argentina	326.4%	326.4%
Puerto Rico	103.4%	103.4%

**Table 3.2 Abertis starting salary to minimum local salary—  
telecommunications<sup>11</sup>**

Division/location	Men	Women
Terrestrial	199.3%	199.3%
Satellite Spain	210.3%	210.3%
Satellite Brazil	129.0%	129.0%

impacts (EC8). In 2014, Fiat Chrysler Automobiles (FCA), a global auto group that manufactures and sells vehicles, reported that it contributed approximately €24 million in resources to benefit local communities in Europe (45 percent), North America (27 percent), Latin America (26 percent), Asia (1 percent) and others areas (1 percent). These resources supported education, culture and art (53 percent), social welfare (22 percent), health (19 percent), emergency relief (1 percent), and other support (5 percent).<sup>12</sup> An example of significant indirect economic impact on a community is found in Ball State University's 2013 report, which states that approximately \$95 million spent in the the City of Muncie, Indiana can be attributed to university-associated visitors.<sup>13</sup> The procurement practices indicator discloses the proportion of spending on local suppliers at significant locations of operation (EC9). In its 2013 report, UPS stated that 53 percent of all procurement spending goes to local suppliers. When fuel is excluded from the mix, it spent 68 percent with local suppliers.

*Environmental aspects* provide information about the organization's impacts on living and nonliving natural systems, which includes land, air, water, and ecosystems. Disclosing the quantity and source of an organization's inputs (e.g., materials, energy, water) and outputs (e.g., emissions, effluents, waste) are examples along with how an organization affects biodiversity. Transport and product and service-related impacts, as well as environmental compliance and environmental expenditures, fit into this category.

The 13 environmental aspects are covered by 34 environmental indicators labeled EN1 through EN34. Under the materials aspect, materials used (EN1) by weight or volume and percentage of recycled input materials used (EN2) give information relevant to how well an organization is conserving materials. This is useful for both external and internal stakeholders. With these indicators, internal stakeholders are better able to manage material efficiency and sourcing. For Ball Corporation, a manufacturer of metal packaging for beverages, foods and household products, the quantity of materials used in manufacturing is relevant to its operations.<sup>14</sup> Aluminum and steel are the main raw materials in its manufacturing operations. In its 2013 report, Ball Corporation stated that it strives to reduce materials used by "lightweighting"



containers and increasing processing speeds. Cost of sales was around 81 percent of sales so cost reduction is an important goal. Lightweighting reduces the amount of aluminum needed to produce a container thus saving on raw materials used. This is possible through a process call impact extrusion, which forces aluminum slugs into desired shapes by a high impact press. Raw materials used by type and tons are shown in Table 3.3.

Ball reported its recycled metal used for beverage cans manufactured in North America to be 68 percent, which was based on industry averages. The company has an incentive to use recycled metals to reduce its costs and environmental impacts. Virgin aluminum is costly to produce from an energy and environmental perspective; bauxite ore, the main source material of aluminum, is strip-mined and heated in two processes at 300 degrees and 1700 degrees Fahrenheit, respectively.

Energy, another environmental aspect, includes disclosures about energy consumption, energy intensity, and energy reduction. The rationale for this aspect relates to how energy affects costs and reflects risks associated with supply and prices. Energy consumption within the organization (EN3) encompasses reporting how much fuel (renewable and nonrenewable) was consumed in addition to amounts of energy (electricity, heating, cooling, steam) sold. Energy consumption outside of the organization (EN4) is reporting about upstream (suppliers) and downstream (consumers) consumption; this has relevance as an organization tries to improve the life-cycle performance of its products and services. The energy intensity ratio (EN5) gives a context for the organization's energy efficiency relative to an organization-specific metric. For example, it can be how much energy it takes to produce one unit of product, service, or sales dollar. This enables a normalization of total consumption that can be compared across time or organizations. Energy reduction metrics (EN6) disclose how much energy has been saved by

**Table 3.3 Ball Corporation raw materials consumed<sup>15</sup>**

Raw materials consumption (metric tons)	2012	2013
Aluminum	1,124,243	1,068,465
Steel	696,728	694,343
Plastic pellets	10,527	12,909

reduction initiatives such as process redesign, operational changes, and retrofitting equipment. An organization's costs savings and environmental impact have relevance here. To take this a step further, an organization can monitor its energy efficiency as it specifically relates to reductions in energy requirements of products and services (EN7).

In 2014, Abertis reported its energy impacts by disclosing several metrics. Its total energy consumption within the company was 642,509 MWh, which was a 10.3 percent increase from the previous year. Electricity and liquid fuels accounted for 97.8 percent of the total energy consumption. Although the company was able to measure consumption within the organization's operations, it reported being unable to track the upstream and downstream consumption at the time. Its future plans involved a measurement system under development for deployment in 2017 to track energy outside the company. As an example of an intensity ratio in its Toll Roads operations, Abertis disclosed its liquid fuel consumption in liters (L) by country in relation to average daily traffic (ADT). As seen in Table 3.4, this allows for comparison across years and countries. As a means to reduce fuel consumption, Abertis also disclosed that it launched an application to manage its fleet consumption.

Water is an environmental aspect because clean freshwater is a natural resource under increasing pressure from population growth and changing weather patterns. Monitoring water use by amounts and sources can provide information about efficient consumption, cost savings, and disruption risk. Water use includes how much is employed as a raw material in products (e.g., beer), a process (e.g., rinsing) in production, or component of services provided (e.g., hotel shower). Total water withdrawn by source (EN8) reflects volume used from sources such as surface

*Table 3.4 Abertis liquid fuel consumption by country (L/ADT)<sup>16</sup>*

Country	2013	2014	Change
Brazil	908.5	860.8	-5.3%
France	232.7	229.2	-1.5%
Spain	80.5	81.8	+1.5%
Chile	75.2	81.6	+8.5%
Argentina	5.2	5.1	-1.6%
Puerto Rico	1.3	0.9	-31.7%

water, ground water, rainwater, municipal water, and waste water. Accor reported consuming 4.5 million cubic meters of water in its hotels for showers, toilets, kitchens, swimming pools, and gardens. When an organization uses a significant amount of water, it may reduce the water table or water available for use along with adversely affecting an ecosystem. As a means to describe the impacts of its water consumption, Accor disclosed its water impacts using a water risk analysis system developed by the World Resources Institute. A breakdown of the hotel locations by risk category gives it information to better manage its operations in the highest risk categories. Table 3.5 provides information about where Accor has the most impact.

Reporting which specific water sources are significantly affected by the withdrawal of water (EN9) is meant to reflect the scale of an organization's impact. Measuring and reporting the percentage and volume of water reused and recycled (EN10) is a means to monitor water conservation and cost reduction. If an organization uses greywater (rainwater or wastewater produced by laundry and dishwashing), this could contribute not only to the organization's environmental goals but also to the local and regional goals for water conservation. In its 2014 sustainability report, Hormel Foods, a multinational manufacturer and marketer of food and meat products, disclosed that it used 5 billion gallons (19 million cubic meters) of water, which were drawn from municipalities (87 percent) and company owned wells (13 percent).<sup>18</sup> The company reported that its manufacturing plants in California had been identified by the World Resources Institute Aqueduct Water Risk Atlas as having an overall high risk. Hormel also described its water reduction goals and initiatives in

**Table 3.5 Accor water impacts<sup>17</sup>**

Water-stressed levels	Percentage of hotels
Drylands	1%
Very high water stress	17%
High water stress	15%
Moderate to high water stress	20%
Low to moderate water stress	26%
Low water stress	20%
No data	7%

California. By installing a reverse osmosis systems, its Swiss American Sausage plants in California saved over a million gallon of water in 2014. In addition, water reduction projects at its Farmer John facility resulted in saving 27.8 million gallons of water, which was a 22 percent reduction from the previous period.

Disclosures on the aspect of biodiversity are aimed at protecting areas of high biodiversity. These disclosures aid organizations with understanding and creating an organizational strategy to lessen their impacts. Organizations that are located on or adjacent to such sites should report (EN11) their locations and the nature of the biodiversity area. To add to this, significant impacts (EN12) caused by the organization's activities and products or services should be described. If organizations are proactive in their approach to biodiversity, they need to report the habitats they have protected or restored (EN13). In various parts of the world, certain biological species are at more risk from extinction than others. Organizations can also report if their impacts (EN14) are affecting any of the species on the International Union for the Conservation of Nature Red List of Threatened Species. This authoritative list provides updated scientific information about the status of species in an attempt to reduce species extention. In its 2013 sustainability report, the Indianapolis Airport Authority (IAA) presented its impact on biodiversity.<sup>19</sup> It described its partnership with federal, state, and local agencies to manage 2,000 acres of its property as part of a conservation management area, which is a preservation habitat for the federally endangered Indiana bat and a federally protected wetlands. The IAA reported its specific actions and plans to protect biodiversity in this conservation area.

Emissions disclosures encompass GHG emissions in addition to ozone-depleting gases such as nitrous oxide (NO<sub>x</sub>), sulfur oxides (SO<sub>x</sub>), and others. GHG disclosures are categorized by source, intensity and type. There are three scopes (i.e., Scope 1, 2, and 3) or sources defined for GHG accounting and reporting purposes; for each organization, determining its scopes is based on where it sets its organizational boundaries.<sup>20</sup> The sources of emissions can be direct (Scope 1), energy indirect (Scope 2), and other indirect (Scope 3) GHG. Direct GHG (EN15), or Scope 1 emissions are from sources owned or controlled by the organization. Examples are emissions from generating energy (e.g., electricity,

heat), manufacturing or processing chemicals and materials, and transporting materials, employees, and passengers. In its 2014 sustainability report, Dow Chemical, a diversified chemical manufacturer, reported total direct GHG to be 26.6 million metric tons.<sup>21</sup> Energy indirect GHG (EN16) or Scope 2 emissions are the result of purchasing electricity, heating, cooling, and steam from other organizations. For Dow Chemical, Scope 2 emissions amounted to 8.1 million metric tons in 2014. Other indirect GHG (EN17) or Scope 3 are generated due to the activities of the organization but are not from sources owned or controlled by the organization. These emissions come from the activities of its suppliers (upstream) in extracting, producing materials and customers (downstream) in using its products and services. Dow estimated its Scope 3 emissions based on its inputs and outputs and reported them by source and quantity (see Table 3.6).

To establish a context for the organization's efficiency over time and in comparison other organizations, the GHG intensity indicator (EN18) provides a means to normalize its total emissions. It is calculated when dividing the organization's absolute emissions by an organization-specific metric such as products produced, services delivered, or sales dollars. For example, Dow Chemical reports its emissions intensity by dividing its GHG emissions in metric tons by metric tons of production resulting in 0.607. To track reductions associated with established targets, organizations can report their GHG reductions (EN19). Dow reported reducing its total emissions by 25 percent since 2006.

Emissions of ozone depleting substances (ODS) are commonly used as in refrigerators, airconditioners, fire extinguishers, dry cleaning

**Table 3.6 Dow Chemical scope 3 emissions estimates (million metric tons)<sup>22</sup>**

Source	2013
Purchased goods	49.2
End-of-life treatment of sold products	21.4
Use of sold products	12.5
Fuel and energy-related activities	8.4
Upstream and downstream activities	6.7
Other	5.6

chemicals, solvents, electronic equipment, and agricultural pesticides. When released to the atmosphere, these substances destroy Earth's protective ozone layer, which filters harmful UV rays from the sun. The Montreal Protocol, an international treaty signed in 1987, requires eliminating the production of ODS over specific time intervals. The indicator (EN20) is relevant for organizations that produce or use ODS in processes, products, services, and need to change to new substances to adhere to phase-out requirements. Dow Chemical reported emissions of 10 metric tons of chlorofluorocarbons, which is down from over 200 tons in 2005. Air pollutants (EN21) such as nitrous oxides, sulfur oxides, particulate matter, and volatile organic compounds have significant adverse effects on the environment. Dow emits these gases and reports these values in separate categories as priority compounds,  $\text{NO}_x$ ,  $\text{SO}_x$ , and volatile organic compounds.

Effluents and waste metrics represent an organization's impacts on the environment as it discharges water and disposes of waste. Total water discharged (EN22) by quality and destination has relevance for how an organization manages its impacts on the surrounding environment. Unmanaged discharges with substantial chemical or nutrient loads can dramatically affect the quality of the water supply in a local community. Accor presented its effluent impacts by assessing its contribution to marine and freshwater eutrophication, which is excessive nutrients from land runoff and sewage in a body of water. This excess leads to an abundance of plant life causing low-oxygen conditions that damage fisheries, biodiversity and amenities. Measurements of nutrient saturation provide information on the discharge impacts on water quality. After looking at its life-cycle of operations, Accor measured its nitrogen (4,569 kilograms of nitrogen equivalent) and phosphorous (10,345 kilograms of phosphorous equivalent) saturation. The company determined that 78 percent of its marine eutrophication impact was due to farming activities involved in supplying its food services while 96 percent of its freshwater eutrophication resulted from on-site consumption of energy supplied from nuclear plants.

The total weight of waste (EN23) by type and disposal method can provide information about how an organization can lower costs and improve efficiency in its operations. To illustrate, Accor Group

manages waste over 3,700 hotels; it reported total waste weight disposed in 2013 to be 160,000 tons. Table 3.7 shows the composition of Accor's waste.

The company reports that approximately 60 percent of waste that is sorted is recycled. In a more detailed breakdown, it categorized waste by hotel type with 7 tons per year for the "budget," 34 for the "economy," 69 for the "mid-range," and 94 for the "luxury, top-end."

Monitoring the total number and volume of significant spills (EN24) of hazardous materials can help prevent damage to the surrounding area. Hewlett-Packard Company, a multinational information technology company, reported in its 2015 sustainability report that it had one significant spill of diesel fuel at a UK facility. The company stated that it was able to contain the spill on its property without contaminating areas outside of its property boundaries.

Hazardous waste transportation (EN25) is a concern to many stakeholders because of the potential harm to humans and the environment. Proper management of these wastes reduces potential harm and liabilities that could come from fines and damaged reputation associated with improper treatment of the waste. In 2014, Dow Chemical generated approximately 610,000 metric tons of hazardous waste, of which 22 percent was transported and treated by third parties. To monitor

**Table 3.7 Accor's breakdown of 160,000 tons of waste by type<sup>23</sup>**

Type of waste	Percent
Food waste, food oils, fats	50%
Paper, card	20%
Glass	8%
Plastics	5%
Other (scrap metal, crockery, nonrecyclable throwaway items, textiles)	5%
Hazard waste (batteries, printer cartridges, compact fluorescent light bulbs)	3%
Garden waste	3%
Palettes	2%
Metal packaging	1%
Large items	1%

this treatment process, Dow stated that it audits its third party disposal providers.

As organizations discharge their effluents back into bodies of water, the effluents may have significant effects. If this is the case, organizations need to identify these impacts (EN26). A major water quality concern for the IAA is the stormwater runoff from the surfaces of the Indianapolis International Airport. Chemicals for deicing such as propylene glycol used on aircraft and sodium acetate used on pavement are applied during the winter months. During 2013, IAA reported that it discharged 155 million gallons of stormwater into the local sewer systems for treatment. Its report described the system of collection and measurement of stormwater and glycol along with its Stormwater Pollution Prevention Plan that governs its activities.

Reporting the extent of impact mitigation of environmental impacts of products and services (EN27) provides feedback about actions an organization has taken to lessen the negative environmental impacts and improve the positive impacts of its product and service design and delivery. Seventh Generation, a natural household products company, set its goals for 2020 to use plant-based not petroleum materials with all products and packaging and to make all products and packaging recyclable or biodegradable. In its 2013 report, the company published its 2012 baseline data and goals (see Table 3.8).<sup>24</sup>

At the end of the useful life of a product, a company can reclaim it for reuse. Reporting the percentage of products sold and their packaging

**Table 3.8 Seventh Generation products and packaging<sup>25</sup>**

Type	2012 baseline	2020 goals
Recycled content		
Overall	35%	100%
Packaging	75%	100%
Renewable materials	63%	100%
Recyclable materials		
Overall	41%	100%
Packaging	98%	100%
Biodegradable materials	55%	100%



materials that are reclaimed by category (EN28), an organization can measure the extent to which its products, components, or materials are collected and successfully converted into useful materials for new production processes. This is relevant for effective recycling and closed-loop production not to mention cost savings. An example is Dell's closed-loop recycling program described in its 2015 sustainability report.<sup>26</sup> It became the first in its industry to offer a desktop made with third party-certified closed-loop recycled plastics. The closed-loop system starts with U.S. customers who recycle their old systems through Dell's Reconnect consumer recycling partners (Goodwill® locations). After collection, the plastics are separated and sorted into different types. Once inspected, they are baled and shipped to China and blended with virgin plastics. Dell reported 35 percent of the plastic raw material mix was recycled-content, which was molded into new parts. For its computer model OptiPlex 3030, the plastic is molded into the stand and back plate of the final computer or monitor. According to Dell, this closed-loop lifecycle generated 11 percent fewer carbon emissions than the equivalent use of virgin plastics. The OptiPlex 3030 was the first Dell product certified by UL Environment to their closed-loop standard, which specifies that at least 10 percent of the final product is made of closed-loop plastics.

To get an indication of how well an organization is complying with laws and regulations, it reports the monetary value of significant fines and total number of nonmonetary sanctions for noncompliance with environmental laws and regulations (EN29). Novartis Group, a multinational Swiss pharmaceutical company, paid a total of \$155, 534 in fines around the world for minor Health, Safety and Environment (HSE) violations in 2013.<sup>27</sup> Novartis does not currently report the number of nonmonetary sanctions or cases brought through dispute resolution mechanisms for HSE violations. It did report its plan to evaluate the reporting of nonmonetary sanctions and cases brought through dispute resolution mechanisms and to begin reporting on this in 2015.

For some organizations, logistics may be a major component of their environmental footprint. As part of a comprehensive approach to planning environmental management strategies, an organization can report its significant environmental impacts of transporting products and other goods and material for the organization's operations, and transporting

members of the workforce (EN30). The largest direct transportation impact identified at Novartis in 2013 was the GHG emissions associated with the use of passenger cars for sales representatives. In 2013, Scope 1 GHG emissions from the use of company-owned or leased vehicles totaled 170 kilotons compared to 177 kilotons in 2012. Scope 1 emissions included 9 kilotons from the six company owned or leased aircrafts. Scope 3 GHG emissions from its global business flights in 2013 totaled an estimated 304 kilotons compared to 313 kilotons the previous year.

Reporting total environmental protection expenditures and investments by type (EN31) allows an organization to examine its ability to use its resources to improve performance. For Novartis, environmental protection expenditures fell into four categories. Table 3.9 shows specific expenses and amounts.

Organizations are being held accountable for what happens in their supply chains and as such need to formalize their assessments of their suppliers. Organizations can report these assessments with a description of their processes and percentage of new suppliers that were screened using environmental criteria (EN 32). In 2014, Nokia, a Finnish multinational communications and information technology company, stated that it expects all of its suppliers to meet ethical, labor and environmental standards set out in its Supplier Requirements before it will contract with them.<sup>28</sup> It conducted in-depth audits of suppliers on labor conditions and environmental management to ensure compliance with its requirements. It reported that in 2014, assessments were conducted with 155 supplier assessments and audits on corporate responsibility. The company spent 104 auditor days conducting in-depth audits at 23 supplier sites in China, India, Iraq, Kenya, Myanmar, and Saudi Arabia. The results indicated 341 instances of noncompliance with 193 related to health and safety.

**Table 3.9 Novartis environmental protection expenditures<sup>29</sup>**

Expenditure type	USD millions
Total costs for waste disposal	\$60
Total costs for energy	\$420
Investments in energy-saving projects	\$34
Total costs for water supply and treatment	\$59

In order for organizations to be aware of significant and actual negative environmental impacts in the supply chain, they can report the number of suppliers subject to environmental impact assessments and the negative environmental impacts and actions taken (EN33). In 2014, Nokia reported that it required its suppliers, with the exception of those with very low environmental impacts, to have a documented environmental management system in place. Those identified as key suppliers and those with greater impacts were required to have ISO 14001 certification, which the company tracked through audits and assessments. In 2014, 141 of its key suppliers, representing 49 percent of their total procurement dollars responded to the CDP's requests to disclose information regarding their performance on climate impacts.

Effective environmental grievance mechanisms are important for remediating environmental impacts. To assess progress in this area, the number of grievances about environmental impacts filed, addressed, and resolved through formal grievance mechanisms (EN34) can be reported. In 2014, Abengoa, a global biotechnology company producing biofuels and biochemicals and promoting sustainability of raw materials, reported 74 environmental claims were received and that 57 were resolved.<sup>30</sup>

The *social category* has four subcategories (i.e., labor practices and decent work, human rights, society, product responsibility) along with aspects and indicators for each. Labor practices indicators are based on internationally acknowledged standards developed by the United Nations (UN), the International Labor Organization (ILO), and the Organization for Economic Co-operation and Development (OECD). In addition to labor practices, organizations are being increasingly held responsible to respect human rights. The subcategory human rights includes the implementation of processes, incidents of violations, and changes in human rights access, which are based on numerous international standards (UN, ILO, OECD), treaties, and laws. Along with impacts on individuals, organizations have impacts on society and local communities; as such, individuals and communities are entitled to free, prior and informed consultation for consent regarding an organization's impacts. Product responsibility is how an organization's products affect stakeholders and in particular customers.

Employees are a major stakeholder in most organizations, which wield considerable control over working conditions, pay, opportunities, and fairness. External and internal stakeholders hold organizations accountable for their treatment of workers as it affects an organization's reputation, risks, and costs. Labor practices and decent work include eight aspects and sixteen indicators (LA1-LA16). The aspects include employment, labor—management relations, occupational health and safety, training and education, diversity and equal opportunity, equal remuneration for women and men, supplier assessment for labor practices, and labor practices grievance mechanisms. The number of indicators for each aspect varies depending on whether there are more concerns in these topics.

There are three indicators under the employment aspect that provide information about new hires and turnover, benefits, and parental leave. Turnover information can indicate problems in the workplace (e.g., dissatisfaction, discrimination) and greater expenses for recruitment. Information disclosing the total number and rates of new employee hires and employee turnover by age group, gender, and region (LA1) provides details about recruiting practices with regard to age, gender, and talent. In 2014, Abengoa disclosed its employee turnover rates by overall, age, and gender. The company reported that 6.9 percent of the workforce turnover compared to 4 percent in the prior year. Exit interviews and questionnaires were administered to determine ways to increase retention.

A measure of an organization's investment in human resources and minimum benefits given to its full-time employees is a good indication of its ability to retain workers. To get such an assessment, an organization can report benefits (e.g., life insurance, health care) provided to full-time employees that are not provided to temporary or part-time employees, by significant locations of operation (LA2). In 2013, UPS offered a range of employee benefits in addition to those for health and wellness. In its U.S. facilities, retirement plans, 401(k) plans, tuition assistance, discounted employee stock purchase plan, paid time off, employee discounts, and relocation programs were provided to nonunion employees with full-time or part-time status. Benefits that were not available to all or some part-time employees include long-term disability coverage, business travel accident insurance, and tuition assistance; availability may depend on

location and employee position. In addition, temporary employees and seasonal workers were not considered eligible for UPS benefits while only management employees have access to certain benefits (e.g., relocation programs).

Recruitment and retention of productive employees can be enhanced by an organization's offer of maternity and paternity leave. To measure how employees by gender are utilizing this benefit, an organization can report by gender return-to-work and retention rates subsequent to parental leave (LA3). For UPS in 2013, it disclosed that more than 2,800 UPS employees, of which were 46 percent female, took parental leave. Following parental leave, 99 percent returned to work. As of the time its sustainability report was published in 2014, 97 percent of employees who returned from parental leave were still employed at UPS.

Good labor management relations are key to providing a positive working environment, a low turnover rate, and minimal operational disruptions. As an indication of an organization's efforts to keep labor relations smooth, it can disclose its minimum notice periods regarding operational changes, including whether these are specified in collective agreements (LA4). UPS reports that its collective bargaining agreements include minimum notice periods regarding operational changes, but these vary by master agreement and according to specific requirements for local chapters of its unions. The example given was 45 days for its U.S. package delivery operations.

Occupational health and safety indicators are relevant to evaluating an organization's approach to worker safety from the perspective of establishing policies, reporting injuries and diseases, and formalizing agreements. The percentage of the total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs (LA5) gives an indication of how involved the workforce is in health and safety issues. At UPS, the company stated that the ideas for health and safety improvements originated from its Comprehensive Health and Safety Process (CHSP) members. Over 3,300 CHSP committees exist in UPS facilities worldwide thus resulting in about 10 percent of the workforce.

To evaluate an organization's health and safety record, it can report type of injury and rates of injury, occupational diseases, lost days, and

**Table 3.10 Abengoa health and safety metrics<sup>31</sup>**

<b>Metrics</b>	<b>2014</b>	<b>2013</b>	<b>2012</b>
Number of work-related accidents requiring medical leave over one day	416	440	502
Lost work days due to accidents	11,731	12,033	8,802
Total absenteeism due to illness (%)	1.15	1.13	1.06
Total absenteeism due to work-related accidents (%)	0.2	0.17	0.19

absenteeism, and total number of work-related fatalities, by region and by gender (LA6). Abengoa reported these metrics as seen in Table 3.10.

Organizations may face high risks associated with communicable diseases (e.g., malaria) by way of facility locations or in work positions with high disease (e.g., asbestosis) rates. Protecting workers from serious diseases associated with the workplace contributes to better worker satisfaction, health, and retention. To assess these risks, organizations disclose workers with high incidence or high risk of diseases related to their occupation (LA7). Abengoa reported that malaria, cholera, and tuberculosis in particular geographic locations are ones that are the highest risk to its employees. To prevent these diseases, Abengoa disclosed that it vaccinates its employees along with providing medical exams and training to prevent disease contraction. Two other work-related health issues were loss of hearing due to an environment with high noise levels and legionnaire's disease for those working in its laboratories. In its report, the company detailed its efforts to minimize employees' risks to both.

An organization's formal health and safety agreements with trade unions can promote a positive health and safety culture. By disclosing health and safety topics covered in formal agreements with trade unions (LA8), an organization can reveal the involvement of workers in creating these agreements. In its report, UPS stated that all of its U.S. collective bargaining agreements have provisions that deal with the health and safety of union employees. These agreements include health and safety committees, hazardous materials handling, vehicle and personal safety equipment, and accidents and reports.

Training and education are a means to maintain and improve workforce skills in addition to providing opportunities for employee advancement. These indicators include reporting the average hours of training per year per employee by gender, and by employee category (LA9). L'Oréal, a French cosmetics and beauty company, disclosed in its 2014 sustainability report that 81.7 percent of its employees received at least one training during the year.<sup>32</sup> As an integral part of its employee development policy at L'Oréal, 64,220 employees, which consisted of 62 percent women, each worker received an average of 24.9 hours of training over the year. The total for the company amounted to 1,599,742 hours.

To be able to plan for skills acquisition to meet changing workplace needs, an organization can evaluate and disclose its programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings (LA10). For example, in its 2013 report, UPS described that its program for skills management involved both continuing education and career evaluation processes. For education, it reported maintaining on-demand offerings provided through its enterprise-wide learning management system. In addition, comprehensive talent management processes were described as part of its annual Quality Performance Review (QPR) process, which included an annual performance review, career development planning, and Administrative and Technical Performance Appraisal (ATPA). Both the QPR and ATPA were used to establish expectations employee performance measurement.

Developing human capital within an organization can improve employee satisfaction and skills enhancement. Reporting the percentage of employees receiving regular performance and career development reviews, by gender and employee category (LA11) can indicate how an organization manages skill enhancement. In 2013, UPS reported providing performance reviews to 94.5 percent of female management employees and 95 percent of male management employees. In addition, reviews were given to 83.3 percent of U.S. administrative and technical full-time personnel.

Diversity and equal opportunity metrics reveal information about the composition of the human capital of an organization. To evaluate the entire organization, this metric includes the composition of the

governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity (LA12). For example, approximately 40 percent of the UPS workforce in the United States in 2013, was labeled diverse as defined by the U.S. Equal Employment Opportunity Commission. This includes 21.6 percent African-American, 12.7 percent Hispanic, 2.6 percent Asian-American, and 0.6 percent Native American or other. In its management ranks, 32.7 percent of U.S. employees were from diverse ethnic backgrounds. In its European headquarters, its 300 employees represented 30 separate nationalities.

Equal pay is relevant to retaining a qualified workforce, and imbalances threaten an organization's reputation along with its potential legal standing. To assess this issue, an organization should report its ratio of basic salary and remuneration of women to men by employee category, by significant locations of operation (LA13). In its 2014 sustainability report, Dow Chemical stated that pay equity studies had been conducted over the preceding 20 years and have been updated biannually. The studies examined gender on pay decisions globally and ethnicity in the United States. Three components of compensation were analyzed (base pay, performance award and long-term incentives). The 2014 pay equity study was reported to have found no significant difference in base pay, performance award, or long-term incentives between genders or between U.S. minorities and nonminorities. Pay differences were attributed to performance ratings, job level, education, years of service, time since promotion, age or geography or both, and not to gender or ethnicity. In 2014, Dow concluded that global pay planning guidelines were being applied appropriately across the company.

Labor practices in the supply chain that affect safety, wages, and working hours can be linked to an organization's activities, products, or services. Negative associations damage the organization's reputation, which is in its best interest to protect. Potential negative impacts could be prevented or mitigated when contracts are being negotiated. As a means to monitor and manage its supply chain, there are several actions that it can take and report. It can screen and report the percentage of new suppliers that were screened using labor practices criteria (LA14) and report significant and potential impacts for labor practices in the



supply chain and actions taken (LA15). Dow established a Code of Business Conduct, which is applied to all its suppliers including new supplier engagements. The requirements of the Code of Conduct are part of supplier contracts to help the company with contract enforceability. These contracts included expectations around legal labor practices, and all new contracted suppliers were reported to be in line with acceptable labor practices. Dow disclosed that there were no reported significant actual and potential negative impacts for labor practices in the supply chain for the year 2014.

Labor disputes are not uncommon occurrences in the workplace and need to be addressed. If unresolved, the disputes can be detrimental to worker productivity and the organization's reputation. Grievance mechanisms provide an opportunity for these disputes to be resolved. The number of grievances about labor practices filed, addressed, and resolved through formal grievance mechanisms (LA16) provides information on the effectiveness of the organization's mechanism. In 2014, HP revealed it had cases regarding human resources policy and practices to be less 0.2 percent of the total number of employees. These were reported as having been addressed and resolved within 90 days.

In the human rights subcategory, the 10 aspects include investments, nondiscrimination, freedom of association and collective bargaining, child labor, forced or compulsory labor, security practices, indigenous rights, assessment, supplier human rights assessment, and human rights grievance mechanisms. Human rights aspects are based on accepted international standards developed by the UN and ILO. There are 12 indicators (HR1-HR12) under the 10 aspects.

Organizations are being monitored for their human rights impacts not only for what they produce but also in what they invest. To get a sense of the extent to which human rights are a factor in an organization's economic decisions, reporting the total number and percentage of significant investment agreements and contracts that include human rights clauses or that underwent human rights screening (HR1) serves this purpose. To address human rights in its investments, Dow Chemical reported establishing a process for due diligence and implementation phases of mergers, acquisitions and joint venture formations. This included a

review of all human rights risks prior to the completion of an acquisition or the formation of a new entity.

How well an organization implements its human rights policies and procedures may depend on whether it trains its workforce in the applicable human rights laws and standards. To provide some insight into its preparedness, an organization can report total hours of employee training on human rights policies or procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained (HR2). To ensure that all employees are aware of its policies and procedures, Dow Chemical required all employees to complete its Code of Business Conduct training course to assure they understand how Dow's Code applies to their jobs and where to obtain guidance for questions and concerns. This requirement was administered by the Office of Ethics and Compliance to new employees within their first 45 to 60 days of employment and scheduled on a subsequent three-year refresher cycle. In 2014, Dow reported that all *new* employees were required to complete the Code of Business Conduct course.

Nondiscrimination policy is a major part of international conventions and social laws and guidelines. Engaging in discrimination based on race, color, sex religion, political opinion, national extraction, or social origin, or other forms of discrimination against internal or external stakeholders is detrimental to society. As a way to monitor how an organization is behaving, the total number of incidents of discrimination and corrective actions taken (HR3) can provide useful information. To illustrate, L'Oréal conducted social audits at its suppliers and subcontractors in 2014, and found that 1.9 percent of the cases of noncompliance identified were related to discrimination issues. All these were practices that could have resulted in discrimination during hiring. As a consequence, the company put corrective action plans in place for major cases with plans to conduct follow-up audits to monitor the progress.

The freedom of association and collective bargaining is considered by many international standards bodies like the UN and ILO to be a fundamental right that allows for workers to organize collectively in groups of their choice. Organizations can demonstrate their support of workers' right to this freedom. To measure this support, organizations

report operations and suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and measures taken to support these rights (HR4). According to Dow Chemical's report, it stated that employees are free to form collective bargaining agreements in all of its operations, and 11 percent of employees throughout global operations are involved in collective bargaining agreements.

Supporting the abolition of child labor is socially responsible and is expected of organizations that have significant risks for incidents of child labor. To show their approach to assessing their risks and effective implementation of policies, organizations need to report operations and suppliers identified as having significant risk for incidents of child labor, and measures taken to contribute to the effective abolition of child labor (HR5). L'Oréal disclosed that during its social audits of its suppliers and subcontractors in 2014 no reports of child labor were identified. However, in its new supplier and subcontractor selection process, two cases of child labor with children under 16 were uncovered in production sites in Asia. Neither supplier met the other L'Oréal requirements so it chose not to work with the suppliers.

Many international standards bodies like the UN and ILO consider not being forced to work to be a fundamental human right. For organizations at risk, assessing the issue of forced or compulsory labor is part of their risk management. As a way to measure this risk, organizations report operations and suppliers identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of all forms of forced or compulsory labor (HR6). Bloomberg L.P., a privately held financial software, data, and media company, disclosed in its 2014 sustainability report that its premium products from Asia and e-waste business had possible exposure to compulsory labor.<sup>33</sup> As a consequence, the company reported that it had updated its procurement policies. Additionally, it revealed that comprehensive social audits were performed on its manufacturing partners who produce flat panels, B-Units and keyboards. It concluded that there was no evidence of compulsory labor being recorded.

Maintaining appropriate levels of security for an organization's facilities involves providing appropriate human rights training for security

personnel. To reduce the reputational and litigation risks associated with having security personnel, organizations can monitor the percentage of security personnel trained in the organization's human rights policies or procedures that are relevant to operations (HR7). Dow Chemical stated that it established processes and plans to protect its employees and contractors against abuse or violence. A part of this protection, the company employs globally several hundred workers and contractors in its Emergency Services and Security department. Dow security employees as well as contractors were trained as a condition of employment in the company's policies and procedures covering human rights.

Organizations that have operations in or near communities where indigenous peoples reside need to attend to their rights. As part of the organization's policies, it may establish relations with these communities to understand and protect their rights. Reporting the total number of incidents of violations involving rights of indigenous peoples and actions taken (HR8) will provide an indication of the state of relations. In 2014, Heineken, a Dutch brewing company, disclosed that there were no reported incidents regarding the violation of the rights of indigenous people.<sup>34</sup>

A periodic assessment of an organization's human rights responsibility allows for evaluation of its risk to be associated with human rights abuse. A systematic review of its operations provides information about how human rights factors into its decision making. Total number and percentage of operations that have been subject to human rights reviews or impact assessments (HR9) gives an indication. Heineken disclosed in its 2014 report that 24 out of 68 Operating Companies performed a gap analysis between the content of the new policy and local practices.

Human rights practices in the supply chain can be linked to an organization's activities, products, or services. Negative associations damage the organization's reputation, which is in its best interest to protect. Potential negative impacts could be prevented or mitigated when contracts are being negotiated. As a means to monitor and manage its supply chain, it can report the percentage of new suppliers that were screened using human rights criteria (HR10) along with significant actual and potential negative human rights impacts in the supply chain and the actions taken (HR11). Heineken disclosed that all of its new suppliers

received its Supplier Code, which includes human rights criteria. A refusal to sign or failure to comply with its Supplier Code can end a commercial relationship. Heineken's important suppliers are assessed and audited on compliance with human rights by Ecovadis, a third party provider of sustainability ratings. In 2014, the company ceased business relationships with 176 suppliers because in 139 cases the suppliers were unwilling to sign the Supplier Code and in 37 cases suppliers refused to comply with Heineken's supplier monitoring requirements.

Disputes may arise regarding human rights impacts caused by the organization or by suppliers. Grievance mechanisms provide an opportunity for these disputes to be resolved. Reporting the number of grievances about human rights impacts filed, addressed, and resolved through formal grievance mechanisms (HR12) can be a way to assess these disputes. Volkswagen reported in its 2014 sustainability report that it had a world-wide ombudsman system, which could be used to confidentially report corruption, fraudulent activities, or other serious concerns (such as human rights violations or ethical misconduct) in 10 different languages to two external lawyers.<sup>35</sup> In addition, an online channel was reported to be provided to allow for communication with the ombudsmen. In 2014, its report revealed that 51 reports were delivered to the Volkswagen Group's Anti-Corruption Officer, the Head of Group Internal Audit. In addition, the Anti-Corruption Officer received information on 91 additional cases, which had one identified as a possible human rights violation. If breaches of the law or internal regulations are discovered, Volkswagen reported that they are appropriately punished.

The subcategory society has seven aspects, which are local communities, anticorruption, public policy, anticompetitive behavior, compliance, supplier assessments for impacts on society, and grievance mechanisms for impacts on society. There are 11 indicators (SO1–SO11). These aspects and indicators cover impacts that organizations have on society and local communities because community members are considered to have individual and collective community rights. These rights are based on UN declarations and ILO conventions.

Impacts on people in local communities are relevant to organizations as they plan their operations and assess actual and potential impacts. To better understand these impacts and respond to them, organizations need

to engage with the local communities. This can be monitored by reporting the percentage of operations with implemented local community engagement, impact assessments, and development programs (SO1). Alcoa, one of the world's largest producers of aluminum, reported its approach to its engagement with local communities in its 2014 sustainability report.<sup>36</sup> In this approach, each location of operation completed a dashboard to assess its progress on five key engagement levers (public strategy plan, communications, stakeholder engagement, community partnerships, and employee engagement) with specific attention to its activities around environment, infrastructure, policy, and community relationships. In addition, with the assistance of formal community advisory boards with external community members, NGO leaders, and local officials, company officials met regularly to discuss relevant community matters. Operations with significant actual or potential negative impacts on local communities (SO2) should be disclosed. Alcoa reported in 2014 that its potential impacts to communities include dust from bauxite residue found in storage areas at all refineries and noise issues associated with many locations.

Combating corruption involves a systematic approach with supporting procedures in place. Risk assessments for the potential of corruption are important to system design and the extent to which assessments are being made. In an effort to see the organization-wide implementation of assessments, the total number and percentage of operations assessed for risks related to corruption and the significant risks identified (SO3) can be reported. Aegon, a Dutch diversified insurance company, disclosed its approach to assessing risk of corruption in its acquisitions and partnerships.<sup>37</sup> As a result of its assessments, it was able to identify risk in Ukraine; due to the security situation, it closed several offices in the country. It also identified India as a country where it faces significant risk of fraud and corruption.

Anticorruption policies are not effective if they are not communicated throughout the organization. A measure of governance members' and employees' awareness is the total number and percentage receiving communication and training on anticorruption policies and procedures (SO4). Ball Corporation provides all employees with its Business Ethics Booklet; to comply with legal requirements, employees certified

that they read, understood, and intend to follow the corporate policies. Recertification yearly is mandated for all managers and certain other employees.

When corruption occurs, it damages an organization's reputation and operations. If it does occur, it is important to demonstrate how the organization responds to such incidents by reporting confirmed incidents of corruption and actions taken (SO5). Volkswagen reported that in 2014 the company took action based on findings of investigations against a total of 132 employees across the Volkswagen Group. In cases globally, 72 employees' contracts were terminated. Because of corruption infringements, 16 contracts with business partners were ended.

Contributing to political causes can raise concerns of undue influence and corruption. To establish integrity and provide transparency on these contributions, a reporting of the total value of political contributions by country and recipient or beneficiary (SO6) is warranted. American Electric Power (AEP), a major American investor-owned electric utility, disclosed its lobbying and political activity in its 2015 sustainability report.<sup>38</sup> It reported that it has five political action committees (PACs) run by employees; these included the AEP Committee for Responsible Government established for federal candidates and four separate state committees in Michigan, Ohio, Texas and Virginia. In 2014, AEP's federal PAC contributed more than \$705,000 to candidates for public office. In addition, AEP spent approximately \$6.5 million on internal and external lobbying activities at state and federal levels. A detailed list of recipients and donations was provided as part of its disclosures.

Anticompetitive behavior is detrimental to efficient markets because consumer choice and pricing may be affected. If an organization is involved in legal procedures for this behavior, it should be disclosed with the total number of legal actions for anticompetitive behavior, antitrust, and monopoly practices and their outcomes (SO7). Volvo, a Swedish multinational manufacturing company, stated in its 2014 sustainability report that there were two investigations into potential corruption in its operations. In addition, there were two other on-going noncompliance claims.<sup>39</sup> One involved the European Commission, which issued a preliminary view that the Volvo Group and several other European truck companies may have violated European competition rules. Although it

was early in the proceedings, Volvo made a provision of €400 million to cover the potential liability; consequently, this had a negative impact on its operating income. In the United States, Volvo appealed to the U.S. Supreme Court a \$72 million fine imposed by the U.S. EPA pertaining to emission compliance of its diesel engines.

Compliance with laws and regulations establishes an organization's reputation for operating within legal boundaries. This is important for its reputation as it reduces the financial risks from fines and lost business. The monetary value of significant fines and total number of nonmonetary sanctions for noncompliance with laws and regulations (SO8) provides an indication of being able to ensure that operations meet certain performance standards. In 2013, UPS reported that it faced a compliance challenge because illicit online pharmacies had been using its shipping services. The company forfeited \$40 million in earnings to the U.S. government and agreed to a Non-Prosecution Agreement with the United States Attorney's Office. The agreement included an Online Pharmacy Compliance Program aimed at preventing online pharmacies from using its services illegally.

Negative impacts on society can be mitigated with due diligence. Because organizations are often held accountable for their own actions along with those of their suppliers, it is important to initiate procedures to structure agreements and contracts to prevent negative impacts. A measure of an organization's due diligence is the percentage of new suppliers that were screened using criteria for impacts on society (SO9). In its 2014 sustainability report, Bloomberg reported that 50 percent of its new suppliers were screened. In addition to screenings, disclosure of significant actual and potential negative impacts on society in the supply chain and actions taken (SO10) can inform stakeholders of an organization's awareness and actions. Bloomberg disclosed that its premium products produced in Asia and e-waste operations were spotted as having potential for child labor issues; as a result, it updated its procurement policies. It conducted e-waste audits for each new scrapper being evaluated for a contract.

Disputes may arise regarding impacts on society caused by the organization or by suppliers. Grievance mechanisms provide an opportunity for these disputes to be resolved and to mitigate the impacts on society.



Disclosing the number of grievances about impacts on society filed, addressed, and resolved through formal grievance mechanisms (SO11) can be a way to assess these disputes. Through its social impacts grievance mechanism, Natura, a Brazilian cosmetics company, in 2014 recorded 837 contacts for grievances from suppliers, supplier communities, Natura Consultants, and consumers.<sup>40</sup> According to its report, all cases were addressed and resolved.

There are five aspects under the subcategory product responsibility. These are intended to reveal the impacts of an organization's products and services as they affect customers in particular. They are customer health and safety, product and service labeling, marketing communications, customer privacy, and compliance. There are nine indicators labeled PR1–PR9.

Products and services are expected to not represent a health or safety risk. To contend with how an organization systematically addresses product and service health and safety across the life cycle, disclosing the percentage of significant product and service categories for which health and safety impacts are assessed for improvement (PR1) achieves this. L'Oréal reports that in order to meet the international regulations involving the assessment of the safety of cosmetic products and their ingredients, it complies with the requirements of Regulation (EC) No.1223/2009 and the European REACH regulation (Regulation (EC) No. 1907/2006). In addition, it has a procedure for systematically assessing *all* products placed on the market worldwide, which includes regions with few or nonexistent regulations.

Noncompliance with laws and regulations governing product safety indicates problems with quality control systems. Revealing the total number of incidents of noncompliance with regulations and voluntary codes concerning the health and safety impacts of products and services during their life cycle, by type of outcomes (PR2) gives an indication of the associated actual and potential financial risks from fines and reputation. In 2014, Danone, a multinational food products corporation, disclosed that 33 incidents related to food safety were recorded.<sup>41</sup> Eight were classified as crisis situations where the company's crisis management can involve blocking, withdrawing or recall of products in some cases if there is a material or direct risk for consumer's health.

Product and service labeling with respect to sustainability impacts is linked directly to certain national regulations and codes. To disclose information about addressing a product's adherence to sustainability impact, the type of product and service information required by the organization's procedures for product and service information and labeling, and percentage of significant product and service categories subject to such information requirements (PR3) addresses this. In its 2013 report, Ball Corporation stated that because its packaging products are sold to consumer and household goods companies, procedures for product and service information and labeling are done by companies that determine product information and labeling for the end user. In addition as part of this disclosure, it described its aerospace division as supplying advanced-technology products and services to governmental and commercial customers.

Noncompliance with laws and regulations governing product labeling may indicate problems with quality control systems. Revealing the total number of incidents of noncompliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes (PR4) gives an indication of the associated actual and potential financial risks from fines and reputation. L'Oréal reported its product labeling came under scrutiny from officials in several countries (e.g., India, Indonesia, Germany, Italy, Lebanon, Switzerland, France, and Brazil) regarding information made available to consumers on product labels. Examples of the labeling issues involved were font size, the information consistency, the language used, packaging dates, lack of regulatory information, and problems with list of ingredients. The company reported that all issues were addressed and changes made when appropriate. Fines were levied in three cases. Products in several other countries (e.g., Costa Rica and Paraguay) were denied entry by authorities because of labels that had no translation; the company subsequently modified the labels. In Italy, in response to distributors' questions on the labels of certain products, L'Oréal made changes where it deemed appropriate. In its procedures of self-regulation, L'Oréal withdrew voluntarily products with noncompliant labeling (i.e., list of ingredients) in the United States and Kurdistan.

Customer satisfaction is key to measuring an organization's sensitivity to its customers and long-term organization success. The results of surveys measuring customer satisfaction (PR5) can provide how well the organization is addressing the needs and preferences of its customers. In 2014, Dow Chemical reported that its overall customer satisfaction, which measures the percent of customers who scored their satisfaction either 4 (Somewhat Satisfied), 5 (Satisfied) or 6 (Very Satisfied) was 89 percent.

Under the marketing communications aspect, the sale of banned or disputed products (PR6) may cause concern for stakeholders. Some products may be legal in some countries but not in others as well as products that are considered controversial due to social mores. Dow Chemical disclosed that it sells several compounds that have been banned in other applications or in other regions. Dow responded to this indicator with a description of how it conducts comprehensive risk assessments to validate that such products can be used without harm to people and the environment. It reported that such cases are due to a different use pattern or lack of infrastructure to manage waste or wastewater. Dow also acknowledges that it sells products that are disputed. For these products, Dow provides hazard and use or exposure information to support a comprehensive risk assessment to validate the intended uses. In some circumstances, it voluntarily discontinued selling products into certain applications or into certain countries because of questions of user's ability to implement product stewardship programs.

The second indicator under marketing communications is the total number of incidents of noncompliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship, by type of outcomes (PR7). Noncompliance with laws and regulations governing product safety can indicate problems with quality control systems or problematic implementation. Disclosing this information gives an indication of the associated actual and potential financial risks from fines and reputation. Natura disclosed that it complied with guidelines from Conar, a self-regulatory body, and the codes of conduct of Brazilian advertising, consumer defense, and direct selling associations. In 2013, the company reported that it had no notifications of violations of laws or voluntary codes related

to marketing communications, including advertising, promotion and sponsorship.

Customer privacy has become essential to maintaining customer loyalty and satisfaction. Direct financial impacts from fines along with loss of customer confidence and sales are significant consequences. Disclosing the total number of substantiated complaints regarding breaches of customer privacy and losses of customer data (PR8) can signal that internal management systems are inadequate or its implementation is faulty. UPS reported that it had not experienced any breaches of customer data privacy that are required disclosure in its financial reports.

Noncompliance with laws and regulations governing product safety can indicate problems with quality control systems or problematic implementation of controls. Disclosing the monetary value of significant fines for noncompliance with laws and regulations concerning the provision and use of products and services (PR9) gives an indication of the associated actual and potential financial risks from fines and reputation. Abengoa stated that during 2014, there were no reports of either fines or sanctions or noncompliance with regulations involving product and service provision and use.

## Companies Reporting With GRI

The GRI Reporting Framework is one of the leading standards for sustainability reporting.<sup>42</sup> Among the world's largest 250 corporations, 93 percent report on their sustainability performance and 82 percent of these use GRI's Standards.<sup>43</sup> Over 19,600 GRI reports are recorded in the GRI database of reporting organizations. Many more GRI reports may be published but not listed in the database because organizations submit their reports voluntarily. In the database, information about these organizations can be sorted by date of report, organization name, report title (with web link), publication year, GRI Guidelines used (G2, G3, G4), adherence level, assurance level, country and region of world of headquarters, membership in the Organisation for Economic Cooperation and Development (OECD), sector, and organization Web site (if available).

## The <IR> Framework

In 2010, the International Integrated Reporting Council (IIRC) was created to develop a reporting framework that communicates to providers of capital about how an organization creates value over time.<sup>44</sup> It is a global group consisting of investors, regulators, companies, NGOs, standard setters, and the accounting profession. Among the framework's objectives is the enhancement of accountability and stewardship of six capitals, which are financial, manufactured, intellectual, human, social and relationship, and natural, along with the explanation of their interdependencies. A fundamental assumption of this framework is that an organization affects and is affected by the external environment as it creates value over the short, medium, and long terms; the material value created by an organization's relationships, activities, and interactions should be in their report. Companies such as Aegon, AEP, Danone, and Natura, which used the GRI G4 guidelines, are engaging in integrated reporting. A list of other companies using the <IR> framework is posted on the IIRC website.

The six capitals are intended only as a guide for organizations to identify what capitals it uses or affects. Financial capital, which represents funds from debt, equity, investment, or operations, is what is available for organizations to use in their normal course of producing goods or providing services. Manufactured capital represents produced physical objects such as buildings, equipment, and infrastructure that can be used to provide services or produce goods for sale. While manufactured capital refers to tangible items, intellectual capital includes intangibles such as patents, copyrights, software, rights and licenses. This also covers organizational knowledge, systems, procedures, and protocols. Human capital is what people bring to the organization in the way of their capabilities, competencies, and experience along with their incentives to innovate. This incorporates more than their knowledge but how they interact with the organization's strategy, governance, ethics, and processes. Social and relationship capital consists of norms, values, stakeholder relationships, and reputation. Natural capital is all renewable and nonrenewable environmental resources and processes that are necessary to an organization's prosperity. These are air, water, land, minerals, and

forests. From a systems perspective, natural capital includes biodiversity and the health of ecosystems. The framework acknowledges that not all capitals are relevant to all organizations nor will they be organized in the same categories.

The framework is principles-based and does not specify key performance indicators, measurement methods, or individual disclosures. Based on an application of the guiding principles, the preparer decides material issues and disclosure measurement and method. This allows for flexibility to accommodate differences in organizations' purposes, sizes, and circumstances. However, in order to be considered in accordance with the framework, there are some specific requirements. The "report should be a designated, identifiable communication."<sup>45</sup> It can be a separate report or included with another report as long as it is distinct and accessible. A statement from those in charge of governance of an organization should acknowledge their responsibility to ensure the integrity of the report, their collective work in the preparation and presentation of the report, and the report's adherence to the framework.

### <IR> Guiding Principles

Seven guiding principles specify the content and presentation of an integrated report and are required components. These include strategic focus and future orientation, connectivity of information, stakeholder relationships, materiality, conciseness, reliability and completeness, and consistency and comparability. Strategic focus and future orientation stipulate how an organization can create value in the short, medium and long term and its use of and effects on the capitals relevant to its operations. As an example, this could include a discussion of significant risks, opportunities and dependencies stemming from its business model and market position. Connectivity requires a holistic illustration of value creating factors and how they are combined, interrelated, and dependent. The principle of stakeholder relationships describes an organization's relationships based on nature and quality and how those relationships addresses the stakeholders' needs. Materiality represents matters that are significant to an organization over the short, medium, and long terms. Conciseness indicates that the report needs to be concise. Reliability and completeness

speak to the need to report both positive and negative significant matters, which are free of material errors. Consistency and comparability refer to presenting information in a consistent manner over time to allow comparisons within the organization and across other organizations.

### <IR> Content Elements

There are eight required content elements in an integrated report. These are organizational overview and external environment, governance, business model, risks and opportunities, strategy and resource allocation, performance, outlook, and basis of preparation and presentation, and general reporting guidance. These elements are framed in the form of questions. The organizational overview and external environment ask what an organization does and what the circumstances of operation are. To set the stage for why an organization exists, an organization's mission and vision along with its culture, ethics, and values need to be described. The principal activities and markets, ownership and operating structure, competitive landscape and market positioning are among the items that explain what it does and under what conditions. Quantitative information such as total revenues, employees, and countries of operation inform stakeholders in this category about the size of the organization's impact and where.

Governance is how the governance structure supports the organization's ability to create value in the short, medium, and long terms. This would include information about its leadership structure such as skills and diversity along with decision processes, ethics, innovation, remuneration and incentives. Additional factors from the external environment such as the legal, commercial, social environmental and political context should be included.

Business model poses questions about the organization's inputs, business activities, outputs, and outcomes as they relate to creating value. The inputs should be key ones and how they relate to the capitals. Key business activities need to be described and can include ways that the organization differentiates itself; examples are product differentiation, market segmentation, delivery channels and marketing. Outputs are not only an organization's major products and services but also by-products

and waste, which could be emissions. Major outcomes involve internal (e.g., revenue, reputation, employee morale) and external ones (e.g., tax payments, customer satisfaction, brand loyalty). Positive and negative outcomes should be included. Positive ones are those that create value such as a net increase in the capitals while negative ones decrease value such as a net decrease in the capitals.

## **Sustainability Accounting Standards Board**

The SASB is a U.S. nonprofit organization established in 2012 to develop and distribute industry relevant accounting standards involving material sustainability topics.<sup>46</sup> The sustainability accounting standards are intended for use by publicly listed corporations in the United States for the benefit of investors and the public. Standards are developed in three phases, which are preparation, development, and finalization. Preparation, which is led by SASB, starts the process. Development, the second phase, includes involvement by a multistakeholder industry working group. Finalization, the last phase, takes feedback from the public and a review by SASB's independent Standards Council. To provide transparency to the process, SASB allows access to a summary of feedback received during the public comment period and industry working groups, along with SASB's response to feedback received.

These standards are designed for disclosure in mandatory filings to the Securities and Exchange Commission (SEC), such as the Form 10-K and 20-F. As with many other reporting standards, SASB developed them with specific principles, which include the qualities of being relevant (tied to performance), useful (information for decision making), applicable (specific to industries), cost-effective (cost within reason), comparable (benchmarking among peers), complete (sufficient to understand), directional (clarity about changes), and verifiable (confirmable with evidence). In establishing the standards, 10 sectors (health care, financials, technology and communications, nonrenewable resources, transportation, services, resource transformation, consumption, and renewable resources and alternative energy) were targeted for development. Each of the 10 sectors includes specific industries with detailed metrics for each industry. Table 3.11 provides the sectors and industries covered.



**Table 3.11 SASB sectors and industries<sup>47</sup>**

Sectors/release date	Industries
Health Care/July 31, 2013	Biotechnology; Pharmaceuticals; Medical Equipment and Supplies; Health Care Delivery; Health Care Distributors; Managed Care
Financials/February 25, 2014	Commercial Banks; Investment Banking and Brokerage; Asset Management and Custody Activities; Consumer Finance; Mortgage Finance; Security and Commodity Exchanges; Insurance
Technology and Communications/April 2, 2014	Electronic Manufacturing Services and Original Design Manufacturing; Software and IT Services; Hardware; Semiconductors; Telecommunications; Internet Media and Services
Nonrenewable Resources/June 25, 2014	Oil and Gas—Exploration and Production; Oil and Gas—Midstream; Oil and Gas—Refining and Marketing; Oil and Gas—Services; Coal Operations; Iron and Steel Producers; Metals and Mining; Construction Materials
Transportation/September 24, 2014	Automobiles; Auto Parts; Car Rental and Leasing; Airlines; Air Freight and Logistics; Marine Transportation; Rail Transportation; Road Transportation
Services/December 17, 2014	Education; Professional Services; Hotels and Lodging; Casinos and Gaming; Restaurants; Leisure Facilities; Cruise Lines; Advertising and Marketing; Media Production and Distribution; Cable and Satellite
Resource Transformation/March 25, 2015	Chemicals; Aerospace and Defense; Electrical and Electronic Equipment; Industrial Machinery and Goods; Containers and Packaging
Consumption I/June 30, 2015	Agricultural Products; Meat, Poultry and Dairy; Processed Foods; Nonalcoholic Beverages; Alcoholic Beverages; Tobacco; Household and Personal Products
Consumption II/September 2015	Multiline and Specialty Retailers and Distributors; Food Retailers and Distributors; Drug Retailers and Convenience Stores; E-Commerce; Apparel, Accessories and Footwear; Building Products and Furnishings; Appliance Manufacturing; Toys and Sporting Goods
Renewable Resources and Alternative Energy/December 2015	Biofuels; Solar Energy; Wind Energy; Fuel Cells and Industrial Batteries; Forestry and Logging; Pulp and Paper Products
Infrastructure/March 2016	Electric Utilities; Gas Utilities; Water Utilities; Waste Management; Engineering and Construction Services; Home Builders; Real Estate Owners, Developers and Investment Trusts; Real Estate Services

One set of released standards is for commercial banks in the financials sector. SASB defines commercial banks as those that accept deposits and make loans to individuals and corporations and can also provide loans for infrastructure, real estate, and other projects. Material sustainability topics for commercial banks are: Financial Inclusion and Capacity Building, Systemic Risk Management, Customer Privacy and Data Security, Management of the Legal and Regulatory Environment, Integration of Environmental, Social, and Governance Risk Factors in Credit Risk Analysis. The accounting metrics, category and unit of measure are provided in the standards (see Table 3.12).

**Table 3.12 Commercial banks sustainable accounting standard<sup>48</sup>**

<b>Material topic</b>	<b>Accounting metric</b>	<b>Category</b>	<b>Unit of measure</b>
<b>Financial inclusion and capacity building</b>	Percentage of new accounts held by 1st time account holders	Quantitative	Percentage
	Percentage of total domestic loans for underserved and underbanked business segments	Quantitative	Percentage
	Number of participants in financial literacy initiatives for unbanked, underbanked or, underserved customers	Quantitative	Number (#)
	Loan to deposit ratio for: (1) overall domestic lending, (2) underserved and underbanked business segments	Quantitative	Ratio in U.S. dollars (\$)
	Loan default rates for: (1) Overall domestic lending (2) underserved and underbanked business segments	Quantitative	Ratio in U.S. dollars (\$)
	Discussion of management approach to identifying and addressing vulnerabilities and threats to data security	Discussion and Analysis	

*(Continued)*

**Table 3.12 (Continued)**

<b>Material topic</b>	<b>Accounting metric</b>	<b>Category</b>	<b>Unit of measure</b>
<b>Management of the legal and regulatory environment</b>	Amount of legal and regulatory fines and settlements associated with financial industry regulation and percentage that resulted from whistleblowing actions	Quantitative	U.S. dollars (\$) Percentage (%)
	Number of inquiries, complaints, or issues received by the legal and compliance office through an internal monitoring or reporting system, and percentage that were substantiated	Quantitative	Number (#) Percentage (%)
<b>Systemic risk management</b>	Results of stress tests under adverse economic scenarios, including the following measures (actual and projection): (1) loan losses; (2) losses, revenue, and net income before taxes; (3) Tier 1 common capital ratio; (4) Tier 1 capital ratio; (5) total risk-based capital ratio; (6) Tier 1 leverage ratio	Quantitative	U.S. dollars (\$), Ratio in U.S. dollars (\$)
	Basel III Liquidity Coverage Ratio (LCR)	Quantitative	Ratio in U.S. dollars (\$)
	Skewness and kurtosis of trading revenue	Quantitative	
	Net exposure to written credit derivatives	Quantitative	U.S. dollars (\$)
	Level 3 assets: (1) total value and (2) percentage of total assets	Quantitative	U.S. dollars (\$) Percentage (%)

<b>Integration of environmental, social, and governance risk factors in credit risk analysis</b>	Discussion of how environmental, social, and governance (ESG) factors are integrated into the lending process	Discussion and Analysis	
	Discussion of credit risk to the loan portfolio presented by climate change, natural resource constraints, human rights concerns, or other broad sustainability trends	Discussion and Analysis	
	Amount and percentage of lending and project finance that employs: (1) Integration of ESG factors (2) Sustainability themed lending or finance (3) Screening (exclusionary, inclusionary, or benchmarked) (4) Impact or community lending or finance	Quantitative	U.S. dollars (\$) Percentage (%)
	Total loans to companies in the following sectors/ industries: Energy/Oil and Gas, Material/Basic Materials, Industrials, and Utilities	Quantitative	U.S. dollars (\$)

### Sustainability Frameworks Compared

The three frameworks getting the most attention are complementary and are compared in the following table (Table 3.13).

**Table 3.13 Sustainability frameworks compared<sup>49</sup>**

	<b>GRI</b>	<b>IIRC</b>	<b>SASB</b>
Type of guidance provided	Guidance	Framework	Standards
Scope	General	General	Industry specific
Scale	International	International	United States
Target audience	All stakeholders	Investors	Investors
Target disclosure	Voluntary	Voluntary	Mandatory filing
Target reporters	Public and private companies	Public companies traded on international exchanges	Public companies traded on U.S. exchanges
Definition of materiality	Information that “may reasonably be considered important for reflecting the organization’s economic, environmental and social impacts, or influencing the decisions of stakeholders.” (GRI definition)	“A matter is material if it is of such relevance and importance that it could substantively influence the assessments of providers of financial capital with regard to the organization’s ability to create value over the short, medium and long term.” (IIRC definition)	Information is material if “a substantial likelihood that the disclosure of the omitted fact would have been viewed by the reasonable investor as having significantly altered the ‘total mix’ of the information made available.” (U.S. Supreme Court definition, <i>TSC Industries, Inc. v. Northway, Inc.</i> , 426 U.S. 438 (1976) and <i>Basic v. Levinson</i> , 485 U.S. 224 (1988))

## CHAPTER 4

# What Are the Responses to Sustainability Reporting?

As sustainability reporting becomes more prevalent, it is important to examine how it is perceived. There are many reasons (e.g., doing what is right, establishing a “green” reputation, creating innovative products) that motivate organizations to report their sustainable progress. On a practical level, the process of collecting and reporting the information requires considerable investment and eventually a return on the investment. The payoffs may be both short term and long term. In the short term, benefits could be immediate cost savings from energy efficiencies. The long-term benefits could be an organizational transformation that takes the organization in new and more profitable directions. The payoffs are not only about profits; the payoffs also may be in doing what is right. The major question needs to be asked—is all this effort worth it? Investors, rating groups, and the reporting companies seem to think so.

### What Are Some of the Returns?

The popularity of sustainable development as an investment criterion is evident in the existence of sustainability and socially responsible investment (SRI) funds. SRI indexes have performed very competitively when compared with non-SRI indexes. Between 1990 and 2013, the total returns for the Domini 400 have outperformed the S&P 500.<sup>1</sup> For nearly the last 30 years, the number of professional, institutional, and individual investors along with the total dollars invested has grown substantially. Total dollars under professional management in SRI from 1995 to 2014 increased from \$639 billion to \$6.57 trillion.<sup>2</sup> SRI focuses on issues other than just net income, and this has proven to be a profitable approach as investors demand more of these investments. Since

the beginning of 2012, many institutional investors in the United States have incorporated environmental, social, or corporate governance criteria in investment analysis and portfolio selection for total assets of \$4.04 trillion—a 77 percent increase.

Numerous academic studies over the past 20 years have examined the effect of environmental and social performance on numerous performance measures. In a 2011 study, the researchers examined the effect of corporate sustainability on organizational processes and performance of 180 U.S. companies categorized as high sustainability companies versus low sustainability companies.<sup>3</sup> Evidence from this study indicates that in the long term companies in the high sustainability group significantly outperformed the low group in the stock market as well as on accounting performance measures. In another study published in 2014, firms with superior performance on corporate social responsibility strategies were found to have better access to finance.<sup>4</sup> As more companies begin to report with a more common reporting framework, examinations across companies and time will be more meaningful.

## Why and What Are the Companies Reporting?

The Big Four accounting firms, university researchers, and consulting companies have been tracking sustainability reporting trends of the world's largest companies since the 1990s. In the International Survey of Corporate Responsibility Reporting 2013, KPMG reported that 93 percent of companies in the Global 250 (G250) companies issued sustainability reports, of which 82 percent referred to the GRI guidelines.<sup>5</sup> Based on the number of reports issued worldwide, corporate sustainability reporting is now considered mainstream among the largest companies. In a 2013 survey conducted by the Boston College Center for Corporate Citizenship and EY, companies responded that transparency with stakeholders was a key reason driving them to report.<sup>6</sup> Other top reasons were competitive advantage, risk management, stakeholder pressure, company culture, and brand reputation. In another recent study conducted by Baruch College, 614 companies that were listed in the top 250 of the 2012 Fortune 500 or Fortune Global 500, were examined to determine the most relevant topics considered.<sup>7</sup> Seven topics

surfaced as important in more than 90 percent of the reports; these were environment (99.7 percent), human rights (98.4 percent), code of conduct (97.1 percent), external stakeholder engagement (96.9 percent), philanthropy and community involvement (96.4 percent), labor relations (95 percent), and executive's message (92.5 percent).

## **How Is the Investment Services Community Responding?**

The investment services community provides various information products (e.g., evaluations of companies by industry) and financial products (e.g., mutual funds by company size). Sustainability has become a valuable criterion to evaluate organizations' performance and for establishing mutual funds. Indices providing assessments of sustainability have increased in the last 10 years. For example, the list includes KLD Domini 400 Index, the Dow Jones Sustainability Indices (DJSI), RobecoSAM, the FTSE4Good Global 100 Index, Morningstar Japan SRI Index, and Humanix 200 Global Index. To illustrate how some of these indices work, the DJSI, RobecoSAM, and FTSE4Good are described further.

### ***What Is the DJSI?***

The DJSI was established in 1999 to provide investors with a third-party assessment of leading, global sustainable companies.<sup>8</sup> Together, RobecoSAM and S&P Dow Jones Indices provide the DJSI. The performance of the world's leading companies is tracked in terms of economic, environmental and social criteria. For investors who integrate sustainability considerations into their portfolios, the DJSI Family of indices serve as benchmarks. These indices are DJSI World, DJSI North America, DJSI Europe, DJSI Asia Pacific, DJSI Korea, DJSI Emerging Markets, and DJSI Australia. Each year the DJSI invites 3,000 companies to submit information to RobecoSAM's Corporate Sustainability Assessment (CSA). Information for evaluation comes from the RobecoSAM questionnaire, media, and stakeholders. The evaluation involves quantifying companies' opportunities and risks from economic, environmental, and social developments that are relevant to the



companies' financial success but not necessarily found with conventional financial analyses. With these evaluations, the DJSI identifies and selects 2,500 companies for inclusion in the DJSI World.

*RobecoSAM Questionnaire*—this is considered the most important source of information. The *economic, environmental, and social dimensions* of sustainability are covered in questionnaires, which are specific to each of the 59 DJSI industries following Standard & Poors Global Industry Classification Standard. RobecoSAM's analysts identify sustainability topics and apply general specific criteria relating to standard management practices and performance measures. These include Corporate Governance, Human Capital Development, and Risk and Crisis Management. Approximately 40 to 50 percent of the assessment is based on the general criteria. The questionnaire is devoted to approximately 50 percent industry-specific economic, environmental, and social challenges that face companies in similar industries. This focus allows for peer comparisons and identification of industry leaders.

*Media and stakeholder analysis* is integral to CSA. This involves ongoing monitoring of media coverage and other publicly available information from consumer organizations, governments, or NGOs. As part of the analysis, RobecoSAM employs RepRisk ESG Business Intelligence to gather information about the environmental, economic, and social crisis situations of companies and their responses to them. This is done daily so that companies' environmental, social, and governance risks can be assessed on an up-to-date basis. This provides a way to assess a company's exposure to material risks as well as how well its policies, processes, management systems, and commitments are working.

### **Who Are the DJSI World Industry Leaders?**

The Dow Jones Sustainability World Index (DJSI World) includes the top 10 percent of the biggest 2,500 companies in the Dow Jones World Index in terms of economic, environmental, and social criteria. The first publication of the DJSI Index was September 8, 1999. To illustrate a sample of the wide variety of companies, industries, and countries represented in this index, Table 4.1 lists the industry group leaders as of September 2014.

**Table 4.1** *DJSI world: Industry leaders (2014)<sup>9</sup> (effective as of September)*

Company name	Industry group	Country
Bayerische Motoren Werke AG	Automobiles and components	Germany
Westpac Banking Corp	Banks	Australia
Siemens AG	Capital goods	Germany
SGS SA	Commercial and professional services	Switzerland
LG Electronics Inc	Consumer durables and apparel	Republic of Korea
Sodexo	Consumer services	France
ING Groep NV	Diversified financials	Netherlands
Thai Oil PCL	Energy	Thailand
Woolworths Ltd	Food and staples retailing	Australia
Unilever NV	Food, beverage, and tobacco	Netherlands
Abbott Laboratories	Health care equipment and services	United States
Kao Corp	Household and personal products	Japan
Swiss Re AG	Insurance	Switzerland
Akzo Nobel NV	Materials	Netherlands
Telenet Group Holding NV	Media	Belgium
Roche Holding AG	Pharmaceuticals, biotechnology, and life sciences	Switzerland
GPT Group	Real estate	Australia
Lotte Shopping Co Ltd	Retailing	Republic of Korea
Taiwan Semiconductor Manufacturing Co Ltd	Semiconductors and semiconductor equipment	Taiwan
Wipro Ltd	Software and services	India
Alcatel-Lucent	Technology hardware and equipment	France
Telecom Italia SpA	Telecommunication services	Italy
Air France-KLM	Transportation	France
EDP Energias de Portugal SA	Utilities	Portugal

### ***What Is RobecoSAM?***

RobecoSAM (formerly SAM) was founded in 1995 in Zurich, Switzerland, as an asset management company dealing exclusively with sustainability investments.<sup>10</sup> Its services include asset management, indices, engagement, voting, impact analysis, sustainability assessments, and benchmarking. In providing asset management, the company works with institutional asset owners and financial intermediaries. It focuses on a variety of ESG-integrated investments both in public and private equity. Resource efficiency themes (i.e., sustainable agribusiness, smart energy, sustainable healthy living, smart materials, and sustainable water) are a feature of its offerings.

### ***FTSE4Good Index Series***

FTSE4Good provides tradable indices and benchmarks for investors interested in environmental, social, and governance practices socially.<sup>11</sup> Started by the FTSE Group, FTSE is an independent company that provides indices used by consultants, fund managers, investment banks, stock exchanges, brokers, and asset owners. The indices are used for asset allocation, investment analysis, portfolio hedging, tracking funds, and performance measurement.

## CHAPTER 5

# External Assurances

For many companies, corporate social responsibility reporting is seen as an approach to doing “things differently.” How do companies gain public trust with sustainability reporting? If companies are going to publish sustainability performance indicators, then the information needs to be credible. Third-party assurance of these reports is one approach to gaining credibility. Accounting firms, specialist consultancies, certification bodies, nongovernmental organizations, stakeholder groups, and academics perform third-party evaluations. Accounting firms, specialist consultancies, and certification bodies provide the vast majority of sustainability related services and third-party assurance. Certification bodies are typically involved with the certification of specific systems (e.g., ISO 9000 or 14001), projects, and measurements (e.g., greenhouse gas emissions) rather than the assurance of a complete report.

Large accounting firms such as Deloitte, Ernst & Young, KPMG, Moss Adams, and PriceWaterhouseCoopers have divisions dedicated to sustainability and climate change services, which includes advisory (e.g., sustainability strategy, implementation), tax (e.g., U.S. renewable energy tax credits), and assurance (e.g., examinations, reviews, agreed-upon-procedures). It is no surprise that the accounting profession is involved in providing assurance for sustainability reports given its long history of providing financial statement audits. The profession offers a variety of attestation services. These attestation engagements include agreed-upon procedures, examinations of nonfinancial information, and reviews and audits of financial reports. Users of financial reports (interim and annual) should be familiar with assurances provided by a review or audit opinion issued by certified public accountants (CPA). A review is performed when limited assurance is needed and is much narrower in scope than an audit. The purpose of an audit of financial statements is to examine management’s assertions that the financial statements are fairly presented

in accordance with Generally Accepted Accounting Principles (GAAP). In the audit process, the financial statements are tested for compliance with GAAP, an established set of criteria. To test these assertions, auditors conduct their examination in accordance with the accounting profession's Generally Accepted Auditing Standards. Audits provide the highest level of assurance for financial statements. The final product is an opinion on the fair presentation of the financial statements. The audit report describes the scope of the work done and the conclusion. The auditing process for financial statements is well established and consistently applied across companies.

Audits of financial statements demonstrate how companies establish a level of trust with users who depend on financial information to make decisions. The legal requirement for public companies to have audited financial statements goes back to legislation passed in the 1930s after the stock market crash of 1929. Before that time, financial reports—if published at all—were not reliable. When financial securities were traded on false or nonexistent information, there were dire consequences for the U.S. stock market and eventually the world economy. The U.S. Securities and Exchange Commission requires publicly held companies to have their annual financial statements audited by independent CPA. As part of its Code of Professional Conduct, the American Institute of Certified Public Accountants (AICPA) stipulates that when independence is required, “A member in public practice should be independent both in fact and appearance when providing auditing and other attestation services.”<sup>1</sup> For CPAs, the issue of public trust is at the heart of their profession. For nearly 100 years, the accounting profession has been performing financial statement audits with the trust of the investing public in mind. This is evident in its establishment of standardized auditing standards that binds CPAs' work.

Although U.S. regulators do not govern sustainability assurance services, globally recognized standards do exist. Assurance standards include the AccountAbility AA1000 Assurance Standard (AA1000AS, 2008), the International Auditing and Assurance Standards Board (IAASB) International Standards on Assurance Engagements (ISAE) 3000, and the AICPA Attestation Standards (AT 101, AT201, and AT601).

The AA1000AS (2008) standard addresses the requirements for performing sustainability assurance with a focus on the organization's responsiveness and future performance.<sup>2</sup> Nonaccounting firms tend to follow this standard. It was developed by AccountAbility, an international think tank and consulting firm specializing in advisory services. The standard emphasizes the significant interests of the stakeholders by finding omissions or misrepresentations in the report as a whole that could affect the behavior of intended users of the report. Using this standard, the assurance provider gives assurance on the extent and type of adherence to the three AA1000 AccountAbility Principles Standards (AA1000APS) 2008. These principles are the Foundation Principle of Inclusivity, the Principle of Materiality, and the Principle of Responsiveness. Inclusivity addresses the issue of including stakeholders in developing a strategy for sustainable development, while materiality covers determining the important issues for an organization and its stakeholders. Responsiveness involves how the organization responds to the important issues that pertain to sustainability performance.

The ISAE 3000 standard provides principles and procedures for accounting professionals performing all assurance engagements other than historical financial information audits or reviews, which are covered by the International Standard on Auditing (ISA) and International Standard on Review Engagements. The IAASB, an independent standard-setting body that operates under the auspices of the International Federation of Accountants, issued ISAE 3000.<sup>3</sup> It specifies an approach and procedures to be followed to be in compliance with professional assurance standards and codes of conduct. The ISAE 3000 standard states that assurance engagements can be conducted for (a) environmental, social, and sustainability reports; (b) information systems, internal control, and corporate governance processes; and (c) compliance with grant conditions, contracts, and regulations. ISAE 3000 provides guidance on evaluating ethical requirements, maintaining quality control, accepting and planning engagements, acquiring work of an expert, obtaining evidence, documenting the engagement, and preparing the assurance report. Effective on or after September 30, 2013, ISAE 3410 has been issued to cover assurance on greenhouse gas statements.

The Attest Engagements AT Section 101 (AT 101) standard, developed by the AICPA and used by CPAs in the United States, binds CPAs when they are conducting assurance services other than the audit and review of financial statements. Assurance services such as examinations and reviews for sustainability reporting come under this category for CPAs. Examinations are considered a high level of assurance because they involve search and verification procedures, such as observations, inspections, and confirmations. The resulting assurance report states whether or not the information is fairly presented, in all material aspects, based on the criteria identified. The examination report basically states whether the company has applied the reporting criteria appropriately. For example, if the company used the Global Reporting Initiative (GRI) sustainability reporting framework, the CPA's report says whether or not they followed the GRI framework in presenting the information.

Reviews of sustainability reports represent a moderate (or limited) level of assurance because the procedures are limited to inquiries of key company personnel and analytical procedures (e.g., comparisons of data to prior periods, forecasts, and expected relationships). Reviews are not considered opinions on the fair presentation, and the wording in the report demonstrates this. Review assurance reports state whether nothing came to the attention of the auditors that would make them believe that the information is not fairly presented, in all material aspects, in conformity with the criteria.

The AT 101 standard stipulates general standards, standards of fieldwork, and standards of reporting for when accountants are engaged to do examinations and review. The general standards address what constitutes adequate training and proficiency, knowledge of the subject matter, independence, and due professional care. Standards of fieldwork include how to plan and supervise these engagements along with how to obtain sufficient evidence to issue a conclusion. Reporting standards cover the content of the assurance report. These include stating the subject matter or the assertion being reported on, a statement about the character of the engagement in the report, and the CPA's conclusion about the subject matter in relation to the criteria against which it was evaluated. The CPA is obligated to state all significant reservations about the engagement, the subject matter, and, if applicable, the assertion in the report. If the report

is restricted to certain users, the standard specifies what special wording is needed to convey the restrictions.

CPAs can be hired for other than examinations and reviews, such as attestation to agreed-upon procedures and compliance. The AT201 standard covers agreed-upon procedures, which is when a CPA is engaged by a client to issue a report of findings based on specific procedures performed on subject matter. An example is the confirmation of specific information with third parties. AT601 provides guidance for a client's compliance with specified laws, regulations, rules, contracts, or grants or the effectiveness of a client's internal control over compliance with specified requirements. An attest engagement conducted in accordance with AT201 and AT601 must comply with the general, fieldwork, and reporting standards in AT101.

The AICPA Auditing Standards Board is considering developing guidance for review-level engagements that addresses greenhouse gas statements. Another area being considered by the AICPA Assurance Services Executive Committee is the development of assurance, advisory guidance, or both to help members address an emergence of sustainability reporting and assurance requirements stemming from supply chain vendor code of conduct requirements and other certification requirements. Big retail organizations are fueling demand for these services by requiring their current and prospective suppliers to provide reporting and third party assurance on their environmental, social, and corporate governance practices.

Recent studies of U.S. companies issuing sustainability reports show that there is an increasing trend. For companies in the early stages of reporting, the state of their supporting records and information systems may be inadequate for assurance. As companies refine their information systems and reports and stakeholders demand more information, they will see the need for assurance. As more people use sustainability information to make decisions, the economic implications of using this information are increasing. Credibility of the information becomes crucial as the information is publicly presented.

If assurance is an investment in establishing credibility for sustainability reports, what is the return on investment (ROI)? The answer depends on what a company hopes to gain from the process of reporting



and assurance. A quantifiable ROI might not be calculable because many of the benefits are qualitative and have long-term impacts. Risk mitigation is one example. If the sustainability report process enables companies to focus on being active in mitigating economic, environmental, and social risks, companies can be more resilient when responding to crises. For example, without a dedicated approach to tracking and eliminating slave labor in their factories or supply chain, companies can be caught unable to respond in an appropriate and timely fashion to the discovery of such instances. Being less able to respond to the problem means being less in control of the narrative of events. Another benefit is that sustainability reports and assurance can be a product differentiator. The CDP ratings of companies are using the assurance of greenhouse gas emissions. If assurance on these reports provides differentiation between companies, credible information has tremendous value.

Why might assurance reports from nonaccounting firms seem more informative than those produced by accounting firms? Accounting firms are bound by professional standards that cover report content and are consistent across similar engagements. The assurance report form and content are based on those standards similar to those for financial statement engagements. There are three standard paragraphs, which include an introduction, the scope of work, and a conclusion. In both financial statement audits and nonfinancial attestation engagements, accounting firms provide detailed recommendations for improving processes and operations in a “management letter,” which is not made public. These letters are viewed as internal management tools that are not necessarily useful to external users because of the level of detail about internal controls, processes, and so on. Nonaccounting assurance firms are not bound by specific standards that guide their work and report content. Their report forms can vary depending on the requests of their clients.

How should a company choose its assurance provider? Company officials should decide what they want the sustainability report and assurance to provide. It should not be viewed as a commodity, because one size does not fit all companies. Companies need to discuss their needs with various providers and assess what is appropriate for their sustainability journey. Sustainability reporting and assurance is evolving

as the demand for report content and format are changing. Many reports are freestanding, but the trend is toward integrated reporting, which has sparked the interest of many preparers and users.

How much do reporting and assurance services cost? Pricing for these sustainability reporting and assurance services depends on what is provided and by whom. Companies need to assess what they want and which provider meets their needs. There are many important questions to ask before deciding which firm is the right one. What are the provider's methods for delivering assurance? Are their methods rigorous and understandable? Which provider is likely to address their long-term needs? How does the future of reporting fit into their plans?

Can assurance of sustainability reports counter charges of "green-wash?" For negative actions that are covered up in a sustainability report, an assurance on the report lessens the likelihood that a misstatement would be missed. If the information in a sustainability report is geared to promoting only a company's positive actions, the answer is no. An assurance report would only address the items in the report and not necessarily the items omitted. A globally standardized reporting framework could address this issue.

Achieving sustainability is a multifaceted task, one that is dynamic and requires deliberate assessment. To get the most out of reporting and assurance, companies need to become educated on the process, the providers, and the outcomes. One way is to look to other firms' reports and their successes. Another is to solicit information from providers about what they can do for the company. If done with the intention of improving operations, building their brand, mitigating risks, and communicating with stakeholders, companies can benefit from this close examination of their operations as they plan for the future.

The GRI supports the use of internal and external approaches to bolster the credibility of sustainability reports. Internal auditing and controls can provide some degree of assurance about the quality of the information being produced. Because internal methods are not sufficient, external assurance can be obtained from professional assurance providers, stakeholder panels, and other external parties. Regardless of whether internal or external methods are used, the GRI recommends that competent individuals or groups perform the evaluation. Professional standards or

other systematic methods that provide evidence can be used. The GRI defines external assurance as a report on the quality of the sustainability report being reviewed and information in the report. The expectation is that the conclusions of an assurance evaluation are to be published. The GRI makes a distinction between external assurance and compliance assessments (or performance certifications). The latter is an assessment on the level of performance.

The GRI specifies important attributes for external assurance of reports that are constructed under the GRI Reporting Framework. First, external groups or individuals conducting the assurance should be properly trained in assurance procedures and knowledgeable of the matter being assessed. Second, the assurance procedures should be defined, documented, and based on evidence. Third, the report should consider the reasonableness and fairness of the organization's performance. This includes correctness of the data as well as an overall evaluation of the content. Fourth, assurance providers should be in a position of independence from the organization. Relationships with the organization should be ones that do not preclude the assurance providers from rendering an independent and impartial conclusion. Fifth, the report should state the degree to which the report has applied the GRI Reporting Framework with regard to the conclusions of the report. The final attribute is that a written opinion or conclusion be available to the public with an assertion about the organization's relationship to the assurance provider.

## **International Organization for Standardization Standard 14001—Environmental Management Systems**

In addition to having its sustainability report evaluated, an organization can have the environmental dimension of their operations assessed for performance quality. For example, environmental management systems (EMS) can be certified in accordance with international standards by certification bodies. ISO 14001, the international standard for EMS, is becoming increasingly popular among organizations that want to exert more control over their environmental impacts. ISO 14001 was designed to help an organization to identify, evaluate, and continually improve an organization's products, services, and activities that affect the environment.

In effect, it helps with the implementation of an EMS and allows for an EMS to be certified by an outside party. The standard was initially issued in 1996, and it was revised in 2004. There are other standards in the environmental series that are guidelines to address the development and implementation of EMS, audit program review and assessment material, labeling issues, performance targets and monitoring, and life cycle issues. ISO 14001 is the only one in the series that can be certified.

### ***The Benefits of ISO 14001***

The ISO 14001 certification demonstrates that an organization has met an international standard for establishing and maintaining its EMS. This provides an organization with a systematic approach to monitor their resource and energy usage so they can reduce their waste. A reduction in waste can reduce costs. Another benefit is a systemized approach to legal compliance. Such an approach can prevent legal costs and fines if environmental damage is averted. In addition, a certified EMS enables an organization to be equipped to address stakeholders' demands for better environmental performance. It allows the organization to demonstrate its efforts to lessen its impact on the environment and to publicly advertise its certification.

ISO 14001 is intended to be flexible so that many organizations can use the standard. For example, an organization sets its own goals. This allows organizations of all sizes and types to use the standard. ISO 14001 also allows that different organizations will have different purposes. The standard requires an organization's environmental policy to comply with legal requirements and to be committed to pollution prevention and continual improvement. In addition, the standard facilitates the creation of an EMS that can be subjected to an objective audit.

### ***The Components of an EMS Under ISO 14001***

There are six components to an EMS under ISO 14001.<sup>4</sup> These are general requirements, environmental policy, planning, implementation and operation, checking and corrective action, and management review. The general requirements involve establishing and maintaining the system

in accordance with the standard. This encompasses implementation, documentation, and continual improvement of the system.

## Policy

In setting its environmental policy, top management should be directly involved by committing to compliance with environmental laws and to continual improvement. The policy should be the foundation for objectives and goals. A written policy is necessary so that both external and internal groups can review it. To keep the policy current with the organization's environmental status, it should be reviewed periodically. In order for the policy to be beneficial to the organization, it should be distributed to employees and contractors along with being made available to the public.

## Planning

Planning needs to be done for all the environmental aspects of an organization's activities (past, current, and future). An examination of inputs and outputs of proposed, current, and past products and services is relevant to determining how an organization interacts with the environment. Examples of interactions are air emission, waste and by-products, and use of raw materials. The effects of packaging and transportation of products also should be considered. The planning component involves setting up a system that identifies and updates environmental laws that are applicable to the organization. Environmental goals and targets should be set in the environmental policy and need to be documented. Methods, timeframes, and levels of responsibility for these goals need to be specified.

## Implementation and Operation

The implementation of an EMS involves many aspects. Typically, financial, human, and organizational infrastructure are the resources needed for a successful system. Top management's support is important here because it is responsible for providing the resources to establish and maintain the EMS. In addition to resources, it is essential to communicate to

employees what their roles, responsibilities, and levels of authority will be. To provide for a consistent implementation, this information should be documented. Responsibility for the system should be given to a key employee, but top management should keep involved with the system by reviewing it regularly. Implementation should involve identifying employees that could cause material environmental impact in the course of their work. Training these employees to handle their work carefully is a crucial step. In addition, all employees need to be apprised of the consequences of not conforming to the policy.

The successful operation of an EMS is dependent on many things. Internal and external communications are important aspects of the EMS. Internal communications need to be formalized so that information can be communicated across various levels of the organization. In addition, a policy for communications from and to external parties should be determined and documented. Public relations can be critical to safe handling of environmental problems.

ISO 14001 requires that the organization document many aspects of its EMS. This includes documenting its environmental policy, goals, and targets; boundaries of the EMS; main components of the EMS; and interactions of the system. The organization must take control of EMS documents. This relates to how specific documents are approved, changed, and stored. As part of its operational controls, an organization should connect its environmental policy to its activities that have significant environmental impacts. Plans and procedures for controlling operations that deviate from policy should be established along with plans and procedures for emergencies. Emergency preparedness and response should be adapted to what could happen at the organization's facilities. Testing for emergency preparedness should be done periodically.

### Checking

How well an organization is managing its environmental impacts can be evaluated by collecting data. This data can be compared to standards or targets. Not only should the organization meet its targets, but it should also demonstrate that it has complied with legal requirements. The organization should have procedures that deal with nonconformity.

In addition, procedures for access to these records and identification of users should be created. Procedures for internal audits should be created.

### Management Review

Management review is a necessary component of the ISO 14001 standard. Top management should review the environmental management system at specific intervals. This review should include an examination of audit results, external communications, environmental performance, performance reports, corrective and preventive actions, and recommendations.

### *How Many Organizations Are ISO 14001 Certified?*

ISO 14001 was published in 1996, and since then the number of companies acquiring third-party certification has increased steadily. By the end of 2013, there were approximately 354,542 certifications worldwide.<sup>5</sup> The countries with more than 10,000 certifications at the end of 2013 are shown in Table 5.1.

**Table 5.1** *Number of certifications by country*

Country	Number of certifications
China	104,735
Italy	24,662
Japan	23,723
United Kingdom	16,879
Spain	16,081

## CHAPTER 6

# Conclusion

Sustaining the good health of Earth is in large part dependent on the actions of businesses, governments, and individuals that strive for sustainable development, or “development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”<sup>1</sup> Scientific evidence of climate change and the projected consequences are cause for great concern for everyone. Human activities that are responsible for climate change, environmental pollution, and wasteful use of resources (natural and human) have had profound effects on Earth’s health. The consequences are being felt now and are likely to get worse without concerted efforts from everyone. This means that more businesses, governments, and individuals must respond soon; humans have no other planet to go to. In order to protect the health of the planet for human life, it is essential for everyone to address the problems created by the past and current practices of businesses, government, and individuals. These problematic practices are often short term in focus. In business, the focus on short-term profits without regard for the future has been harmful. These profits have been frequently at the expense of the health of the environment, workers, communities, and companies. For governments, many past policies and practices regarding the protection of the environment have dealt with legal compliance rather than proactive policies such as requiring green buildings for government facilities. Individuals in many industrial countries have participated in a consumer society that has encouraged one-use disposable goods.

Examples of the detrimental effects of one-use disposable goods can be seen in the plastic bottles and bags that litter the land and oceans. The collective enormity of this litter can be seen in what is called the Great Pacific Garbage Patch, which stretches from the West Coast of North America to Japan.<sup>2</sup> It is in reality two patches, the Western Garbage Patch, located near Japan, and the Eastern Garbage Patch, located between the



U.S. states of Hawaii and California. Around 80 percent of the debris originates from land-based activities while 20 percent from water-based activities (i.e., boats, oil rigs, cargo ships). These patches consist almost entirely of small pieces of plastic, called microplastics. What starts as larger pieces (e.g., plastic bags, plastic water bottles) floating in the ocean is degraded by the sun. Once the plastic breaks into tiny pieces, they are not always visible by eye but can make the water cloudy. This cloudy mix is often intermixed with larger solid items (e.g., shoes, fishing nets). Scientists who study the Great Pacific Garbage Patch have measured close to 750,000 bits of microplastic in one square kilometer. This debris has severe health implications because harmful chemicals from the plastic leech into the ocean. Contamination of the oceans has dramatic consequences for the fishing industry and the millions of people who depend on fish as a major food source.

Many businesses, countries, and individuals worldwide are attempting to address the problems of an expanding population facing finite and stressed resources, but many more need to do so as well. For businesses, operating in unsustainable ways is likely to be unprofitable. Companies that continue to waste resources will cease to be competitive because the cost of waste will become too expensive. Rather than be forced into sustainable activities, many organizations have chosen to engage in sustainable activities on their own accord. These organizations have seen the benefits that accrue from a sustainable approach. Many companies are reporting their activities and seeing the both internal and external rewards.

## Benefits Analysis

Sustainability reporting provides the opportunity to identify the organization's biggest challenges for the future. For many companies, sustainability reporting helps them identify what they need to change to become more sustainable. Some companies may find it necessary to develop ecoefficient manufacturing processes in an effort to reduce greenhouse gas emissions. It also may mean adapting to increased demands to produce environmentally friendly products. Innovation to meet challenges can give an organization the opportunity to become a leader in its

industry. A company that is adaptive and innovative can instigate changes in an industry. Interface Inc. has been successful in turning its carpet and upholstery business into more than a business whose only goal is to make a profit. It has transformed itself into a company that leads the industry in sustainable processes and products. It has shown that this approach is profitable in economic, environmental, and social ways. Identifying the sustainability challenges in advance is part of good strategic management.

Sustainable development is multifaceted, and, as a result, it requires a systematic approach. This can have important implications for establishing and implementing a unifying sustainable development strategy throughout the organization. Sustainability accounting and reporting provide a systematic way to collect the necessary information to evaluate an organization's economic, social, and environmental risks. Once a system is in place, benchmarks for performance can be established and prioritized. Actual performance can be compared to these benchmarks. The feedback from sustainability reporting enables both internal and external monitoring of progress toward sustainability.

Sustainability reporting is not only for internal monitoring but also for communicating progress toward sustainability. This communication serves many purposes. Goodwill is generated when organizations communicate with their stakeholders. The goodwill is valuable to establishing cooperative relationships with stakeholders. Cooperative relationships can lead to direct conversations with their stakeholders—customers, investors, suppliers, and anyone that is affected by the organization. Stakeholders can provide valuable input that allows the organization to be proactive rather than reactive to problems. Companies can use stakeholder engagement meetings to educate stakeholders about their product innovations along with their products in development. Stakeholders can provide suggestions to improve the products. This open dialogue generates goodwill that improves relationships with stakeholders.

Organizations are recognized for their good reporting, which enhances their reputation. CorporateRegister.com, an independent, privately held organization in the United Kingdom, provides an online directory of sustainability reports and makes it publicly available. In addition to the directory, CorporateRegister.com provides independent awards for corporate social responsibility reporting. To determine best reports,

**Table 6.1 Corporate Register Sustainability Awards<sup>3</sup>**

Company name	Award
Aurora Organic Dairy	Best First Time
Novo Nordisk A/S	Best Integrated
BMW AG	Best Carbon Disclosure
Coca-Cola Enterprises Inc	Creativity in Communication
Nike Inc	Innovation in Reporting
Novartis International AG	Relevance and Materiality
H&M Hennes & Mauritz AB	Openness and Honesty
BMW AG	Credibility Through Assurance

stakeholders worldwide such as academics, sustainability consultants, NGOs, journalists, investors, analysts, and students are invited to vote on the report content, communication, credibility, commitment, and comparability. In 2015, Nestlé's 2013 sustainability report won first place in Corporate Register's best overall report category.<sup>4</sup> Nike Inc and The AP Moller-Maersk Group won first and second runner up, respectively. Other categories and winning companies are presented in Table 6.1.

## Cost Analysis

There are several cost considerations for sustainability accounting and reporting. The tangible costs include system design, data collection, report design, and expertise. With an increase in reporting, there has been an increase in firms that specialize in assisting organizations with their reporting needs. The demand for this service is on the rise and will lower the cost of the service. Organizations should seek competitive bids before contracting for this service. These costs should be part of an organization's budgeting process.

The intangible cost is the risk of reporting unfavorable outcomes. If positive outcomes enhance an organization's reputation, there is the risk of harm from negative ones. This risk should be compared to the risk of not reporting. Not reporting puts an organization in a reactive posture rather than a proactive one. Wal-Mart's labor problems are a good example. Lawsuits over unfair labor practices have put Wal-Mart on the defensive. Employees are distrustful of Wal-Mart's claims that the

company is working to correct its past actions. Organizations that engage with their stakeholders and develop trusted relationships are better able to mitigate these risks.

## Standardization

Standardization of reporting and assurance services may prove beneficial to the credibility of sustainability reporting. This standardization should be in the form of basic guidelines with requirements that would be common to all organizations. However, reporting standards should be flexible enough to allow for differences in organizations. This approach may be useful to help users understand the importance of the report contents as they relate to a specific organization's progress. Reports prepared on a basic set of guidelines will allow for comparability across time. Sustainable progress or the lack of it will be evident. For the organization issuing the report, consistency of reporting can reduce costs. Another added benefit is that assurance providers will have a standard set of criteria against which to provide assurance. The training of assurance providers will be easier if the reporting principles are standardized. The cost of assurance services will also be less if the assurance process is relatively standardized. Organizations need to become involved in the standard-setting process to ensure that their interests are represented.

As more standardized reports emerge, conducting research on sustainability reporting may provide useful analyses of the effects of these reports on internal and external decision making. This includes research involving managerial accounting tools and sustainability indicators. More research needs to be conducted on the effects of sustainability reporting on long-term stock price performance. As companies adopt more standardized guidelines for reporting, studies of these reports may provide better comparisons across time and companies.

## Predictions for the Future

Sustainable development will continue to be adopted worldwide as an operational strategy for many organizations. As organizations adopt this strategy, sustainability reporting will continue to increase in importance.

The reporting process will evolve as more participants become invested in producing reports. Accounting professionals are in a good position to be leaders in assisting their clients with the adoption of sustainability accounting and reporting systems. Their knowledge of traditional financial and managerial accounting will serve this end well.

Sustainability reporting is not likely to reach the same level of standardization as financial reporting, but there is likely to be a commonly accepted set of guidelines similar to the current Global Reporting Initiative (GRI) Reporting Framework. One set of guidelines will probably not be all things to all organizations so sector guidelines are likely to be the next growth area of report development. This growth will be a natural progression as members of each sector find that they have special sustainability reporting needs. Each sector (e.g., utilities, manufacturing) has some sustainability concerns that are more pressing than others. The risks and opportunities in each may need to be addressed separately to make sustainability reporting more useful to the preparers and readers. GRI has already begun creating sector guidelines for reporting. This process presents a great opportunity for many professions to be more involved in the development of these reports.

There will be many career opportunities in sustainable development. To be a part of these opportunities, knowledge of the three dimensions of sustainability and their impacts on organizations' long-term success will be critical to developing expertise in sustainability. Established business professionals will need to acquire the skills necessary to adopt, report, and analyze sustainability information. Various professional organizations like the American Institute of Certified Public Accountants have begun to provide information to the public and its members about sustainability reporting.<sup>5</sup> In addition, new business students are being introduced to these concepts and practices in their formal education. Business schools have more offerings in all the business functions—accounting, finance, marketing, and management. This movement is underway at many universities and colleges as evidenced by a list of 116 sustainability-focused business, management, and finance programs on the website of the Association for the Advancement of Sustainability in Higher Education (AASHE), a nonprofit organization.<sup>6</sup> AASHE promotes sustainability in

higher education by providing among other things leadership, resources, and professional development to faculty, students, and administrators.

The future looks bright for sustainability accounting and reporting. This includes the incorporation of sustainability indicators in managerial accounting reports. As more organizations adopt sustainable development as part of their strategy, more managerial accounting tools will be adapted to make assessments of progress. As more organizations adopt sustainability reporting, readers of these reports will demand assurance that the reports reflect an organization's true progress toward sustainability. External assurance is likely to become a major part of the reporting process and the accounting profession. Adopting sustainable development for the future health and wealth of the planet and its people is an exciting prospect. This approach is not only the right thing to do but also the smart thing to do.



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**Gwendolen B. White, PhD, CPA**, is founder of Sustainability Within Reach LLC (<http://www.sustainabilitywithinreach.com/index.php>), a sustainability consulting firm specializing in sustainability reporting, sustainability strategy development, and assurance preparedness. She speaks at national and international conferences on sustainability reporting. She is also the author of *Sustainability Reporting—Doing Well by Doing Good*. Her numerous articles on environmental and sustainability reporting are published in academic and practitioner journals. She is a GRI Certified Trainer with the ISOSGroup. She earned her PhD in business administration with a major in accounting from Indiana University. Her previous work experience includes being on the accounting faculty at Indiana University and Ball State University and as a staff auditor for KPMG.

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