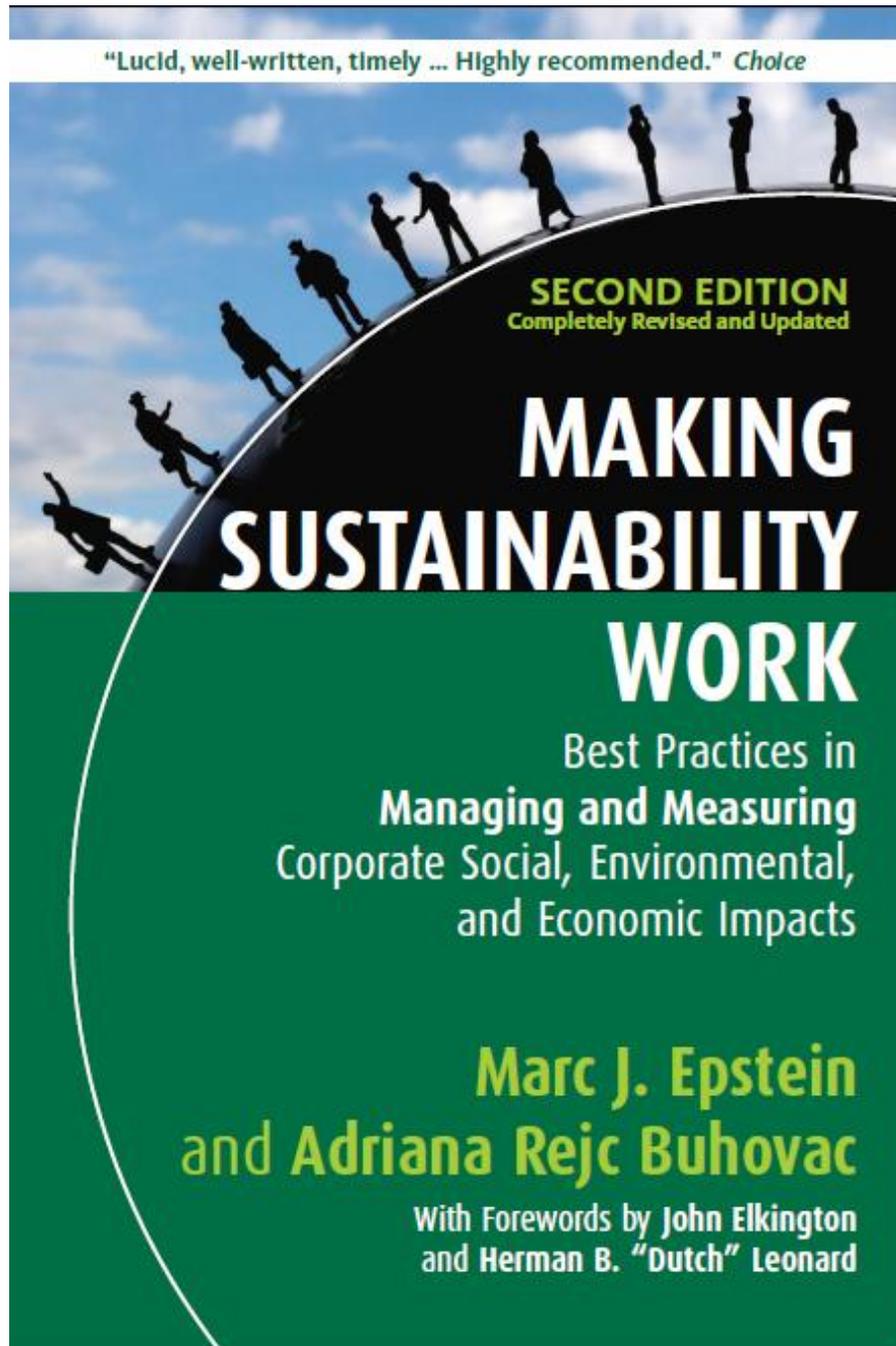


STUDYGUIDE

WITH REVIEW AND DISCUSSION QUESTIONS

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FOREWORD

Since the first edition of *Making Sustainability Work*, a book that introduced the Corporate Sustainability Model and supported it with the best practices of world's leading companies in sustainability performance, the scope of corporate responsibility has changed. While the underlying premises—to align sustainability strategies with structures, systems, and procedures within your company— have remained the same, the impetuses for integrating social, environmental, and economic impacts have strengthened on both the internal and external sides.

The second edition of *Making Sustainability Work: Best Practices in Managing and Measuring Corporate Social, Environmental, and Economic Impacts* addresses these new challenges and further builds on the Corporate Sustainability Model. Numerous companies that have taken innovative steps toward improving their sustainability performance and reducing their negative social, environmental, and economic impacts are included in this book as exemplars of best practice. These innovative approaches are presented along the various elements of the Corporate Sustainability Model and provide practical advice on how to implement it successfully.

The Study Guide to *Making Sustainability Work – Second Edition* has been prepared to guide managers and other readers through key points in each chapter and foster the comprehension of challenging issues that the book addresses. The study guide can be used by managers in general management functions at the senior and middle levels of organizations, but also by functional managers in the social and environmental management functions and the finance and accounting functions. It can be used by other practitioners, lecturers and students.

For each chapter, this guide contains an overview of key points, review questions, and discussion questions:

- Key points provide a summary of the chapter and cover the most important topics addressed in each chapter. These sections of the study guide are particularly suited for managers.
- Review questions are listed primarily to recall facts and review content knowledge. These sections of the study guide are suited for learning environments.
- Discussion questions, on the other hand, are more in-depth and insightful. They often require synthesis, comparison, or evaluation about the issues it raises. By using particular passages of the chapter, the reader is asked to draw connections between these passages and the rest of the book. Readers may have different perspectives and interpretations and such questions will engage them in dialogue with each other. For this reason, they are particularly useful to both the managers and the students.

INTRODUCTION

Key points:

- Sustainability or sustainability performance is the effect of corporate activity on the social, environmental, and economic fabric of society.
- Sustainability strategy is a set of strategic activities by which companies are following sustainability principles and contributing to sustainable development.
- The global climate change, local air and water pollution, child labor, workers' rights, and many more like them, have become a central part of the creation of shareholder value and the management of both global and local enterprises, but the scope of corporate responsibility is changing.
- It is now about how to engage corporate stakeholders more effectively.
- It is about the specific actions that managers can take to effectively deal with the paradox of trying simultaneously to improve corporate sustainability and financial performance.
- Four main reasons why sustainability now demands our urgent attention:
 1. Regulation (penalties and fines, legal costs, lost productivity due to additional inspections, potential closure of operations, the related effects on corporate reputation).
 2. Community relations (identifying the social, environmental, and economic issues that are important to key stakeholders and improving stakeholder relationships can foster loyalty and trust).
 3. Cost and revenue imperatives (costs can be lowered due to using resources more efficiently, product and process improvements, and a decrease in regulatory fines. Revenues can be increased through increased sales due to improved corporate reputation).
 4. Social and moral obligations (because of their impact on society, environment, and the economy, companies have a responsibility to manage sustainability. Many executives have personal concerns for their companies' social, environmental, and economic impacts).

Discussion questions:

Sustainability or sustainability performance is the effect of corporate activity on the social, environmental, and economic fabric of society.	<i>Is sustainability different from corporate social responsibility?</i>
Sustainability strategy is a set of strategic activities by which companies are following sustainability principles and contributing to sustainable development of the society.	<i>Is sustainability strategy different from corporate or business strategy? If yes, how?</i>

While global climate change, local air and water pollution, child labor, and workers' rights, remain among the key sustainability challenges, the scope of corporate responsibility is changing.	<i>How is the scope of corporate responsibility changing? Provide arguments based on an example.</i>
The size of corporate sustainability expenditures is increasing rapidly.	<i>What implications does this have on management of sustainability?</i>
There are various reasons why sustainability demands urgent attention of most companies.	<i>What are these reasons? Discuss their importance in the past and today.</i>
Managing sustainability is more challenging in large corporations.	<i>What specific challenges do large corporations face when they try to implement sustainability?</i>
Implementing sustainability is fundamentally different than implementing other strategies in the organization.	<i>What are the differences?</i>
A particular challenge is how to integrate sustainability impacts and financial performance into day-to-day management decision-making.	<i>Why is it so? What particular challenges are associated with the paradox of trying to simultaneously achieve corporate sustainability and financial performance? How can this be solved?</i>

Chapter 1

A NEW FRAMEWORK FOR IMPLEMENTING CORPORATE SUSTAINABILITY

Key points:

- A balance between social responsibility, environmental protection, and economic progress, sometimes referred to as the triple bottom line, can lead to competitive advantage.
- The evaluation of social, environmental, and economic impacts of organizational actions is necessary to make effective operational and capital investment decisions that positively impact organizational objectives and satisfy the objectives of multiple stakeholders.
- The financial payoff of a proactive sustainability strategy can be substantial.
- To become a leader in sustainability, one needs to articulate what sustainability is, develop processes to promote sustainability throughout the corporation, measure performance on sustainability, and ultimately link this measurement to corporate financial performance.
- Corporate citizenship is an important driver for building trust, attracting and retaining employees, and obtaining a “license to operate” within a community.
- Corporate citizenship is much more than charitable donations and public relations—it’s the way the company integrates sustainability principles with everyday business operations and policies and then translates all of this into bottom-line results.
- For sustainability to be long lasting and useful, it must be representative of and integrated into day-to-day corporate activities and corporate performance.
- If sustainability is seen only as an attempt to provide effective public relations, it does not create long-term value and can even be a value destroyer.
- The key to success is integrating sustainability into business decisions, identifying, measuring, and reporting (both internally and externally) the present and future impacts of products, services, processes, and activities.

I. Defining sustainability within the context of corporate responsibility

- The nine principles of sustainability share three attributes:
 1. They make the definition of sustainability more precise.
 2. They can be integrated into day-to-day management decision processes and into operational and capital investment decisions.
 3. They can be quantified and monetized.
- The nine principles of sustainability are as follows:
 1. *Ethics*: The company establishes, promotes, monitors, and maintains ethical standards and practices in dealings with all company stakeholders.

2. *Governance*: The company manages all of its resources conscientiously and effectively, recognizing the fiduciary duty of corporate boards and managers to focus on the interests of all company stakeholders.
3. *Transparency*: The company provides timely disclosure of information about its products, services, and activities, thus permitting stakeholders to make informed decisions.
4. *Business relationships*: The company engages in fair-trading practices with suppliers, distributors, and partners.
5. *Financial returns*: The company compensates providers of capital with a competitive return on investment and the protection of company assets.
6. *Community involvement and economic development*: The company fosters a mutually beneficial relationship between the corporation and the community in which it is sensitive to the culture, context, and needs of the community.
7. *Value of products and services*: The company respects the needs, desires, and rights of its customers and strives to provide the highest levels of product and service values.
8. *Employment practices*: The company engages in human-resource management practices that promote personal and professional employee development, diversity, and empowerment.
9. *Protection of the environment*: The company strives to protect and restore the environment and promote sustainable development with products, processes, services, and other activities.

II. Identifying stakeholders

- How an organization chooses to define its stakeholders is an important determinant of how stakeholder relations are considered in sustainability decision making and how stakeholder reactions are managed.
- Some definitions cover those individuals who can either be affected by or affect the organization, while others require that a stakeholder be in a position to both influence and be influenced by organizational activities.
- There are core stakeholders and fringe stakeholders:
 - Core stakeholders are visible and are able to impact corporate decisions due to their power or legitimacy.
 - Fringe stakeholders are disconnected from the company because they are remote, weak, or currently disinterested.
- Typical stakeholders include shareholders, customers, suppliers, employees, regulators, and the community.
- Stakeholder relationships go through a four-stage evolution:

1. *Awareness*: At this stage, stakeholders know that the company exists. The company will want to communicate with these stakeholders by providing them with more information about it so that they can begin to appreciate the company's mission and values.
2. *Knowledge*: Stakeholders have begun to understand what the company does, its values, strategy, and mission. During this stage, the company will want to provide stakeholders with information to make decisions. Customers want to know how the organization's products meet their needs, employees need to understand organization structure and systems, and suppliers want to understand what the company needs from them.
3. *Admiration*: Once stakeholders have gained knowledge about the company, trust needs to be developed. This is the stage where stakeholders will develop commitment toward the company.
4. *Action*: The company is now taking action to collaborate further with stakeholders. Customers refer business, investors recommend the stock, and employees are willing to take on greater responsibility.
 - To move toward a more complete understanding of sustainability and a further integration of social, environmental, and economic issues into core business strategy and operational decisions, sustainability values and organizational stakeholders must be identified and specified.

III. Accountability

- To better integrate a broader set of stakeholder concerns into management decisions, consideration of impacts and recognition of the importance of accountability is necessary. Four approaches to becoming an accountable organization are as follows:
 1. Improve corporate governance around director independence and enhanced board performance.
 2. Improve measures of operational and sustainability performance along with financial metrics that include both leading and lagging indicators.
 3. Improve reporting to a broad set of internal and external stakeholders of information relevant to decisions.
 4. Improve management systems to drive these improvements through corporate culture.

IV. The Corporate Sustainability Model

- To have an effective sustainability strategy, it is critical that managers understand:

- The causal relationships between the various alternative actions that can be taken.
- The impact of these actions on sustainability performance.
- The likely reactions of various stakeholders to sustainability performance.
- The potential and actual impacts of sustainability performance and stakeholder reactions on financial performance.
- The Corporate Sustainability Model uses the social, environmental, and economic dimensions of sustainability as its foundation.
- The model describes the drivers of corporate sustainability performance, the actions that managers can take to affect that performance, the consequences of those actions on corporate social, environmental, and economic performance, stakeholder reactions, and the final outcome, corporate financial performance.
- It describes the inputs, processes, outputs, and outcomes of a successful sustainability strategy.
- The *inputs* include
 - The broader environment
 - The internal context
 - The business context
 - Human and financial resources
- The *processes* include
 - Leadership
 - Sustainability strategy
 - Sustainability structure
 - Sustainability systems, programs, and actions
- The *outputs* include
 - Sustainability performance (the effect of corporate activity on the social, environmental, and economic fabric of society)
 - Stakeholder reactions
- The *outcomes* include
 - Long-term corporate financial performance
 - Sustainability performance
- Sustainability performance can be seen as both an output (as an intermediate determinant of corporate financial performance) and as an outcome (the concern for societal, environmental, and economic impacts as the final goal).
- Appropriate management control systems should feedback information on sustainability initiatives, potential social, environmental, and economic impacts, actual sustainability performance (at all organizational levels), stakeholder reactions, and corporate financial performance. Use feedback to challenge assumptions.

V. Sustainability actions

Four sustainability actions lead to financial and sustainability success:

1. Leadership
2. Strategy
3. Structure
4. Systems

Review questions:

1. Why is corporate citizenship important?
2. Is a public relations approach to sustainability beneficial?
3. What are the nine principles of sustainability?
4. What three attributes do the nine sustainability principles share?
5. Why is it important to define a company's stakeholders?
6. What is the difference between core and fringe stakeholders?
7. Which six groups are typical stakeholders?
8. What are the four stages in the evolution of stakeholder relationships?
9. What are the four inputs in the Corporate Sustainability Model?

Discussion questions:

A balance between social responsibility, environmental protection, and economic progress (the triple bottom line) can lead to competitive advantage.	<i>How can this happen? Provide examples.</i>
There are nine principles of sustainability.	<i>How can these principles be integrated in sustainability strategies?</i>
If sustainability is seen only as an attempt to provide effective public relations, it can even be a value destroyer.	<i>How can a public relations approach to sustainability be detrimental? Give an example.</i>
How an organization chooses to define its stakeholders is an important determinant of how stakeholder relations are considered in sustainability decision making and how stakeholder reactions are managed.	<i>Why is it important to understand which stage of the evolution of stakeholder relationships the company is in?</i>
To better integrate a broader set of stakeholder concerns into management decisions, consideration of impacts and recognition of the importance of accountability is necessary.	<i>What is accountability and how is it different from sustainability?</i>

<p>To have an effective sustainability strategy, it is critical that managers understand the causal relationships between the various alternative actions that can be taken, the impact of these actions on sustainability performance, the likely reactions of various stakeholders to sustainability performance, and the on financial performance.</p>	<p><i>How can the Corporate Sustainability Model help managers manage sustainability performance? Explain its components and how they are interrelated.</i></p>
<p>Sustainability performance can be seen as both an output (as an intermediate determinant of corporate financial performance) and as an outcome (the concern for societal, environmental, and economic impacts as the final goal).</p>	<p><i>Which of the two is called the sustainability business case and why?</i></p>
<p>Appropriate management control systems should feedback information on sustainability actions, actual sustainability performance (at all organizational levels), stakeholder reactions, and corporate financial performance</p>	<p><i>Why are feedback processes important in measuring and managing sustainability? How should managers use feedback information?</i></p>

Chapter 2

LEADERSHIP, ORGANIZATIONAL CULTURE, AND STRATEGY FOR CORPORATE SUSTAINABILITY

Key points:

- Sustainability performance begins with the commitment of the board of directors and CEO and the development of a mission and vision statements and values.
- Having the CEO and other senior corporate officers set the tone at the top is critical but not sufficient on its own.
- A corporate sustainability mission statement should be adopted to convey the corporate commitment throughout the organization.
- Corporate sustainability strategies are then developed to move the company toward a full integration of sustainability.
- Such a move must be seen as a core corporate value, central to company operations, rather than as a reaction to current or pending governmental regulations.
- Implementation must continue through
 - Broad-based institutional support for the company strategy
 - Development of an organizational structure to support sustainability
 - Development of costing, capital investment, and risk management systems
 - Performance evaluation and incentive systems
 - Measurement and feedback systems
 - Reporting and monitoring systems
- Sustainability can improve international competitiveness.
- A commitment to sustainability can prompt a closer examination of production processes, resulting in improved product designs, product and service quality, and production efficiency and yields, along with environmental improvements. These improvements, in turn, often result in increased employee and customer satisfaction and retention, increased social, environmental, and economic performance, and increased profitability.

I. Board and CEO commitment to sustainability

- The commitment of the board and management to the enforcement of sustainability principles and development of organizational systems can encourage all employees to comply with the company strategy.
- A high-performance board should achieve three core objectives:
 1. Provide superior strategic guidance to ensure the company's growth and prosperity.

2. Ensure accountability of the company to its stakeholders, including shareholders, employees, customers, suppliers, regulators, and the community.
 3. Ensure that a highly qualified executive team is managing the company.
- Six core principles can help boards to formulate strategies in general and to improve sustainability in particular:
 1. *Leadership*: Provide a framework for checks and balances; identify and build skills to address sustainability issues.
 2. *Engagement*: Support engagement as a corporate value through dialog and consultation with stakeholders.
 3. *Alignment*: Establish operational practices and incentives that align with sustainability policies and performance goals.
 4. *Diversity*: Include a diversity of races, skills, experiences, genders, and ages in executive and director positions.
 5. *Evaluation*: Evaluate the performance of the board and the company in progressing toward a higher level of accountability and sustainability performance.
 6. *Responsibility*: Ensure that the board responds to company stakeholders and maintains their trust.
 - Research has clearly shown that sustainability strategies are typically top-down and that the most effective implementation occurs when top management is clearly committed to the strategy.
 - To deliver positive sustainability outputs and outcomes, corporate leaders should
 - Know their company's current sustainability activities and impacts.
 - Set the organization's sustainability strategy and goals and gather information on sustainability indexes through benchmarking with peers and competitors.
 - Understand and engage with stakeholders.
 - Implement sustainability policies that support the overall business and sustainability.
 - The CEO and board of directors are responsible for initiating, communicating, and implementing sustainability values and strategy throughout the organization. To do this, they should
 - Integrate awareness of social, environmental, and economic issues into corporate decisions at all levels, and ensure such concerns have representation on the board.
 - Develop measures to identify, measure, report, and manage the social, environmental, and economic impacts of corporate activities.

- Modify the corporate structure as needed to integrate sustainability throughout the organization.
- Create incentives promoting socially, environmentally, and economically responsible behavior and integrate them into the performance evaluation system and corporate culture.

II. The role of the corporate mission and vision statements

- While the CEO and other senior corporate officers must set the tone at the top, it is with a strong mission and vision statements that awareness of corporate sustainability often begins.
- By including sustainability principles in the mission statement, a company can declare that it considers corporate sustainability a fundamental part of its corporate strategy.
- Companies can also use sustainability principles to communicate vision.

III. The role of organizational culture

- Companies that integrate sustainability into their organizational culture and business practices are better able to integrate sustainability messaging into mainstream communication.
- Some best practices for building the buy-in across the entire business system are: cross-functional and multigenerational working groups, campaigns, employee meetings and trainings, starting on real projects proposed and developed by the employees with short timeline, and clear and consistent communication via newsletters, internal memos, articles, intranet tips, blogs, etc.

IV. Developing a corporate sustainability strategy

- A sustainability strategy requires the commitment of senior management and the board, who provide leadership and guidance. They drive the sustainability message through the organization and lend it credibility and weight.
- Developing a sustainability strategy involves identifying and prioritizing social, environmental, and economic issues that the company can have the greatest impact on.
- Social, environmental, and economic issues facing companies fall into three categories:
 1. General sustainability issues
 2. Value-chain sustainability impacts
 3. Sustainability dimensions of competitive context
- Sustainability strategies pass through three stages:

1. Managing regulatory compliance
2. Achieving competitive advantage
3. Completing social, environmental, economic, integration

V. The challenges multinational corporations face when operating globally

- Challenges include global climate change, nongovernmental organization (NGO) pressure, worker rights, political upheaval, human rights, and labor/supply-chain issues.
- When determining a corporate sustainability strategy, companies must take into account
 - Internal factors:
 - Corporate culture
 - Competitive positioning
 - Sustainability performance
 - External factors:
 - Regulations
 - Market factors
 - Geographic factors

VI. Important industry standards that should be considered

- *ISO 14000* and *EMAS*: These standards help provide a structured approach to environmental management systems.
- *ISO 26000*: provides guidance on how businesses and organizations can operate in a socially responsible way. It lays out seven principles.
- *ISO 20121*: provides guidance to ensure events leave behind a positive legacy in terms of social, environmental, and economic benefits.
- *SA8000*: This standard focuses on workplace values and is based on International Labor Organization (ILO) conventions, the Universal Declaration of Human Rights, and the UN Convention on the Rights of the Child.
- *United Nations Global Compact*: This agreement encourages and promotes good corporate practices in the areas of human rights, labor, the environment, and anticorruption.
- *Millennium Development Goals*: These are UN-led global goals and a timetable for combating poverty, hunger, disease, illiteracy, environmental degradation, and discrimination against women.

- *Voluntary industry codes of conduct:* Many industries establish voluntary codes that companies can subscribe to in order to address stakeholder concerns. These are an alternative to government regulation.

VII. How government regulations can affect sustainability decisions

- A useful framework for thinking about the role of government in social, environmental, and economic regulation is “government policy contributes to competitiveness if it encourages innovation . . . and undermines competitiveness if it retards innovation or undermines the intensity of competition.”
- Companies can innovate in anticipation of government regulation to avoid the heavy costs of regulation.
- Companies can take a proactive stance to work with government and be part of the public-policy-making process.

VIII. How socially responsible investment and rating systems can influence sustainability strategies

More and more investors are considering social, environmental, and economic impacts when making investment decisions. Social investors include individuals, investment funds, businesses, nonprofit organizations, and others who want to invest in companies that achieve positive social, environmental, and economic impacts. Two primary decision methods are practiced by social investors:

- *Negative screening:* Eliminates companies that have practices or products that do not fit with the investors’ requirements.
- *Positive screening:* Selects companies that have products or operations that fits the investors’ criteria.

Review questions:

1. What are the three core objectives of a high-achieving board?
2. What are the six core principles that can help boards to formulate strategies in general and to improve sustainability in particular?
3. What components are important to crafting a sustainability strategy?
4. Why is the board and senior management’s involvement in sustainability strategy important?
5. What are the four actions that corporate leaders should take to deliver positive sustainability outputs and outcomes?
6. What are some of the most important industry standards to be considered in sustainability strategy?

Discussion questions:

Sustainability performance begins with the commitment of the board of directors and CEO and the development of a mission and vision statements and values.	<i>Is setting the tone at the top sufficient on its own? Is the top-down approach more effective than two-way communication?</i>
Boards are being asked to focus more on evaluating and improving their own performance as a means of improving corporate governance and transparency.	<i>How can boards evaluate and improve their own performance?</i>
CEO commitment and straightforward communication must also be supported by leading by example and consistent support to sustainability.	<i>Provide examples of how this can be done effectively.</i>
Management support is particularly important when companies are implementing global sustainability standards across their business units.	<i>Why? What are the specific challenges that business unit managers face in a multinational global corporation?</i>
Sustainability principles can be included in a mission statement, but also used to communicate vision.	<i>Provide an example of a mission and a vision statement that consider sustainability a fundamental part.</i>
Companies that integrate sustainability into their organizational culture are better able to integrate sustainability messaging into mainstream communications.	<i>What practices can be adopted for building the buy-in across the entire business system?</i>
Formulating a successful sustainability strategy is, in part, about choosing which issues the company will address.	<i>What methods (analytical approaches) can companies adopt to focus on most important sustainability issues?</i>
Sustainability strategies may pass through three stages: managing regulatory compliance, achieving competitive advantage, and completing social, environmental, and economic integration.	<i>How do sustainability strategies differ in relation to the three different stages? What implications do these stages have on implementation challenges?</i>
As companies become more global and multinational, they often confront additional challenges that relate to their sustainability strategies.	<i>What are these challenges and how can companies address them?</i>
With more and more voluntary standards, codes,	<i>What are the main differences</i>

and principles being developed, companies must decide which are most appropriate for their business strategies.	<i>between ISO 14000, EMAS, ISO 8000, ISO 26000, ISO 20121, UN Global Compact and the Millennium Development Goals?</i>
Some say that it is important for government to enact and enforce laws that prevent the most unacceptable social, environmental, and economic impacts while leaving companies freedom to innovate and remain profitable.	<i>Do you think that companies should take a proactive stance to work with government and be part of the public-policy-making process? Why?</i>
Socially responsible investing is a booming market.	<i>Why are social investors interested in socially responsible investments?</i>
To assist social investors, many socially responsible investment indices have been created.	<i>Which are they and how do they help social investors? What other information can social investors gather to monitor sustainability performance of companies?</i>

Chapter 3

ORGANIZING FOR SUSTAINABILITY

Key points:

- Once leadership commitment is established, corporations need to implement their sustainability strategies through appropriate organizational structures, systems, performance measures, rewards, cultures, and people.
- This alignment of strategy, structure, and management systems is essential for companies in both coordinating activities and motivating employees.
- Companies should integrate social, environmental, and economic concerns into all areas of the organization.
- The senior sustainability officer should preferably have direct access to both the board of directors and the CEO and not have a primarily legal function.
- Organizations should provide adequate resources for the implementation and control of sustainability strategies, including setting the appropriate structures for efficient alignment of human resources with sustainability strategies, as well as allocating technological and financial resources.
- The alignment of the sustainability structure with the strategy is critical to improving sustainability and financial performance.
- The existing structure must be assessed to decide the best way to integrate sustainability into the various functional and business units and whether a new department should be created.
- Outsourcing certain functions and using collaboration strategically are also important factors in deciding how the sustainability function should be organized.
- No single design is appropriate for every organization; the sustainability structure must be aligned with the strategy and systems and encourage employees to include sustainability in their day-to-day decisions.

I. The challenges for global corporations

- Decisions about the best organizational structure for improved corporate sustainability performance are usually further complicated as geographical diversity increases and particular business needs, local laws, and different cultures must be confronted.
- A global integrative sustainability standard implies centralization of many social and environmental functions.
- A locally adaptive standard relates to a decentralized operation in which business units are provided with a high level of autonomy.
- Multinational corporations should align their corporate structure and sustainability structure with their corporate sustainability strategy.

II. The integration of sustainability throughout the organization

Integrating sustainability into the organization is the process of ensuring the achievement of social, environmental, and economic goals through organization-wide efforts. Different departments can promote sustainability in different ways:

- Procurement finds raw materials from sustainable sources of supply that are produced with lower environmental impacts, finds ways to reduce packaging and use more recycled materials, and looks for sourcing from socially responsible factories both domestic and overseas.
- Research and development identifies processes that use resources more efficiently by finding new uses for waste products.
- Marketing looks at the growing consumer preference for goods that support sustainability principles and how marketing, distribution, and selling methods can reduce adverse social, environmental, and economic impacts.
- Production works with engineers and maintenance staff to devise processes that are more efficient and less costly in energy and resource use while maintaining adequate health and safety standards.
- Legal keeps abreast of legislation and learns how to best disseminate this information.
- Management accounting provides managers with information so that they can make better decisions on product costing and pricing, product and process design, and capital investments.
- Financial reporting and auditing provides external disclosures related to contingent liabilities so that external users of the information can better evaluate the company's current and future prospects.

III. Information flow

- Lower-level managers should be empowered to pursue sustainability goals.
- Senior managers in charge of sustainability should have a "seat at the table" with access to the CEO and board for successful integration of sustainability strategy.
- Information can be provided in several ways:
 - Written summaries and sustainability reports
 - In-person updates
 - Use of executive committees
- The level of authority given to the sustainability manager is critical for success.

IV. Outsourcing

Companies must decide if they want to have a dedicated internal sustainability staff or use third-party consultants. The benefits of each are as follows:

- *Third party:* Avoids ingrained inertia and culture issues.
- *Internal team:* Directly involves managers in social, environmental, and economic accountability and avoids the risk of decision makers being unfamiliar with the scope of the business.

V. Collaboration with NGOs

- Companies can collaborate with NGOs for improved sustainability and financial performance. Collaboration can include
 - Donation of in-kind services or cash
 - Cause-related marketing
 - Employee volunteerism
 - Significant joint projects
- Philanthropic activity can have five benefits
 1. Building a reputation with a respected organization
 2. Creating community goodwill and national attention
 3. Strengthening the corporation's industry
 4. Building and securing a strong brand position
 5. Having an impact on social issues in local communities
- Managers should take five key steps to make collaborations between corporations and nonprofits work:
 1. Proactively seek opportunities for collaboration.
 2. Ensure that the partnership creates value for each party and for society.
 3. Recognize that the relationship requires a commitment of time, talent, and resources.
 4. Align structure, systems, and programs, as needed, to effectively manage the relationship.
 5. Use effective communication with the other party and the community.

Review questions:

1. What do global/local sustainability standards imply with respect to sustainability structure?
2. What are the benefits of having an internal or a third-party sustainability team?
3. What are the four ways companies and NGOs can collaborate?
4. What are the five main steps for making collaborations with NGOs work?

Discussion Questions:

The alignment of the sustainability structure with the strategy is critical to improving sustainability and financial performance.	<i>What happens if appropriate structures are not put in place?</i>
Corporations must consider whether key sustainability resources and activities should be centralized or decentralized and decide on a level of central control versus business unit autonomy.	<i>What are the arguments for centralization or decentralization of organizational structure when sustainability?</i>
Integrating sustainability into the organization is the process of ensuring the achievement of social, environmental, and economic goals through organization-wide efforts.	<i>How can different departments promote sustainability?</i>
The senior sustainability officer should preferably have direct access to both the board of directors and the CEO and not have a primarily legal function.	<i>Why may a strong, centralized staff and a Chief Sustainability Officer be critical?</i>
Some companies have chosen to outsource many of their sustainability functions to external providers.	<i>Provide arguments for and against outsourcing sustainability functions to a consulting firm or a facilitator.</i>
Corporate philanthropy can be beneficial, if used strategically. It represents a direct contribution by a company to a charity or cause.	<i>How can companies use philanthropic activities to support their sustainability strategies? Provide examples.</i>

Chapter 4

COSTING, CAPITAL INVESTMENTS, AND THE INTEGRATION OF SUSTAINABILITY RISKS

Key points:

- Techniques are currently available to incorporate social, environmental, and economic costs, benefits, and risks into operating and capital investment decisions.
- Project and product decisions can be improved by
 - Identifying and measuring a broad set of social, environmental, and economic benefits and costs and considering current and future impacts on both the company and society
 - Integrating all current and future social, environmental, and economic costs and benefits into decisions
 - Integrating the assessment of social, environmental, economic, and political risks into the evaluation of product, process, and project decisions
- Costs and benefits should be identified and measured before investment decisions are made and strategy is implemented. This accounting should include costs and benefits related to both current and future operations but should not include current costs related to past operations.
- Present and future risks, costs, and benefits can be more accurately measured for more effective costing and investment decisions.
- Through these models and measures, and the systems to implement them, managers can make more effective decisions to improve both sustainability and financial performance.

I. The capital investment decision process

- Capital investment decisions influence innovation, productivity, costs, revenues, capacity availability, and quality.
- Eighty-four percent of companies do not formally integrate social and political risks in financial calculations and capital investment decisions.
- When quantification of these risks is undertaken, it is often underdeveloped and not monetized.
- Two principal factors contribute to this situation:
 1. *The regulatory nature of sustainability investment projects:* Companies that are forced, because of government regulations, to invest in technologies that are more socially, environmentally, or economically responsible often do not adequately analyze the full range of social, environmental, and economic costs and benefits associated with the projects.

2. *The difficulty of evaluating social, environmental, and economic costs and benefits:* Future risks and benefits, such as a changing climate of sustainability awareness, changing technologies, changing costs of technology, future government regulations, long time horizons, and potential stakeholder pressures, increase the complexity of the capital investment decision-making process.

II. Costs in the decision-making process

- One of the first steps in the approval process for making capital decisions is to evaluate the costs and benefits of the decision.
- Most companies do not have an adequate system for identifying and measuring social, environmental, and economic impacts of new products, projects, processes, and facilities. In some instances, companies do not separately track or accumulate the social, environmental, and economic costs and thus do not know the total amount or the causes of those costs.
- Within a cost-management and decision-making framework, companies must distinguish and account for three categories of social, environmental, and economic costs:
 1. Costs (both current and future) related to past operations
 2. Current costs related to current operations
 3. Future costs related to current operations

III. Costing systems

A number of companies have begun the transition to improved social and environmental cost accounting using methodologies such as

- *Activity-based costing (ABC):* ABC assumes that activities related to products, services, and customers cause the costs. ABC first assigns costs to the activities performed by the organization (direct labor, employee training, regulatory compliance) and then attributes these costs to products, customers, and services based on a cause-and-effect relationship.
- *Life-cycle assessment (LCA):* LCA is a design discipline used to minimize the environmental impacts of products, technologies, materials, processes, industrial systems, activities, and services. Life-cycle cost has been defined as the amortized annual cost of a product, including capital costs, and disposal costs discounted over the lifetime of a product.
- *Full cost accounting (FCA):* FCA allocates all direct and indirect costs to a product or product line for inventory valuation, profitability analysis, and pricing decisions.

IV. Risk assessment

- Today, risks are both larger and more varied than previously thought and have been seen in companies and countries that believed they were shielded. Some of these include political instability, political corruption, business corruption, child-labor practices, anti-corporate sentiment, terrorism, and environmental pollution.
- Corporations hoping to properly manage risk require more analysis, evaluation, preparation, mitigation, and response planning.
- Effective risk management includes eight key elements:
 1. Identifying the corporate environment that might impact risks
 2. Identifying risks
 3. Evaluating potential effects
 4. Measuring these impacts
 5. Identifying and analyzing possible solutions
 6. Adopting the most appropriate solutions for managing risks
 7. Communicating results
 8. Monitoring risks as they continue to evolve
- Sustainability risks involve the many social, environmental, and economic issues that can impact a company doing business in an international context, particularly in developing countries. Such risks can include the perception that local expectations are not being met, pollution of the surrounding area, and complex social issues resulting from actions taken by government or local military personnel with which the company is associated.
- Political risk occurs when political power is exercised in a way that threatens a company's value.
- The first step in risk management is to identify risks facing the company and integrate them into a larger risk management framework. Developing a risk profile involves three steps:
 1. Identify enterprise risk sources. Sources of risk include
 - Product or service
 - Employees
 - Customer base
 - Location
 - Process
 - Supplier
 - Media
 2. Identify real versus perceived risk.
 3. Identify company- or project-relevant social and political risks.

Review questions:

1. What are the two principal factors contributing to companies' not monetizing sustainability and political risks?
2. What are the eight key elements for effective risk management?
3. What are sustainability and political risks?
4. What are the three steps to developing a risk profile?
5. Why is understanding the context in which a company is doing business important?

Discussion questions:

SMEs make even less use of sophisticated capital budgeting techniques than larger companies.	<i>Why is it so? What are the specifics of capital budgeting in small and medium enterprises?</i>
In some companies, large capital investment decisions are reviewed and are often subject to approval by sustainability managers before a final decision is reached.	<i>What are the benefits of understanding the total costs and benefits of capital investments?</i>
Within a cost-management and decision-making framework, companies must distinguish between three categories of sustainability costs: costs (both current and future) related to past operations, current costs related to current operations, and future costs related to current operations.	<i>What are the differences between the three categories of costs? How can they be used in decision-making?</i>
A number of companies have begun the transition to improved social and environmental cost accounting using ABC, LCA, and FCA methodologies.	<i>How can they be used in decision-making?</i>
A common challenge is also how to integrate social, environmental, economic, and political risks into management decisions.	<i>What are these risks? Provide examples.</i>
Social, environmental, economic, and political risks can be real and perceived. Though both may carry financial costs to the company, the preparation and response to these risks differ.	<i>What is the difference between a real and a perceived risk? How can companies address each?</i>
Although the CEO and the board are the ultimate risk managers in a company, many different employees can integrate risk management into their jobs.	<i>How can risk management be integrated throughout the whole organization?</i>

Chapter 5

PERFORMANCE MEASUREMENT, EVALUATION, AND REWARD SYSTEMS

Key points:

- Performance measurement systems communicate management priorities by signaling throughout an organization the expected outcomes that management has determined to be important.
- “What gets measured gets managed.”
- Actual performance outcomes provide feedback to management about the efficacy of a strategy.
- The performance evaluation of all employees, teams, facilities, and business units should include a sustainability performance component where appropriate. By defining specific social, environmental, and economic work goals for individuals and measuring progress toward these targets, an organization is signaling that sustainability performance is an important driver of corporate value.
- Social, environmental, and economic performance can often be improved if it is integrated into the performance evaluation system for all employees, teams, and business units.
- Empowering and rewarding managers and production workers can improve sustainability planning and compliance activities.
- Better alignment of corporate and sustainability strategies with company-wide performance measures and rewards can improve sustainability and financial and operational processes and performance.

I. Performance measurement and evaluation systems

- One important tool for linking corporate objectives with results is the company’s performance measurement and evaluation system.
- Performance measurement is critically important because it links performance to the principles of sustainability and facilitates continuous improvement.
- The challenge in performance measurement is that many existing systems are missing relevant and comprehensive measures of performance.
- Systems that extend beyond financials to nonfinancials deliver maximum value to shareholders, customers, and other stakeholders.
- An individual’s or business unit’s performance measure can be determined primarily by two factors: the corporation’s strategy and the action taken by a person or business unit that contributes to the success of the strategy. This process can be centralized or decentralized:

- *Centralized:* The corporation sets the performance measure by giving the individual or business unit the performance drivers and the weight each driver has in the determination of the performance measure.
- *Decentralized:* The corporation prescribes the performance measure for the individual or the business unit, and then the individual or business unit decides what the performance drivers are and how to manage them.
- The social, environmental, and economic performance of the entire corporation, individuals, facilities, and business units is an integral part of a performance measurement and evaluation system.

II. Performance measures

- Performance measures should have the following six objectives:
 1. Make strategic objectives clear.
 2. Focus on core cross-functional processes.
 3. Focus on critical success variables.
 4. Act like early-warning signals for problems ahead.
 5. Identify critical factors going awry.
 6. Link to rewards.
- Each element of the Corporate Sustainability Model from Chapter 1 should be converted into a performance indicator and measured.
- Every team and operating unit needs a family of measures to motivate workers to act in concert with the strategy developed for the whole company.
- Performance measurement and evaluation systems fulfill at least three vital roles:
 1. Capture the logic behind a sustainability strategy and facilitate agreement about what is important, how day-to-day activities add value, and how each person contributes to the mission.
 2. Monitor progress.
 3. Facilitate the ongoing discussion within an organization that will lead to better performance.
- Objective measures are the bread and butter of most performance measurement systems.
- Subjective measures of performance should be used to complement objective measures.
- The benefits of subjective measures are their ability to help the evaluator.
 - Include information not foreseen before the project started.
 - Observe the actions and decisions of the person evaluated.
 - Evaluate tasks that are hard to quantify and judge whether they are beneficial to the company.

- Discount the effect of uncontrollable events.
- Adjust the importance of different measures and observations with changing priorities for the sustainability project.
- Use what he or she knows about the person evaluated to better assess performance, because people interact on various issues and over time.
- Subjective measures have their limitations:
 - They rely on the availability of information and the ability, knowledge, and effort of the person doing the evaluation.
 - They rely on the evaluator having the right incentives to provide a fair evaluation and on his or her reputation, fairness, and ability to judge.

III. The importance of performance measurement and evaluation

- Performance measurement and evaluation is important because
 - It aids in the alignment of strategy, structure, and other systems to achieve success.
 - Explicitly identifying corporate goals and setting specific targets improves corporate sustainability performance and focuses attention on areas of concern and priority.
- It is critical to set objectives and targets and measure success against them.
- It is critical to measure success by looking at not only the results (outcomes) but also the inputs, processes, and outputs that led to those outcomes.
- Some of the benefits companies can get by including social, environmental, and economic indicators in performance measurement and evaluation include
 - Comparison of performance over time
 - Highlighting of optimization potential
 - Derivation and pursuit of social, environmental, and economic targets
 - Evaluation of sustainability performance between firms (benchmarking)
 - A communication tool for corporate reports
 - A feedback instrument for information and motivation of the workforce
 - Technical support for certification programs
 - Most importantly, information to change managerial actions to improve performance
- Despite their importance, performance measurement systems are inadequate at most companies.
- Such systems tend to rely on historical information and lack predictive power, failing to give managers the information they need to make decisions.
- The challenge is to look past financial performance toward a more thorough integration of sustainability performance.

- Measures should communicate to employees the values of the company and how performance will be judged.

IV. Incentives and rewards

- The traditional accounting system often provides a disincentive to report potential hazards or violations of environmental laws, corporate goals, and corporate practices.
- Employees sometimes believe they will be penalized if they notify a manager of a potential hazard because eliminating the hazard might cause the business unit to suffer a short-term financial loss.
- To confront this disincentive, many companies have programs that provide awards to employees for exemplary sustainability performance. In some cases awards are given to teams rather than individuals.
- The level of risk taking that a company encourages is an important issue to consider in addition to measuring and rewarding. Risk-taking behavior is necessary for successful sustainability strategies but can be dysfunctionally reduced if failure is punished economically.
- Two different methods that induce companies to evaluate environmental impacts and that can be included in incentive systems are
 - *Internal waste taxes*: Such taxes are a practical application of activity-based costing at the organizational level. They introduce more direct accountability by making each business unit responsible for the waste it produces.
 - *Emissions trading*: Emissions credits provide powerful inducements for corporations to reduce emissions.

V. Strategic performance measurement systems

Numerous approaches can be used to organize, identify, measure, and report sustainability performance for improved managerial decision making. These include

1. *Balanced scorecard*: This is a strategic management system that links performance measurement to strategy using a multidimensional set of financial and nonfinancial performance metrics.
 - The scorecard has four dimensions or perspectives that relate to the strategy and core values of the company:
 1. The *financial perspective* focuses on the shareholders' interests and shows the link between strategic objectives and financial impacts.
 2. The *customer perspective* focuses on measures that reflect how the company is creating customer value through its strategy and actions.

3. The *internal business processes perspective* contains measures that indicate how well a company performs on key internal dimensions.
 4. The *learning and growth perspective* stresses measures of how well the company is preparing to meet the challenges of the future through leveraging its organizational and human assets.
 - In practice, many managers use the term “balanced scorecard” to refer to any set of financial and nonfinancial measures that link performance indicators to corporate objectives.
2. *Shareholder value analysis*: Increasing shareholder value is a key objective of most companies, and managers have begun to recognize that shareholder value is improved by creating value for employees, customers, suppliers, the community, and other stakeholders.
- Many companies have expanded their method of measuring shareholder value creation by using measures that reflect economic value created by an organization.
 - The best-known example is economic value added.
 - This financial metric of economic profit takes into account the cost of the capital and assets involved in creating profits. The traditional measurement of net profit does not take into account the cost of capital provided by shareholders and is also distorted by applying GAAPs (generally accepted accounting principles) that govern corporate financial reporting. Shareholder value calculations include the costs of equity capital and are also adjusted for GAAP-related distortions.
 - Shareholder value analysis provides an incentive for sustainability managers to pursue investment opportunities to create shareholder value. It also helps to communicate the potential value of sustainability initiatives to managers who must justify the allocation of scarce resources.

Review questions:

1. What six objectives should performance measures have?
2. What are the three vital roles of a performance measurement system?
3. What are some of the benefits of subjective performance measures?
4. Why is performance measurement and evaluation important?
5. What are some of the benefits companies can get by including social, environmental, and economic indicators in their performance evaluations?
6. What are the four elements of the balanced scorecard?

Discussion questions:

<p>“What gets measured gets done” is an adage that represents the signaling capability of performance measures.</p>	<p><i>How does it relate to sustainability implementation? Why are reward systems still important?</i></p>
<p>Every team and operating unit needs a family of measures to motivate workers to act in concert with the sustainability strategy developed for the whole company.</p>	<p><i>Why is the development of performance measures for monitoring sustainability performance a particular challenge?</i></p>
<p>A prime challenge is to create ‘performance logic’ among all measures. From the bottom of the organization up, managers must ask: How does each variable measured contribute to a higher-level variable and, in turn, contribute to organizational results?</p>	<p><i>How can the Corporate Sustainability Model help create the performance logic?</i></p>
<p>The performance evaluation of all employees, teams, facilities, and business units should include a sustainability performance component where appropriate.</p>	<p><i>Why is this important? Does that include CEO and senior executives? How could their individual sustainability performance be evaluated?</i></p>
<p>It is critical to set objectives and targets and measure success against them.</p>	<p><i>Why is it critical to measure success by looking at not only the results but also the inputs, processes, and outputs that led to those outcomes?</i></p>
<p>Many companies have programs that provide awards to employees for exemplary sustainability performance.</p>	<p><i>Give examples of performance measures and grants for rewarding individual contribution to sustainability performance.</i></p>
<p>In some cases companies tie performance (and rewards) to teams rather than individuals.</p>	<p><i>When is this more appropriate?</i></p>
<p>Performance goals and incentives can also be used for subcontractors.</p>	<p><i>How can they be enforced?</i></p>
<p>Dysfunctional behavior may be associated with incentive systems.</p>	<p><i>In what circumstances may this occur and what can managers do to prevent it?</i></p>
<p>Balanced scorecard and the shareholder value analysis can be used to help managers implement sustainability strategies.</p>	<p><i>What is the difference between the two? How can they be used to incorporate sustainability issues?</i></p>

Chapter 6

THE FOUNDATIONS FOR MEASURING SOCIAL, ENVIRONMENTAL, AND ECONOMIC IMPACTS

Key points:

- The evaluation of the social, environmental, and economic impacts of an organization on society is important for management decisions.
- Measuring the payoffs of sustainability initiatives is challenging even without specifically identifying the appropriate inputs, processes, outputs, and outcomes; however, to know if sustainability strategies are succeeding, measurement of these elements is critical.
- Although it is difficult to precisely measure sustainability performance, social science, economic, and financial analysis techniques that provide reasonable estimates for sustainability performance do exist.
- This evaluation is important to better meet the needs of the various stakeholders and usually benefits all stakeholders.
- When the needs of all stakeholders are more broadly examined, both social benefits and long-term corporate profitability are often increased.
- The method of evaluation of the impact of an organization's activities, products, services, and processes on society is critical.
- Although most managers understand the importance of measuring social, environmental, and economic impacts, implementation of such evaluation often remains difficult.
- Although the methods described in this chapter often seem to lack precision, they can provide an estimate of how companies are performing.
- These methods provide guidance to managers who must make difficult decisions when social, environmental, or economic interests and corporate interests are not aligned.
- They provide a solid academic foundation for developing measurements for sustainability performance.

I. The concept of value

- The benefits related to social, environmental, and economic impacts are often categorized as either *market* or *nonmarket* impacts.
 - *Market* benefits include
 - Increased sales quantities due to increased market demand
 - Increased prices due to quality and reputation
 - Reductions in costs due to increased efficiencies
 - Increased productivity

- Reduced future costs related to environmental cleanup, internal control and ethics breaches, and employee and customer problems associated with a lack of social sensitivity
- *Nonmarket* benefits include
 - Increased recreational benefits from cleaning up waterways (boating, swimming, fishing)
 - Enjoyment of greater species diversity
 - Increased life span and quality of life
- To measure these impacts, we need to understand how stakeholders place value on social, environmental, and economic assets.
- The concept of value is based on the preferences that people have for the services and products they use.
- The value given to goods and services can include
 - *Use value*: The economic value associated with human use of a resource. Use value may be further categorized as having either *consumptive* value (logging of forests or use of water for drinking or farming) or *nonconsumptive* value (recreational use, such as bird-watching or photographing, that leaves the resource unchanged).
 - *Nonuse value*: Any value not directly associated with human uses of natural resources. The first type of nonuse value is *option* value. (If the future benefits that a resource might yield are uncertain and the depletion of the resource would be irreversible, one might value preserving the option to use the resource in the future.) The second type is *existence* value. (Also called conservation or intrinsic value, existence value is independent of people's present use of the resource. These values arise from a sense of environmental stewardship related to a responsibility to preserve natural resources for future generations.)
- The total value of a resource is the sum of three components:
Total value = use value + option value + existence value
- Sometimes the difference between use value and nonuse value is ambiguous. Managers can handle this ambiguity by expressing the use and nonuse values in terms of individuals' WTP (willingness to pay) for the resource or WTA (willingness to accept) compensation in exchange for the resource. Then managers can use the economists' approach of consumer surplus to estimate what constituents are gaining from the resources available:
 - *Willingness to pay*: One way to measure consumer benefit from social, environmental, and economic improvements is to compare what consumers are willing to pay for them with the actual prices of these improvements. Thus, if a social, environmental, or economic improvement

is provided at no charge, the stakeholder benefit can be measured according to the amount that stakeholders would be willing to pay for it. Aggregated, these amounts allow managers to estimate the total benefits provided

- *Willingness to accept*: An alternative approach is to estimate the amount of money stakeholders would be willing to accept that would make them indifferent to degradation in the environment, society, or ethical values or practices.
- *Consumer surplus*: Consumer surplus is a basic approach that economists often use to measure consumer benefits. It is the difference between what one is willing to pay and what one actually must pay to acquire a service or product.

II. Methods for measuring sustainability impacts

There are six methods for measuring sustainability impacts. Each has advantages and disadvantages, as indicated in the following table:

Method	Description	Advantages	Disadvantages
Cost of control and shadow pricing	Cost of avoiding damage before it occurs	Avoids difficult-to-determine actual costs Uses simple calculations	Assumes legislators accurately value the cost of damage in shadow pricing
Damage costing	Actual cost of damage	Recognizes external damages	Includes difficult-to-assess monetary effects
Market price and appraisal	Trading of resources in existing markets	Uses LCA	Requires existence of a competitive market
Contingent valuation	Hypothetical questionnaire	Assesses passive use values Helps identify impacts	Lacks precision
Hedonic pricing	Property value or wages as proxy for costs	Values an entire range of impacts simultaneously	May lack precision
Travel cost	Cost of travel to recreation sites	Uses available data	Includes difficult-to-measure hypothetical alternatives

III. Methodologies for measuring sustainability and political risks

- Social, environmental, economic, and political issues pose risks to companies that can be quantified and monetized.
- Risks should be monetized for inclusion in ROI (return-on-investment) calculations and to improve resource allocation and investment decisions.
- To measure risk, management must first identify potential liabilities, which fall into four broad categories:
 1. *Strategic risks* relate to an organization's choice of strategies to achieve its objectives.
 2. *Operational risks* relate to (1) threats from ineffective or inefficient business processes for acquiring, financing, transforming, and marketing goods and services and (2) threats of loss of company assets, including its reputation.
 3. *Reporting risks* relate to reliability, accuracy, and timeliness of information systems and to reliability or completeness of information for either internal or external decision making.
 4. *Compliance risks* relate to inadequate communication of (1) laws and regulations, (2) internal behavior codes and contract requirements, and (3) information about failure of management, employees, or trading partners to comply with applicable laws, regulations, contracts, and expected behaviors.
- Methods to identify and evaluate relevant risks to companies or projects include
 - *Scenario-based methods*: A tool used by several companies to identify social, environmental, economic, and political issues and opportunities is scenario analysis. The approach is based on anticipating stakeholders' reactions to and concerns about sustainability in order to determine the underlying issues. Issues that could have an impact on the business are then grouped, different scenarios are developed, and outcomes are forecasted.
 - *Fuzzy logic*: Fuzzy set theory is a branch of mathematics dealing with sets of information that do not have precise boundaries. To account for uncertainty, a "best" estimate is provided to establish the "most likely" dollar value that will be required to cover the foreseeable consequences and the most probable to occur of the uncertain consequences. Next, the most optimistic (best case) and pessimistic (worst case) monetary value limits are estimated.
 - *Monte Carlo simulation*: A computer simulation can be used to calculate the probability distributions of outcomes. First, the user expresses a given

social, environmental, or economic risk in terms of a probability distribution. That risk can increase or decrease depending on changes to social, environmental, or economic regulation or improved information. Once probability distributions are established for all inputs required for an NPV (net present value) analysis, a computer program implementing the algebraic formula for NPV is written, except that dollar values of future liabilities or interest rates are replaced by random numbers drawn from appropriate probability distributions. The computer goes through the decision tree, drawing a sample from the relevant probability distributions at each point where an event occurs, and then applies simple logic to determine how to proceed through the tree.

- *Option pricing*: This is a method for calculating the expected market value of an option. It models the time series interaction between investments and has been used most often in the financial markets (for stock options). The same kind of methodology can be applied to social and environmental investment decisions.
- *Real options*: This analysis provides a way to aid the framing of decisions for risk analysis. It is consistent with discounted cash flow approaches but also recognizes that plans often change as new information is obtained.
- *Option assessments and option screenings*: These methods are designed to provide decision makers with a full vision of alternative courses of action, their associated costs, and their relative attractiveness. They help in analyzing the choices and options, as well as the value of retaining some of those options for future managerial decisions.

Review questions:

1. What are use value, option value, and existence value?
2. What are willingness to pay and willingness to accept?
3. What are the six methods for measuring sustainability impacts?
4. What are the methods for identifying and evaluating relevant risks to companies or projects?

Discussion questions:

<p>Although most managers understand the importance of measuring social, environmental, and economic impacts, implementation of such evaluation often remains difficult.</p>	<p><i>Why is it important to measure the payoffs of sustainability strategies? Why are managers reluctant to use the know methods for measuring and evaluating these impacts?</i></p>
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The benefits related to social, environmental, and economic impacts are often categorized as either market or nonmarket impacts.	<i>Which are the market and nonmarket impacts of sustainability initiatives?</i>
To measure these impacts, we need to understand how stakeholders place value (use value or non-use value) on social, environmental, and economic assets.	<i>How can one measure these values and incorporate them into organizational decisions?</i>
There are six common methods for measuring social, environmental, and economic impacts.	<i>How are they different?</i>
Not only do managers need to know the impact that their products, processes, and services have, they also need methods to measure the risks they undertake when making decisions.	<i>Can sustainability and political risks be quantified and monetized? How?</i>

Chapter 7

IMPLEMENTING A SOCIAL, ENVIRONMENTAL, AND ECONOMIC IMPACT MEASUREMENT SYSTEM

Key points:

- Many social, environmental, and economic impacts may appear to have no market consequences and no financial effect, but many externalities are internalized in future periods and do affect the operations and profitability of the firm in the long term.
- Proper evaluation of the consequences of these long-term impacts when activities are being planned and products and processes are being designed indicates a sensitivity to stakeholders that is essential for a company's profitability and sustainability.
- A company must develop a structure and systems to evaluate both the impacts of sustainability initiatives on financial performance and the trade-offs that ultimately must be made when there are many competing organizational constraints and numerous barriers to implementation.
- The systems assist corporate executives in developing a sustainability strategy and in allocating resources to support it.
- The systems also assist sustainability and environmental managers as they evaluate the trade-offs and decide which sustainability projects provide the largest net benefit to both sustainability and financial performance.
- However, setting up the appropriate structure and systems is only one step in the pursuit of a sustainability strategy—measurement is also critical.
- Measurement is critically important because it links performance to the principles of sustainability and facilitates continuous improvement.
- As companies assess the choices of appropriate measures to evaluate sustainability investments, numerous issues may arise. Since the choices are different for each company, substantial customization is necessary.
- Different measurement criteria are important for companies that have different strategies or may be in a different stage of their life cycle or the development and implementation of their sustainability strategy.
- Multiple measures will typically include both financial and nonfinancial measures that are leading and lagging indicators of performance.
- The measures should be linked to strategy and include a combination of input, process, output, and outcome measures.
- Though challenging, measurement of sustainability impacts can be done and is needed in corporate decision making.
- Currently, most companies do not include extensive measures of social, environmental, and economic impacts in their decision making processes and ignore what are potentially significant effects.

- Although measurement may be imprecise, it is still relevant. Social, environmental, and economic impacts must be included in ROI calculations and managerial decision making at all levels.

I. Mapping the actions that drive performance

- The drivers of corporate sustainability performance, the actions that managers can take to affect that performance, and the consequences of those actions on corporate sustainability and financial performance rely on a thorough identification of performance metrics characterizing each component of the Corporate Sustainability Model.
- Understanding and mapping the causal relationship between inputs, process, outputs, and outcomes is critical.
- All four elements of the Corporate Sustainability Model connect in a chain of cause and effect. In other words, one category of measurement drives performance in the next. These drivers and subsequent measures should reinforce each other, all contributing to measuring the impact of sustainability performance on financial performance.

II. Sustainability performance metrics

- Specific and appropriate measures that reflect the sustainability strategy are essential to monitor the key performance drivers (inputs and processes) and assess whether the implemented sustainability strategy is achieving its stated objectives (outputs) and thus contributing to the long-term success of the corporation (outcomes).
- Without appropriate metrics, companies often waste resources on projects or do not invest when they should because they cannot effectively evaluate the potential payoffs of sustainability initiatives.
- Every component of the Corporate Sustainability Model should be associated with specific performance indicators. Impacts related to sustainability strategies can be translated into indicators of company performance in quantitative or financial terms.
- The inputs, processes, and outputs will be measured by evaluating various dimensions of strategies, processes, leadership, and other elements and reported quantitatively.
- They will be linked and converted into monetary terms as the evaluation of the impacts is summarized in the outcomes of sustainability performance and financial performance.
- Examples of metrics are listed in tables 7.1–7.6.

III. Engaging with stakeholders

- Stakeholders include employees, customers, community activists, environmental groups, human rights groups, and product safety associations.
- Companies are increasing the quality and quantity of stakeholder engagement as a risk-mitigation technique.
- The amount of engagement will be determined in part by the company impacts and the products, geography, industry, and customer characteristics.
- Channels for engaging with stakeholders range from focus groups and opinion polls to formal progress meetings with government entities and NGOs.

IV. Measuring reputation

- Reputation risk is considered a cost resulting from, and therefore a secondary effect of, social, environmental, economic, and political risk.
- A company's reputation depends partly on its reputation among its stakeholders on specific issues.
- Stakeholders' opinions are based on their perceptions and expectations of what companies are doing.
- Ways to place a value on a company's reputation include the following:
 - *Reputation quotient* captures perceptions from stakeholders in six categories:
 1. Emotional appeal
 2. Products and services
 3. Vision and leadership
 4. Workplace environment
 5. Social and environmental responsibility
 6. Financial performance
 - *Reputational capital* is the excess market value of the company's shares—the amount by which the company's market value exceeds the liquidation value of its assets.
 - *Corporate personality scale* has seven pillars: agreeableness, enterprise, competence, ruthlessness, chic, machismo, and informality.
 - *Reputational audits* may begin with a review of the company's current identity, image, and reputation, followed by an analysis of the trends, plans, and competitive positioning of the company. A careful identification and measurement of the likely reputational impacts of company activities, products, and processes is then completed.
 - *Reputation costs* can be measured through lost sales minus the cost of producing those goods, or the *lost net profit*. *Share price* and *market share* decline are two other potential issues to consider.

V. Measuring risk

- Conducting a risk analysis is one method to help organizations measure inputs and develop processes to mitigate any negative affect that taking a risk might have on them.
- After identifying the possible risks, a company goes through eight steps to measure sustainability and political risk:
 1. Calculate the benefit associated with each issue that may generate risk.
 2. Calculate the potential costs associated with each political or sustainability risk, including reputation costs.
 3. Estimate the probability that each risk will materialize.
 4. Multiply the potential cost of each risk by its expected probability of materializing to calculate the expected value of each risk.
 5. Estimate when, over time, the risk may emerge. Calculate the NPV (net present value) of the risk.
 6. Aggregate the NPVs of all sustainability risks. Insert this total as a line item in ROI calculations.
 7. Aggregate the NPVs of all political risks. Insert this total as a line item in ROI calculations.
 8. Calculate the expected value of the ROI.

VI. Measuring social, environmental, and economic impacts

Measuring social, environmental, and economic impacts consists of four steps:

1. Identify the impact to be valued and the population, or affected group, whose values will be measured.
 2. Choose one or more measurement methods (travel cost and hedonic pricing, etc.).
 3. Identify and evaluate secondary data sources if using the revealed-preference method.
 4. Derive an estimate of willingness to pay (WTP) or willingness to accept (WTA) from the collected data.
- At least six main methods are available to gather information through surveys, but all use a general approach consisting of the following three steps:
 1. A sample of the population is questioned about its value regarding a specified good.
 2. The responses are documented and form the basis for estimating WTP or using another relevant method.
 3. Results are extrapolated to the entire population.
 - Bias that arises due to poorly designed surveys comes from at least three main sources:

1. Sample bias
 2. Nonresponse bias
 3. Interviewer bias
- The contingent valuation methodology has four particular sources of bias related to quantifying WTP:
 1. Strategic behavior
 2. Compliance bias
 3. Free-riding behavior
 4. Embedding bias
 - Three types of surveys can be conducted: in-person, telephone, and mail/e-mail.
 - To design a survey, an organization should
 1. Perform interviews with important stakeholders to gain knowledge of the decision being studied.
 2. Pretest the survey to gauge the clarity and understandability of the survey questions.
 3. Determine a survey method such as mail or person-to-person interviews.

Review questions:

1. Why is measurement of sustainability performance necessary?
2. What are some of the measures for inputs, processes, outputs, and outcomes in the Corporate Sustainability Model?
3. Why is engaging stakeholders important?
4. What are some of the ways to engage stakeholders?
5. What are the six categories of reputation quotient?
6. What are three ways to measure reputation costs?
7. What are the eight steps for measuring social and political risk?
8. What are the three main steps for gathering information through surveys?
9. What are the four biases particular to the contingent valuation methodology?

Discussion questions:

<p>Only by making the business case for sustainability can managers truly integrate social, environmental, and economic aspects into their business strategies. However, the main reason for not adopting sustainable business practices is the inability to present a clear business case.</p>	<p><i>What should companies do to quantify the link between corporate actions, sustainability, and financial performance? What role do stakeholder reactions play in this link?</i></p>
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The Corporate Sustainability Model can help understand and map the causal relationship between inputs, process, outputs, and outcomes.	<i>What is the difference between the Corporate Sustainability Model and a causal linkage model (a strategy map)?</i>
Causal relationships between the various drivers and elements in the Corporate Sustainability Model are based on hypothetical assumptions of causes and effects.	<i>Who is a helpful source of these hypotheses? Why do these hypotheses need to be constantly tested?</i>
To monitor the cause-and-effect relationships in a sustainability strategy, appropriate metrics must be developed.	<i>What happens if metrics are inappropriate? How do we know that performance measures are inappropriate?</i>
The inputs, processes, and outputs should be measured by evaluating various dimensions of strategies, processes, leadership, and other elements and reported quantitatively.	<i>Why is quantification important?</i>
To manage sustainability impacts, companies are increasing the quality and quantity of interaction they have with various stakeholder groups on a regular basis.	<i>Why is this today more important than it was a decade ago?</i>
When stakeholders have significant distrust of a product, company, or industry, it is particularly challenging to persuade them that the company is effectively managing its sustainability impacts.	<i>What channels for engaging with stakeholders can company use in such situation?</i>
To enable managers to integrate the project- and company-related social, environmental, economic, and political risks into ROI calculations, impacts of these risks must be measured. The quantification of sustainability and political risks also includes monetization.	<i>How can the quantification and monetization of sustainability and political risks take place?</i>

Chapter 8

IMPROVING CORPORATE PROCESSES, PRODUCTS, AND PROJECTS FOR CORPORATE SUSTAINABILITY

Key points:

- Analysis of sustainability performance is important for improved performance.
- An organization's measurement system will provide important information to aid in management decision making, but improvements will occur only if managers and organizations learn and redesign processes, products, services, projects, and other activities to achieve improved sustainability impacts and performance.
- The feedback process is an important aspect of sustainability performance and will probably challenge and change strategies and assumptions.
- Managers should not underestimate the importance of the underlying learning process associated with measuring sustainability impacts.
- Using feedback systems, organizations can develop new capabilities that enable them to achieve competitive advantage from improved sustainability performance.
- Social, environmental, and economic programs that are designed only from a compliance perspective and that are reactive rather than proactive will not provide adequate productive learning and capability-building possibilities.
- The feedback and internal reporting process should provide managers with information to help reduce social, environmental, and economic impacts substantially through
 - Process and product redesigns
 - Zero-waste strategies
 - Product differentiation
 - Supply-chain relationships
- Product quality, production yields, and profitability can be increased, and waste can be reduced or eliminated.
- Striving for continuous social, environmental, and economic improvement usually causes both sustainability impacts and corporate costs to decrease.

I. **Organizational learning: the new battleground?**

- The ability of an organization to learn faster than its competitors holds the promise of sustainable competitive advantage.
- A company's knowledge assets (core capabilities) are embodied in four dimensions:
 - Skills and knowledge
 - Physical technical systems
 - Managerial systems

- Values and norms
- Organizations must develop learning mechanisms to develop and maintain capabilities that will meet present and future challenges of sustainability management.
- A company's ability to learn (its absorptive capacity) affects its actual learning process, and absorptive capacity is an important determinant of a company's ability to exploit new or outside knowledge.
- Learning can be divided into two types:
 - *Single-loop*: This type of learning occurs when members of an organization make corrections to errors to maintain the features, strategy, or culture already in place.
 - *Double-loop*: In this type of learning, assumptions and strategies may be challenged and changed; feedback is used to question the basic assumptions about the strategy and whether it remains viable.
- The Plan, Do, Check, Act (PDCA) cycle is a valuable tool for learning and promoting change in organizations and provides a valuable framework for continuous improvement.
 - *Plan* includes all the activities that will guide the organization to a better understanding of the issues at stake before it commits itself to its sustainability strategy.
 - *Do* includes the actual sustainability programs are introduced.
 - *Check* helps the organization assess its situation against the initial plan.
 - *Act* is the management review.

II. Improving sustainability performance

- Improving sustainability performance begins by communicating to all employees the importance of social, environmental, and economic performance to the corporation, to their individual welfare, and to their jobs.
- Life-cycle assessment (LCA) can be used to improve performance:
 - To manage the learning process more effectively, organizations must create systems and processes that support these learning activities and integrate them into daily operations.
 - By examining the impact of products, processes, services, and other activities over their complete life cycle, managers can redesign these products and activities to improve sustainability and financial performance.
 - “Producer responsibility and product take-back” refers to the assignment of responsibility for the end of the product life cycle to the producer. This practice is becoming increasingly prevalent in Europe and Japan.

III. Reducing social, environmental, and economic impact

- Often, the focus of various feedback mechanisms that are such a critical part of the Corporate Sustainability Model and in managing sustainability is the development of methods to reduce the social, environmental, and economic impacts produced by processes and products.
- At least five methods can be used to help companies become more socially, environmentally, and economically efficient:
 1. Redesign the product.
 2. Re-engineer the process.
 3. Create more but use less.
 4. Rethink the market.
 - Some companies differentiate themselves by marketing products toward the “bottom of the pyramid” (BOP)—the four billion people worldwide who live on less than \$2 per day, the world’s poorest, representing two-thirds of the global population sitting at the bottom of the economic pyramid.
 - Four broad strategies can help companies find success in BOP markets:
 1. Focus on the BOP with unique products, services, or technologies that are appropriate for BOP needs.
 2. Localize value creation through franchising and using members of the community as vendors or suppliers.
 3. Enable access to goods and services through innovative distribution and packaging strategies.
 4. Partner with governments, nonprofits, or other organizations when necessary.
 5. Involve the supply chain:
 - The benefits of socially, environmentally, and economically sensitive purchasing systems include
 - Cost avoidance, including lower waste management fees and hazardous material management fees
 - Savings from conserving energy, water, fuel, and other resources
 - Easier compliance with regulations
 - Reduced risk of accidents, reduced liability, and lower health and safety costs
 - Improved image
 - Companies have developed several methods of instituting sustainable purchasing initiatives into their systems, including

- Written policies and communication
- Questionnaires and audits
- Supplier meetings
- Training and technical assistance
- Collaborative research and development

IV. Internal reporting

- To make decisions to improve processes and products, managers and employees need information about sustainability performance.
- Internal reporting provides important feedback for effective decision making and strategic planning and also helps employees to see how their individual contributions add to the successful performance of the company.
- The most important audiences for reporting include
 - Internal reporting: board of directors, audit committee, internal control steering committee, senior management, managers, employees, and integrated business partners
 - External reporting: registered auditor, regulators, shareholders, creditors, financial analysts, customers, suppliers, community, media
- When thinking about what to include in an internal sustainability report, managers should, at a minimum, cover targets, accountability, and recommendations and decide what type of data to provide, what metrics to include, and how to explain the context of the information reported. Managers should
 - Set and report on targets
 - Demonstrate accountability
 - Make recommendations
 - Include different types of data
 - Include metrics
 - Explain the context

Review questions:

1. What four pieces of information should the feedback and internal reporting process provide managers to help substantially reduce sustainability impacts?
2. What four dimensions embody a company's knowledge assets?
3. What are single-loop learning and double-loop learning?
4. What is Plan, Do, Check, Act, and why is it helpful?
5. What is producer responsibility and product take-back?
6. What are five methods to help companies have less sustainability impact?

7. What does “bottom of the pyramid” mean, and what are four ways to help companies focus on this group?
8. What are five benefits of socially, environmentally, and economically sensitive purchasing systems?
9. Name five important members of the audience for internal reporting and external reporting.

Discussion questions:

Striving for continuous social, environmental, and economic improvement usually causes both negative sustainability impacts and corporate costs to decrease.	<i>Explain, why?</i>
A measurement system will provide important information to aid in management decision making, but improvements will occur only if managers and organizations learn and redesign processes, products, services, projects, and other activities to achieve improved sustainability impacts and performance.	<i>What types of mechanisms at various levels in the organization can provide feedback to top managers, promote knowledge sharing and improve performance?</i>
The ability of an organization to learn faster than its competitors requires adoption of practices for knowledge transfer and transparency.	<i>How can companies improve their learning capacity? How can LCA method be used for this purpose?</i>
Companies have developed several methods for instituting sustainable purchasing initiatives into their systems.	<i>What are these methods? Why are these particularly important for companies operating in the toy, footwear, and apparel industries?</i>
By properly disclosing social, environmental, and economic performance metrics for internal users, leading companies are empowering their employees to provide both a horizontal and a vertical analysis of their functions.	<i>What are the interests of various internal constituents in internal reporting on sustainability?</i>
While some internal audiences must be informed about sustainability outputs and outcomes because of regulation or recommendations in standard-setter guidance (such as audit committees or boards of directors), voluntary disclosure to other internal audiences is also recommended.	<i>Explain, when and why is voluntary disclosure of sustainability issues beneficial?</i>

When thinking about what to include in an internal sustainability report, managers should, at a minimum, demonstrate accountability, report on targets, and make recommendations.	<i>When internally reporting on sustainability targets, why is it critical to appropriately explain the context of reported impacts?</i>
The reporting of specific outputs must include sufficient evidence to influence proper decisions.	<i>How might managers react when insufficient evidence is presented?</i>

Chapter 9

EXTERNAL SUSTAINABILITY REPORTING AND VERIFICATION

Key points:

- Various pressures have caused companies to increase their social, environmental, and economic disclosures in corporate annual reports and the quantity and quality of disclosure in separate environmental or sustainability reports.
- Stakeholders want more verification of corporate sustainability, which can be accomplished with external audits and verification.
- Some companies have issued social, environmental, or sustainability reports for each operating division or geographic area, some have issued such reports for the entire corporation only, and some have included this information in corporate annual reports.
- The rise in reporting of social, environmental and economic performance goes hand in hand with stakeholders' demands for reliable and credible information from management.
- Managers and external stakeholders must have the information they need to make better decisions, and it is important that the information is high in quality, reliable, relevant, and intelligible to likely readers.
- To provide confidence among stakeholders, companies should demonstrate that the sustainability performance metrics disclosed are integral and representative of actual efforts and achievements.
- External reporting is an opportunity for a company to tell the story of its performance.
- The external report should not, however, precede the integration of social, environmental, and economic considerations into product costing, capital investment decisions, company processes, product design, or performance evaluation.
- Companies and their stakeholders need to ensure that the flurry of activity created by external sustainability reporting and external environmental auditing is supported by actual company progress.

1. **Standards for sustainability reporting**

- *Global Reporting Initiative*: Spearheaded by Ceres in partnership with UNEP (United Nations Environment Programme), the GRI (Global Reporting Initiative) was established in 1997 with the mission of developing globally applicable guidelines for reporting on the economic, environmental, and social performance of corporations, governments, and NGOs. The GRI's Sustainability Reporting Guidelines (now in their fourth version known as G4) represents the first global framework for comprehensive sustainability reporting

- *IRIS, GIIRS, and B-LAB*: IRIS (Impact Reporting and Investment Standards) provides a common reporting language for impact-related terms and metrics. GIIRS (Global Impact Investing Rating System), on the other hand, is a comprehensive system for assessing the social and environmental impact of market companies and funds with a rating and analytics approach. GIIRS is powered by B-LAB, a non-profit that leads the initiative of building a community of Certified B (‘Benefit’) Corporations.
- *SASB, IIRC*: SASB (Sustainability Accounting Standards Board) is developing sustainability accounting standards that are U.S.-focused and industry specific, designed for use in integrated disclosure in the Form 10-K and 20-F. IIRC (International Integrated Reporting Council) is a global coalition of regulators, investors, companies, standard setters, the accounting professionals, and NGOs, leading the creation of the globally accepted International Integrated Reporting Framework.

2. **External reporting**

- Generally, senior management must assure stakeholders that sustainability processes and impacts are well managed.
- Some companies are reluctant to report internal performance indicators, especially if the news is not entirely favorable. However, just as the disclosure of information in corporate reports can signal good performance, it can also be used to soften the impact of poor performance.
- Disclosures should reflect the results of past sustainability performance as well as the strategies and systems in place to improve future performance.
- There is growing consensus that external social, environmental, or sustainability reports should contain more comprehensive information than just that required by regulatory agencies.
- A five-part test devised by Zadek and Merme can help a company decide what information it should disclose (what information is “material”). The test covers the following areas for disclosure:
 1. The report covers the traditional direct, short-term financial impacts of sustainability performance, such as carbon emissions.
 2. The company discloses performance associated with declared policies, regardless of short-term financial consequences.
 3. The company discloses information similar to that of its market peers.
 4. Stakeholder concerns are addressed. (Are companies disclosing information that is likely to impact stakeholder behavior?)
 5. Aspects of performance that might not be currently regulated but could be regulated in the future are discussed.

- Report length varies, but studies show that most people do not want to read a long document. So producing a clear and concise discussion of sustainability performance and important processes and outputs in language written for a general audience is important.
 - Distribution channels may include analyst meetings, press conferences, formal documents, and other channels of communication, such as the Internet or Web sites.
3. **External disclosure of sustainability measures**
- Disclosing sustainability measures to external stakeholders has been shown to boost company valuation as it reduces investor uncertainty.
 - Companies are increasingly disclosing metrics on sustainability, including supplier relationships, material usage and disposal, operational performance, workplace safety, waste generation and disposal, development of personal and organizational capabilities, etc.
4. **Verifying sustainability performance and reporting**
- Independent verification is an important component of external reporting.
 - One of the major challenges in auditing social, environmental, and economic performance is the lack of standardization of sustainability management systems, performance measures, and reporting structures.
 - Correspondingly, there are no generally accepted worldwide auditing or reporting standards.
 - However, some guidance on reporting social and environmental performance is provided by the GRI, AccountAbility, and other organizations.
 - A corporate sustainability reporting and verification system usually involves internal and external reporting and audits.
 - Through extensive internal auditing processes, companies can identify areas of concern and improvement and gather information to aid in managerial decision making.
5. **Internal sustainability audits**
- Currently, in most organizations, a social, environmental, or sustainability internal audit program is well developed and routine.
 - An audit report should be made to the head of sustainability, to a member of the senior management team, and to a member of the board of directors, as well as the business unit manager.

- The audit should be part of a more comprehensive program of evaluating the social, environmental, and economic performance of the business unit, the facility, the business unit manager, and other management and staff.
- The audit should be part of a comprehensive performance evaluation system in the organization to provide the incentives necessary to motivate improved corporate sustainability performance.
- Among the types of audits are
 - Compliance audit
 - Social and environmental management systems audit
 - Due-diligence audit
 - Treatment, storage, and disposal facility audit
 - Pollution prevention audit
 - Social and environmental liability accrual audit
 - Product audit
- When conducting audits, companies should
 - Reconsider strategy
 - State objectives
 - Pinpoint critical success factors
 - Devise measures that gauge success among appropriate stakeholders
 - Evaluate impacts on company stakeholders
 - Work the measures into the remaining steps of the sustainability model to drive high performance

6. **External sustainability audits**

- Companies have found it desirable to obtain independent verification and attestation of progress toward improved sustainability management and performance.
- Some companies employ large accounting and auditing firms for external assurance; others use firms that specifically focus on sustainability.
- The general benefits of external audits include
 - Increasing stakeholder confidence in the quality of corporate social and environmental controls, planning, and performance
 - Providing senior management with an independent verification and analysis of the strengths and deficiencies of the sustainability program
 - Providing additional confidence that hazards and violations will be minimized
- Sustainability auditing and verification can create significant legal and operational benefits for organizations. The benefits include
 - Ensuring compliance with applicable laws and regulations

- Ensuring compliance with management directives and procedures
- Proactively identifying areas of potential or actual noncompliance
- Minimizing the risk of civil and criminal liability to the corporation and to its employees
- Ensuring accurate certifications
- Ensuring accurate regulatory disclosures
- Raising employee consciousness about the importance of compliance
- Providing independent verification of a program, which some companies use as a public relations or marketing tool
- Assessing the potential impact of new or expected regulation
- Helping to standardize systems and measures in multiple facilities by providing a common framework for assessment

Review questions:

1. Why is external verification important?
2. How can sustainability reports be distributed?
3. Give four examples of different kinds of audits.
4. What should companies consider when conducting audits?
5. What are three general benefits of external audits?
6. Give four examples of legal and regulatory benefits of conducting audits.

Discussion questions:

Many reports began as only environmental reports; however, more companies have broadened their reports to include social and economic issues as well. Also, more companies are including governance and legal aspects in their reports.	<i>More recently, integrated reporting movement emerged. How is it different from other types of sustainability reports?</i>
To provide confidence among stakeholders, companies should demonstrate that the sustainability performance metrics disclosed are integral and representative of actual efforts and achievements.	<i>What can companies do to ensure confidence among stakeholders that their sustainability reports are representative?</i>
There are numerous standards for sustainability reporting, including the GRI, IRIS, GIIRS etc.	<i>Why are different standards for sustainability reporting being developed? What are the differences between the various standards?</i>

Different external interest groups have different interests in disclosure.	<i>How do the interests of creditors in sustainability issues differ from the interests of, for example, customers?</i>
Some companies are reluctant to report internal performance indicators, especially if the news is not entirely favorable.	<i>Why is there a growing consensus that external sustainability reports should contain more comprehensive information than just that required by regulatory agencies?</i>
There are corporate accounting methods that can be used to hide social, environmental, and economic liabilities in reports. They include hiding big issues in the footnotes, delaying the quantification of liabilities, avoiding meaningful qualitative disclosure, disaggregating social, environmental, and economic liabilities, and employing artificial time horizons.	<i>While each of these methods is legal, what consequences might the withdrawing of important and material information from stakeholders cause?</i>
When deciding what to report externally, managers should choose from the data that it has already collected for its internal reports.	<i>How can the Corporate Sustainability Model help create a meaningful content of external reports?</i>
Companies and their stakeholders need to ensure that the flurry of activity created by external sustainability reporting and external environmental auditing is supported by actual company progress.	<i>What may happen if the opposite is true?</i>
Increasingly, companies are indicating specifically when they are reporting GRI indicators.	<i>How do readers of an external sustainability report benefit from a GRI Content Index included at the end of the report? What does the GRI Application Level Check mean?</i>
One of the major challenges in auditing social, environmental, and economic performance is the lack of standardization of social and environmental management systems, performance measures, and reporting structures.	<i>How are internal and external auditing integrated in this process? What role does independent verification play in confirming that representative information has been disclosed?</i>
Among the types of audits are compliance audit, social and environmental management systems	<i>What types of audit are conducted for compliance with government</i>

<p>audit, due-diligence audit, treatment, storage, and disposal facility audit, pollution prevention audit, social and environmental liability accrual audit, and product audit.</p>	<p><i>regulations and internal procedures and what types are aimed at proactively identifying critical points for sustainability performance?</i></p>
<p>Some companies employ large accounting and auditing firms for external assurance; others use firms that specifically focus on sustainability.</p>	<p><i>What are the advantages of each type of external sustainability auditors?</i></p>

Chapter 10

THE BENEFITS OF SUSTAINABILITY FOR CORPORATIONS AND SOCIETY

Key points:

- Global companies are increasingly faced with difficult dilemmas.
 - They face significant pressure to reduce costs in the supply chain, yet switching to lower-cost suppliers may increase social, environmental, and economic impacts, and reactions from various stakeholders, including employees, customers, regulators, and community activists, may have a detrimental effect on financial performance.
 - Senior management often faces complex decisions about facility location that in simpler times could be made by examining differentials in labor, shipping, and raw material costs.
 - Now sustainability and political risk must become part of the calculations.
- Managers have often been frustrated by the challenges of execution in complex business organizations.
- Even the most socially concerned senior corporate and business unit managers find it difficult to simultaneously meet social, environmental, economic, and financial goals.
- The Corporate Sustainability Model describes the antecedents (drivers of success) and consequences (payoffs and measures of success) of investments in sustainability and a way to analyze the social, environmental, and economic impacts of corporate products, services, processes, and other activities.
- The model describes the critical role of management control and performance measurement in improving social, environmental, and economic performance.
- The model recognizes the importance of both the formal processes of strategy, structure, systems, performance measures, and rewards and the more informal systems of culture and people.
- The model shows the cause-and-effect relationship between managerial actions and improvements in sustainability and financial performance.
- In spite of numerous inputs that act as constraints, managers have significant capability to affect corporate sustainability performance through leadership and the formulation and implementation of a sustainability strategy, structure, and systems, leading to better sustainability and corporate financial performance.
- Payoffs include
 - *Financial payoffs:*
 - Reduced operating costs (including lower litigation costs)
 - Increased revenues
 - Lower administrative costs
 - Lower capital costs

- Stock market premiums
- Customer-related payoffs
- Increased customer satisfaction
- Product innovation
- Market share increases
- Improved reputation
- New market opportunities
- *Operational payoffs:*
 - Process innovation
 - Productivity gains
 - Reduced cycle times
 - Improved resource yields
 - Waste minimization
- *Organizational payoffs:*
 - Employee satisfaction
 - Improved stakeholder relationships
 - Reduced regulatory intervention
 - Reduced risk
 - Increased learning
- Implementing sustainability is particularly difficult because
 - The goal is to simultaneously achieve excellence in social, environmental, and economic, as well as financial performance.
 - It is often unclear how to make trade-offs.
 - It is often unclear how stakeholders will respond.
 - Corporate and societal priorities often change.
 - The costs of implementing sustainability constantly change.
- Implementing a sustainability strategy involves four steps:
 1. Make sustainability a central component of the strategy.
 2. Be committed to sustainability and build additional organizational capacity. Sustainability actions are more difficult to specify, so distributed leadership is more critical.
 3. Support the strategy with formal processes such as management control, performance measurement, and reward systems as appropriate. Support the strategy with informal processes such as mission, culture, and people as appropriate
 4. Use sustainability processes and systems to learn how to make the necessary trade-offs and the challenging managerial decisions. Integrate sustainability into

- all strategic decisions and then introduce additional systems and rewards to formalize and support it.
- Leadership and strategy are key components in improving sustainability and financial performance.
 - In developing sustainability strategies, corporate executives will also have to consider the role of various voluntary and industry standards, government regulations, and social investors.
 - Management systems are critical to any successful implementation. These include
 - Costing systems
 - Capital investment systems
 - Risk management systems
 - All employees must view sustainability performance as critical to the long-term financial success of the corporation.
 - Incentives based totally on profits provide a signal that sustainability performance is unimportant.
 - Corporations should consider sustainability performance as a variable in the evaluation of total corporate performance and provide incentives for employees to suggest social, environmental, and economic improvements.
 - Measuring the payoffs of sustainability actions is difficult but critical.
 - External reporting is an opportunity for companies to share information about its sustainability performance to stakeholders.
 - Verification of sustainability reports will increase stakeholder confidence in the quality of the reporting.
 - A model for sustainability performance should accurately capture the range of corporate activities and the relevant effects of those activities and define the cause-effect links that are crucial to the corporation's success.
 - With accurate observational data replacing untested beliefs and assumptions, managers are in a position to conduct performance-enhancing analyses of their programs, projects, and activities. Precise measurement is challenging, but approximations are very useful.
 - By articulating explicit hypotheses about cause and effect and establishing measurable indicators at each end of the cause-effect links, managers have established conditions in which not only optimization but also systematic ongoing learning is possible (and even likely).
 - Building and operating systems that communicate management objectives and the results of learning efforts to guide and align actions throughout the organization with the best current understanding of which activities create the most value is an essential step for enacting what has been discovered and learned.

- Increased risks also create new opportunities for innovation to improve both sustainability and financial performance. These opportunities call for
 - More innovation and entrepreneurship from leaders in sustainability
 - More sensitivity to sustainability issues by innovation and R&D, business unit, and functional leaders
 - More thought, not only about corporate social responsibility (CSR) but also corporate social opportunity (CSO)
- Companies can become leaders in corporate sustainability by creating proactive strategies that create opportunities and increased profits rather than using reactive strategies that only respond to government regulations, industry standards, or consumer protests.
- Leadership companies view sustainability responsiveness as an asset producing increased revenues rather than a liability with the associated costs.
- Leadership companies recognize that an investment in structures and systems to ensure strong sustainability performance often pays dividends in terms of improved process and production quality, improved production efficiency and yields, lower risk, improved reputation, and increased profitability.
- It is important to evaluate stakeholder impacts and the level of trust or distrust from the perspective of external stakeholders (including activists, consumers, and suppliers), internal stakeholders (including employees and managers), and the senior and top management team.
- Corporate executives need to recognize the opportunities for both technological innovation (products) and business model innovation (processes).
- To develop processes more effectively, senior managers need to
 - Identify, measure, manage, monitor, and report corporate social, environmental, and economic impacts
 - Integrate sustainability into operational, strategic, and resource allocation decisions
 - Assist colleagues in managing the paradox of simultaneously improving sustainability and financial performance
 - Recognize that strategy, leadership, and implementation tools are all essential components

Review questions:

1. What are the payoffs of improved sustainability performance?
2. Which four steps does the process of implementing sustainability involve?

Discussion questions:

Global companies are increasingly faced with significant pressure to reduce costs in the supply chain, yet switching to lower-cost suppliers may increase negative social, environmental, and economic impacts. In return, reactions from various stakeholders may have a detrimental effect on financial performance.	<i>How can the Corporate Sustainability Model help manage these pressures?</i>
Though sustainability initiatives are often driven by regulatory requirements, an increasing number of companies are noticing that they frequently result in decreased operating costs and increased revenues.	<i>Delineate individual causal relationships between specific sustainability initiatives and decreased operating costs and/or increased revenues.</i>
One of the reasons why implementing sustainability is particularly difficult is because corporate and societal priorities often change.	<i>Explain, why.</i>
Through a mix of formal ('hard') and informal ('soft') management systems sustainability implementation can be successful.	<i>What are hard and soft management systems? How are hard and soft management systems included in the Corporate Sustainability Model?</i>
Measuring the payoffs of sustainability actions is difficult but critical. Measures are often imprecise and data difficult and expensive to collect.	<i>How can financial/accounting and IT professionals help overcome these obstacles?</i>
By articulating explicit hypotheses about cause and effect and establishing measurable indicators at each end of the cause-effect links, managers have established conditions in which not only optimization but also systematic ongoing learning is possible.	<i>How can benchmarking with prior performance, to a competitor's performance, or to performance in a different business unit help confirm hypotheses?</i>
Increased risks also create new opportunities for innovation to improve both sustainability and financial performance.	<i>What can managers do to make this happen?</i>