

Environmental, Social, and Governance Factors at Listed Companies

A Manual for Investors

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The mission of the CFA Institute Centre for Financial Market Integrity is to be a leading voice on issues of fairness, efficiency, and investor protection in global capital markets and to promote high standards of ethics, integrity, and professional excellence within the investment community.

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Introduction

Successful investing is dependent on one's ability to discern the factors that influence the market's valuation of a Company ("Company")¹ and then judge the accuracy of that valuation. Analysts are generally well versed in using financial metrics to understand those drivers of corporate value and lend skilled interpretation to what is often highly detailed accounting data. In recent years, however, nonfinancial² factors—including **environmental, social, and governance (ESG)**³ factors—have figured ever more prominently in the value of corporations. For example, at Companies such as Enron Corporation, WorldCom, and Parmalat, corporate scandals, and in some instances outright fraud, have rendered financial data untrustworthy and brought **corporate governance** issues to the forefront of Investor ("Investor")⁴ consideration. Similarly, increased sensitivity to the potential implications of **climate change** has sparked interest in the investment consequences of Companies' strategic positioning to address this environmental concern.

Increasingly, analysts are probing a wide variety of nonfinancial factors to better understand their potential impact on the valuation of a Company. Traditional financial analysis already accounts for certain "intangibles"—such as goodwill—but up to this point has been less successful in integrating more dynamic, nonfinancial attributes. ESG factors represent a broad set of intrinsic concerns that may ultimately affect valuation of equity, fixed-income, real estate, and infrastructure investments.

Offering Investors Tools

This manual aims to help investment professionals identify and properly evaluate the risks and opportunities ESG issues present for Investors in public Companies and in the process clarify the relatively sparse and inconsistent information provided in current financial statements. Some Investors may choose to consider ESG factors for emotional or political reasons—for example, they may favor a product for its "social good"—but such uses are beyond the scope of this manual, which is strictly focused on ESG factors as they relate to investment management.

In 2005, the CFA Institute Centre for Financial Market Integrity published *The Corporate Governance of Listed Companies: A Manual for Investors* so that all Investors—be they existing Shareowners ("Shareowners")⁵, potential Investors, or analysts—could learn how to better evaluate the corporate governance risks inherent in the Companies in which they invest. The corporate governance issues discussed in *The Corporate Governance of Listed Companies* are still relevant to Investors; therefore, we refer interested readers to that document for a more detailed analysis of corporate governance issues and do not address many of these governance issues in this manual. Rather, *Environmental, Social, and Governance Factors at Listed Companies* serves as a supplement to our earlier manual to help the Investor better understand and evaluate the particular social and environmental factors that have the potential to affect Company valuations.

Consideration of ESG factors in the context of investing is not a new phenomenon. Many analysts and Investors already consider ESG-related issues in their analysis when they include an assessment of regulations, litigation, political risks, and the like. This manual aims to help Investors better understand the broad range of ESG factors to consider in properly analyzing Companies, indicates where to find this information, and provides a primer on the diverse vocabulary of ESG analysis.

¹The "Company," as used in this manual, is the firm in which the Shareowners have an ownership position and in which Investors are considering an investment.

²The terms "nonfinancial" factors and "ESG" factors are used often in this manual but are not meant to be used interchangeably, or as synonyms. ESG factors are one kind of nonfinancial factor, but there are a wide range of nonfinancial factors that Investors must look at beyond ESG, such as key performance indicators (KPI) and enhanced business reporting (EBR) factors.

³Bold indicates common ESG terms defined in Appendix B.

⁴The term "Investor" refers to all individuals or institutions who are considering investment opportunities in shares and other securities of the Company.

⁵The term "Shareowners" is distinguished from the term Investors by referring only to those individuals, institutions, or entities that own shares of common or ordinary stock in the Company in question.

What's in a Name?

Varying labels have been ascribed to similar factors in the past, including “**sustainability** factors,” “**corporate social responsibility (CSR)** factors,” “nonfinancial factors,” “extrafinancial factors,” and “social investment factors.” Consideration of such factors traditionally has been used to align investment strategy with sponsor organizational missions and philosophies, to orient investment decisions with larger societal goals and objectives, and to make investment decision making consistent with personal political views. There also have been academic and commercial efforts to consider the potential economic impact of these factors on portfolio Companies, both to understand potential new opportunities on which Companies may capitalize and to identify risks that may place constraints on future economic resources of a firm.

Reasons for Considering ESG

Investors may choose to incorporate the evaluation of ESG risk exposures as part of their investment process for diverse reasons. Some may wish to better understand how future ESG trends could affect an industry they follow, and others may believe screening for ESG factors can lead to enhanced security selection and risk management. Some Investors might consider an ESG analysis as one proxy for the quality of management.

Through the publication of this manual, the CFA Institute Centre does not endorse any particular ESG screening practice but, instead, offers Investors the tools they need to understand and consider these nontraditional ESG-related factors in order to gain a more complete understanding of a Company's prospects.

Augmenting traditional financial analysis with consideration of ESG factors is complicated by a changing political and regulatory landscape. Companies face varying degrees of ESG-based risks and opportunities depending on the industries and cultures in which they operate. For example, utilities face greater exposure to environmental risks than do software providers, just as clothing manufacturers face unique labor challenges that do not appear in the financial services industry. As global political and regulatory agendas shift over time, new factors may become more acute and relevant to the investment perspective.

A Company that incorporates ESG exposures into its long-term strategic planning and adequately communicates these factors and strategies to Investors will provide a more complete picture of that Company's prospective value. Strategically incorporating ESG analysis may also position Companies to better anticipate future operating environments, including potential costs or burdens to their existing business model.

Likewise, those money managers and financial analysts who can interpret and relate ESG factors to a Company's future prospects may potentially develop a competitive advantage should others fail to recognize the same risks or opportunities related to those factors. In order to succeed in this arena, analysts need both the willingness to assign weight to ESG factors and an understanding of the appropriate metrics that help show how ESG considerations affect value.

Environmental, Social, and Governance Factors at Listed Companies focuses on the legislative and regulatory, legal, reputational, and operational ESG risks and opportunities Shareowners will need to consider to fully understand the Companies in which they invest. This manual addresses each risk and opportunity—along with its respective implications for Investors—and suggests resources for incorporating those risks or opportunities into the analysis process. Compared with the vast wealth of financial statement data gathered and analyzed as the current standard for evaluating Companies, the collection and evaluation of nonfinancial data is in its infancy. Information gathered in this manual will help Investors understand how ESG issues affect a Company, identify the relevant ESG factors that affect a publicly traded Company, and suggest further resources to help assess the potential impact of such factors on Company values.

Relevance of ESG Factors to Investors

In April 2006, investment funds representing more than US\$4 trillion in assets backed the United Nations Environment Programme Finance Initiative (UNEP FI) and the UN Global Compact **Principles for Responsible Investment (PRI)**.⁶ Signatories of both principles believe that ESG factors can affect the long-term performance of investments. By July 2007, more than 200 global institutions, representing over US\$9 trillion in assets under management, had endorsed the PRI.

CFA Institute stresses as a fundamental governing principle that financial professionals worldwide have a duty to act in the best interests of their clients and ultimate beneficiaries. There is an increasing recognition of the need to include the analysis of ESG factors in order to more completely fulfill this duty (see Appendix D, under ESG, Freshfields Bruckhaus Deringer 2005). However, it is as important as ever that the analyst maintain a balanced and professional approach—factor in environmental or social issues while being careful not to distort investment decisions with political or emotional agendas that do not serve the clients' interests.

Another key responsibility of an investment manager is to know the client well enough to ensure that the time frames of the investment process are aligned with the client's financial needs. Clients with long-term time horizons will often require that their investment managers take into account issues that have a long-term impact on valuations, which will certainly include environmental, social, and/or governance factors.

Awareness

A growing number of Investors (such as those committed to the PRI and other initiatives) have begun to focus on ESG factors to arrive at a more thorough understanding of the risks and opportunities that face the Companies in which they invest. These Investors share the view that a prudent Investor ought to consider ESG issues in his or her analysis because these factors can have an impact on investment performance. Indeed, a number of investment banks already employ dedicated "ESG teams" who are charged with evaluating relevant issues and incorporating them into the larger equity analysis processes. Consulting firms have also recently enhanced their ESG competencies to serve the growing demand from their pension fund clients for attention to such matters.⁷

As Investors have increasingly included corporate governance risk exposures in their investment decision-making processes, as well as in their engagement and proxy-voting activities, governance ratings agencies have emerged to meet the growing demand for information on governance-related risks at publicly traded Companies. Many Investors rely on such private governance ratings agencies to assess the governance risk found in their own portfolios.

Investors also have become more willing to push for governance changes at the Companies in which they invest, sometimes taking on entrenched management teams or inattentive Boards ("Boards")⁸ to protect the Company's value. **Activist** Shareowners are addressing various governance issues, such as mismanaged Company finances, incoherent strategic vision, failure to capitalize on investment opportunities, and management's refusal to invest a large cash position in future growth. Some of these strategies have delivered competitive returns for Investors and may have prompted changes in corporate behavior that lend greater transparency to the overall market, to the benefit of all Investors.

⁶A copy of the paper can be found at www.unpri.org/files/pri.pdf

⁷"Watson Wyatt Hires for 'Green' Investing," *Financial News* (November 2007).

⁸The term "Board" in this manual refers to both the supervisory board in countries with a two-tier board structure and the board of directors in countries that use a unitary board.

Along with increased Investor awareness, regulatory focus on transparency and disclosure in governance has sharpened, as has academic research on the link between governance practices and corporate performance. Although the intensity of focus on environmental and social issues does not yet match the depth or breadth of scrutiny placed on corporate governance issues, there is increasing interest in such factors as energy utilization and production of greenhouse gases.

Climate Change Tops List of Environmental Issues

Markets are accepting scientific research that shows the earth is experiencing a climate change. Many Investors are concerned with the degree of mankind's influence on this change, and as a result, this environmental factor will gain expanded relevance in financial analysis. Based on the initial response of governments worldwide, it is reasonable to assume that in the near future Companies will need to deal with a changed corporate landscape that addresses climate change. This new landscape might be one in which carbon-based energy sources face either restricted use, increased taxation, and/or increased regulation (see Appendix D, under Environmental, Intergovernmental Panel on Climate Change 2007). Indeed, in early 2008, three investment banks announced that they had agreed to factor in the risks posed to the environment from carbon emissions when lending to power Companies planning to construct coal-fired power plants.⁹

Climate change may be the most prominent environmental issue facing Companies, but it is clearly not the only one. Investors and analysts should understand how such issues as pollution, resource depletion, ecosystem change, waste disposal, the use of toxic chemicals, the license to operate in communities, and other environmental issues affect a Company in order to fully understand the environmental risks and opportunities facing the Companies they follow.

Although carbon-intensive industries, such as oil and gas and the utilities sector, will be a principal target of any pending carbon legislation, the uncertainty around such changes is currently hindering analysts and the corporate community in properly assessing the potential future effects of regulation and changing cost structures. Future climate change regulations will likely have ripple effects across all sectors, including those outside carbon-intensive industries. In a carbon-constrained world, Companies that seize an early opportunity by developing technologies in anticipation of this changed environment may offer a lower risk profile and enhanced return opportunities to their Shareowners compared with competitors that do not adequately prepare for these developments.

Analysts may not have access to appropriate disclosures and metrics to properly assess the risk to a Company's bottom line posed by a carbon-dependent business. In the absence of uniform data that can be measured, it is not especially surprising that balance sheets and income statements do not explicitly reflect these potential risks. Thus, the task of developing measurement tools that give appropriate weighting to ESG factors is an important challenge to more widespread use of such factors.

Some resources, such as the Global Reporting Initiative (GRI)¹⁰ and the Carbon Disclosure Project¹¹, have attempted to quantify some environmental measures in order to better facilitate meaningful comparisons between Companies in the same industries, or with similar risk profiles. Groups such as the Enhanced Analytics Initiative (EAI) have tried to focus attention on factors that do not normally appear on the financial statements of publicly traded Companies—including environmental and social factors—by allocating a percentage of their broker commissions on the basis of how well brokers integrate analysis of extrafinancial factors and intangibles into their mainstream (sell-side) research.

⁹Howard Winn, "Banks to Evaluate CO2 Emissions on Loans," FinanceAsia.com (6 February 2008).

¹⁰www.globalreporting.org.

¹¹www.cdproject.net.

The Social World

Social factors (such as human rights, worker rights, safety, labor relations, child labor, community relations/development, and indigenous rights) play an increasingly expanded role in the public's perception of listed Companies. News of a poor safety record or the use of forced labor has the potential to damage a Company's reputation. That negative reputation, in turn, adversely affects the financial prospects of the Company in the public eye by depressing revenue or prompting new regulatory burdens. In an age of instantaneous communications, potential Investors around the globe can observe a Company's social behavior within seconds of an event or breaking news story. Investors need to understand the social risks that threaten the reputation and brand integrity of the Companies in which they invest. Similar insights into the potential implications of a Company's labor and community relations practices will help Investors understand their potential to influence value as well.

In some cases, the outcome of evaluating the ESG risks and opportunities may simply be predictive, and in other cases, quite material. New protocols (such as the European Union Accounts Modernisation Directive of 2005) require disclosure of consideration of the potential impact of nonfinancial factors (such as environmental and employee matters) as part of a "business review." Such mandated disclosures may spur more systematic review of ESG information across industries or sectors, thus improving the predictive value of this information in the investment process.

Key ESG Issues to Consider

Although this should by no means be thought of as an exhaustive list, the following are some of the key ESG issues that historically have been areas of concern for Shareowners. These and other issues will continue to offer risks and opportunities to Investors in the future.

Investors seeking a truly thorough understanding of the Company or industry being analyzed will consider the relevance of these issues to that Company and will consider each issue for its potential for financial impact.

Environmental

- Carbon emissions, greenhouse gas emissions, disclosure/measurement and reporting
- Climate change; effect on Company/risk exposure/opportunities
- Ecosystem change
- Facilities citing environmental risks
- Hazardous waste disposal/cleanup
- License to operate in communities
- Pollution
- Renewable energy
- Resource depletion
- Toxic chemical use and disposal

Social

- Animal welfare
- Child labor
- Community relations
- Discrimination
- Diversity (employee/Board diversity)
- Facilities, citing social risks
- Genetically modified organisms
- Living wage disputes
- Predatory lending
- Political contributions
- Political risk of involvement in troubled markets, countries
- Sexual harassment
- Shareowner advisory vote on executive compensation
- Slave labor

Governance

- Cumulative voting
- Dual-class share structure
- Executive compensation (pay for performance, pay equity)
- Majority voting
- Poison pills
- Say on pay
- Separation of chairman/CEO position
- Shareowner rights
- Staggered Boards
- Takeover defenses/market for control

Legislative and Regulatory Factors

Shareowners face the risk that laws and regulations affecting a Company's operations will change, with potentially adverse effects on the Company's continued profitability and even its long-term sustainability. Investors also need to be aware of new regulatory frameworks, such as industry self-regulation or where businesses set the bar for acceptable behavior and governments intervene only when business fails to adequately regulate itself. Many Companies are involved in helping to develop voluntary or regulatory frameworks concerning a number of issues, from carbon emissions standards to worker health coverage. Such involvement at the industry level ensures that the Companies' perspective is represented and facilitates their ability to implement changes if such adjustments become a regulatory mandate.

There also is an opportunity for Companies to proactively adopt new industry standards, making them more competitive in both local and international markets and better prepared for imminent legislation. Legislative and regulatory changes are also likely to spur the adoption of new technologies, offering new investment opportunities for Investors.

Risks in Regulating Climate Change

Uncertainty about future legislative or regulatory actions regarding climate change means Investors may have a particularly difficult time accounting for risks or opportunities associated with this factor. Governments around the world may be likely to take some legislative or regulatory action in order to address climate change, yet great unknowns—the speed, direction, and magnitude of such governmental mandates—lend uncertainty to the operating environment. Analysts should understand the legal and regulatory frameworks in which public Companies operate and be able to assess the likelihood of significant changes in these regulatory regimes.

For example, in early 2007, the U.S. Supreme Court ruled that the U.S. Environmental Protection Agency (EPA) has the responsibility to regulate greenhouse gases under the existing Clean Air Act, an action that could open the door for tighter regulation. Months after this decision, President Bush's administration introduced a plan for progressively tighter automobile emissions standards to cut U.S. gasoline consumption by 20 percent over 10 years. As of mid-2008, multiple bills are pending in the U.S. Congress to address the issue of climate change by attempting to reduce the amount of greenhouse gas emissions. Based on these and other legislative efforts, it is likely that greenhouse gas emissions will come under stricter control in the United States in the near future. Such policy changes would have meaningful impacts on a number of industries.

On a smaller, state-sized scale, the California Energy Commission adopted stricter greenhouse gas emissions standards for publicly owned utilities in May 2007. This action will hit the heaviest emitters of greenhouse gases (such as coal-fired power plants) the hardest, making it much more difficult for such plants to compete in the state of California.¹² If such a standard becomes the norm in other markets, Investors in plants with the highest greenhouse gas emissions could suffer the greatest financial setbacks.

Elsewhere, the European Union's 2007 tightening of allocation of carbon dioxide emission limits has threatened to sharply limit the growth of steel manufacturing operations. One possible outcome of this action could be to shift business to other parts of the globe where emissions are not subject to such stringent control.¹³

¹²"California Energy Commission Adopts Standards to Limit Power Purchases from Coal-Fired Plants," *Global Power Report* (31 May 2007).

¹³"Mittal Says EU Emission Cap Will Limit Growth," *The Guardian* (30 July 2007): <http://business.guardian.co.uk/story/0,,2137464,00.html>; retrieved 16 October 2007.

Not All Factors Bring Risk

Regulatory changes can bring opportunity in a number of ways. In Brazil, for example, financial regulators established the *Nuevo Mercado* (New Market), a part of the São Paulo Stock Exchange with stricter reporting rules and expanded Shareowner rights, to attract investment from outside the country. So far, the promise of greater transparency and higher corporate governance standards by the Companies listed on the New Market has led to great increases in foreign capital invested in Brazilian listed Companies. A Brazilian Company that chooses to list on the New Market sends a signal to its Shareowners that the Company is committed to the highest level of transparency and accountability available in the Brazilian market. Investors looking to invest in Brazil can feel more confident about the corporate governance standards of a Company listed on the New Market than about a similar Company without such governance safeguards.

IMPLICATIONS FOR INVESTORS

Investors need to understand the potential for changes in the legal and regulatory frameworks that can impose additional costs or establish new opportunities for Companies. This investing calculus is complicated when the future regulatory environment is expected to change but the magnitude and implications of that change remain unknown—as is indeed the case with the current state of much climate change regulation. Some Companies may be better equipped than others to influence change and adapt, thus allowing them to maximize opportunity and minimize disruption to their business model.

Things to consider

Investors should determine whether:

- The current or anticipated legislative and regulatory environment helps or hinders the current and long-term strategy of a Company.
- A Company has identified and addressed the current and future legislative and regulatory risks of the markets where it operates and has communicated those matters to Investors.
- A Company clearly communicates its strategy for addressing a current or future legal or regulatory environment to the Investor's satisfaction. This could include a "scenario analysis" of possible regulatory and legislative outcomes and how the Company plans to adapt to each potential scenario.
- A Company reports on its environmental or social performance according to a well-recognized independent standard. For example, a Company that produces environmental reports according to the guidelines of the Global Reporting Initiative or the Carbon Disclosure Project offers Investors the ability to more easily understand certain ESG risks and opportunities facing the Company.
- A Company adequately discloses its current and projected greenhouse gas emissions if that Company operates in a carbon-intensive industry. These data will help an Investor better understand and compare the climate change exposure a Company may face in relation to its peers. Information that is audited or otherwise verified by an objective third party is more compelling than self-reported data.

Where to find information about legislative or regulatory risks and opportunities

- Most Companies will disclose information about the legislative and regulatory environment they face in their annual and/or quarterly reports to Shareowners. An Investor may have to look in multiple places, such as the management discussion and analysis (MD&A), legal proceedings, risk factors, business summary, or other sections of the annual report or annual financial report.
- Some ESG-related information may be found in current financial statements because it may reflect the past, current, and in some cases the pending costs of certain ESG factors. Items such as write-downs of impaired assets or contingent liabilities may already reflect a Company's best estimates of costs related to current ESG factors.

- Sell-side research and broker reports are increasingly covering ESG issues in their Company evaluations, and some reports even focus on ESG issues exclusively. In addition, some investment banks have established dedicated ESG research departments. Investors should consider gathering information from clearinghouses for nonfinancial reports that focus on how certain regulations may influence an industry as well as from specialized units or firms that consider ESG issues in their analysis.
- Investors also may turn to one of the specialist research providers that have emerged in recent years to focus exclusively on ESG issues. Because of their focus on one or more aspects (environmental, social, or governance) of ESG issues, these services can offer a more specialized analysis.
- If a Company operates in an environment where carbon emissions and current or future carbon regulation is a potential concern, Investors should understand the Company's current or imminent potential for exposure on carbon issues. A Company may disclose this information in its annual report or in a companion sustainability report. Central clearinghouses, such as the Carbon Disclosure Project and the Global Reporting Initiative also provide comparative data on thousands of public Companies.
- Many Companies already produce an annual sustainability report, environmental health and safety report, or some other similar disclosure that provides enhanced qualitative and quantitative data concerning the environmental, social, and safety issues relevant to that Company. Such reports are generally found on a Company's website and may be ordered from the Company if an Investor prefers a printed copy of the document. These reports increasingly feature meaningful information germane to the unique risks a Company faces. For example, an electric utility will likely publish an environmental report that details that Company's yearly emissions of greenhouse gases, including trends and expected future projections. A clothing manufacturer will likely use such a report to describe its labor practices and how they compare with internationally recognized standards. It is increasingly rare to find a Company that operates in an environmentally or socially sensitive industry that does not produce such a report.
- Some Companies may report their compliance with process standards, such as **ISO 14000** (environmental compliance) or **SA8000** (supply chain labor practices). Others may emphasize how they comply with performance standards such as those laid out by the Global Reporting Initiative. If a Company reports its compliance with or performance relative to such a standard, it is likely that the Company will mention this in its yearly ESG report or annual report.
- Second-order effects of ESG factors (for example, increases in climate-related diseases as a result of climate change) may make assessing their potential for impact on specific Companies more difficult. Thus, general research related to key issues may help the analyst develop and test hypotheses of potential effects on Companies. General news reports and the business press may be useful in this regard, as might be more specialized journalism that is focused on environmental and social issues related to such second-order effects.

Legal Factors

If Company managers do not effectively address sustainability factors and end up embroiled in lawsuits or other judicial troubles, there is considerable potential for material losses for the Company and Investors. Legal risks will vary by market: Companies in a relatively litigious market—such as the United States—are apt to face legal risks more frequently than a similar Company in a less litigious market.

Obligation to Shareowners

As Shareowners and markets increasingly recognize the effects and potential legal implications that ESG factors have on Company valuations, it will become imperative for Companies to understand the legal obligations they have to Shareowners to address such factors. Some jurisdictions—for example, the JSE (Johannesburg Stock Exchange)¹⁴—strongly encourage Companies to include certain disclosures relevant to ESG factors in reporting. A case could be made that U.S. Securities and Exchange Commission (SEC) Regulation S-K also requires discussion of potential ESG factors in the MD&A to the extent that those issues are material.¹⁵ International Financial Reporting Standards (IFRS) and Canadian and U.S. Generally Accepted Accounting Principles (GAAP) already require that Companies recognize known asset impairment if the impairment is material. Indeed, underwriters of directors and officers liability insurance policies are considering the implications of failing to disclose corporate exposure to the anticipated consequences of global warming.¹⁶

The Price of Risk

Environmental costs created by corporate activity may no longer be dismissed as outside the Company's responsibility. For example, a U.S. utility recently agreed to a US\$4.6 billion settlement—including some US\$60 million for remediation of past environmental damage—resulting from alleged violations of the EPA's Clean Air Act New Source Review provisions covering power plant emissions.¹⁷

Company or industry behavior can alter the legal environment and profoundly affect the businesses in that industry. In 2006, as a result of public outcry over the lending practices of industry practitioners, the Japanese government made legislative changes that devastated the future financial prospects of the consumer lending industry in that country. The Japanese government was spurred into action following criticism of industry practices, such as aggressive collection tactics—including harassment of families and co-workers of borrowers—that led to thousands of suicides each year by desperate borrowers.¹⁸ Activists pushed for laws to make it harder for consumers to accumulate excessive debt. Japanese legislators acted by placing caps both on the interest rate allowable on some consumer loans and on a consumer's debt ratio to one-third of annual income. These legislative changes severely curtailed the earning power of consumer lenders in Japan, which caused some firms

¹⁴The JSE has established the Socially Responsible Investment Index (SRI Index) to help identify Companies listed on the JSE that embrace sustainability in their business operations. Participation in the SRI Index is voluntary. Companies that participate are rated based on a series of criteria in social, economic, environmental sustainability, and corporate governance practices. Each category is then divided into three subcategories: policy, management and performance, and reporting and consultation. To be included in the SRI Index, Companies must achieve an overall score of at least 70 and are required to achieve a certain number of points in each individual category.

¹⁵Regulation S-K contains the disclosure requirements for the nonfinancial statement portion of filings with the SEC.

¹⁶Joseph P. Monteleone, "Global Warming—Will There Be Exposures for Directors and Officers and Will It Be Covered?" Presented at Mealey's Global Warming Litigation Conference: Are You Ready? San Francisco, California (6 June 2007).

¹⁷American Electric Power, "AEP Reaches Settlement Agreement in NSR Case," press release (9 October 2007): <http://www.aep.com/newsroom/newsreleases/default.asp?dbcommand=DisplayRelease&ID=1411>; retrieved 16 October 2007.

¹⁸"Credit, Where Credit Is Due: Until '06, Japan Lenders Had Suicide Coverage," *Atlanta Journal-Constitution* (9 September 2007).

to leave the industry and others to fail despite their attempts to continue operations. (This example can, of course, also be seen as a legislative risk; a number of examples given in this manual may exhibit risks or opportunities spanning multiple categories.)

If a Company operates under a policy or produces a product that is harmful to its customers or if its manufacturing facilities involve a process that may be harmful to the environment, the Company may face legal risks that could prove detrimental to the Company's future prospects. The cost of bankruptcy brought about by unforeseen ESG issues, both in terms of its effect on Shareowners and on the Company itself, may take years and billions of dollars to resolve.¹⁹ Such events emphasize the extreme risk that some Companies must face when operating in industries in which ESG issues are a concern.

IMPLICATIONS FOR INVESTORS

Investors need to understand the legal risks inherent in the ESG factors relevant to the Companies in which they invest. Similar to the factors they face with legislative and regulatory risk, Investors must also understand how both the current and future legal environment may potentially affect a Company. For example, stricter restrictions on greenhouse gas emissions may change the definition of pollution and impose tougher legal obligations on Companies in the future.

Things to consider

Investors should determine whether:

- The current or anticipated legal environment helps or hinders the current and long-term strategy of a Company.
- A Company has identified, addressed, and communicated to Investors the risk it faces as a result of potential changes in the legal and regulatory environment.
- A Company has mechanisms in place to research, anticipate, and address any expected legal or regulatory changes.

Where to find information about legal risks and opportunities

- Most Companies will disclose the legal risks they face in the legal proceedings section of their annual reports. The MD&A may also discuss strategic legal risks. Typically, this discussion is limited to current or pending litigation, although potential future legal risks may also be discussed.
- Sell-side research and broker reports that focus on ESG issues may concentrate on how those issues influence the legal environment in certain markets.
- Specialist research providers that focus exclusively on ESG issues offer specialized analyses.
- Industry reports and news searches may yield further information about the risks Companies face with regard to the legal and regulatory environment. Information concerning the unique sustainability-related legal factors facing some Companies may be explored further in news or industry reports that detail the challenges facing certain industries. This analysis might not necessarily address risk to specific Companies but may instead suggest trends in the evolution of relevant legal and regulatory frameworks that could pose future concerns for Companies.

¹⁹See, for example, "Asbestos Cost Creates Huge Loss for Owens Corning," Associated Press (11 February 2003).

Reputational Factors

Risk to a Company's reputation from ESG-related factors is an increasingly recognized consideration that can affect brand, market share, and public perception of integrity. Specifically, Companies whose managers have inadequately managed ESG factors in the past and failed to eliminate or otherwise mitigate this risk exposure could suffer greater market value loss than otherwise comparable Companies that have properly addressed such factors.

Famous or Infamous?

Investors should consider what a Company does to maintain and protect one of its most important assets: its reputation. Companies that anticipate challenges to the strength of their brand identity and corporate reputation are better able to preserve the value of their corporate franchise when any trouble does arise. Often, a good understanding of reputational risk factors and adequate planning and preparation can save Companies from the corporate damage done by oil spills, chemical accidents, or poorly handled labor relations. Yet, it is also important that Investors distinguish between sound policies and mere public relations sound bites or “**greenwashing**.” A Company that merely promotes itself as “green” or socially and/or environmentally conscious without taking the necessary steps to protect its reputation will remain vulnerable to ESG risks.

Apparel manufacturers have long faced scrutiny over labor practices and working conditions at their own or suppliers' factories around the world. In recent years, some Companies have offered more transparent reporting of their labor practices in response to past criticism. Public exposure of sweatshop conditions and employees denied a living wage have brought negative attention to many in the apparel industry. Consequently, Companies that understand the risks their reputation may face from such accusations will enhance both their practices and reporting on working conditions in contract factories.

Responsibility in Action

For example, an apparel manufacturer that adopted measures to improve working conditions in its factories and address the rising concerns of consumers, Investors, and critics about labor standards at its factories also improved its reporting.²⁰ This Company's Investors may now review the “Workers in Contract Factories” section of its environment, health, and safety report and determine for themselves whether the Company is acting responsibly. The Company audits—in partnership with outside environmental, health, and safety consultants—and reports on more than 650 contract factories around the world to determine these factories' compliance with Company labor policies.²¹

In another industry, two major U.K.-based grocery store chains have competitively marketed themselves as environmentally and socially conscious retailers and have promoted their commitment to such policies as local sourcing of merchandise to cut down on vehicle emissions from transporting goods to market. One chain has adopted “**fair trade**” policies to increase the amount of fair trade goods in its stores and has vowed to sell only fair trade items in some circumstances. For instance, the store will now only carry bananas if they are fair trade.²²

The other chain has promised to measure and disclose the general environmental impact of each self-branded product²³ and is considering disclosing the **carbon footprint** of all products sold in its stores as well.²⁴ These issues have implications for the reputation of both Companies—and their suppliers—if consumers will indeed differentiate products based on the social or environmental “footprint” of a given product.

²⁰See “Nike Unfurls Anti-Sweatshop Measures,” *Footwear News* (18 May 1998).

²¹See <http://www.nikeresponsibility.com/#home/>.

²²See “Sainsbury's to Sell Only Fairtrade Bananas,” *Datamonitor News and Comment* (12 December 2006).

²³See “Tesco to Map Carbon Footprint of 30 Products,” *Reuters* (10 October 2007).

²⁴See “‘Green’ Tesco Has Worked Out the Wind Direction,” *Daily Telegraph* (10 October 2007).

Some Shareowners may argue that carrying fair trade or environmentally sensitive products, which are usually more expensive to stock, may reduce a Company's profit margin. Others counter that by featuring such products, Companies can not only attract a growing subset of consumers who will seek out such products but also enhance their reputation, increase sales, and grow market share. Indeed, a Company legitimately dedicated to such initiatives as fair trade or selling environmentally friendly products may earn brand loyalty from consumers inclined to buy such goods and “do something positive” for society.

IMPLICATIONS FOR INVESTORS

Investors need to understand the impact a Company's reputation can have on its value and assess what measures that Company has taken to deal with risk exposures. For example, a utility Company that relies exclusively on nuclear power generation faces very different risks from an energy provider that is powered by coal. Regardless of which factors each utility Company might face, they all will benefit from proper planning for and management of environmental risks.

Things to consider

Investors should determine whether:

- A Company views its reputation as a key strategic asset and manages it accordingly.
- A Company has developed adequate plans for evaluating the risks its reputation may face. In some cases, a Board-appointed committee will be responsible for reviewing such risks and helping to develop plans for dealing with potential reputational risks.
- A Company has identified and has adequately communicated to Shareowners the potential reputational risks inherent in its line of business.
- A Company has mechanisms in place—such as crisis planning or training for executives/the Board—to adequately deal with situations that may potentially harm the Company's reputation over the long term.
- A Company is prepared to quickly and clearly communicate with key stakeholders, addressing issues that may affect reputation proactively rather than reactively so as to minimize risk.
- A Company has its ESG reporting audited by an outside source. An independent audit of a Company's environmental and social reporting adds a level of credibility to the information contained in any such report.
- A Company adheres to a professional or industry code of conduct that will enhance and affirm the Company's reputation. If so, Investors should investigate the quality of such a code of conduct—comprehensiveness, fellow signatories, auditors of the code—to better understand how the Company's adherence to such a code may affect its reputation.

Where to find information about reputational risks and opportunities

- Some Companies may highlight reputation risk factors in the risks section of the annual report. Others may place such information in an environmental health and safety or ESG report.
- Sell-side research and broker reports produced by specialized research firms and investment banks are good sources of such information. Additional information may also be obtained from clearinghouses for such reports.
- Specialist research providers that focus exclusively on ESG issues produce reports that can be helpful.
- Some Companies may inadequately account for reputation as a risk factor and fail to provide Investors with meaningful information about how the corporate identity is safeguarded. In such cases, Shareowners may find helpful information in third-party-produced industry reports or through targeted news searches instead.

- Investors may better understand the factors potentially affecting a Company's reputation by looking elsewhere in an industry—for example, in the annual reports of competitors. Risks that are disclosed by some competitors but not by others may warrant additional analysis.
- If a Company adheres to a professional code of conduct, such information will likely be highlighted on the corporate website, in an annual report, or in a sustainability report.
- Human rights and consumer rights groups may provide Investors with resources that offer information on both positive and negative events that can affect a Company's reputation.

Operating Factors

Investors face the risk that a Company's operations may be detrimentally affected by ESG factors, even to the extent that one or more product lines or possibly entire operations could be severely affected, and in some cases shut down. There also are opportunities for Investors to find Companies that are best positioned to respond to new opportunities, such as changing consumer preferences or new technologies.

Operating risk relates to what a Company does to create value for its Shareowners; the Company's operations may be compromised if its business practices should prove unsustainable. Forward-looking Companies that understand and act on the ESG factors relevant to their operating activities will better mitigate such operating risks than will their less proactive peers.

Examples

As an example, the U.S. National Academy of Sciences estimates that long-term changes in weather patterns linked to climate change could reduce the U.S. wine industry's grape production by 81 percent by the late 21st century, threatening the US\$15 billion California wine market.²⁵ Although small relative to the U.S. economy as a whole, second-order effects on the California economy from disruption to this industry could be considerable. Companies deriving significant sales from domestic wines would feel a dramatic impact if California grape growers experience a decrease in their production of quality crops. Preparing in advance for such a situation may help lessen the strain on California wine businesses, and a proactive response may demonstrate a Company's ability to remain strong when such challenges emerge.

The market impact of—and how Companies responded to—regulatory changes in chlorofluorocarbon (CFC) use in the 1980s is another example of ESG factors affecting operational performance. Financial markets recognized that there were potential costs and opportunities associated with regulatory changes mandating the elimination of CFCs from refrigeration equipment. Seeing the opportunity, a Company that produced CFCs announced it would end production of CFC-based products by the turn of the century. By late 1989, the Company's researchers had filed 20 patents for non-CFC refrigerants, and by 1990, it had introduced refrigerants and propellants to replace CFCs. In 1993, the Company accelerated its CFC phaseout deadline to the end of 1994, one year ahead of the timetables established by both the 1987 Montreal Protocol and the 1990 Clean Air Act Amendments. As the market for non-CFC refrigerants increased throughout the 1990s, this Company was well positioned to take advantage of this ESG-related impact on operations (and reputation).²⁶

IMPLICATIONS FOR INVESTORS

Analysts are familiar with the need to identify and consider operating risks as part of traditional financial analysis. And although a Company's potential operating risks from ESG factors may seem the most obvious of the risks discussed in this manual, analysts will sometimes overlook these factors in less obvious industries. The operating risks for industries dependent on finite natural resources, such as oil or precious metals, may be straightforward and easily anticipated, but nearly every industry faces ESG-related factors somewhere along its supply chain, so it is important to consider such factors regardless of industry. Investors should understand the many operating risks a Company faces from ESG factors, including second-order effects.

²⁵M.A. White, N.S. Diffenbaugh, G.V. Jones, J.S. Pal, and F. Giorgi, "Extreme Heat Reduces and Shifts Premium Wine Production in the 21st Century," *PNAS*, vol. 103, no. 30 (25 July 2006):11217–11222.

²⁶See "DuPont Says It Will Phase Out HCFCs 10 Years Early," *Ozone Depletion Network Online Today* (3 January 1996).

Things to consider

Investors should determine whether:

- Strategic analysis of ESG factors takes place at the management or Board levels. A strategic commitment to these factors may be more prominent in environmentally sensitive industries, although many financial and service organizations have made a strategic commitment to understanding how ESG factors may affect their business.
- A Company has identified the potential operational risks inherent in its line of business and established a plan to contend with such risks.
- Company management and the Board of directors effectively communicate to all stakeholders their plan for mitigating these operating risks over both the near and long term.

Where to find information about operating risks and opportunities

- Many Companies discuss their operating risks in the risks area of their annual report. A Company may dedicate an entire section of its annual report to operating risks if such risks are intrinsic in the type of business in which the Company engages. Operating risks related to suppliers or supply chain factors may also be disclosed in the annual report.
- Companies that operate in more socially or environmentally sensitive industries may cover such factors in more depth in a sustainability, environmental, ESG, or health and safety report.
- Specialized reporting for Companies that operate in carbon-intensive activities may contain a great deal of data—allowing Investors to assess and compare Companies' operating risks (see Appendix C).
- Some specialist research providers focus their analyses exclusively on ESG issues.
- Investors should monitor all Company communications and should not rely solely on annually released reports. Operating risks sometimes appear over a shorter time frame than can adequately be addressed in the standard, yearly reporting cycle. Quarterly communications, press releases, and other interim communications should convey a consistent message concerning how a Company recognizes and handles its operational challenges.
- Shareowner proxy proposals also may be a good source of information to help Investors identify a Company's issues and to determine whether those issues are material to the Company's operation.

Appendix A

Sample ESG Scenarios

To assist the Investor in understanding how ESG factors may affect Companies, the following fictional scenarios explore some examples of how a Company's value might be affected by certain ESG-related considerations. Each example explores a specific factor discussed in this manual—regulatory/legislative, legal, reputational, operational—defines the relevant ESG factors, and suggests possible Investor actions. Although the suggestions given by no means represent an exhaustive list of possible Investor actions, they should help the reader better prepare to undertake full research of the issues addressed.

I. Analyzing Legislative and Regulatory Factors

The situation

Your client owns a significant position in ABC Company, a mid-sized electric utility. The Company operates 15 power plants, 10 of which are coal fired and 5 of which are nuclear powered, across a number of different markets in Europe. It is expected that pending environmental legislation will bring change over the next two years to many of the markets in which the Company operates. Broader European Union legislation as well as specific country rules will likely impose stricter costs on Companies producing carbon emissions. The probability and magnitude of such costs are not certain but would apply to all 10 of ABC's coal-fired power plants.

The stock of ABC Company has declined 10 percent in the past year, although it is unclear whether that is the result of poor management or a reaction to the likely future impact the impending legislation will have on the Company. ABC Company discusses the impacts of such legislation in broad terms only in its public disclosures, and you need to make a fair and informed assessment of ABC's prospects for your client.

Relevant ESG issues to consider

- Will environmental legislation increase emissions fines, increasing costs to operate coal-fired plants?
- Are emissions from the Company's coal-fired plants bad for ABC Company's reputation?
- Will ABC Company be required to make expensive upgrades to equipment to comply with new regulations?
- How will regional and country regulations affect ABC Company's short- and long-term value?

Possible Investor actions

- Determine whether you will be better informed if you conduct your own research or if you purchase existing research. Either way, investigate fully how the proposed legislative challenges could affect not just ABC Company but the industry as a whole.
- Contact experts who are knowledgeable in the industry and who cover the Company, and ask their opinion on how these legislative challenges may affect the Company and quality of management issues.
- Contact ABC Company and request answers to your questions.
- Review reports by industry peers to seek out relevant environmental disclosures.
- Research media coverage of actions taken by ABC's competitors in the affected markets and any local regulatory or legislative actions—and results—already reported.
- Review public disclosures made by other utility Companies in the markets in question.
- Develop a "buy-hold-sell strategy" based on thorough financial analysis, supported by a full understanding of the potential and existing environmental regulations, taxes, and impacts, to understand the current legislative debates relevant to ABC.
- Separately assess any governance issues that might affect the quality or stability of current management.

II. Analyzing Legal and Reputational Factors

The situation

XYZ Company produces many products—one that is particularly profitable but that has become increasingly socially unacceptable to some groups. Anecdotal evidence in recent years has linked the product's use to an increased likelihood of cancer diagnoses. Independent academic studies to determine if there is such a link have just begun but will not be completed for another three years. XYZ Company has grown substantially lately, and your firm is a large and potentially influential owner with a 3 percent stake in the Company. XYZ Company shares continue to be attractive to your firm when judged based solely on standard financial analysis.

Yet, consumer groups recently have launched a public campaign against XYZ Company and initiated litigation calling for the removal of the objectionable product from store shelves. XYZ Company management does not proactively comment in any detail on the issue of cancer risk, and when specifically asked, it responds only that it does not plan to pull the product and any legal action is without merit. The product in question brings in 15 percent of the Company's revenue. Recent scientific advances appear to offer the Company the option of reformulating its product to make it less objectionable, but XYZ Company has not yet undertaken any such steps and has not stated any intent to do so. Furthermore, any such reformulation of the product may take up to four years to finish, and your firm estimates that net income could be reduced by approximately 2 percent per year until any reformulation and reintroduction of the refined product is complete.

Relevant ESG issues to consider

- If public pressure grows, turning more consumers against XYZ Company's product, will it drive sales profits down?
- Could public pressure escalate to a boycott of the Company's other products?
- What happens if the independent studies do find a link between the Company's product and the onset of cancer? Would that news harm the Company's long-term viability through a loss of product revenue, litigation risk, and/or damage to XYZ Company's reputation?
- Will the Company's competitors eventually outperform XYZ if XYZ hesitates to act while the competitors proactively undertake reformulation and move ahead of XYZ?
- As a large Shareowner in XYZ Company, your firm may have potential influence on the officers and directors of the Company. What will you do with that access?

Possible Investor actions

- As a large Shareowner, you could use your access to speak to Company leaders, encouraging them to reformulate the product in an effort to protect XYZ's long-term business model.
- The continued absence of a full response to charges or any action to demonstrate the Company's willingness to address concerns only fuels the "silence = guilty" damage to reputation and is likely to hurt the Company's value in both the short and long term. Offering XYZ Company's leaders suggestions for risk management and public relations outreach might be helpful.
- An Investor might also encourage XYZ Company's management to proceed with the reformulation as soon as possible; the longer the Company delays a product reformulation, the greater the risk to the Company. Given that it will take four years to reformulate, and the studies investigating the risk of cancer will be done in three years, it is in the best interest of the Company to reformulate as soon as possible and limit "down time" between when the study is released and the new product is available.

III. Analyzing Legislative, Regulatory, and Reputational Factors

The situation

For more than three years, across several discretionary equity accounts for which you are responsible, you have owned a significant position in shares of Big Green Grocers. In a market characterized by thin margins and intense competition, Big Green Grocers has succeeded in defining and expanding a global market segment of higher-end consumers who are less price sensitive and who value availability of healthy foods presented in an attractive setting.

In four of the countries in which Big Green Grocers operates, local environmental activists are lobbying legislators to forbid the use of plastic shopping sacks in all retail establishments, citing both the petroleum inputs required to make the sacks and the increased pollution sacks add to the world's landfills and oceans. Currently, 82 percent of Big Green Grocers' customers choose plastic sacks over the other alternatives (paper sack or reusable canvas bags). The unit cost of plastic sacks is approximately US\$0.0125, and the unit cost of paper sacks is US\$0.0185; customers are not charged for either plastic or paper sacks. Big Green Grocers sells the reusable canvas bags and realizes a profit margin of approximately US\$0.08 on each canvas bag sold.

At the same time, several of the jurisdictions where Big Green Grocers operates are moving toward regulation requiring inspection and certification of those merchants—such as Big Green—claiming to sell organic products, potentially raising the wholesale cost of such items. Along with these new regulations comes the prospect of significant fines to vendors who source and sell organic merchandise without reasonable processes in place to check the validity of organic designations.

Relevant ESG issues to consider

- Will the pending legislation force Big Green to switch to more expensive paper sacks and/or start charging for the paper sacks? Or might it offer customers the canvas sacks at little or no cost? What affect will this have on the Company's value?
- What impact does the use of plastic sacks have on Big Green Grocers' brand integrity and reputation; how will it respond to such "green" concerns?
- What additional costs might be associated with developing and maintaining an organic certification program?
- Will Big Green Grocers' response to either situation pose Investor risk or opportunity? What are its competitors doing, and how will their response affect Big Green's market value?

Possible Investor actions

- Analyze whether Big Green Grocers management has considered the risks to its brand, reputation, and/or customer loyalty from using plastic sacks.
- Determine the economic cost to Big Green Grocers if the Company discontinues the use of plastic sacks.
- Consider if alternatives to paper sacks or canvas bags exist, are viable, and if Big Green Grocers has considered such options.
- Review Company reports and speak with Big Green Grocers' representatives to learn if they have considered and are preparing to address the consequences—including financial impact—of either plastic bag legislation or organic certification regulations.
- Obtain research and compare the vulnerability Big Green Grocers and its competitors each have to pending legislation.

IV. Analyzing Operating Factors

The situation

A Company in your portfolio, Osiris Film Company, just received a tender offer from Arthouse Films for €96 per share. Osiris Film Company currently trades at €90 per share and has been slowly declining from a high of €110 three years ago. Over the same time period, Osiris' competitors'—including Arthouse's—share prices have trended slowly upward. The present owners of Osiris Film Company control 35 percent of the Company's shares, and four of the nine Board members have publicly stated they will reject the merger offer. Arthouse responded that if its offer is successful, the size of the Board will remain the same but the four dissenting Osiris directors will be replaced with the Arthouse CEO and three independent directors.

Your analysis of the Company's financial statements finds Osiris to be worth €98–100 per share, but you believe that the market's recognition of lost faith in management over the years has resulted in a “governance discount” in the share price. Meanwhile, Osiris Film Company has placed a proposal on the proxy ballot to create a “staggered” Board structure, requiring only a third of the Board members to come up for election every year.

You hold 9 percent of the shares of Osiris Film Company and believe it is likely that your votes will decide the results of an expected close vote on acquisition.

Relevant ESG issues to consider

- Could concentrated ownership hinder needed change in management at Osiris?
- Will the proposed staggered Board structure further entrench a problematic management team? How might that impact Company value?
- Is the Osiris “governance discount” in fact caused by the current management, or is some other operational factor holding down the Company's value? Will new ownership improve the Company's prospects, or will underlying operational issues remain?
- What are the similarities and differences in management, operations, reputation, or other factors between Osiris and Arthouse?

Possible Investor actions

- Conduct your own research of annual reports, financial statements and disclosures, and media coverage (or purchase outside research) to deny or confirm and then quantify the suspected “governance discount.” Investigate what other factors may also/instead be depressing Osiris' stock price.
- Ask Osiris representatives what potential changes are being considered to improve value.
- Research Arthouse's financial reports and reputation; do the same for Osiris' other competitors, assessing each Company's governance structure to understand if that framework could be placing the Company at a disadvantage.
- Establish a voting decision for or against the acquisition by Arthouse based on a thorough financial analysis and a full understanding of the governance risks and opportunities associated with either vote.

V. Analyzing Legislative, Regulatory, and Reputational Factors

The situation

You are the portfolio manager for Small-Capitalization Fund, which invests in equity securities globally. You are considering adding to the portfolio and have been analyzing Tiny Bubbles, a Company that held its IPO two years ago. Tiny Bubbles has brought to market a proprietary, patented process that significantly reduces nitrous oxide and carbon dioxide emissions from gasoline-powered automobiles; the process already has been adopted by two major automobile manufacturers. The stock has preformed slightly above its peer group over the past two years.

Tiny Bubbles recently announced an adaptation of the original process and claims it will reduce both carbon dioxide and nitrous oxide emissions from coal-fired power plants. So far, no power producers have purchased the Tiny Bubbles process, citing the potential additional expense of US\$0.02–0.03 per kWh if they were to adopt the process. Yet, if future legislation levies an anticipated “tax” on plants for carbon dioxide and nitrous oxide emissions, those plants that use the new process could potentially reduce ongoing expenses and offset some of the investment in Tiny Bubbles’ process.

Relevant ESG issues to consider

- How much will the markets shift and demand for the Tiny Bubbles technology change if carbon tax legislation is passed? Is Tiny Bubbles’ management considering revisions to its business model if the legislation does not pass?
- What are the prospects for limited resources or disruption to supply of other power fuels? What impact might that have on coal-powered plants?
- Will any coal-fired plants use the Tiny Bubbles process and market themselves as a progressive green entity? Will that spur customer loyalty to a specific power Company? Are “green-minded” consumers willing to pay extra for cleaner energy? Might plants impose a “green” surcharge to offset the expense of Tiny Bubbles’ process?
- What impact has similar emissions-taxation legislation had in other markets? In other industries?

Possible Investor actions

- If the utility Companies that currently operate coal-fired power plants produce reliable information on their own carbon dioxide and nitrous oxide emissions, use these data to determine expected emissions in future years and the potential cost of these emissions to the Company if legislation places a cost on these emissions.
- If these utility Companies do not produce information concerning their own emissions, contact other knowledgeable analysts or specialty research firms to obtain this information.
- Conduct your own research of annual reports, financial statements and disclosures, and media coverage (or purchase outside research) to determine how the economics of power production would have to change for Tiny Bubbles’ new process to be a viable product and positively affect the Company’s value.
- Determine what might happen to Tiny Bubbles Company’s value if either the legislation does not pass or power plants opt to pay new fines rather than buy the new process.
- Assess what effect other (if any) emissions-reduction systems have had in other markets or industries under such regulations: Are fines or operating costs offset by increased Company value brought by reputational or environmental gains?
- Compare current coal-powered plant operating costs with projections for the same plant using Tiny Bubbles’ process.
- Develop a “buy-hold-sell strategy” based on thorough financial analysis and a full understanding of the potential environmental, legislative, and reputational risks facing Tiny Bubbles Company and its proposed new process.

Appendix B

Definitions

General ESG Definitions

Corporate Social Responsibility (CSR). CSR considers the impact of a Company on society as a whole based on how the Company takes responsibility for the effect of its activities on a number of stakeholders—employees, the communities in which it operates, the environment—and not just on Shareowners.

Environmental, Social, and Governance (ESG). The environmental, social, and governance issues that Investors are considering in the context of corporate behavior. Often these ESG issues have been considered nonfinancial or nonquantifiable in nature and have a medium-to-long-term time frame in their effect on a Company.

Negative Screening. An investment approach that excludes some Companies or sectors from the possible investment universe based on criteria relating to their policies, actions, products, or services. Investments that do not meet the minimum standards of the screen are not included in the investment portfolio.

Positive Screening. An investment approach that includes some Companies or sectors from the possible investment universe based on criteria relating to their policies, actions, products, or services. Investments that meet the minimum standards of the screen are included in the investment portfolio.

Socially Responsible Investment (SRI). An investment process that seeks to achieve social and environmental objectives alongside financial objectives.

Triple Bottom Line. The notion of measuring a Company's success by more than just financial metrics or the traditional "bottom line." The triple bottom line attempts to incorporate a measurement of a Company's social and environmental performance—and its effectiveness in addressing the needs of stakeholders beyond Shareowners—into an overall measure of corporate success.

United Nations Principles for Responsible Investment (PRI). The PRI are a series of investing principles drafted by institutional Investors who believe that ESG factors can affect the performance of investment portfolios. The principles support the signatories' belief that Investors fulfilling their fiduciary (or equivalent) duty need to give appropriate consideration to these factors and that the PRI provide a framework for making access to ESG information more widely available and for incorporating these factors into the decision-making process.

Environmental Definitions

Carbon Footprint. A measure of the impact human activities have on the environment in terms of the amount of greenhouse gases produced. It is measured in units of carbon dioxide. A Company's "carbon footprint" is how much greenhouse gases that Company produces over a specified period of time.

Climate Change. A change in modern climate that alters the composition of the global atmosphere and changes weather patterns on a global scale, likely with significant ramifications for a number of human, animal, land, and marine systems.

Environmental Management System (EMS). An environmental management system is part of a management system in which certain policies and procedures dealing with an organization's environmental policy are defined.

Greenwash. The actions of a Company, government, or other organization that publicizes its practices as being environmentally or socially enlightened but in reality doing little to improve its environmental or social behavior or, in some cases, even undertaking practices contradictory to those publicized. The term is generally used when significantly more money or time has been spent on promoting an entity as environmentally conscious rather than on spending resources on environmentally sound practices.

ISO 14000. The environmental management standard established by the International Organization for Standardization (ISO). These standards help organizations to minimize negative effects on the environment and to comply with laws, regulations, and other environmentally oriented requirements. Certification of compliance with ISO 14000 is performed by third-party organizations and not awarded by ISO directly. ISO 14001 is the standard against which an organization's environmental management system is assessed. A system meeting the requirements of ISO 14001 is a tool that enables an organization of any size or type to identify and control the environmental impact of its activities, products, or services; improve its environmental performance continually; implement a systematic approach to setting environmental objectives and targets; achieve established objectives; and demonstrate that those objectives have been met.

Sustainable Development (Sustainability). Refers to development that “meets the needs of the present without compromising the ability of future generations to meet their own needs.”²⁷ Sustainability relates to the continuity of economic, social, institutional, and environmental aspects of human society as well as the nonhuman environment.

Social Definitions

Fair Trade. A trading partnership that seeks greater equity in international trade by contributing to sustainable development and offering better trading conditions to, and securing the rights of, marginalized producers and workers. Fair trade organizations are engaged actively in supporting producers, raising awareness, and campaigning for changes in the rules and practice of conventional international trade.

ILO Core Conventions. The International Labour Organization (ILO) is a United Nations agency focused on promoting decent work throughout the world. Eight ILO conventions have been identified by the ILO's Governing Body as being fundamental to the rights of human beings at work, irrespective of levels of development of individual member states.

The ILO Core Conventions and the dates of their adoption are:

- Forced Labour—1930
- Freedom of Association and Protection of the Right to Organize—1948
- Right to Organize and Collective Bargain—1949
- Equal Remuneration—1951
- Abolition of Forced Labour—1957
- Discrimination (Employment and Occupation)—1958
- Minimum Age Convention—1973
- Elimination of the Worst Forms of Child Labour—1999

Moskowitz Prize for Socially Responsible Investing. The annual Moskowitz Prize is the only global award recognizing outstanding quantitative research in the field of SRI. The prize was launched in 1996 by the Social Investment Forum—the national trade association for the socially and environmentally responsible investing industry—to recognize the best quantitative SRI study. The Moskowitz Prize is named for Milton Moskowitz, one of the first investigators to publish comparisons of the financial performance of screened and unscreened portfolios. His distinguished works include “The 100 Best Companies to Work for in America,” an annual list published in *Fortune* magazine, and “The Global Marketplace: 102 of the Most Influential Companies Outside America.”

²⁷Our Common Future World Commission on Environment and Development 1987.

SA8000. An international standard promulgated by Social Accountability International for assessing working conditions based on the principles of 13 international human rights conventions. The standard can be used to audit Companies and contractors in multiple industries and countries. To certify conformance with SA8000, every facility seeking certification must be audited. Auditors visit factories and assess corporate practice on a wide range of issues and evaluate the state of a Company's management systems necessary to ensure ongoing acceptable practices. Once an organization has implemented any necessary improvements, it can earn a certificate attesting to its compliance with SA8000. This certification provides a public report of good practice to consumers, buyers, and other Companies and is intended to be a significant milestone in improving workplace conditions. As of June 2007, more than 1,373 facilities in 65 countries were certified to SA8000 standards.

Corporate Governance Definitions

Activism. An investing strategy that includes active engagement with a Company's management and the Board on ESG and other issues in order to lower risk and enhance long-term value creation. Activism also often involves a strategic voting of Company shares in order to support a specific issue or to bring about change in management or Board actions.

Corporate Governance. The system of internal controls and procedures by which individual Companies are managed. It provides a framework that defines the rights, roles, and responsibilities of different groups—management, Board, controlling Shareowners, and minority or noncontrolling Shareowners—within an organization. This system and framework is particularly important for Companies with a large number of widely dispersed minority Shareowners.

Appendix C

ESG Organizations, Principles, and Other Resources

Business and Human Rights Resource Centre. A clearinghouse of information concerning human rights issues. The organization's website provides links to a wide range of materials published by NGOs (non-governmental organizations); Companies and business organizations; UN, ILO, and other intergovernmental organizations; governments and courts; policy experts and academics; social investment analysts; and journalists. The website is updated hourly with news and reports about Companies' human rights impacts worldwide—positive and negative. The site covers more than 3,600 Companies across 180 countries. Topics include discrimination, environment, poverty and development, labor, access to medicines, health and safety, security, and trade.

www.business-humanrights.org

Carbon Disclosure Project (CDP). An independent, not-for-profit organization that seeks to facilitate a dialogue, supported by quality information, from which a rational response to climate change will emerge. CDP provides a coordinating secretariat for over 300 institutional Investors with a combined US\$41 trillion of assets under management. The CDP gathers information on the business risks and opportunities presented by climate change and greenhouse gas emissions data from the world's largest Companies.

www.cdproject.net

Ceres. A national network of Investors, environmental organizations, and other public interest groups working with Companies and Investors to address sustainability challenges. Ceres launched the Global Reporting Initiative (GRI), now the de facto international standard (used by more than 1,200 Companies) for corporate reporting on environmental, social, and economic performance.

www.ceres.org

Conference Board Center for Corporate Citizenship and Sustainability. An organization that attempts to help member Companies transform their corporate citizenship and sustainability thinking and activities into integral, core business strategies, targeting business opportunities that provide maximum economic, environmental, and societal benefits.

www.conference-board.org/knowledge/citizenshipcenter

Corporate Leaders Group on Climate Change. A group that brings together business leaders from major U.K. and international Companies who believe that there is an urgent need to develop new and longer-term policies for addressing climate change; they aim to work with politicians to create the policy environment for a low-carbon future.

www.cpi.cam.ac.uk

Enhanced Analytics Initiative (EAI). An international collaboration between asset owners and asset managers aimed at encouraging better investment research, especially research that takes into account the impact of nonfinancial issues on long-term investment. The EAI currently represents total assets under management of US\$2.4 trillion. The EAI offers research providers incentives to compile better and more detailed analysis of extrafinancial issues within mainstream research. EAI members have agreed to allocate a minimum of 5 percent of their broker commissions on the basis of how well brokers integrate analysis of extrafinancial factors and intangibles into their mainstream (sell-side) research. Such factors typically include corporate governance, human capital management, value creation or destruction during mergers and acquisitions, and corporate performance on material environmental factors, such as climate change.

www.enhancedanalytics.com

Equator Principles. A set of environmental and social benchmarks for managing environmental and social issues in development project finance in emerging markets. The Equator Principles commit the signatory banks and other financial institutions to not finance any projects unless they follow the processes defined by the principles. These principles were developed by private sector banks and were launched in June 2003. The banks chose to model the Equator Principles on the environmental standards of the World Bank and the social policies of the International Finance Corporation. More than 50 financial institutions around the world have adopted the Equator Principles, which have become the standard for banks and Investors on how to assess major development projects around the world. In July 2006, the Equator Principles were revised, increasing their scope and strengthening their processes.

www.equator-principles.com

European Centre for Corporate Engagement (ECCE). A “laboratory for sustainable investment”; a multidisciplinary research network founded by researchers with established track records in the academic domain and in practice. ECCE is an internationally oriented research consortium devoted to delivering top-ranked research in the fields of corporate engagement and sustainable finance. ECCE helps practitioners and scholars understand how businesses and financial markets can promote sustainable development by considering ESG issues.

www.corporate-engagement.com

European Corporate Governance Forum. Established in 2004 by the European Commission to examine best practices in member states with a view to enhancing the convergence of national corporate governance codes and providing advice to the European Commission. The forum is composed of 15 senior experts from various professional backgrounds (issuers, Investors, academics, regulators, auditors) whose experience and knowledge of corporate governance are widely recognized across Europe.

www.ec.europa.eu/internal_market/company/ecgforum/index_en.htm

European Fair Trade Association (EFTA). An association of 11 fair trade importers in nine European countries (Austria, Belgium, France, Germany, Italy, the Netherlands, Spain, Switzerland, and the United Kingdom). EFTA is based in the Netherlands and has Dutch Articles of Association. EFTA gained formal status in 1990 and aims to support its member organizations in their work and to encourage them to cooperate and coordinate their efforts. It facilitates the exchange of information and networking, creates conditions for labor division, and identifies and develops joint projects. EFTA organizes meetings of the members (on food, handicrafts, marketing, managers), circulates relevant information to them, and maintains a database of EFTA suppliers and their products, called Fairdata EFTA. It also has an office in Brussels responsible for the execution of the Fair Procura project (funded by the EU) intended to make public authorities and institutional buyers local actors of sustainable development.

www.european-fair-trade-association.org

European Social Investment Forum (Eurosif). A pan-European group whose mission is to address sustainability through financial markets. Current member affiliates of Eurosif include pension funds, financial service providers, academic institutions, research associations, and NGOs. The association is a not-for-profit entity that represents assets totaling over €600 billion through its affiliate membership. A number of European countries also have developed their own social investment forums, such as UKSIF in the United Kingdom and FIR (French Social Investment Forum).

www.eurosif.org

Fair Trade Federation (FTF). An association of Canadian and U.S. fair trade wholesalers, importers, and retailers. The organization links its members to fair trade producer groups while acting as a clearinghouse for information on fair trade and providing resources and networking opportunities to its members.

www.fairtradefederation.com

Fairtrade Labelling Organizations (FLO) International. An association of three producer networks and 20 national labeling initiatives that promote and market the Fairtrade Certification Mark in their respective countries. The FLO labeling system is the largest and most widely recognized standard-setting and certification body for fair trade products. It regularly inspects and certifies producer organizations in more than 50 countries in Africa, Asia, and Latin America, encompassing approximately one million families of farmers and workers.

www.fairtrade.net

Global Corporate Governance Forum. A multidonor trust fund co-founded by the World Bank Group and the Organisation for Economic Co-operation and Development (OECD) to promote global, regional, and local initiatives that aim to improve the institutional framework and practices of corporate governance. The forum—housed in the joint IFC/World Bank Corporate Governance and Capital Markets Department—promotes sustainable economic growth and poverty reduction within the framework of agreed international development targets.

www.gcgf.org

Global Framework for Climate Risk Disclosure. A tool created by 14 institutional Investors and other organizations to encourage standardized corporate climate risk disclosure and to help Investors analyze and compare Companies.

<http://www.ceres.org/netcommunity/document.doc?id=73>

Global Reporting Initiative (GRI). The product of more than 1,000 organizations and thousands of related stakeholders who have developed a sustainability reporting framework by which Companies may measure and report their economic, environmental, and social performance. The framework is adaptable to different sectors and countries, lending consistency to reporting of ESG-related information.

www.globalreporting.org

Global Reporting Initiative Sustainability Reporting Framework. The Reporting Framework is made up of the Sustainability Reporting Guidelines (the Guidelines), Sector Supplements, and Indicator Protocols. Together these are known as the Sustainability Reporting Framework. The components contain reporting principles, guidance, and standard disclosures that are generally applicable to all businesses, nonprofits, public agencies, and other organizations large and small.

www.globalreporting.org/home

Greenhouse Gas Protocol. The most widely used international accounting tool for government and business leaders to understand, quantify, and manage greenhouse gas emissions. The GHG Protocol Initiative, a decade-long partnership between the World Resources Institute and the World Business Council for Sustainable Development, is working with businesses, governments, and environmental groups around the world to build a new generation of credible and effective programs for tackling climate change.

www.ghgprotocol.org

Institutional Investors Group on Climate Change (IIGCC). A forum for collaboration between pension funds and other institutional Investors on issues related to climate change. The IIGCC seeks to promote better understanding of the implications of climate change among members and other institutional Investors; encourage Companies and markets in which IIGCC members invest to address any material risks and opportunities to their businesses associated with climate change; and advocates for a shift to a lower carbon economy.

www.iigcc.org

Intergovernmental Panel on Climate Change (IPCC). Established by the World Meteorological Organization (WMO) and the United Nations Environment Programme (UNEP) to assess available scientific, technical, and socioeconomic information relevant to understanding climate change, its potential impacts, and options for adaptation and mitigation. As of early 2008, the group has produced four “Assessment Reports” on climate change. The reports provide a comprehensive assessment of the current state of knowledge on climate change.

www.ipcc.ch

International Corporate Governance Network (ICGN). An Investor network organized to exchange views and information about corporate governance issues internationally, examine corporate governance principles and practices, develop and encourage adherence to corporate governance standards and guidelines, and promote good corporate governance. ICGN members presently control more than US\$10 trillion in assets.

www.icgn.org

International Fair Trade Association (IFAT). A global association of fair trade producer cooperatives and associations, export marketing Companies, importers, retailers, national and regional fair trade networks, and fair trade support organizations created in 1989. In 2004, IFAT launched the FTO Mark, which identifies registered Fair Trade Organizations (as opposed to the FLO system, which labels products). IFAT has nearly 300 member organizations in more than 60 countries.

www.ifat.org

International Labour Organization (ILO). The tripartite United Nations agency that brings together governments, employers, and workers from its member states to promote decent work standards throughout the world. ILO's main focus is to promote rights at work, encourage decent employment opportunities, enhance social protection, and strengthen dialogue in handling work-related issues. The ILO hosts the International Labour Conference in Geneva each June. At the conference, conventions and recommendations are drafted and adopted by majority decision, which sets international labor standards covering a broad spectrum of labor-related subjects; together, they are sometimes referred to as the International Labour Code. Adoption of a convention by the International Labour Conference becomes a treaty in international law when a specified number of governments has ratified the law. As of the 2008 report, there are 185 ILO conventions.

www.ilo.org

Investor Network on Climate Risk (INCR). A network of institutional Investors and financial institutions dedicated to promoting better understanding of the financial risks and investment opportunities posed by climate change. The INCR was launched at the first Institutional Investor Summit on Climate Risk at the United Nations in November 2003 and now includes more than 50 institutional Investors that collectively manage over US\$4 trillion in assets.

www.incr.com

Social Accountability International (SAI). Organization whose mission is to promote human rights for workers around the world. SAI has established SA8000, a comprehensive and flexible system for managing ethical workplace conditions throughout global supply chains. SAI works with Companies, consumer groups, NGOs, workers and trade unions, and local governments as well as a network of agencies accredited for SA8000 auditing. The purpose is to ensure that workers are treated according to basic human rights principles.

www.sa-intl.org

Social Investment Forum (SIF). A U.S. membership association dedicated to advancing the concept, practice, and growth of socially and environmentally responsible investing. Members integrate economic, environmental, social, and governance factors into their investment decisions, and SIF provides programs and resources to advance this work. The SIF membership includes more than 500 social investment practitioners and institutions, including financial professionals, analysts, portfolio managers, banks, mutual funds, researchers, foundations, community development organizations, and public educators. There are a number of similar SIFs in markets outside the United States.

www.socialinvest.org

Studies of Socially Responsible Investing. A resource for investment professionals, academics, and others interested in the quantitative aspects of socially responsible investing (SRI). This site is a project of the Moskowitz Research Program, which is affiliated with the Center for Responsible Business at the Haas School of Business, University of California, Berkeley.

www.sristudies.org

Sustainable Investment Research Analyst Network (SIRAN). An analyst network that supports more than 150 North American social investment research analysts from 30 investment firms, research providers, and affiliated Investor groups. Social research analysts evaluate corporate policies and performance on various issues of corporate social responsibility (CSR). CSR includes such issues as environment, health and safety, diversity and human resources policies, and human rights and the supply chain.

www.siran.org

United Nations Environment Programme Finance Initiative (UNEP FI). A global partnership between UNEP and the financial sector. Over 160 institutions, including banks, insurers, and fund managers, work with UNEP to understand the affects of environmental and social considerations on financial performance.

www.unepfi.org

United Nations Global Compact. An international initiative that encourages Companies to collaborate with UN agencies and others “to support universal environmental and social principles.” The compact is voluntary and aims to spread the incorporation of 10 principles into global business activities and to garner support for UN goals. The 10 principles define actions for businesses covering human rights, environment, and anticorruption.

www.unglobalcompact.org

United Nations Universal Declaration of Human Rights (UNDHR). On 10 December 1948, the General Assembly of the United Nations adopted and proclaimed the Universal Declaration of Human Rights. The declaration contains internationally accepted standards for human rights. Although the UNDHR applies to governments as well as business, the general principles related to business practices are as follows:

1. safe and healthy working conditions;
2. freedom of association;
3. nondiscrimination in personnel and hiring practices;
4. no forced or child labor;
5. rights to basic health, education, and housing (if operations are located in areas where these are not provided);
6. respect for existing international guidelines and standards for the use of force;
7. protecting the economic livelihood of local communities; and
8. contributing to the public debate about matters that affect a Company’s operations, employees, customers, and communities where the Company operates.

Some Companies are signatories to the UNDHR and, therefore, pledge to support each of the general principles.

www.un.org/Overview/rights

World Business Council for Sustainable Development (WBCSD). A CEO-led global association of some 200 Companies dealing exclusively with business and sustainable development. Working with governments as well as nongovernmental and intergovernmental organizations, the council provides a platform for Companies to explore sustainable development; share knowledge, experiences, and best practices; and advocate business positions on these issues in a variety of forums. Members are drawn from more than 35 countries and 20 major industrial sectors. The council also benefits from a global network of about 55 national and regional business councils and partners.

www.wbcsd.org

Appendix D

ESG Studies and Research

ESG

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