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CHAPTER 6

Business and Industry: Transitioning to Sustainability

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A stubborn resistance to sustainability thinking persisted in the U.S. private sector throughout the 1990s. As the World Summit on Sustainable Development (WSSD) approached in 2002, William Thomas noted that the extent to which businesses would translate sustainability concepts into practical measures and execute them was unclear.¹ “[S]ome leading American companies are among those pioneers working on the sustainability frontier. But the journey is in its early stages and the U.S. business community is by and large still formulating a case for, and a plan of action concerning, sustainable development.”²

While businesses were visible at WSSD, particularly in championing partnerships through Business Action for Sustainable Development (BASD),³ that initiative did not immediately affect the course of business activities in the United States. Instead, it appeared that government might act first, as early in the George W. Bush Administration certain key appointees at the U.S. Environmental Protection Agency (EPA) and the Council on Environmental Quality (CEQ) were known to favor sustainability-oriented policy and regulatory structures.⁴ While several leading companies --- notably DuPont, IBM, Interface, and Genencor⁵ --- were already implementing their sustainability visions, and several states had embraced sustainability through executive orders, progress in the United States for much of the first half of the decade remained episodic at best. A promising opportunity to embrace

sustainability had been missed post-WSSD, and, as informed by the history of Love Canal and OPEC oil shortages, many feared that it would take a crisis to catalyze change.

Thus, although General Electric, Wal-Mart, and Goldman Sachs announced pathbreaking environmental policies in 2005, the more recent accelerated pace of change caught many by surprise. Indeed, we may look back at 2007 as the year that represented a tipping point for sustainable business practices in the United States: “[t]he greening of business has gone from movement to market as companies understand there [are] opportunities for improving the bottom line and creating new business value.”⁶ For what many have termed “sustainable business practices” or “triple bottom line” thinking, and others have addressed under the rubric of “corporate social responsibility” (CSR), and, more recently, what the financial sectors have termed “Environment, Social and Governance” (ESG) standards, there has been a game-changing convergence, not yet fully appreciated due to the breadth and divergence of the spheres and disciplines involved.

Although no single cause fully explains the shift we are seeing, acceptance of the real threat posed by climate change has had the greatest impact on the mindset of U.S. business. Understanding that “business as usual” is an untenable long-term strategy in the face of overwhelming scientific evidence, some businesses are responding to climate change by identifying the opportunities it presents, perhaps “one of the greatest investment, business and job creation opportunities of this generation . . . from carbon trading to renewable and cleaner energy generation and energy efficiency.”⁷ Another indication of a change in approach by business leaders was the formation in 2007 of a coalition that took the lead in urging President Bush to support a cap-and-trade system.⁸ It remains to be seen, however, whether climate change will come to be understood and addressed by business and industry as the quintessential sustainability issue of our time.

This chapter provides the context for the ongoing transition to sustainability by business and industry in the United States. It identifies four key trends---multi-stakeholder partnerships, voluntary reporting, private regulation, and the role of the financial sector---that are significant for business in the transition to sustainability. The chapter also provides three brief illustrative case studies, dealing with Wal-Mart’s sustainability program, General Electric’s Ecomagination initiative, and Coca Cola’s Global Water Stewardship program. It concludes with a set of recommendations for businesses seeking to gain advantage from the key challenges ahead.

WHAT DOES SUSTAINABILITY MEAN FOR BUSINESS? WHY IS IT IMPORTANT IN THE UNITED STATES?

While a transition to sustainability is already in progress, albeit at an early stage in the U.S. market, the business community is still far from consensus on the meaning of sustainability and corporate social responsibility (terms now often used interchangeably). There is clearly increasing momentum for both among the leading companies in the United States, albeit with different variations and formulations. There are signs of a broader acceptance and deeper entrenchment of sustainable business practices,⁹ with sustainability reporting on the rise and the launch of several sectorwide sustainability initiatives in the United States in 2007.¹⁰

A survey¹¹ in 2006 polled the predominantly North American member companies of the Global Environmental Management Initiative (GEMI) and Business for Social Responsibility (BSR), two business associations that emphasize the importance of sustainability for business success. A number of companies noted that sustainability is increasing in business importance in such areas as product design, procurement, and collaboration with external stakeholders. Respondents noted increasing alignment between CSR efforts and business strategy, including 68 percent who believed that sustainability was “tied to company’s business success” and 94 percent who were highly confident that CSR’s impact on business strategy would increase.

Several recent books by U.S.-based practitioners, scholars, and other thought leaders have presented sophisticated articulations of the business case for sustainability and examples of recent experience from leading companies.¹² Further indication of progress is provided by reports and studies intended for use by the business community such as those issued by U.S.-based GEMI and BSR, and, with a more international perspective, from the World Business Council for Sustainable Development (WBCSD) and the Prince of Wales’ Business and Environment Program.¹³ Especially influential in the U.S. market are the conferences and sustainability-related activities led by The Conference Board¹⁴ and the World Environment Center (WEC).¹⁵ In the climate change arena, leading businesses have participated in the Business Environmental Leadership Council (BELC) of the Pew Center for Global Climate Change.¹⁶

On the negative side of the ledger, influential voices from many quarters still deride or dismiss sustainability and CSR on a dishearteningly regular basis. In a Foreign Affairs article David Victor argues that sustainability has lost its original meaning and scoffs at the “cocktail party version” of sustainable development that “gleams with promises of harmony and globalism.”¹⁷ Sustainability is mocked as “the interconnection of everything,” “wooly thinking,” and “a compass [that] . . . swings in all directions,”¹⁸ and Victor asserts that it will

have practical relevance only if it can accommodate local preferences and capabilities. The notion of CSR is regularly confused with corporate philanthropy, especially in *The Economist*,¹⁹ or when viewed as a threat to the Milton Friedman “shareholders first” orthodoxy. Others assert that “non-strategic” CSR is “partly to blame for meaningless voluntary codes that define the private regulatory sphere . . . [,] business behavior that is at direct odds with short-and (reasonably) long-term profit maximization.”²⁰

For many organizations, it is still the norm to address areas such as environmental management, governance, human rights, and labor---all relevant to sustainable business practices or CSR---as separate issues stovepiped under different departments, rather than managing them as a cross-functional or synergistic sustainability bundle. Particularly for experienced environmental professionals in the United States, weaned on regulatory compliance for a generation, sustainability can be a difficult concept to grasp. Environmental sustainability can be seen as “the evolution of industry practices such as pollution prevention, environmental stewardship, and design for environment, that aim to reduce pollution costs through process improvements.”²¹ Thus, for many organizations, sustainability is limited to the environmental dimension, rather than the more robust triple bottom line conception of sustainability. Unfortunately, the implementation of an environmental management system, or participation in one or more voluntary programs, is often conflated with sustainability. Such strategic environmental management efforts may indeed be laudable attempts to move “beyond compliance,” but should not be equated with sustainability.²²

The drivers for sustainability are more complex than simple avoidance of government regulation. According to Jennifer Howard-Grenville, “drivers for change on the issue are coming from a broader set of social interests, not simply from the traditional regulatory and economic drivers that have strongly influenced environmental or labor practices in the past.”²³ Sustainability creates opportunities for companies to gain competitive advantage by addressing changing stakeholder expectations with new technologies, products and services. According to Deloitte LLP, a consulting and financial services firm, companies require “fundamental business model innovations” to gain from sustainability opportunities, including “innovating products and services with a broader life-cycle view” and “leveraging non-traditional collaborations.”²⁴

But is it possible even to define the “sustainable” or “responsible” company? In a recent speech, Achim Steiner, head of the U.N. Environment Programme, listed these hallmarks of sustainable business practice:

- Redefine company vision, policies and strategies to include the triple bottom line of sustainable development;
- Develop sustainability targets and indicators (economic, environmental, social);
- Establish a sustainable production and consumption program with clear performance objectives that take the organization beyond compliance in the long-term;

- Work with suppliers to improve environmental performance, extending responsibility up the product chain and down the supply chain;
- Adopt voluntary charters, codes of conduct or practice internally as well as through sectoral and international initiatives to confirm acceptable behavior and performance;
- Measure, track, and communicate progress in incorporating sustainability principles into business practices, including reporting against indicators as found in the Global Reporting Initiative (GRI) Guidelines.²⁵

Some would claim that these indicia are merely superficial add-ons, and hardly represent the transformational changes needed to move business to the sustainability level. That may be so, but it is genuine progress when the leading edge recognizes these actions as appropriate initial steps in a longer transition to sustainability.

PROGRESS TOWARD SUSTAINABILITY SINCE JOHANNESBURG: FOUR TRENDS

To further illustrate progress in the U.S. market, since 2002 and going forward, this section describes four significant trends affecting sustainable business practices: multi-stakeholder partnerships, voluntary reporting, private regulation, and financial sector engagement.

Multi-Stakeholder Partnerships

In 2002, as the WSSD approached, William Thomas noted the importance of partnerships: “For most companies, the journey toward sustainability will also require changes in the nature of relationships with governments, communities, and environmental groups . . . [,] including the use of partnerships and alliances. . . .”²⁶ More recently, Wal-Mart has learned that “[p]roductive partnerships can include supply and value chain partners, non-government organizations and academics with requisite expertise as well as government policy makers and scientists. Such partnerships can provide insight as well as key resources to deliver sustainable value solutions.”²⁷

The introduction of multi-stakeholder “type II partnerships”²⁸ at the WSSD in 2002, a departure from government-only outcomes, provided businesses and corporations with new impetus to operationalize sustainability and advance the goals of Rio’s Agenda 21. At the 11th meeting of the U.N. Commission on Sustainable Development (CSD) held in 2003, reporting guidelines for these partnerships were established. As of February 24, 2006, “[a]

total of 319 partnerships had been registered with the Commission secretariat,” of which “61 partnerships [had] reported updates on their activities.”²⁹ However, “while reporting was encouraged, it is still voluntary.”³⁰

More generally, collaboration through partnerships enables corporations to tailor “strategic, goal-oriented action plans” to each “company’s characteristics and core competencies,” thereby enabling “innovative applications of these competencies” that fit the company’s sustainability goals.³¹ Corporate collaborative partnerships present opportunities for corporations to address their impacts and foster mutual gain relationships with local communities through “new relationship[s] between private capital and the public interest.”³²

One such partnership is reporting “real, tangible development benefits to the local communities including increased access to resources, such as health, education, water and sanitation; poverty mitigation; and the development of human capital and community empowerment.”³³ Elsewhere, the very real benefits to partnering corporations include “the securing of an informal social ‘license to operate’; the reduction of dependency of the local communities; the sharing of costs; the winning of new contracts based on past performance; and the improvement of existing performance (financial or otherwise).”³⁴

The widened perspective that partnerships provide can help bring legitimacy, verification, and accountability to a corporation’s sustainability initiatives. But these characteristics can be weakened by partnerships’ nature as voluntary, decentralized, and self-regulating,³⁵ attributable in part from weak transparency mechanisms, stemming from “unclear guidelines and a lack of mandatory reporting requirements.”³⁶ Therefore, the United Nations risks conferring legitimacy without accountability for WSSD partnerships.³⁷

Finally, “[t]he performance of these collaborative initiatives depends on how well they make decisions and on their legitimacy to key stakeholders,” says Simon Zadek, of AccountAbility, which “in turn depends on their governance and accountability structures, processes and norms.”³⁸ Ideally, businesses and corporations would support such collaborative cooperation when they are invested in the partnership, implement outcomes and decisions, and face reputational risk.³⁹

Voluntary Reporting

Voluntary sustainability reporting, also styled as “CSR” or “citizenship” reports, allows businesses to evaluate their social and environmental consequences and communicate information to the public for review and scrutiny. The reports, especially those based on the Global Reporting Initiative (GRI), which released its revised G3 guideline in 2006, are proving a popular option for enhanced transparency and accountability. According to the Social Investment Research Analysts Network (SIRAN) and KLD Research & Analytics, 49 of the 100 U.S. companies in the S&P100 Index now disclose information beyond the financial, including environmental, social, and governance issues. Moreover, 38 companies in the S&P 100 Index are using the GRI’s Sustainability Reporting Guidelines.⁴⁰ Sustainability reporting may be, for now, “the tail wagging the dog” of corporate

sustainability because this is often the only sustainability-oriented effort in place at many organizations. This is not necessarily a criticism. Preparing a sustainability report can be a useful entry point--if it leads to the development of metrics to be used in decision making and in managing identified risks.⁴¹ With or without a public report, the GRI reporting framework can be a useful tool for driving organizational performance through internal reporting.

Private Regulation

Many American and European businesses have adopted voluntary standards for labor conditions, environmental practices, and human rights; these are often institutionalized in corporate and industry codes, multi-stakeholder initiatives, and private standard-setting bodies, often with reporting and monitoring requirements.⁴² Private regulation, or “civil regulation” as it is described by David Vogel, attempts to fill the governance gap between the law and the market. It represents a dimension of what political scientists have characterized as the global privatization of regulation through increased reliance on market-based strategies and nongovernmental regulatory mechanisms.⁴³

In one defined subset of private regulation, which Benjamin Cashore labels as “non-state, market driven” (NSMD) governance systems, “rulemaking clout does not come from traditional Westphalian state-centered sovereign authority, but rather from companies along the market’s supply chain, who make their own individual evaluations as to whether to comply to the rules . . . of these private governance systems.”⁴⁴ Thus, these programs appear to work because they generate potential compliance incentives (or disincentives) along supply chains, through price premiums, market access, or the prevention of negative boycott campaigns.⁴⁵

The forest sector arguably presents the foremost example of an international NSMD governance system, with the emergence of the Forest Stewardship Council (FSC) and its competitors addressing standards for and certification of sustainable forestry.⁴⁶ Indeed, the FSC program is using private-sector certification programs to force sustainable forest management standards upward. “FSC competitors, like the Sustainable Forestry Initiative championed by the AF&PA [American Forest & Paper Association] in the United States, initially took a different NSMD stance, in which business interests strongly shape rule making, while other non-governmental and governmental organizations act in advisory capacities.”⁴⁷ At present, the FSC and its competitors coexist, but it is too soon to tell whether the result will be the “privatizing up” of sustainable forestry standards or a watering down of the FSC model.⁴⁸

Similar certification programs are expanding to address some critically important issues, including fisheries depletion, food production, mining, inhumane working conditions (such as apparel industry sweatshop practices), human rights abuses, and sustainable tourism.⁴⁹ As these governance systems emerge in such sectors as food, coffee, tourism, and fisheries,⁵⁰ “[t]heir potential impact is far from trivial--if completely successful, current efforts alone would govern 20 percent of products traded globally.”⁵¹

Financial Sector

The growing acceptance of sustainability by the financial sector has become a major driver since 2002. Socially Responsible Investment (SRI) was a well-established but niche market in 2002. By the close of 2007, however, sustainability policies reached the Wall Street mainstream,⁵² with such a leading player as Goldman Sachs articulating sustainability-based, sector-specific methodologies to outperform the market.⁵³

Many actors on Wall Street now recognize that opportunity always accompanies risk. Independent rating agencies such as Innovest and KLD have developed risk profiles of multinational corporations based on the carbon content of their products (among other factors), causing a slow movement of public and private investments from bad to good environmental corporate actors.⁵⁴ Reinsurers, with Swiss Re taking the lead, have seen that climate change is real, with inevitable, dramatic impacts upon their business model.⁵⁵

The leveraged buyout in 2007 of TXU, the largest power utility in Texas, also sheds light on the evolving role of the capital markets and their influence on sustainability thinking among U.S. businesses. Private equity groups, as part of the leveraged buyout deal of TXU, agreed to scrap plans for eight coal-burning power plants, invest \$400 million in consumer-side energy efficiency, build a pilot “clean-coal” plant, and increase alternate energy investment. The Environmental Defense Fund greeted the transaction, which reshaped TXU’s business and environmental strategy, as a “watershed moment in America’s fight against global warming.”⁵⁶

PROGRESS TOWARD SUSTAINABILITY SINCE JOHANNESBURG: THREE CASE STUDIES

Wal-Mart

A meeting in Rogers, Arkansas, in October 2007 has already taken on legendary proportions. Wal-Mart CEO Lee Scott summoned the CEOs of 250 suppliers and told them Wal-Mart would be watching their carbon footprints.⁵⁷ The potential downstream consequences are huge: With revenues greater than \$350 billion, Wal-Mart’s action poses a powerful threat, approximating a privatized EPA, but with coercive powers beyond that of any government. “The EPA can levy a seven-figure fine; Wal-Mart can wipe out more than a quarter of a business in one fell swoop.”⁵⁸

Wal-Mart's initial announcement of its sustainability program, two years earlier in October 2005, had surprised and created doubts among its critics. Wal-Mart was viewed as an aggressive, sometimes "arrogant leviathan," out of touch with progressive social and environmental ideas.⁵⁹ Yet the giant retailer set "audacious" goals in three areas---climate, waste, and products:

1. 100 percent renewable energy;
2. Zero waste;
3. Sell products that sustain the resources and environment.⁶⁰

As over 90 percent of Wal-Mart's sustainability footprint is in its supply chain, Wal-Mart's sustainability efforts focus squarely on its extended value chain, including its suppliers' operations.⁶¹ The results can be staggering. For example, when Procter & Gamble sells Wal-Mart its Charmin 6 Mega Roll with the same amount of toilet paper as a regular 24-roll pack, Wal-Mart can ship about 40 percent more units on their trucks. This eliminates 90 million cardboard rolls, 360,000 pounds of plastic wrapping, and 54,000 gallons of fuel consumption.⁶²

Wal-Mart readily concedes that its sustainability programs are a work in progress, but states they are still growing. The company is still developing a system to track waste through its supply chain, but has no accurate way to measure waste it may have already eliminated.⁶³ "We make no claims of being a green company," says CEO Scott, "We're not saying we're better than anyone, we're not saying we're doing it right. What we're saying is that we recognize an opportunity to make a difference in this world . . . , and it is worthwhile to do."⁶⁴

General Electric

GE built on existing technologies and research to launch Ecomagination, its corporatewide sustainability initiative, in May, 2005. CEO Jeffrey Immelt stated that GE intends to "develop tomorrow's solutions such as solar energy, hybrid locomotives, fuel cells, lower-emission aircraft engines, lighter and stronger durable materials, efficient lighting, and water purification technology."⁶⁵ Ecomagination's goal is both to offer "a continuous stream of advancements to existing products" and to "serve as a catalyst for development of the next generation of 'clean' technologies."⁶⁶ GE committed to increasing its investment in research in air pollution, energy consumption, and water quality from \$900 million to \$1.5 billion by 2010.⁶⁷ In addition to doubling its annual cleaner technologies research investment, GE also plans to

- Double revenues from Ecomagination clean tech products to \$20 billion by 2010;
- Reduce absolute greenhouse gas emissions one percent by 2012 (a big goal given GE's business growth projections) and improve energy efficiency by 30 percent in the same time frame;
- Report publicly its progress in meeting these goals⁶⁸

GE has developed its own internal screening process to “certify” Ecomagination products’ environmental benefits.⁶⁹ To date the company has launched 45 new products and technologies for customers that have produced \$12 billion in revenue.⁷⁰ The GE initiative is receiving mixed reviews, especially from critics who note that GE continues to sell “dirty” technology.⁷¹ Others are more enthusiastic about Ecomagination, calling it “a bellwether in the quest for sustainable enterprise” because it uses growth strategies to deal with social and environmental issues.⁷²

Coca-Cola

As the world’s largest bottler, Coca-Cola operates in over 200 countries. Coke views its approach to corporate responsibility and sustainability (CRS) as “a way to balance all of the considerations that shape our decisions, weighing the possibility of growth today with the promise of sustainability in the future.”⁷³ Coca-Cola identified the social and environmental issues of greatest concern to the business and its stakeholders as: health and wellness; water stewardship; energy and climate change; sustainable packaging and recycling; and diversity management and inclusion. These issues reflect Coca-Cola’s strategic priorities, and it is developing a three-year plan with performance targets for each.⁷⁴

Coke has linked sustainability to its core business at the most fundamental level: Without a reliable supply of water, the company cannot exist. Coke’s Global Water Stewardship, perhaps the most sophisticated of its kind, includes four components:

- Global awareness and action;
- Plant performance;
- Support for community initiatives;
- Watershed protection.⁷⁵

The goal of global awareness and action is to mobilize the international corporation to address water challenges. The goal of plant performance is to be the best in class in water management. Coca-Cola has established standards for efficient water use and wastewater management, and water usage has been reduced by 6 percent. Coca-Cola’s community initiatives to protect the environment and promote sustainability are consistent with the company’s longstanding efforts to build relationships in communities where plants are located and employ up to hundreds of local residents.⁷⁶

Does this amount to a transformative strategy for Coca-Cola? CEO Brock says, “We still have a long way to go to embed [corporate responsibility and sustainability] in our business and are working hard to close the gaps.”⁷⁷

RECOMMENDATIONS FOR THE NEXT DECADE

The recommendations that follow are directed to business leaders. Because the discussion above is necessarily selective, these recommendations should not be seen as a comprehensive “to do” list. There are many other significant sustainability-related issues for business and industry, including the juxtaposition of globalization and “buy local” pressures, the emergence of green consumerism, the increasingly important role of international standards as an adjunct to regulation, the implications of retaining or eliminating perverse subsidies, and the need for sizeable investment in breakthrough technologies. These components of the multi-faceted sustainability dialogue will all need to be addressed going forward.

1. Develop multi-stakeholder “partnerships” within the framework of specific commitments made under international law. Since the inception of type II partnerships, it was understood that “partnerships would complement and work with global governance and international environmental law, not replace them.”⁷⁸ However, Carl Bruch and Jay Pendergrass suggest that integrating existing international law with partnerships will require greater involvement of the United Nations and individual nations to instill a sense of accountability and coordination, and to identify the extent to which these partnerships seek to implement international agreements or achieve other sustainability goals as articulated, for example, in Agenda 21. Greater partnership reporting is essential to (1) discuss implementation plans and challenges, and partners’ contributions to a specific partnership,⁷⁹ (2) identify partnership success and failure factors⁸⁰ and (3) provide some external accountability, not through oversight but by giving the public data on the progress of the partnership.

2. Embrace voluntary reporting on social and environmental effects or face mandatory reporting. Government can “instigate, catalyze, and hold accountable corporate social responsibility” reporting through a law.⁸¹ In other countries, mandatory reporting is taking hold; in the United States, the components of such an approach are already available, including reporting guidelines such as GRI, and regulatory schemes such as the Sarbanes-Oxley Act.⁸² The use of a standard reporting guideline provides the substantive values and indicators, while the regulatory nature of Sarbanes-Oxley opens management to external values. Mandatory reporting requirements could be avoided by establishing an external assurance mechanism to verify data and statements in voluntary reports.

3. Determine the limits of private regulation. According to Vogel, “[c]ivil and government regulation both have a legitimate role to play in improving public welfare. The former reflects the potential of the market for virtue; the latter recognizes its limits.”⁸³ Private regulation is well established but is still maturing, and new certification programs are emerging in various forms.⁸⁴ Of the various mechanisms moving into this governance gap,

programs like the FSC potentially offer the most promise, beyond the “other non-state, hybrid and voluntary initiatives with which they have been conflated”⁸⁵ because they provide governance directly in markets, so long as they “contain purposeful social steering efforts.”⁸⁶

4. Recognize that the financial sector will increasingly seek verifiable and comparable ESG information from businesses. The financial sectors are already incorporating ESG factors into their methodologies, and these nonfinancial aspects will only become more intimately woven into the operations of the capital markets. As Ross Gelbspan points out, because individual companies tend to focus on “shorter-term concerns about quarterly or annual [financial results],” it falls to financial institutions to ensure the health of the capitalist system by taking the longer view driven by their own strategic needs.⁸⁷

5. Use widely-accepted and comparable performance metrics in the implementation and recognition of sustainability and CSR initiatives. If sustainability reporting is the tail wagging the dog, as suggested above, then the key to the more sophisticated implementation strategies that will emerge over the next decade will be metrics. Numerous attempts have been made to develop sustainability metrics and indicators, not only at the organizational level but also for “sustainable communities” at the national level for use in domestic policy setting and at the international level to compare nations. As a significant stakeholder itself, business should engage in the development of metrics and indicators at each level of scale. At the enterprise level, the myriad sustainability reports and questionnaires from the investment community and other stakeholders will generate a need for greater comparability and transparency. If the disclosure rules of the U.S. Securities and Exchange Commission, which are limited to environmental liabilities, do not escape a decades’ old time warp and expand to cover the broader scope of sustainability, the financial sectors will demand it. Moreover, it is not unreasonable to see currently distinct disclosure activities---such as GRI reporting, Sarbanes Oxley requirements and SEC materiality reporting---converging over time.

6. Understand how business can succeed in a carbon-constrained economy. Companies that manage their risks based on climate change and respond to new opportunities for profit will hold a competitive advantage over rivals in a carbon-constrained future. According to Jonathan Lash and Fred Wellington of the World Resources Institute, risks and opportunities include skill at hedging against physical climate risk, mitigating regulatory costs, avoiding expensive litigation and other threats to corporate reputation, managing climate risk in the supply chain, investing capital in low-carbon assets, and innovating around new technology and product opportunities.⁸⁸

CONCLUSION

Borrowing Al Gore's reference to climate change as an "inconvenient truth," the future can be seen in the light of "inconvenient sustainability truths" expressed by three keen observers of the transition to sustainability.

First, Simon Zadek's truth: "[M]any companies have decided that the sustainability imperative is important, but they don't yet know how to exploit it . . . [;] smart strategies by innovative companies have not yet fed through to market performance . . . [a]nd . . . some aspects of sustainability, desirable as they may be, simply have no business case [for current markets]." ⁸⁹

Second, Tom Friedman's truth: "[G]reen has really gone Main Street--thanks to the perfect storm created by 9/11, Hurricane Katrina and the Internet revolution. The first flattened the twin towers, the second flattened New Orleans and the third flattened the global economic playing field." But "[w]e have not even begun to be serious about the costs, the effort and the scale of change that will be required to shift our country, and eventually the world, to a largely emissions-free infrastructure over the next 50 years." ⁹⁰

Third, Jonathon Porritt's truth: "What counts as CSR today will soon be seen as the palest imitation of genuinely sustainable [behavior and] . . . superficial add-on palliatives to inherently unsustainable business models" will not suffice. ⁹¹

The greening revolution was indeed an important first step on the path to sustainable enterprise. ⁹² Today, corporations are being challenged to move beyond greening, first by pursuing new potentially inherently clean technologies (e.g., renewable energy, biomaterials, nanotechnology, wireless IT); and second, by extending the benefits of capitalism to the entire human community of 6.5 billion people, rather than merely the 800 million at the top of the economic pyramid. ⁹³

As the transition to sustainability continues, we will see increasing pressure to adopt sustainability measures, perhaps driven at first by carbon mitigation metrics, and we can anticipate that huge advantages will accrue to companies that adopt transformational business models. To achieve these advantages, Deloitte identifies an essential need "for a disciplined, structured approach tightly focused on strategic, operational, collaborative and governance drivers." ⁹⁴ In conclusion, as Stuart Hart and Mark Milstein have noted, companies that lead this shift to sustainability will not only outperform competitors today, they will preempt competitors from tomorrow's markets and technologies, and speed up our rise to a sustainable world. ⁹⁵

ENDNOTES

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1. William Thomas, *Business and Industry*, in *Stumbling Toward Sustainability*, at 541 (John C. Dernbach ed., 2002).

2. *Id.*

3. BASD was a joint activity of the International Chamber of Commerce (ICC) and the World Business Council for Sustainable Development (WBCSD) at the WSSD; the partnership concluded shortly thereafter. The BASD website has been preserved and is available at <http://basd.free.fr>.

4. In 2001, EPA Administrator Christine Whitman promised, "You will hear a lot more about sustainability from this administration." James Connaughton, at CEQ, was an expert on the international consensus ISO 14000 processes and often alluded to NEPA as a "sustainability statute."

5. For Dupont, IBM, and Genencor, see case studies prepared by Ira Feldman included in Thomas, *supra* note 1, at 558-66. For DuPont's Sustainable Growth Excellence Award program, see www2.dupont.com/Sustainability/en_US/assets/downloads/2005%20SGEA%20brochure.pdf. For Interface, see also Ray Anderson, *Mid-Course Correction* (1998).

6. Joel Makower, quoted in Anita Huslin, *Sustainability Coach Takes Her Expertise to Market*, *Wash. Post*, Nov. 26, 2007, at D5, available at www.washingtonpost.com/wp-dyn/content/article/2007/11/25/AR2007112501272.html.

7. Achim Steiner, *Global Business for the Environment Summit, Opening Speech at the UNEP and Global Compact, Singapore* (Apr. 19, 2007) [hereinafter Steiner speech], available at www.unep.org/Documents.Multilingual/Default.asp?DocumentID=505&ArticleID=5565&I=en.

8. DuPont, Alcoa, BP America, General Electric, and PG&E joined with the Pew Center and other nonprofit groups to form the United States Climate Action Partnership. See, e.g., Peter Baker, *In Bush's Final Year, The Agenda Gets Greener*, *Wash. Post*, Dec. 29, 2007, at A10.

9. The operationalization of sustainability since 2002 in U.S. business and industry is proceeding with the use of methods familiar to executive-level managers: strategic planning, training/capacity building, internal pilot projects, and engagement with external stakeholders, including voluntary reporting. The drivers for this increase include CEO epiphany (such as the well-known Ray Anderson example at Interface); supply chain pressure; NGO watchdogs; and consumer demand.

10. See Grocery Manufacturers Association's website at www.gmabrands.com/about/index.cfm, and the Sustainable Green Printing Partnership website at www.sgppartnership.org.

11. *Global Envtl. Mgmt. Initiative & Bus. for Soc. Responsibility, Sustainable Business & Strategy; Views From the Inside* (2006).

12. See, e.g., Chris Laszlo, *The Sustainable Company* (2003); Daniel Esty & Andrew Winston, *Green to Gold* (2006); Andrew Savitz, *Triple Bottom Line* (2006); and William Blackburn, *The Sustainability Handbook* (2007).

13. GEMI reports are available at www.gemi.org/docs/PubTools.htm; BSR reports are available at www.bsr.org/insight/reports.cfm; WBCSD reports are available at <http://qpub.wbcds.org/templates/TemplateWBCSD2/layout.asp?type=p&MenuId=ODU&doOpen=1&ClickMenu=RightMenu>; and the Prince of Wales' Business and Environment Programme reports are available at www.cpi.cam.ac.uk/programmes/sustainable_development/business_the_environment_pro/bep_network/reports_and_newsletters.aspx.

14. The Conference Board recently established the Center for Corporate Citizenship and Sustainability. See www.conference-board.org/knowledge/citizenshipcenter.

15. The World Environment Center recently launched a series of dialogues on corporate sustainability practices. See www.wec.org/news/wec-establisheswashington-sustainability-forum.

16. Pew Center for Global Climate Change, Business Environmental Leadership Council (BELC), available at www.pewclimate.org/companies_leading_the_way_belc.

17. *Id.*

18. David Victor, *Recovering Sustainable Development*, 85 *Foreign Aff.* 91 (Jan./Feb. 2006).

19. See, e.g., *In Search of the Good Company*, *Economist*, Sept. 6, 2007, available at www.economist.com/business/displaystory.cfm?storyid=9767615.

20. Aaron Chaterjee & Siona Listokin, *Corporate Social Irresponsibility, Democracy* (Winter 2007).

21. See GEMI, *Exploring Pathways to a Sustainable Enterprise*, at 3-4 (2002), stating that sustainability can be distinguished from these environmental management practices by its consideration of the socioeconomic dimension (i.e., social well-being) and by sustainability's link to marketplace competitive advantage as a strategic consideration.

22. Usage of the term "sustainability" in the business world remains inconsistent and confusing. Some organizations use the corporate sustainability terminology in a strictly financial sense, equating it solely with long-term financial success. Elsewhere, sustainability and CSR initiatives are co-opted by communications and public relations departments; in still others, corporate philanthropy or "corporate citizenship" programs take priority over efforts to infuse the core business with sustainability thinking.

23. Jennifer Howard-Grenville et al., *Who Can Act on Sustainability Issues? Corporate Capital and the Configuration of Organizational Fields*, in *Organizations and the Sustainability Mosaic: Crafting Long-Term Ecological and Societal Solutions*, at 197 (S. Sharma et al. eds., 2007).

24. Deloitte, *Sustainability: Balancing Opportunity and Risk in the Consumer Products Industry*, report to GMA/FPA (the Association of Food, Beverage, and Consumer Products Companies), June 10, 2007, at 10.

25. Steiner speech, *supra* note 7.

26. Thomas, *supra* note 1, at 571.

27. BluSkye Sustainability Consultants, *Making Sustainability Work* (2007), available at www.bluskye.com/pdf/Making%20Sustainability%20Work.pdf.
28. Traditional or “type I” agreements are between governments; “type II” agreements contemplate partnering agreements among combinations of governmental, private sector, and NGO entities. See Minu Hemmati, *Implementation Conference: Stakeholder Action for Our Common Future*, 3 *Stakeholder F.* 8 (2002); and *Type 2s Explained*, both available at www.earthsummit2002.org. See also Ira Feldman, *The Stakeholder Convergence: Enhanced Public Participation and Sustainable Business Practices*, 33 *ELR* 10496, 10502 (July 2003).
29. U.N. Commission on Sustainable Development, 14th Session, May 1-12, 2006. *Partnerships for Sustainable Development, Report of the Secretary-General*, at 5, available at <http://daccessdds.un.org/doc/UNDOC/GEN/N06/259/15/PDF/N0625915.pdf?OpenElement>.
30. Karen Backstrand, *Multi-Stakeholder Partnerships for Sustainable Development: Rethinking Legitimacy, Accountability and Effectiveness*, 16 *Eur. Env't* 300 (2006).
31. Global Business Coalition, see <http://www.gbciimpact.org/live/resources/action/bam.php>.
32. Nicola Acutt & Ralph Hamann, *How Should Civil Society (and the Government) Respond to “Corporate Social Responsibility”?* A Critique of Business Motivations and the Potential for Partnerships, 20 *Dev. S. Afr.* 256 (June 2003).
33. *Business Action for Sustainable Development*, <http://basd.free.fr/initiatives/viewproject.php.310.html>.
34. *Id.* See also Juge Gregg & Jacob Scherr, *Johannesburg and Beyond: The 2002 World Summit on Sustainable Development and the Rise of Partnerships*, 18 *Geo. Int'l Envtl. L. Rev.* 425 (Spring 2006).
35. United Nations Partnership Database, <http://webapps01.un.org/dsd/partnerships/public/browse.do>.
36. Backstrand, *supra* note 30.
37. AccountAbility, *Development as Accountability: Accountability Innovations in Action*, at 19.
38. *Id.* at 16.
39. Julia Steets, *Global Pub. Pol'y Inst.*, *Developing a Framework: Concepts and Research Priorities for Partnership Accountability* (2005), at 9.
40. *Grading Sustainability Reports: Creating the Curve*, *GreenBiz*, June 17, 2007, available at www.greenbiz.com/news/reviews_third.cfm?NewsID=35287.
41. Christine Parker, *Meta-Regulation: Legal Accountability for Corporate Social Responsibility?*, in *The New Corporate Accountability: Corporate Social Responsibility and the Law* (Doreen McBarnet et al. eds., 2007), at 42.
42. David Vogel, *The Market for Virtue* (2005), at 162.
43. *Id.* at 9.
44. Benjamin Cashore et al., *Governing Through Markets: Forest Certification and the Emergence of Non-State Authority* (2004), at 4. Four features comprise an ideal type of NSMD

governance system: role of state---the state does not use sovereign authority to directly require adherence to rules; role of market---products being regulated are demanded by purchasers further down the supply chain; role of stakeholders and civil society---authority is granted through an internal evaluation process; and enforcement---compliance must be verified. *Id.* at 20.

45. *Id.* at 23.

46. *Id.* at xi. See also Errol Meidinger, *The Administrative Law of Global Public-Private Regulation: The Case of Forestry*, 17 *Eur. J. Int'l L.* 47 (2006).

47. Cashore et al., *supra* note 44, at 15.

48. *Id.* at 17.

49. Steven Bernstein & Benjamin Cashore, *Can Non-State Global Governance Be Legitimate? A Theoretical Framework*, paper prepared for IDDRI Conference, *The Role of Norms in the Governance of Economic Activities*, Montpellier, France (June 2006), at 2.

50. Cashore et al., *supra* note 44, at 219.

51. Bernstein & Cashore, *supra* note 49, at 2.

52. Goldman Sachs' environmental policy is available at www2.goldmansachs.com/our_firm/our_culture/corporate_citizenship/environmental_policy_framework/docs/EnvironmentalPolicyFramework.pdf.

53. Goldman Sachs' GS Sustain methodology, available at www.unglobalcompact.org/docs/summit2007/g_s_esg_embargoed_until030707pdf.

54. Bruce Piasecki & Peter Asmus, *A Better Shade of Green for Wall Street*, *Christian Science Monitor*, Apr. 3, 2006, at 9. See, e.g., *Innovest Strategic Value Advisors*, www.innovestgroup.com; and *KLD Research and Analytics*, www.kld.com.

55. Swiss Re's position on climate change is available at www.swissre.com/pws/about%20us/knowledge_expertise/top%20topics/our%20position%20and%20objectives.html?contentIDR=c21767004561734fb900fb2e2bd2155&useDefaultText=0&useDefaultDesc=0.

56. Steven Mufson & David Cho, *Energy Firm Accepts \$45 Billion Takeover; Buyers Made Environmental Pledge*, *Wash. Post*, Feb. 26, 2007, at A4.

57. Jack Neff, *Why Wal-Mart Has More Green Clout Than Anyone*, *Advertising Age*, Oct. 15, 2007, at 1.

58. *Id.*

59. Joel Makower, *WalMart's Sustainability Summit*, available at http://makower.typepad.com/joel_makower/2007/10/wal-marts-susta.html.

60. Wal-Mart CEO Lee Scott announced these goals in a speech, *Twenty-First Century Leadership*, on Oct. 24, 2005. See Marc Gunther, *The Green Machine*, *Fortune*, July 31, 2006, available at http://money.cnn.com/magazines/fortune/fortune_archive/2006/08/07/8382593/index.htm.

61. Chris Laszlo, *Sustainable Value* (2008), at 90.

62. Ylan Q. Mui, At Wal-Mart “Green” Has Various Shades, Wash. Post, Nov. 16, 2007, at D1, available at www.washingtonpost.com/wp-dyn/content/article/2007/11/15/AR2007111502519.html.

63. Id.

64. Makower, *supra* note 59.

65. General Electric’s Ecomagination Finds Profit in Going Green, States News Service, Sept. 14, 2007.

66. Stuart Hart & Mark Milstein, In Search of Sustainable Enterprise: The Case of GE’s Ecomagination Initiative, available at www.policyinnovations.org/ideas/innovations/data/ecomagination.

67. GE, Investing in a Sustainable Future, 2007 Corporate Citizenship Report, available at www.ge.com/company/citizenship/2007_citizenship/index.html.

68. Id.

69. Id.

70. BusinessWire, GE Ecomagination R & D Investment to Reach \$1 Billion by Year End, Driving Expansion of Advanced Technology Pipeline, Oct. 23, 2007.

71. Kathryn Kranhold, GE’s Environment Push Hits Business Realities, Wall St. J., Sept. 14, 2007.

72. Hart & Millstein, *supra* note 66.

73. Coca-Cola Enters., Continuing Our Journey, 2006 Corporate Responsibility and Sustainability Report, at 1, available at www.cokecce.com/assets/uploaded_files/2006CCECRS.pdf.

74. Id.

75. Bruce Karas, The Coca-Cola Company and the Environment, Presentation to Georgia Chamber of Commerce, Savannah, Ga., Aug. 2007.

76. Id.

77. Coca-Cola 2006 Report, *supra* note 73, at 2.

78. Sustainable Development Issues Network (SDIN). “Questioning Partnerships,” in Taking Issue, SDIN Paper No. 1 (2002), available at www.sdissues.net/SDIN/docs/TakingIssue-No1.pdf.

79. Carl Bruch & John Pendergrass, The Road From Johannesburg: Type II Partnerships, International Law, and the Commons, 15 *Geo. Int’l Env’tl. L. Rev.* 855 (2003).

80. Id.

81. Parker, *supra* note 41.

82. Australia, Belgium, Canada, Denmark, the European Union, Finland, France, Germany, India, Japan, the Netherlands, Norway, South Africa, Spain, Sweden, and the United Kingdom have enacted mandatory reporting requirements, some more relevant to CSR than others. See KPMG, Global Sustainability Services and United Nations Environment Programme (UNEP): Carrots and

Sticks for Starters: Current Trends and Approaches in Voluntary and Mandatory Standards for Sustainability Reporting (2006), at 22-27.

83. Vogel, *supra* note 42, at 173.

84. Cashore et al., *supra* note 44, at 220.

85. Bernstein & Cashore, *supra* note 49, at 5.

86. *Id.* at 5.

87. Ross Gelbspan, author of *The Heat Is On*, quoted in Piasecki & Asmus, *supra* note 54, at 9.

88. Jonathan Lash & Fred Wellington, *Competitive Advantage on a Warming Planet*, *Harv. Bus. Rev.*, Mar. 2007, at 94.

89. Simon Zadek, *Inconvenient But True: Good Is Not Always Profitable*, *Fortune*, Nov. 1, 2007, available at http://money.cnn.com/magazines/fortune/fortune_archive/2007/11/12/101012017/index.htm.

90. Thomas Friedman, *The Power of Green*, *N.Y. Times Sunday Magazine*, Apr. 15, 2007, available at www.nytimes.com/2007/04/15/magazine/15green.t.html?_r=1&oref=slogin.

91. Jonathon Porritt, *Capitalism as if the World Matters* 270 (2007).

92. Hart & Millstein, *supra* note 66.

93. *Id.*

94. Deloitte, *supra* note 24, at 17.

95. Stuart Hart & Mark Milstein, *Creating Sustainable Value*, 17 *Acad. Mgmt. Exec.* 14 (2003).