CHAPTER 1

The Sustainability Imperative

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Noted author, consultant, and educator Dan Esty returned to government in early 2011 as head of Energy and the Environment for the state of Connecticut. The public sector will benefit from the same toolkit and opportunity set he has provided to the corporate world via his seminal work *Green to Gold* (John Wiley & Sons, 2009) and related endeavors. Only through seizing the opportunities emerging from the megatrend of sustainability can corporations become the winners of tomorrow. There is a clear race to sustainability emerging between corporates and between countries and states. Investors likely cannot ignore these trends for much longer.

Our research into the forces that have shaped the competitive landscape in recent decades reveals that "business megatrends" have features and trajectories in common. Sustainability is an emerging megatrend, and thus its course is to some extent predictable. Understanding how firms won in prior megatrends can help executives craft the strategies and systems they will need to gain advantage in this one.

SUSTAINABILITY: A BUSINESS MEGATREND

The concept of megatrends is not new, of course. Businessman and author John Naisbitt popularized the term in his 1982 best seller of the same name,

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referring to incipient societal and economic shifts such as globalization, the rise of the information society, and the move from hierarchical organizations to networks.

Our focus is on business megatrends, which force fundamental and persistent shifts in how companies compete. Such transformations often arise from technological innovation or from new ways of doing business, and many factors can launch or magnify the process of change. Business megatrends may emerge from or be accelerated by many factors including financial crises, shifts in the social realities that define the marketplace, or the threat of conflict over resources. The geopolitics of the Cold War, for example, drove the innovations that launched both the space race and rapid developments in the field of microelectronics—ultimately unleashing the information technology megatrend. Electrification, the rise of mass production, and globalization were also megatrends, as was the quality movement of the 1970s and 1980s. The common thread among them is that they presented inescapable strategic imperatives for corporate leaders.

Why do we think sustainability qualifies as an emerging megatrend? Over the past ten years, environmental issues have steadily encroached on the capacity of businesses to create value for customers, shareholders, and other stakeholders. Globalized workforces and supply chains have created environmental pressures and attendant business liabilities. The rise of new world powers, notably China and India, has intensified competition for natural resources (especially oil) and added a geopolitical dimension to sustainability. "Externalities" such as carbon dioxide emissions and water use are fast becoming material—meaning that investors consider them central to a firm's performance and stakeholders expect companies to share information about them. These forces are magnified by escalating public and governmental concern about climate change, industrial pollution, food safety, and natural resource depletion, among other issues.

Consumers in many countries are seeking out sustainable products and services or leaning on companies to improve the sustainability of traditional ones. Governments are interceding with unprecedented levels of new regulation—from the recent Securities and Exchange Commission ruling that climate risk is material to investors to the Environmental Protection Agency's mandate that greenhouse gases be regulated as a pollutant. Further fueling this megatrend, thousands of companies are placing strategic bets on innovation in energy efficiency, renewable power, resource productivity, and pollution control. What this all adds up to is that managers can no longer afford to ignore sustainability as a central factor in the long-term competitiveness of their companies.

Megatrends require businesses to adapt and innovate or be swept aside. So what can businesses learn from previous megatrends? Consider the quality movement. The quality revolution was about innovation in the core set of tools and methods that companies used to manage much of what they do. Quality as a central element of strategy, rather than a tactical tool, smashed previous cost versus fitness for use barriers, which meant the table stakes were dramatically raised for all companies.

The information technology (IT) revolution was about tangible technology breakthroughs that fundamentally altered business capabilities and redefined how companies do much of what they do. Digital technologies deeply penetrated corporations in the 1980s and 1990s, and the trend accelerated as IT made its way into the daily lives of workers and consumers with the advent of desktop computing and the Internet. In both the IT and quality business megatrends—as in others we've studied—the market leaders evolved through four principal stages of megatrend driven value creation:

1. They focused on reducing cost, risks, and waste and delivering proof of value.
2. They redesigned selected products, processes, or business functions to optimize their performance—in essence, progressing from doing old things in new ways to doing new things in new ways.
3. They drove revenue growth by integrating innovative approaches into their core strategies.
4. They differentiated their value propositions through new business models that used these innovations like quality and IT to enhance corporate culture, brand leadership, and other intangibles to secure durable competitive advantage.

GETTING THE VISION RIGHT

Just as winners in previous megatrends outperformed competitors by following a staged evolution in strategy, so too must companies hoping to lead (or even compete) in the emerging sustainability wave.

Stage 1: Doing Old Things in New Ways

Firms focus on outperforming competitors on regulatory compliance and environment-related cost and risk management. In doing so, they develop proof cases for the value of eco-efficiency. At its inception 30 years ago, 3M's Pollution Prevention Pays (PPP) was just this kind of initiative. As of 2005, PPP had reduced 3M pollutants by more than 2.6 billion pounds and saved

the company more than $1 billion. It also laid the foundation for the nearly completed Environmental Targets 2005–2010 program, which will reduce expenses related to energy usage, emissions, and waste by another 20%.

Stage 2: Doing New Things in New Ways

Firms engage in widespread redesign of products, processes, and whole systems to optimize natural resource efficiencies and risk management across their value chains. DuPont's "zero waste" commitment, for instance, increased the company's prioritization of eco-efficiency across operations. Its decision to shed businesses with big eco-footprints, such as carpets and nylon, was based on an analysis that the business and environmental risks would outweigh their potential contribution to future earnings.

Stage 3: Transforming the Core Business

As the vision expands further, sustainability innovations become the source of new revenues and growth. Dow's sweeping 2015 Sustainability Goals, designed to drive innovation across its many lines of business, yielded new products or technology breakthroughs in areas from solar roof shingles to hybrid batteries. The core business, which traditionally had relied on commodity chemicals, has shifted toward advanced materials and high-tech energy opportunities fully integrating sustainability into Dow's business strategy

Stage 4: New Business Model Creation and Differentiation

At the highest level, firms exploit the megatrend as a source of differentiation in business model, brand, employee engagement, and other intangibles, fundamentally repositioning the company and redefining its strategy for competitive advantage. For example, Unilever's recently announced Sustainable Living Plan would seem to qualify if executed fully. Unilever, the global consumer goods giant, has pledged that by the year 2020, it will halve the environmental footprint of its products and source all of its agricultural materials sustainably while helping 1 billion people with their health and well-being.[1]

GETTING THE EXECUTION RIGHT

Gaining advantage in a megatrend is not just about vision—it's also about execution in five critical areas: leadership, methods, strategy, management,

and reporting. In each area, companies must transition from tactical, ad hoc, and siloed approaches to strategic, systematic and integrated ones.

Systematic Methods for Assessing Value

With a sustainability vision in place, the executive team must marshal specialized capabilities for weighing options and quantifying benefits and risks. Just as the quality and IT megatrends ushered in new skill sets and fresh perspectives, the sustainability megatrend will require firms to update traditional business tools—business case analysis, trend spotting, scenario planning, risk modeling, and even cost accounting—to encompass the specialized requirements of environmental sustainability.

Most current methods that companies use to track or project sustainability impacts generate inconsistent, incomplete, and imprecise data. Recognizing that if they can't measure it, they can't manage it, companies are developing better means of gauging costs and benefits related to corporate sustainability and of benchmarking performance. Fujitsu, for instance, employs a performance assessment scorecard—its "cost green index"—that assesses the potential cost, productivity, and environmental impacts of eco-efficiency initiatives across the firm.

Other companies are repurposing standardized tools and methods to bring a sustainability focus to all aspects of the business. For example, 3M, a longtime quality leader, is now applying lean Six Sigma methodologies originally aimed at improving operational efficiency and product quality to driving direct reductions in energy use, waste, and greenhouse gas emissions. To meet aggressive five-year sustainability targets, its Six Sigma leadership group has trained 55,000 employees in how to use these methods. As sustainability-related methods and tools mature, we expect training programs and certifications not unlike certified IT roles or black and green belts in the quality domain to emerge.

Developing Distinctive Strategies

Once firms have a solid base of analytical data, they will be positioned to develop distinctive sustainability strategies. Many aspects of strategy development will remain internal, but companies increasingly will adopt open-source approaches that engage outsiders. Perhaps more than any other company, Wal-Mart has pursued this approach. In 2006, then chief executive Lee Scott launched Sustainability 360, establishing explicit goals to purchase 100% renewable energy, create zero waste, slash greenhouse gas emissions, and sell products that sustain global resources and the environment. To this end, Wal-Mart created a dozen Sustainable Value Networks, each comprising Wal-Mart team members, nongovernmental organization experts,

academics, government officials, and supplier representatives, all working under the direction of a Wal-Mart network captain. Each team focuses on a strategic issue targeted by the company's sustainability agenda—such as facilities, packaging, and logistics—and tries to develop new ways of doing business that support the company's sustainability goals. The payoffs are already showing up: One of the Sustainable Value Networks, tasked with fleet logistics, came up with a transportation strategy that improved efficiency by 38%, saving Wal-Mart more than $200 million annually and cutting its greenhouse gas emissions by 200,000 tons per year.

Integrating Objectives into Management

To capture the full benefits of the megatrend-driven strategy, firms must integrate sustainability objectives into day-to-day management. Leadership may come from headquarters, but responsibility for implementation lies in the field. Firms such as Dow have incorporated sustainability objectives into compensation models, reviews, and other management processes, including a requirement that all newly promoted business unit managers review their units' sustainability plans with senior management within 90 days. Managing sustainability strategy requires systems support as well. While many firms have invested in technology to record and report environmental events such as spills and waste disposal, others have gone much further.

Wayne Balta, head of Corporate Environmental Affairs at IBM, describes his company's environmental management system as the foundation for policy deployment, practice management, goal setting, decision-making, and data capture. IBM uses the technology to embed environmental strategies into all areas of the business, from research and development to operations to end-of-life product disposal.

BUILDING A SUSTAINABILITY PERFORMANCE SYSTEM

By joining a vision of sustainability value creation (the "what we must do") with evolving execution capabilities (the "how we must do it"), firms develop what we call a sustainability performance system. Depending on their sophistication in both realms and their desire to use sustainability as a competitive weapon, they will fall into one of the next four categories.

Category 1: Losers

As the sustainability megatrend accelerates, firms that have put in place only modest cost, risk, and waste initiatives and whose vision and strategies are

vaguely conceived or disjointed will find it increasingly difficult to protect their position. It may be too early to see clear examples of firms that have lost their competitive position based on the failure to develop and execute sustainability strategies, but the casualties from other megatrends like quality and IT abound. GM's decline can be traced clearly to its earlier failure to understand how quality considerations would transform the auto industry. Likewise, Kodak's dominant position in photography eroded quickly as it missed or ignored the signals that digital technologies would displace film.

Category 2: Defenders

Some firms may choose a go-slow sustainability strategy for many reasons—the peculiarities of their industry sector or business processes, their environmental exposure, or other competitive considerations. Others will be content to make investments in the early-stage objectives of cost, risk, and waste management. This defensive posture can work, provided the gap between a go-slow company's market position and that of primary competitors does not grow too large and the company has execution capabilities commensurate with the complexity of its business. Maersk, the Danish shipping company, has focused its sustainability efforts on efficiency, slashing fuel costs and cutting carbon dioxide emissions through slow-speed shipping and other initiatives. As long as others in the shipping business do not pursue a more sweeping sustainability strategy, perhaps built on more efficient ship design, Maersk should be able to hold its position. Indeed, many companies may find that their best option is to play defense on sustainability and not try to make this the issue on which they differentiate themselves in the marketplace.

Category 3: Dreamers

When vision and ambition get too far ahead of the capacity to execute, companies face another set of issues. Those that seek first-mover advantages in the later stages of sustainability differentiation without having mapped out a clear strategy and mastered the fundamentals of execution may experience the same kinds of problems that plagued some aspiring pioneers in the quality and IT megatrends. For instance, the London Stock Exchange's vision of a paperless settlement system was a bold move and one that managers believed would catapult the organization ahead of its peers. Managers optimistically ballparked the cost at £6 million and jumped in with both feet. By the time the exchange acknowledged that it lacked the management and technical capabilities to execute this leading-edge IT project, in 1993, the tab had shot past £400 million, with no end in sight. Dreamers who

try to ride the sustainability wave risk making sustainability promises they can't keep, inviting charges of greenwashing and the attendant reputational and financial harm. Some years ago, Ford Motor Company suffered from Bill Ford's attempts to green his business before his management team was ready. His unfulfilled commitments to improve SUV fuel economy and make Ford a leader in hybrid vehicles brought the wrath of environmental groups. His successor, Alan Mullaly, has moved Ford forward with new models that feature advanced materials, smart systems, and high efficiency, enabling the automaker to withstand the current downturn better than domestic competitors and positioning Ford for success.

Category 4: Winners

Although the sustainability landscape continues to shift, some early winners have emerged. GE's financial services business has lagged badly, but its Ecomagination product line has generated tens of billions of dollars in revenues and positioned the company as a leader in rapidly growing market segments such as energy infrastructure and high-efficiency appliances, jet engines, and locomotives.

The Ecomagination marketing campaign has also had a halo effect, helping GE transform its reputation from environmental bad actor to sustainability front-runner. Similarly, Clorox's Greenworks line of ecofriendly cleaning products has reframed the public's perception of the company—and generated billions of dollars of sales. Clorox's acquisition of Burt's Bees, a leader in natural personal care products, further convinced environmental stakeholders that the company's shift in strategy was both sincere and significant. Soon companies will have a clear sense of what it means to manage sustainability as a business megatrend. Best practices will emerge, and sustainability scorecards will allow companies to track cost and risk reduction as well as evaluate value-creation activities. As environmental data become richer and more accurate, companies will be able to chart their impacts in financial terms—making it easier for market analysts to identify the firms positioned to deliver an ecopremium. In this new world, the sustainability strategy imperative will be systematized and integrated into the day-to-day practices of firms of all sizes in all industries.

SUMMARY

Like the IT and quality megatrends, sustainability will touch every function, every business line, and every employee. On the way to this future, firms

with a clear vision and the execution capabilities to navigate the megatrend will come out ahead. Those that don't will be left by the wayside.

NOTE

1. www.sustainable-living.unilever.com/