In today’s complex marketplace, sustainable development offers business leaders a 21st century framework for success, by integrating economic, environmental, and social performance. In this article, the authors explore ways to set pragmatic, sustainability-driven strategies that anticipate the trend toward fuller pricing of environmental and societal resources and to implement these strategies for near-, medium-, and long-term business benefit.

Industry leaders continue to pay close attention to sustainable development for a simple reason. In a complex, turbulent marketplace, sustainable development offers a 21st century framework for success: integrating and balancing short-term and long-term economic, environmental, and social performance. This framework strikes a chord with leaders who want to build long-term value and powerful brands for their companies.

The late 1990s saw some dramatic moves in the direction of sustainable development:

• The growth of the World Business Council for Sustainable Development, with member companies drawn from the ranks of the world’s biggest companies

• The public commitment of a growing number of firms (BP Amoco, DuPont, Interface, Monsanto, Motorola, Procter and Gamble, and Royal Dutch/Shell, among others) to the principles of sustainable development

• The establishment of financially credible environmental rating firms and successful investment funds focused on companies that meet investor criteria for social and environmental responsibility

• The endorsement of sustainable development in the curricula of leading business schools.

Yet, as this article goes to press in early 2000, some marketplace signals might be read as indications that the momentum for sustainable development may be faltering. Monsanto and Interface are stumbling—Monsanto (before the recent announcement that it planned to merge with Pharmacia Upjohn) because of issues of competitive scale, an inability to translate a bold vision...
into actions, and controversies over its engineered seeds; Interface because of technology challenges, Wall Street push-back, and stiff competition from Collins and Aikman. While DuPont, Shell, and other leaders continue to build public positions around sustainable development, other companies that have explored the concept are asking: “What makes sustainable development better than plain old excellent management as we’ve always understood it? Does this approach offer a unique premium—measured in profits, competitive advantage, shareholder value, or some other tangible form?”

**Good Question.** Our answer, based on 10 years’ intensive work with these issues—including a very active past year—is that sustainable development does in fact offer a unique premium. Engaging with sustainable development is not about enhancing the return from existing best practices in management, but about driving companies toward radical new sources of value creation. No other business management approach today addresses two fundamental drivers of the 21st century world economy:

- A rapidly growing population, and an expansion of the proportion of the world’s population that aspires to the prosperous, resource-intensive lifestyles of people in North America and Europe; and

- The appropriate future pricing of resources that are now regarded as cheap or even free—resources as basic as water, soil, weather, and human health, as well as the future pricing of emissions

Given the long-term planning cycles undergirding much of industry, especially the process and manufacturing industries, we believe that now is the time to begin planning how to decouple wealth-creation from one-way, one-time consumption of natural resources. Doing so will put companies on the right side of one of the 21st century’s most important trends—a global revaluing of the resources that support prosperity.
A look at shareholder value suggests that rewards already exist for companies aligned with the social and environmental facets of sustainable growth:

- The five-year backcasted performance of the recently launched Dow Jones Sustainability Group Index was an average 36.1 percent better than that of the Dow Jones Global Index.

- Oil companies in the petroleum subset of Innovest’s EcoValue 21™ rating—which factors in historical liability risk, operating factors, eco-efficiency and sustainability risk factors, risk management capacity, and strategic profit opportunities—outperformed other oil companies by more than 17 percent in 1998. Other industry sectors have comparable stories.

- Through June 1999, socially responsible funds received higher ratings by Morningstar than all mutual funds broadly. Twenty percent of socially responsible funds received a five-star rating, compared to 10 percent of all mutual funds.

While these results show striking correlations, they don’t shed light on exactly how the markets are rewarding sustainability-aligned behaviors, or which behaviors they are rewarding. To examine that question, we have analyzed how sustainable-development-driven behaviors integrate with business management and add value. And we have identified clear sustainable-development premiums that go beyond returns on standard business management. In this article, we explore how to set pragmatic, sustainability-driven strategies that anticipate the trend toward fuller pricing of environmental and social resources and how to implement these strategies for near-, medium-, and long-term business benefit.
Setting a Sustainable-Development-Based Strategy

A strategy based on sustainable development looks beyond the market’s current rules and conditions, enabling a company to invest in resources and capabilities that will give it an edge under new and different conditions. For example, in response to the global climate-change issue (discussed separately in this issue of *Prism*), BP Amoco and Royal Dutch/Shell have set up internal carbon-trading programs that help them prepare a different pricing regimen for carbon emissions (both from products and from operations).

The challenge that companies face as they set these strategies is getting the pacing right. The strategy needs to provide momentum, but not draw too much of the company’s energy away from meeting existing challenges and conditions. It needs to identify ways to balance short-term priorities with medium- and long-term priorities, achieving solid returns in all time periods. As companies look to the longer time horizons, of course, the population and resource trends that drive sustainability thinking become more acute. Rio Tinto’s commitment to long-term local community investments for its worldwide mining operations is an example of blending long-term sustainability thinking with short-term operational actions.

Strategic shifts such as these emerge from intense engagement with the principles of sustainable development which, in the words of the United Nations’ Brundtland Commission report, are grounded in “meeting the needs of the present without compromising the ability of future generations to meet their own needs.” The principles of sustainable development include commitments to maintaining and enhancing natural capital, social capital, and the global economy’s capacity to generate and equitably distribute wealth. Sustainable development pioneers such as Paul Hawken and Amory and Hunter Lovins (authors of *Natural Capitalism*), Stuart Hart, and the founders of The Natural Step, have written extensively...
and persuasively on the very real ways we can integrate the protection of natural and social capital with economic capital—to our lasting benefit.

Building natural capital promotes the separation of business success from the use (and loss) of resources that can’t be replaced. Hence the forest products industry is exploring sources of pulp and fiber for paper, packaging, and construction other than old-growth forests that regenerate slowly and harbor high levels of biodiversity. Similarly, Dow formed a joint venture with Cargill two years ago to develop plastics based on carbohydrates (using corn) rather than hydrocarbons. The anticipated result will be a renewable material for which extraction and processing will not require the same degree of environmental management and control as plastics made from nonreplaceable petroleum hydrocarbons. Many more confidential ventures of this kind are now being launched.

Building social capital takes a nonconventional view of potential customers, focusing not only on the roughly one billion people buying conventional products and services in the marketplace today, but also on the other five billion people who aspire to do so. Some companies view a growing global population, pressure on natural resources, and a declining proportion of the world’s population that plays a productive role in generating economic wealth as a business opportunity. For example, a number of firms are positioning a microturbine business to squarely address the needs of the five billion people not hooked up to electricity grids. Grameen Micro Credit Bank in Bangladesh defied logic and captured a new market, while supporting social well-being and economic performance, by addressing a need many saw as too risky: providing credit to the very poor. Today Grameen Bank provides microcredit to three million people in 35,000 villages across Bangladesh with repayment rates at 99 percent, higher than most any lender in the United States or Europe.
These examples of sustainable-development-driven actions arose from companies’ examinations of some basic questions: What will the world look like in the future? Where are we now? Where do we want to be? How will we get there? In answering these questions, a company’s core values and strengths provide the linkage between the principles of sustainable development and the shareholder value to be delivered in the future (Exhibit 1).

Once companies expand their peripheral vision to see their assets and businesses in terms of societal and environmental trends, they gain striking new insights into their portfolios. DuPont is driving toward new ways of thinking through high-level meetings between senior management and a diverse group of external thought leaders, bold metrics (such as deriving 25 percent of its revenue in 2010 from use of nondepleting raw materials), and the integration of sustainable-development thinking and actions into planning processes and incentives.

Exhibit 1
Sustainable Development and Business Value Creation

Corporations committed to sustainable development put the development of natural and social capital and equitable wealth creation at the center of the way they do business. Active engagement with the external world provides the intelligence required to make decisions that balance these three imperatives in ways that generate sustained financial value.
DuPont now assesses its portfolio in terms of each business’s environmental footprint and potential to add shareholder value. The company found that Conoco, its oil and gas business, presented a large environmental footprint and little potential for a value premium. Since divesting Conoco, DuPont has been migrating toward bioscience businesses, which offer a low environmental footprint, the potential for rapid growth, and a value premium based on innovation and service. For DuPont, as for others, the engagement with sustainable development brought into focus the strategic choices the company faced and helped direct it toward an innovative program for value creation.

During the past year, despite the stumbling of some early pioneers, we have seen a 50 percent increase in strategic exploration of sustainable development among companies that aim to be “smart followers.” Here are the questions they are asking as they develop strategies:

- How do we define sustainable development as it applies to our business and core values?
- Where do we see sustainable-development trends and drivers affecting our business in the future?
- Are we doing enough to address these trends today, or could we clearly be doing more to gain business opportunities in this way?
- Do we have all the competencies we need to make progress?
- Can we learn from others to simplify the process and get to the benefits faster?
- How do we trade short-term risks and opportunities against long-term ones?

When companies embark down the path of taking action on sustainable development, they will find an abundance of tools that can help, including sustainability audits, portfolio analyses using sustainability metrics, social impact assessments, emerging-issue scanning tools, prioritization assessments, and proven roadmaps for engaging effectively with stakeholders. The leading-edge “environmental audits” we are being asked to conduct today are,
in fact, sustainability audits. Using these tools often brings unexpected issues to light. In industries where capital plans call for investments with a useful life of 20 to 30 years or more, a process for systematic scanning of environmental issues usually reveals major discontinuities. In the detergents business, for example, as Niall Fitzgerald, Chairman of Unilever, is fond of pointing out, competitors are dancing around the edges looking for minute formulation changes, when they should be focused on the cleaning needs of the five billion people not currently buying detergents. Rather than pursuing incremental changes in existing formulations, the industry should be focused on how to clean in dirty water, salt water, and no water.

Many companies have also benefited from open and wide-ranging conversations with thought leaders from research and advocacy organizations who view sustainability issues from a very different angle than industry. Novo Nordisk, a global pharmaceutical company with headquarters in Denmark, has demonstrated many years of leadership with true stakeholder engagement (focusing on listening and learning rather than declaring and defending). Shell is establishing key performance indicators in consultation with external stakeholders. Ford is embarking on a similar path.

**Taking Action to Realize Sustainable-Development Premiums**

When a board member, the CEO, or a group of senior officers becomes convinced that sustainability drivers could have a potentially huge impact on the company’s future, the next challenge is identifying how and where to take action—and how to pace actions to meet the difficult-to-gauge pace of change.

We have identified four “levers” companies can use to derive short-, medium-, and long-term value from sustainable development: option creation, cost leverage, customer preference, and risk reduction (Exhibit 2). These levers align sustainability principles with established
business management approaches—and can deliver a clear premium over those approaches. In addition, they reinforce a company’s reputation, adding to its ability to attract resources—both capital and talent.

**Option Creation.** From a business perspective, option creation means finding new markets, securing and enhancing the license to operate and perform, and building an organization that innovates and learns, rather than remaining overly attached to certain materials, products, or service approaches.

BP Amoco realized the value of its investment in securing and enhancing its license to perform when it won initial approval for the acquisition of ARCO on November 8, 1999. (As we go to press, the Federal Trade Commission’s ruling against the acquisition may signal a court battle to come.)

The acquisition gives BP Amoco control over 70 percent of Alaska’s oil production. BP Amoco’s commitment to exceeding the performance expectations of the Alaskan community and the U.S. government on environmental, safety, and community issues led these stakeholders to see the company as a preferred partner and helped create
a favorable atmosphere for the acquisition. Many companies aim for regulatory compliance, which minimizes immediate costs but incurs ongoing incremental costs. BP Amoco’s bolder strategy for performance increased its business options and opened the way to a major return on its investment.

When Dow Chemical established a plant in an undeveloped part of India, it chose to invest heavily in education in the region, not only to build a pool of future employees, but to stimulate broader business development that would support and sustain the long-term success of its investment.

Cost Leverage. Twenty years ago, people thought that improving quality would cost money. Ten years ago, many thought the same about safety performance. Today, many still think the same about environmental emissions and waste. In fact, eco-efficiency is a well-documented source of value that goes straight to the bottom line. Creating value for customers does not necessarily go hand-in-hand with depleting natural resources.

The value derived from diminishing the environmental impact of creating products is clearly illustrated by Dow Chemical’s Louisiana division. In 1981, the division launched an initiative to carry out energy-saving projects with a minimum 50 percent annual return on investment. The first year’s 27 projects averaged a 173 percent return on investment. The second year’s 32 projects did even better, with a 340 percent return. Between 1981 and 1993, Dow documented an average return on investment from 575 projects of 204 percent. Since then, the returns and savings have continued to grow and the payback period has shrunk from six months to four.

While resource efficiency at the level of a single enterprise can generate considerable value, even more may be possible in the future through partnerships among enterprises. The ongoing revolution in supply-chain management, driven by the power of information technology, gives an
idea of the efficiencies that can emerge when enterprises that once lobbed orders and products “over the wall” to each other share information, coordinate supply and demand, and reduce waste. Dow’s ValuePark in Leipzig and the Kalundborg Industrial Ecology Park in Denmark are two pioneering examples of linking individual enterprises to create more effective industrial systems. Wastes from one enterprise become feedstocks for another. Integrated waste and resource management can cut a range of transportation, environmental, and waste costs.

Dow Europe is making a $1 billion investment over 10 years at ValuePark, an industrial park that incorporates the principles of industrial ecology. In the long term, the company foresees a return on its investment of 30 to 40 percent. In the short term, ValuePark can return significant savings through reductions in waste, raw materials, and environmental and labor costs.

**Customer Preference.** It’s well established that while customers like the idea of products that reduce environmental impact or are made under decent working conditions, few will pay extra for these “better world” features. Instead, integrating sustainability values in products and services works to reinforce brand appeal and generate customer loyalty, as long as what’s offered works as well as, and costs no more than, its nonsustainable equivalent.

Co-operative Bank in the United Kingdom adopted the ethical branding position, “A bank that feels as strongly as you do,” following customer survey results. In the bank’s words, “It’s our customers’ money, so we asked for their views on how it should and shouldn’t be invested.” The bank’s investment policy covers a wide range of social, ethical, and environmental issues. For example, Co-operative Bank does not invest in or provide financial services to organizations whose core mission involves the extraction and production of fuels that contribute to global climate change, organizations or regimes that violate basic human rights, or organizations involved in the manufacture, sale, and brokerage of armaments. At the same time, the bank
seeks to support and encourage businesses that promote the concept of fair trade and take an active stance on ethical sourcing with suppliers in developing countries.

How do these positions align with business performance? In 1992, the year after the bank adopted its ethical mission, it gained 205,000 new customers. And 1998 was the bank’s fifth year of strong growth, with an after-tax return on equity of 27 percent. While the bank’s functional offerings are fully competitive with other banks, its position is a powerful differentiator that builds tremendous customer loyalty.

Firms in other industries have also seen solid results from integrating a sustainable-development element into their brand. Iceland, a retailer in the United Kingdom, moved into non-genetically modified produce in March 1998, ahead of the trend. This position, along with early adoption of Internet ordering and free home delivery, has contributed to a 72 percent increase in share price in the past 18 months. Electrolux’s “Green range,” a line of white goods with reduced environmental impact, has yielded a gross margin 3.5 percent higher than other Electrolux white goods since its introduction in 1996. In some instances, consumers will in fact pay more for products and services they perceive as sustainable. Some regional electricity companies in the United Kingdom are offering electricity guaranteed to come from renewable sources. Consumers are choosing this option, although it costs roughly 10 percent more than the standard electricity service.

**Risk Reduction.** Integrating sustainable development in risk assessment enables companies to come closer to “360-degree” risk management. With a focus on wider and longer-term risks, a firm can reduce avoidable losses and exit businesses it regards as unsustainable, as Monsanto has done with commodity chemicals, and DuPont with Conoco, its petroleum business.
A more innovative facet of risk reduction is to make an early move toward a sustainable-development-based business practice, then seek to influence regulation to strengthen competitive advantage. This was the approach used by Sweden’s OK Petroleum (now Preem Petroleum), which developed a reformulated gasoline in the early 1990s. OK Petroleum then lobbied the Swedish government to increase taxes on less environmentally acceptable fuels—favoring and rewarding its capabilities. Swedish refiners are now well-positioned competitively as regulations toughen in the United Kingdom and other European markets.

**Resource Attraction.** We’ve already looked at evidence indicating that investors attach a premium to companies that act in ways conducive to sustainable development. Similarly, in a business environment in which leading global companies compete fiercely for the top talent, companies with strong core values are going to have a better chance of attracting and retaining the best people. Novo Nordisk is well known for its commitment to honesty and stakeholder engagement and its strong corporate values. The company, which has long had a leading environmental policy, recently launched “Values in Action,” a program to align all its businesses with sustainable-development principles. As Novo Nordisk has sharpened and broadened its commitment to sustainable development, it has seen its staff turnover rate drop to 5 percent, compared with a 10 percent average in its industry.

We have repeatedly found that when the vision of the company aligns with the personal visions of its staff, the organization makes impressive gains in effectiveness and innovation. Attaining that alignment is a form of systems optimization, a way of reducing organizational drag. The principles supporting sustainable development are intensely meaningful for many people. As employees, these people take pride in belonging to companies that aspire to sustainable development and will expend extra effort to help attain sustainable-development goals.
Moving Toward Sustainable Development

Sustainable development offers a direction, not a destination. Companies that see value—and a major chance to create more value—in sustainable development expect their engagement with the concept to help drive them toward certain kinds of corporate transformation. Their economic polestar is the sense that trends will be converging in the next 5 to 25 years to create a new pricing for natural resources. The goal of the transformation is to build shareholder value and get ahead of the curve as the value of natural capital alters and building the human capital at the bottom of the economic pyramid grows in importance. The elements of the transformation are values, communication, and innovation. These values inspire a set of questions we hear increasingly from CEOs and Boards of Directors.

How do we put our values to work? Values are the foundation. Few, if any, companies believe that their corporate values are merely a formality. Most are certain that their values align with society’s interests. Yet many have not tapped into the power of widely understood and deeply held values for energizing the corporation and achieving success. Companies that engage in sustainable development find that the internal dialogue about its concepts and goals breathes new life into these values.

How do we engage in real dialogue with the right people? Communication involves a transformation in the company’s “conscious” position in society. By engaging with their stakeholders, by making their processes and actions more transparent, companies can learn immensely valuable things about their customers, their markets, and their competitors. By the same token, these companies must be prepared to manage people’s expectations and define their boundaries. Companies cannot address every issue, fix every problem, or blur their roles with the roles of government and the general public.
How do we fully capture the innovation premium? The engagement with values and with communication is a spur to innovation. Sustainable development, as a goal, dramatically expands companies’ strategic thinking about future risks and opportunities. Companies currently engaged with its issues are laying the groundwork, through investments in technologies, markets, and competencies, for a future that will offer increased rewards for efficiency and innovation. More important, companies that find ways to better serve the full global population with their products and services are sure to emerge as winners.

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