
Sustainable Development: The Next Generation of Business Opportunity

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The issues of sustainable development—a concept that integrates economic success, environmental quality, and social responsibility—are more and more on the minds of business leaders around the world. According to a recent Arthur D. Little survey of executives in Europe and North America, 83 percent of respondents see potential business value in implementing sustainable initiatives. Companies are finding that the benefits of pursuing a sustainable development approach range from opening new avenues to innovation in products, processes, and stakeholder relationships to accelerating learning organization skills throughout a company.

Industry is showing unprecedented interest in the business potential of sustainable development, an approach to developing long-term prosperity by integrating strategies for economic success, environmental quality, and social equity. In a recent Arthur D. Little survey on business and sustainable development,¹ for example, 95 percent of companies responding viewed sustainable development as genuinely important, and 83 percent saw business value in implementing sustainable initiatives. At the same time, when we look beyond a few leaders in key industries, most companies seem uncertain about how to capitalize on the business value of sustainable development, particularly in the short term.

Getting past that uncertainty is one of the most valuable things a company can do today. We have studied the issue of sustainable development deeply over the past 10 years, and believe that it represents the least appreciated—and potentially most significant—set of major business opportunities facing industry in the coming decade. The opportunities are of two kinds: avoidance of threats to growth caused by operating constraints; and pathways to greater success through new products, new technologies, and an enhanced license to operate, innovate, and grow.

So far, only a few companies have forged strong links between their core missions and strategies and the opportunities posed by sustainable development. Now, however, is the time to act: to explore sustainable development's implications for your business, to seek connections with your core business values and goals, to test its value, and to gain market experience and a market position through targeted first actions. Today, companies can gain the rewards of being first movers, enjoying strategic flexibility and the opportunity to innovate freely. They can minimize operating constraints in the form of new social

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expectations, new regulations, or infrastructure and resource shifts. And they can capitalize on opportunities that open up as customers' needs change and as other businesses look for products and services that will help them minimize their operating constraints. Later, when trends are obvious, these advantages will be harder to achieve; competitors could very well own positions that might have been yours.

Firms can advance on the sustainability front without betting the company. In addition, bringing elements of the sustainable development mindset into company thinking and culture can offer attractive near-term benefits, including:

- Opening new avenues to innovation in products, processes, and stakeholder relationships
- Leveraging knowledge and creativity through the energy and enthusiasm of employees
- Accelerating capabilities as a learning organization through sustainable development learning
- Enhancing brand image and protecting the license to operate and grow through attention to the social dimension of sustainable development

In this article, we provide a pathway (Exhibit 1) for helping companies assess the implications and capture the business potential of sustainable development thinking. We look at how to define a corporate direction in relation to sustainable development, how to take action, and how to keep the initiative going through organizational alignment and continuous learning.

Defining Your Direction

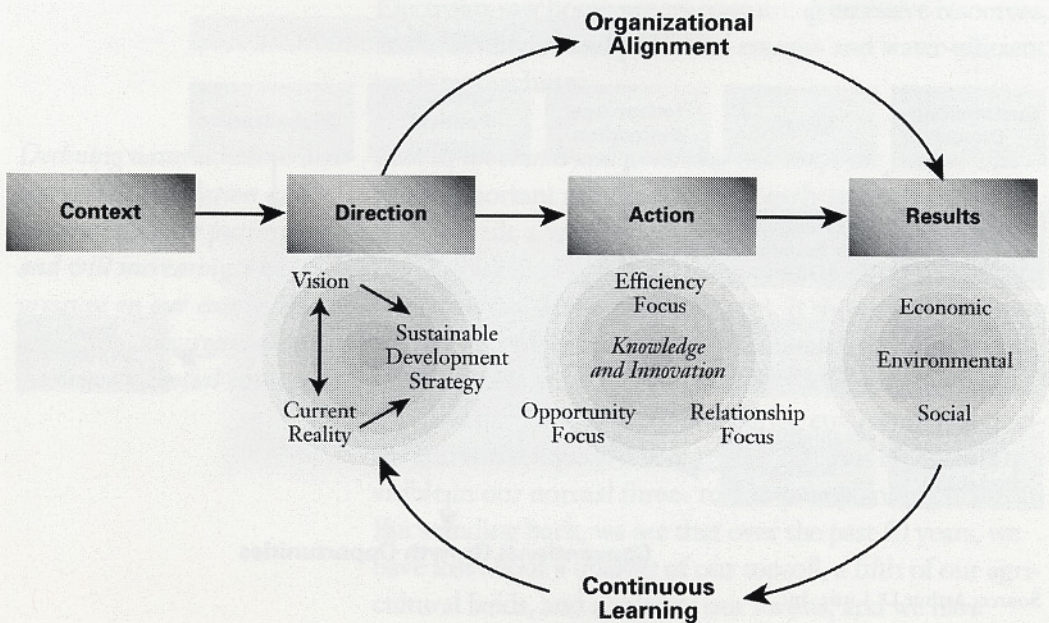
To take hold of the business potential of sustainable development, companies start by exploring how the concept, with its implicit threats and opportunities, relates to their core strengths and objectives. Doing so takes sustainable development out of the realm of philosophy and into that of rewarding actions.

Sustainable development means living off Earth's income, not its capital.

A widely accepted definition of sustainable development is “a way to meet the needs of the present without compromising the ability of future generations to meet their own needs.” Clearly, there is an intuitive link between the concept and most companies’ missions as they strive for stability and prosperity not only in the near term but also in the long term. In the language of investment, this means living off Earth’s income, not its capital.

The forces behind sustainable development also influence the strategic playing field for business. Powerful forces in this field currently include rapid technology development, new economic life in formerly stagnant political systems, and rampant globalization in many industries. Sustainability drivers are rooted in the reality of a quickly growing world population with rapidly rising expectations for personal prosperity. That reality translates into heavy demands on the earth’s natural and social systems—just

Exhibit 1
The Sustainable Development Pathway



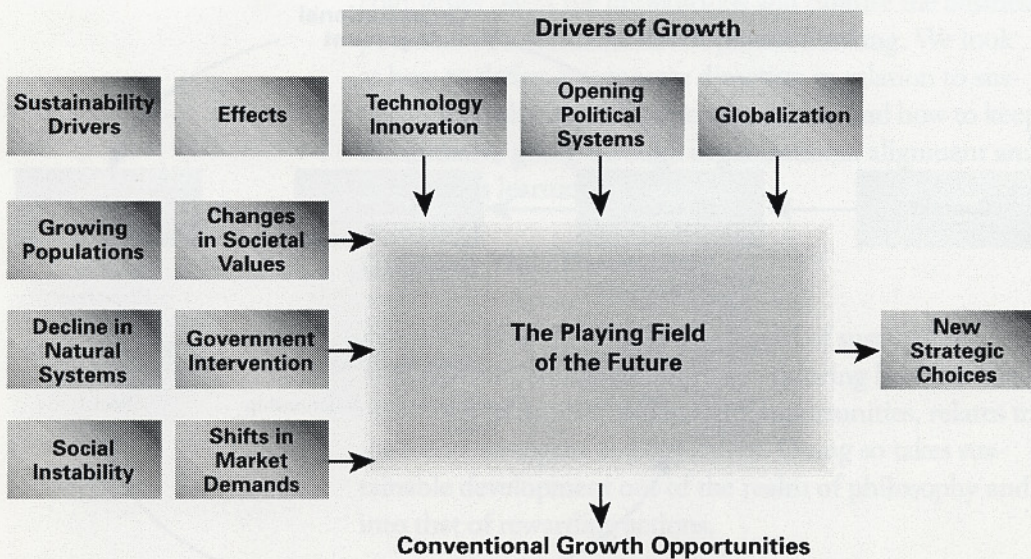
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as many of these systems are showing signs of stress from current human demands. If and when society feels threatened by declines in natural and social systems, sustainability drivers will reshape the business playing field through rapid shifts in people's values, heavy government interventions, and sharp turns in market demand (Exhibit 2).

Companies interested in determining how sustainable development thinking can help them rethink their approaches to strategic threats and opportunities should begin by:

- Assessing current reality and projected trends
- Defining a compelling vision of what the company wants to create
- Establishing measurable results toward achievement of the vision
- Designing a strategy to bridge the gap between where they are and where they want to be

Exhibit 2
The Sustainable Development Playing Field



Source: Arthur D. Little, Inc.

Assess current reality. Assessing current reality involves the following four steps:

Scrutinize environmental and social impacts. Unilever went through a complete life cycle analysis of its major businesses to understand their global environmental impacts. On the basis of these findings, the company developed an innovative approach to sustainable fishery practices to ensure a long-term return from its fishing business. In the wake of public outcry about its policies in Nigeria and regarding the Brent Spar, Royal Dutch/Shell took a hard look at how well it was living up to its financial, social, and environmental responsibilities. The company concluded: "We had looked in the mirror and we neither recognized nor liked some of what we saw. We have set about putting it right."²

Understand customers' impacts. Impacts can present opportunities. Monsanto took a fresh look at agricultural use of pesticides and developed and commercialized insect-resistant crops as a way to reduce the volume of pesticides applied. Interface, a global carpet and textile company, saw building owners throwing old carpeting into landfills and invented carpet leasing with recycling/remanufacturing. Electrolux saw homeowners consuming excessive resources, and it developed and promoted energy- and water-efficient washing machines.

Declining natural systems and increasing population and consumption are putting—and will increasingly put—pressure on our economic prosperity, environmental quality, and social equity.

Look at the trends and forces that will shape the future. The most important are those in their early stages, because they provide a window of opportunity. What do these trends look like? Exhibit 3 offers a compelling way to look at sustainable development drivers. It shows that declining natural and social systems and increasing population and consumption are putting—and will increasingly put—pressure on our economic prosperity, environmental quality, and social equity. These trends may not be especially visible in our normal three- to five-year planning horizon. But standing back, we see that over the past 50 years, we have lost about a quarter of our topsoil, a fifth of our agricultural lands, and a third of our forests, and we have

changed the characteristics of our atmosphere markedly. Companies can turn these potential threats and opportunities into advantages by harnessing their strengths and seeking new levels of innovation.

Identify your strengths. Each company has skills and technologies that create customer value, cost advantage, and/or credibility with their stakeholders. These strengths can be assessed for their fit with significant sustainable development trends, then factored in with the company's impacts. IKEA, for example, built a strong business around providing a better quality of life for customers through quality furniture at affordable prices. Extending its mission and capabilities to embrace sustainability concerns made sense for IKEA and drew on the company's existing strengths. All these elements are building blocks of scenarios, that is, stories of plausible futures. Scenarios in turn will be useful tools for developing a strategy.

Nothing will happen unless strategy is based on what people genuinely want to create.

Define a vision. Nothing will happen unless strategy is based on what people genuinely want to create, based on their own values and the best traditions of their company.

Exhibit 3
The Sustainable Innovation and Growth Funnel

Decline in
Natural and
Social Systems

Increases in
Population,
Consumption,
and Technology



Our survey asked companies what changes they needed to make to implement sustainable development. The top answer, given by three-quarters of the companies, was vision and strategy. Vision answers the question, "What do we want to create?" and focuses the organization on a desired image of the future. Strategy answers the question, "How can we best achieve this vision in light of current reality?"

The companies that have made the most demonstrable progress toward the goal of sustainable development started with vivid corporate descriptions of their aspirations. Their most powerful visions are shared by a group, for whom they generate creativity and excitement. They are positive, aspirational, and inspirational. A new vision is often complemented by a recommitment to a company's values and even a reassessment of the fundamental mission of the business. For example, Shell's senior leadership deeply examined its fundamental purpose. They found that sustainable development is a natural extension of their general business principles and defined their core purpose as "helping people build a better world." Having identified a business opportunity in customers' need to create more value from less resources, and having thought through the long-term prospects for conventional chemicals manufacturing, DuPont and Monsanto are undertaking major strategic shifts of their businesses from chemicals to life sciences.

Establish measurable results. The next step is to translate vision into a meaningful set of results in the areas of economic prosperity, environmental protection, and social accountability.

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While companies are experienced in working for *economic prosperity*, they are generally more effective at promoting revenue growth than asset growth. There has been a lot of talk about the need to develop better eco-accounting tools, and these are important. However, it may be just as important to develop better asset measurement tools. We do not fully appreciate investments in organizational knowledge, skills development, or stakeholder relationships. These are perhaps better treated as assets being developed today to capitalize on the future rather than as operating expenses.

Companies also know how to work for *environmental protection*. Still, it is stimulating to see objectives like those promoted at DuPont and Interface, which have thought beyond accepted targets to reduce their companies' impacts. DuPont got ambitious and called for zero impact. Interface is not satisfied with having zero impact; it wants to make a positive impact it can be recognized for and proud of. It wants to become "the first fully sustainable industrial enterprise, anywhere." The company intends to ensure that its manufacturing plants emit only substances of value: carpet, fabric, clean air, and clean water.

The newest challenge is to develop a set of indicators that demonstrate a company's social accountability.

The newest challenge is to develop a set of indicators that demonstrate a company's *social accountability*. While a wide range of codes and guidelines for measuring social accountability are now emerging, there is as yet no common terminology, standards, methodologies, or recognition. Arthur D. Little has reviewed progress in this area, developed a model of best practice, and identified examples from various standard-setting organizations and companies. Shell, for example, is pursuing a five-year plan to establish a social accountability measurement system building on the work of other companies and parties, yet tailored to its own particular needs.

Design a strategy to bridge the gap. The gap between the organization's vision and its current situation establishes a tension that fuels energy to bridge the gap. The organization may then choose to adopt any of a range of strategic approaches (Exhibit 4).

"*Introverts*" want to avoid the investment and risk that comes with being a leader. This describes the stance many companies are taking today. They want to stay with the pack. They may position what they already do as sustainable development, a potentially risky approach. They may also track the issue so they can take bolder action when conditions change—and they will probably be too late to gain competitive advantage.

Companies that align their actions with the needs of their stakeholders are getting credit for it.

“Extroverts” want to promote their images with stakeholders. They want to protect their licenses to innovate, operate, and grow. BP and Shell, for example, are tackling issues such as global warming and improving their dialogue with broad groups of opinion formers. Novo Nordisk has viewed stakeholder dialogue programs as core to the business for many years. Their candid reporting and annual visits by environmental activists have set the standards in this area in Europe. Through these kinds of efforts, companies align their actions with the needs of their stakeholders, and they are getting credit for it.

“Bottom-liners” want to develop cost advantage. They look for where sustainable development can save them money. For example, Dow has made eco-efficiency an art form. It creates competitive advantage through innovative ways of making raw materials and energy more productive. It is getting more from less.

Exhibit 4
A Range of Approaches to Sustainable Development

	Introverts	Extroverts	Bottom-Liners	Top-Liners	Transformers
Thrust	Stay with the pack	Take the high road	Cost leadership	Differentiation	Growth
Questions	Should I do anything?	How can I better align with stakeholders?	How can I get cost advantage?	How can I capitalize on sustainable development?	How can I leverage sustainable development to transform the organization?
Actions	Wait and see; track the issues	Strengthen communities and environmental protection	Improve eco-efficiency of processes	Create products and services with unique characteristics	Leverage sustainable development to better learn, innovate, and manage for the future

"Top-liners" want to increase their revenue through differentiation. They look to capitalize on the opportunities created by sustainable development. Electrolux invents new products and services that offer unique environmental benefits valued by its customers. In doing so, it is creating a new market position and capturing market share.

"Transformers" want to grow by reinventing their companies around sustainable development. They seek to integrate the benefits of robust stakeholder relationships, cost reduction, and revenue growth by mobilizing their people to think and behave in fundamentally new ways. These companies are often leaders in the area of organizational learning.

Different parts of one organization might appropriately pursue different strategies. Corporate headquarters may focus on the extrovert and transformer dimensions, business units on top-liner strategies, and operating companies on bottom-liner tactics. Monsanto has been integrating the actions taken by extroverts, bottom-liners, and top-liners. Its corporate staff is pursuing new kinds of external partnerships and dialogue to better define the company's strategic direction. R&D and product development efforts are helping create entirely new markets for the company. And operations staff are using sustainable development thinking to open up new avenues in pursuit of efficiency and reduced impact.

Taking Action

When companies apply knowledge and innovation to things that are new and different, they are capitalizing on opportunities.

How do companies achieve outstanding results through sustainable development thinking? A company's actions are influenced by its strategy and strengths. Actions of bottom-liners tend to have an efficiency focus, those of top-liners an opportunity focus, and those of extroverts a relationship focus. When companies apply knowledge and innovation to things they already know how to do, they are improving efficiency and productivity. When they apply knowledge and innovation to things that are new and different, they are capitalizing on opportunities.

And when they apply knowledge and innovation to interactions with people, they are developing new and stronger relationships.

Arthur D. Little's survey shows that half the companies thought that efficiency or eco-efficiency was a source of real business value in sustainable development. That should be no surprise. Today, most companies would call themselves bottom-liners. They are gradually reducing the material and energy intensity of their goods and services. For the past 50 years, the amount of raw materials and energy needed for the next unit of output has been decreasing at 1 percent per year. But there is still a long way to go, because the total amount of energy consumed continues to increase.

Some executives believe we can still achieve a fourfold increase in energy productivity. Companies such as DuPont and Baxter are going after this low-hanging fruit. They are taking such actions as shutting down unneeded equipment, improving lighting, and resizing fans, pumps, and motors. And the achievements of Dow, Monsanto, Polaroid, and 3M in pollution prevention are legendary. They took the lead in applying knowledge and innovation to reducing raw materials and waste. A study of 75 pollution prevention projects across different industries found a 63 percent return on investment.

We see knowledge and innovation applied to opportunities as well. DuPont, S.C. Johnson, 3M, and other top-liners are developing a host of products with environmental benefits to consumers. And they are making money at it. Electrolux's environmental product line is already more profitable than its conventional product line. These companies have picked up on changes that others have not seen.

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In the emerging area of creating new relationships, companies are legitimizing and reaching out to an expanded group of stakeholders. For example, Shell now augments its evaluation of external issues, trends, and stakeholder concerns with dialogues with targeted environmental and human rights organizations to first identify issues of

concern to these groups and then determine where the company can make a significant and credible difference. When DuPont was thinking about building a new plant in India, it realized there were not enough trained operators to run it. So DuPont set up a school and trained everyone in town, even those who would not be working at the plant. By increasing the skills base in the region, DuPont made workers more productive and marketable. In the process, the company built long-term good will.

Part of the real power in leveraging knowledge and innovation is that actions taken for one purpose often deliver benefits in other areas. Health-care companies such as Baxter and Bristol-Myers Squibb have pursued opportunities by bundling environmental services to hospitals with their medical products. They have deepened customer relationships as a result. Dow Europe created a different kind of synergy by inventing what it calls a "Value Park" in Leipzig, Germany. Dow's industrial site is designed to locate suppliers and customers next to one another. This maximizes efficiency and minimizes transportation and inventory costs for everyone. It also creates new revenue opportunities for Dow.

Aligning the Organization

The prospect of making a positive impact on environmental quality and social equity can energize a company from top to bottom.

None of these innovations would have come about without the active involvement of aligned organizations. Sustainable development objectives need to align with the core values of the business and its employees. In fact, the prospect of making a positive impact on environmental quality and social equity can energize a company from top to bottom. When BP, Monsanto, and Interface started down their new paths, they found a gold mine of employee energy and emotional commitment. Employees can be engaged throughout a change process, from helping to explore the territory and set direction to suggesting and implementing improvements in resource efficiency, capitalizing on new business opportunities, and creating new relationships.

Organizational learning is particularly important to today's increasingly decentralized companies in which the pieces tend to optimize themselves, rather than the whole.

The goal of alignment extends beyond purpose, vision, and values. Sustainable development objectives must also be aligned with business processes. For example, Shell is developing a new management system to address its financial, environmental, and social performance in an integrated manner, applying business rigor to each. The system will strengthen and integrate nine business processes across all three dimensions of sustainable development, including performance management (comprising standards, metrics, and verification), and internal and external engagement. It will be built largely on existing processes and operate horizontally and vertically across all Shell's businesses.

Sustainable development fuels not only alignment, but also the desire to learn and share knowledge. Organizational learning is essential to developing and sustaining competitive advantage in today's rapidly changing, complex, global economy. Organizational learning is particularly important to today's increasingly decentralized companies in which the pieces tend to optimize themselves, rather than the whole. Innovations in one part of the company are often not replicated in the rest, and competitive information collected by one business unit is not always passed on to the others.

Daimler-Benz, Holderbank, and Shell each recognized that its progress toward sustainable development required investing in programs to accelerate learning. Holderbank's motto for its worldwide learning program is "steal with pride, share with delight." What these firms are creating is an attitude that sparks self-interest in learning, as well as a catalyst to diffuse the skills of learning so they can be extended to address other challenges as well. What better laboratory for learning than sustainable development?

Reaching for Greatness

The ability of an enterprise to adjust to change in the business environment has always been critical to success. Sustainable development adds new dimensions to the business forces driving supply and demand, igniting innovation

The new capabilities that grow through sustainable development initiatives, when married to a company's existing strengths, will create the kinds of learning and knowledge prosperity that enable companies to tackle the toughest business challenges.

across the full spectrum of business activity. In our work with clients, in our research across industries, and in our collaboration with the financial community, we are finding that companies that innovate consistently and effectively—in products and services, and also in strategy and operations—win a premium in the marketplace. These companies are more valuable to their shareholders and to their customers and suppliers. In the end, the new capabilities that grow through sustainable development initiatives, when married to a company's existing strengths, will create the kinds of learning and knowledge prosperity that enable companies to tackle the toughest business challenges, whether they come in the guise of sustainable development or not. That kind of prosperity is what gives a company control over its destiny—and propels good firms to become great ones.

¹ *In early 1998, Arthur D. Little surveyed executives at 481 companies in Europe and North America on their attitudes about the business value of sustainable development.*

² *"Profits and Principles: Does There Have to Be a Choice?" Royal Dutch/Shell, p. 2.*

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