

## SUSTAINABLE DEVELOPMENT: THE ROLE OF BUSINESS

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### Summary

The role of business is critical and central to sustainable development. This article provides a global perspective in addressing three main questions: 1) why the role of business is increasingly important for sustainable development; 2) why it is in the interest of business to become more environmentally sustainable; and 3) what are the key elements of the role of business in helping global society to achieve sustainable development.

### **1. Introduction: Why is the Role of Business so Important for Sustainable Development?**

There are two main reasons why the role of business will be increasingly critical to our ability to live in harmony with our ecosystem:

**(i) Many of the key priorities and issues of sustainable development are intertwined with business activities.**

Companies emit greenhouse gases, consume energy and natural resources, require water and transport, use toxic materials, and produce waste. Business has an influence on virtually all-major global environmental changes (see Table 1 for examples of major global trends). Their activities, for example, may affect species diversity either directly (e.g. agro-industry, forestry, commercial fishing) or indirectly (e.g. by contributing to air/water pollution or to unsustainable demand for natural resources). And companies

are made up of people whose decisions and influence the production and consumption patterns of others: consumers, managers, employees, suppliers, clients, family, community, etc.

Climate Change	Global emissions of CO <sub>2</sub> reached a new high of nearly 23 900 million tons in 1996—nearly four times the 1950 total.
Biodiversity	In 1996, 25 percent of the world's 4630 mammal species and 11 percent of the 9675 bird species were at significant risk of total extinction.
Freshwater	If present consumption patterns continue, two out of three persons on Earth will live in water-stressed conditions by the year 2025.
Coastal zones	More than half the world's coral reefs are potentially threatened by human activities, with up to 80 percent at risk in the most populated areas.
Chemical risks	Exposure to hazardous chemicals has been implicated in numerous adverse effects on humans, from birth defects to cancer. Global pesticide use results in 3.5–5 million acute poisonings a year.
Desertification	Some 20 percent of the world's susceptible drylands are affected by human-induced soil degradation, putting the livelihoods of more than 1 000 million people at risk.

Source: UNEP, Global Environmental Outlook 2000.

Table 1. Major global trends

Business also affects the environment through industrial accidents (see Table 2 for examples of recent industrial, environment-related accidents). And environmental damage is increasingly affecting business. Insurance companies, increasingly concerned about climate change, for example, estimate a 7-fold increase in economic losses and a 12-fold increase in insurance payouts between 1960 and 1990 as a result of big weather and flooding catastrophes (Official statistics of Munich Re and Swiss Re, two leading reinsurance companies, 1998). Health and economic costs of environmental pollution also affect business. Air pollution costs France an estimated US\$10 billion a year, half in pollution impacts on health, death and absenteeism, and the other half in agriculture yield and wasted crop, buildings and historic monuments (INERIS, May 1996). Such costs are absorbed in part by business, either directly through employee absenteeism, for example, or indirectly through higher tax contributions.

1997	.01	Pakistan, Lahore	Transport accident	Chlorine
	.01	*India, Mumbai	Bulk cargo handling terminal	Sulfur
	26.01	*USA, Martinez	Fire and explosion	Hydrocarbons
	19.02	Russia, Khabarovsk	Explosion (chemical plant)	Chlorine
	21.01	India, Bhopal	Leakage (transport accident)	Ammonia
	8.03	*France, Annezin	Fire	Plastics
	1.04	Salvador, Acajutla	Washing powder factory	Chlorine
	22.06	*USA, Deer Park	Vapor cloud explosion	Hydrocarbons

	3.07	Turkey, Kirikkale	Explosion Ammunition	Ammunitions, fireworks
	4.07	Ecuador, Quito	Explosion at a store	Ammunitions
	14.09	India, Wishakhaptnam	Refinery fire	
	20.09	China, Jin Jiang	Fire in a shoe factory	
	25.10	South Africa, Stanger	Road accident	Petroleum
	02.11	*France, St. Nicolas	Fire (meat industry)	Plastics
1998	24.01	China, Peking	Road accident, explosion	Fireworks
	14.02	Cameroon, Yaoundi	Transport accident	Petroleum products

Inclusion criteria: 25 deaths or more, or 125 injuries or more; 10 000 evacuated or more, or 10 thousand people or more deprived of water; \*US\$ 10 million or more damages to third parties.

Excluding: Oil spills at sea from ships; mining accidents; voluntary destruction of ships or airplanes; damage caused by defective products.

Source: OECD, MHIDAS, TNO, SEI, UBA-Handbuch Stoerfaelle, SIGMA, Press Reports, UNEP, and BARPI.

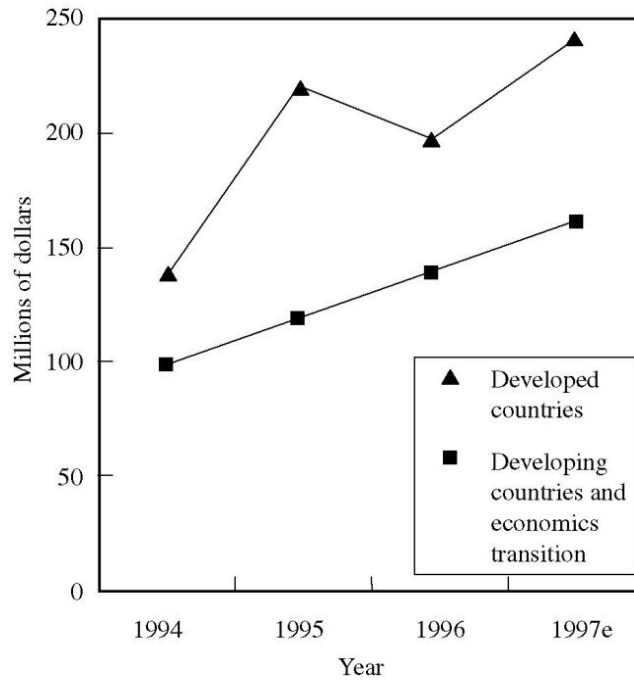
Table 2. Selected Industrial Accidents, Worldwide

Finally, perhaps the most important reason why the role of business is so important for sustainable development is because business is as much a part of the solution as a part of the problem. Business is now almost universally recognized as the primary engine of the economic growth and development needed to alleviate poverty. Business ingenuity and innovation is also needed in meeting sustainable development challenges in the future. Sometimes, the role of business may even be the determining factor. In the case of ozone layer protection, for example, if business had not been able to reduce the production, consumption and release of ozone-depleting substances, the levels of ozone-depleting substances would have been five times higher by 2050 than they are today (UNEP, GEO 2000.).

**(ii) Increasing reliance on the private sector for wealth creation and the growing interconnectedness of the world economy and has increased the influence and role of business.**

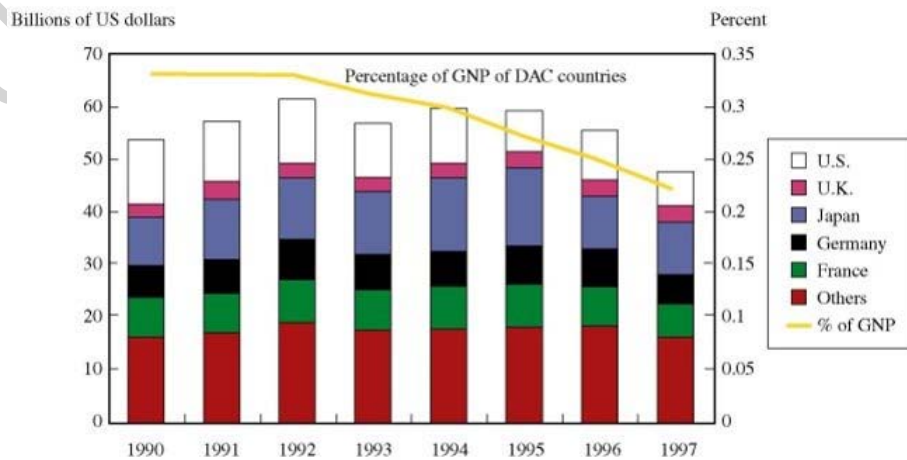
The second main reason why the role of business is critical for sustainable development is due to the greater dependence upon the private sector as a generator of wealth and greater market integration globally. During the 1980s, privatization and private sector development became key parts of economic reform in many developing countries and economies in transition, leading to a greater reliance on market forces and private enterprises. This has helped increase private capital flows (foreign direct investment, portfolio investment and private loans) from developed to developing countries, overtaking flows of official aid and loans by 1992 (the year of the Earth Summit). Between 1990 to 1996 private investment flows to developing countries and economies in transition tripled to US\$250 billion (see Figure 1). Official development assistance (ODA), meanwhile, declined to less than \$US50 billion (see Figure 2).

The increase in foreign direct investment reflects the growing number of multinational corporations, companies with activities in two or more countries. Between 1992 (the year of the Earth Summit) and 1999, the number of multinational corporations increased from 37,000 to 60,000. France, Germany, Japan, the UK and the US account for 70% of all foreign investment by multinational corporations and about half their number. In 1997, the largest multinational corporations exceed the individual GNPs of many countries (see Table 3 for a comparative list of total sales of top corporations and annual gross domestic product of selected countries). All but two of the largest 100 are based in developed countries (UNCTAD, 1999).



Source: UNCTAD, 1998

Figure 1. FDI Flows, 1994-1997



Source: OECD Development Assistance Committee

Figure 2. ODA Flows, 1990-97

Country or corporation	GDP or total sales (US\$ billions)
General Motors	164
Thailand	154
Norway	153
Ford Motor	147
Mitsui & Co.	145
Saudi Arabia	140
Mitsubishi	140
Poland	136
Itochu	136
South Africa	129
Royal Dutch/Shell Group	128
Marubeni	124
Greece	123
Sumitomo	119
Exxon	117
Toyota	109
Wal Mart Stores	105
Malaysia	98
Israel	98
Columbia	96
Venezuela	87
Philippines	82

Source: Forbes Magazine 1998

Table 3. Top corporations had sales totalling more than the GDP of many countries in 1997.

Greater global market integration, facilitated by advances in technology and telecommunications, has intensified business competition and market complexity. This has increased the reliance on and influence of business in areas that were previously considered as a government responsibility (trade policy, energy production, health and environmental protection, etc.), making the role of business increasingly central to sustainable development.

## 2. Why Is It in a Business' Interest to be Environmentally Sustainable?

The technological and social changes of the last half of the century have had profound implications that will not be fully understood until well into the next century. Questions of where corporate responsibility begins and ends are being raised with increasing regularity. How companies respond to these questions of corporate responsibility will greatly affect their “social license to operate”—the social trust and flexibility needed to operate and adapt to change—and, consequently, their profits and survivability.

There are also more immediate reasons why it is in a business' interest to be more

environmentally sustainable:

- **Good Management Practice.** Over the last ten years, sound environmental management has become synonymous with good business management. Preventing or reducing wastes, emissions, and discharges, using less toxic chemicals, and improving energy efficiency—a preventive approach called “cleaner production” or “eco-efficiency”—is now widely recognized as more cost-effective and efficient than the “end-of-pipe” control and treatment measures of the 1970s and 1980s. Sound environmental management is increasingly becoming a business advantage in an increasingly competitive market, not only more efficient environmental practices but also through market recognition schemes such as ISO 14000 environmental management standards (UNEP has produced a training manual on “Environmental Management Systems” to help companies develop ISO certifiable environmental management systems.) and eco-labelling schemes (UNEP has produced a useful guide to ecolabels in the tourism industry—one of the world’s fastest growing industries—“Eco-labels in the Tourism Industry”, 1998).
- **Government policy.** Regulation and economic incentives are undisputed key factors that stimulate companies to higher levels of performance and help establish a more “level playing field” of standards for all companies to meet. Companies have an incentive to establish a good record of behavior to limit the need for regulators to inspect, to avoid future penalties, liabilities and legal costs, and to establish the trust and confidence needed for more flexible regulatory and voluntary methods in achieving future sustainable development challenges.
- **Public opinion.** New information and communication technologies, combined with growing public concern about the environment, make it increasingly important for companies to be doing and to be seen doing “the right thing.” A negative public image can affect a company’s market share, regulator and community relations, investor confidence, and ability to attract future employees.
- **Financial drivers.** In the future, it is going to be increasingly difficult for companies without sound environmental management practices to get a bank loan or insurance. Financial institutions and insurance agencies have a financial self-interest in ensuring that companies are integrating environment and other sustainable development concerns into their core decision-making processes. Some 150 banks and 85 insurers have joined UNEP in a partnership to integrate sustainable development principles into their activities. (see Table 4 for the statement signed by many of the world’s leading banks). Similarly, investors are also becoming increasingly interested about the environmental management of the companies. In 1999 the Dow Jones and Sustainability Group launched a sustainability indicator and selected the top 200 “sustainable” companies from the 3000 companies from 33 countries listed on the Dow Jones Index.

<p>We members of the financial services industry recognize that sustainable development depends upon a positive interaction between economic and social development, and environmental protection, to balance the interests of this and future generations. We further recognize that sustainable development is the collective responsibility of government, business, and individuals. We are committed to cooperating with these sectors within the framework of market mechanisms toward common environmental goals.</p>	
<b>1.</b>	<b>Commitment to Sustainable Development</b>
1.1	We regard sustainable development as a fundamental aspect of sound business management.
1.2	We believe that sustainable development can best be achieved by allowing markets to work within an appropriate framework of cost-efficient regulations and economic instruments. Governments in all countries have a leadership role in establishing and enforcing long-term common environmental priorities and values.
1.3	We regard the financial services sector as an important contributor towards sustainable development, in association with other economic sectors.
1.4	We recognize that sustainable development is a corporate commitment and an integral part of our pursuit of good corporate citizenship.
<b>2.</b>	<b>Environmental Management and Financial Institutions</b>
2.1	We support the precautionary approach to environmental management, which strives to anticipate and prevent potential environmental degradation.
2.2	We are committed to complying with local, national, and international environmental regulations applicable to our operations and business services. We will work towards integrating environmental considerations into our operations, asset management, and other business decisions, in all markets.
2.3	We recognize that identifying and quantifying environmental risks should be part of the normal process of risk assessment and management, both in domestic and international operations. With regard to our customers, we regard compliance with applicable environmental regulations and the use of sound environmental practices as important factors in demonstrating effective corporate management.
2.4	We will endeavor to pursue the best practice in environmental management, including energy efficiency, recycling, and waste reduction. We will seek to form business relations with partners, suppliers, and subcontractors who follow similarly high environmental standards.
2.5	We intend to update our practices periodically to incorporate relevant developments in environmental management. We encourage the industry to undertake research in these and related areas.
2.6	We recognize the need to conduct internal environmental reviews on a periodic basis, and to measure our activities against our environmental goals.
2.7	We encourage the financial services sector to develop products and services, which will promote environmental protection.
<b>3.</b>	<b>Public Awareness and Communication</b>
3.1	We recommend that financial institutions develop and publish a statement of their environmental policy and periodically report on the steps they have taken to promote integration of environmental considerations into their

	operations.
3.2	We will share information with customers, as appropriate, so that they may strengthen their own capacity to reduce environmental risk and promote sustainable development.
3.3	We will foster openness and dialogue relating to environmental matters with relevant audiences, including shareholders, employees, customers, governments, and the public.
3.4	We ask the United Nations Environment Programme (UNEP) to assist the industry to further the principles and goals of this Statement by providing, within its capacity, relevant information relating to sustainable development.
3.5	We will encourage other financial institutions to support this Statement. We are committed to share with them our experiences and knowledge in order to extend best practices.
3.6	We will work with UNEP periodically to review the success in implementing this Statement and will revise it as appropriate.

*We, the undersigned, endorse the principles set forth in the above statement and will endeavor to ensure that our policies and business actions promote the consideration of the environment and sustainable development.*

Table 4. UNEP Statement by Financial Institutions on the Environment and Sustainable Development

- **New opportunities.** “It is not the strongest species that survive, nor the most intelligent, but the ones most responsive to change” (Charles Darwin, 1859). Sustainable development generates new markets, new technologies and new partnerships. These may be catalyzed by a combination of the above drivers—public opinion and government policy, for example, may lead to the development of international agreements that then may lead to new markets and new partnerships for new technologies. Petroleum companies, for example, prompted in part by the climate change convention and the need to reduce future greenhouse gas emissions, are strategically redefining their business from oil to energy and investing in renewable energies such as solar, hydrogen, and biomass. New business alliances or partnerships between governments, automobile or “transport” companies, and energy producing companies are being formed to develop the emerging technologies, such as fuel cells and photovoltaics, to use cleaner energies. Multinational corporations are working with small and medium sized suppliers to raise the environmental and social standards of their supply chain. Companies that fail to register such opportunities may soon find themselves overtaken by events and their more responsive competitors.

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## Bibliography

United Nations Conference on Trade and Development (UNCTAD) (1999). *The World Investment Report*. Geneva, New York: UN Publications. [This provides an annual review of world investment flows and stocks.]

United Nations Development Programme (UNDP) (1998). *Human Development Report*. New York and Oxford: Oxford University Press. [This provides an annual review of human development indicators in all countries.]

United Nations Environment Programme (UNEP) (1998a). *Financial Services, and the Environment: Questions and Answers*. [Frequently asked questions and their answers to how financial institutions can integrate environmental issues into their activities.]

United Nations Environment Programme (UNEP), (1998b). *Ecolabels in the Tourism Industry*. [A comparative study of different label schemes being used in several countries to promote environmental tourism.]

United Nations Environment Programme (UNEP) (1999). *Global Environment Outlook 2000*, London: Earthscan Publications Ltd. [This provides a review of the state of the global environment and priority issues to be addressed.]

United Nations Environment Programme (UNEP)/Sustainability (1997–1999). *Engaging Stakeholders Publications* (1997). *The Benchmark Survey* (1998). *The CEO Agenda* (1998). *The Non-Reporting Report* (1998). *The Social Reporting Report* (1999). *The Internet Reporting Report* (1999). *The Oil Sector Report: A Review of Environmental Disclosure in the Oil Industry*. [This provides a comparative study of corporate environmental reports and addresses key issues in the field of environmental reporting.]

United Nations Environment Programme (UNEP)/International Chamber of Commerce (ICC)/International Federation of Consulting Engineers (FIDIC) (1997). *Environmental Management System Training Resource Kit*. [This is a “train-the-trainers” manual to teach environmental management systems.]

## Biographical Sketch

In July 1998, **Jacqueline Aloisi de Larderel** was nominated Director of the Division of Technology, Industry, and Economics of the United Nations Environment Programme (UNEP). Mrs. Aloisi de Larderel joined UNEP in March 1987, as Director of the Industry and Environment Center, with the mandate of bringing together industry, government, and non-governmental organizations to work towards environmentally-sound forms of industrial development. She has been particularly active in promoting environmental management tools and the Cleaner Production concept to prevent pollution and minimize the use of natural resources. Before joining UNEP, Mrs Aloisi de Larderel was employed from 1972–1987 by the French Ministry of the Environment, initially as Head of the Waste Division, then as Deputy Director of the Pollution Prevention Directorate. Prior to this, she worked with SEMA/OTAM, a French consulting firm specialized in urban planning and technology forecasting, where she was responsible for developing an environment unit. Mrs. Aloisi de Larderel holds a Master of Science degree in Chemistry and Pharmacology from the University of Paris and Master of Business Administration from INSEAD, the European Institute of Business Administration. She is a Fulbright Scholar. In 1986, she received the title of Chevalier dans l'Ordre National du Mérite and, in 1995, received the Rene Dubos Center's Environmental Award. Mrs. Aloisi de Larderel was born in 1942 in Orléans, France. She is married with two children and currently resides in Paris.