

## Financing Change: The Financial Community, Eco-Efficiency and Sustainable Development

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### 1. Executive Summary

In this book we pose a question, attempt an answer, and in the process make tentative proposals on how financial markets could begin to support the goals of eco-efficiency and sustainable development.

#### The Question

Are the world's financial markets and those who work in and around them a force for sustainable human progress, or are they an impediment against it?

This question recognizes the critical role played by financial markets in the way we organize our commercial, industrial, and personal lives. It acknowledges that any form of development-sustainable or not-must be financed largely by these markets.

There is sufficient evidence to support the view that many of our current activities are not sustainable in the long term and that they stifle opportunity for a sizable proportion of the world's fast-expanding population.

This realization leads to two further, fundamental questions: Do the financial markets encourage a short-term, profits-only mentality that ignores much human and environmental reality? Or are they simply tools that reflect human concerns, and so will eventually reflect disquiet over poverty and the degradation of nature by rewarding companies that treat people and the environment in a responsible manner?

#### The Answer

Although the question is succinct, the response is inevitably more complex. In an attempt to find answers, we examine both the workings of the financial markets-established and emerging-and the roles of different key players in the financial community.

We look at how these players are responding to environmental demands on their professions. The findings are mixed, but we detect enough encouraging activity to refute in part the received wisdom that the financial community is, at best, ignorant of the idea of sustainable development or, at worst, dismissive of it.

Not only are the players more aware of the issues than their critics claim, but many of them are grappling with the complexities of the debate. Some, like insurers, if only for reasons of self-preservation, are beginning to take steps to guarantee that their activities contribute to rather than hamper progress toward a sustainable future.

**Company leaders**-chief executives, board-level directors, and owners-have been the first to feel the effects of environmental change. Consequently, most large concerns have become more eco-efficient that is, they add ever more value while using fewer resources and producing less pollution. Because of their broad level of responsibility company leaders have had to understand and accommodate the sometimes contradictory needs of their key stakeholders and then forge strong relationships with them. We find that those who run small and medium-sized businesses need to catch up fast, however.

We urge company leaders to build a sustainable development reflex into corporate activities, so that when the markets come to reward eco-efficiency more systematically, company leaders will have their strategies in place, their teams trained and fit, and their stakeholders loyal.

Mainstream **investors** in equities (stocks or shares) largely dismiss environmental concerns because they are seen as moral issues outside their realm. Those in the financial community who are contracted to manage funds for others point to their legal duty to maximize returns on investments without reference to the morality of environmental damage or social justice.

Even so, we find evidence of change. Investors are beginning to look at the environmental costs and potential environmental liabilities of companies and how these affect share performance. A small but vocal minority of investors and their agents are beginning to broaden their interpretation of fiduciary duty. Some are beginning to question the nineteenth-century definition of prudence and are looking for ways to incorporate society's current concerns. Already, some pension funds are allocating small sums to be invested in socially important but financially risky projects. And so-called ethical investors are using their position in the markets to create a dialogue with company management on the importance of eco-efficiency.

Ways must be found to help markets better understand the environment, probably by putting a price on it. This can be achieved by policies that emphasize market mechanisms, such as tradable emissions certificates. More broadly, and in the interests of efficient markets, "owners" of capital who are now remote from the workings of their capital—such as pensioners and shareholders—should be supplied with the necessary information so that they can influence those who make decisions on their behalf.

**Bankers** know that under certain circumstances they can be held responsible by society, through the legal system, for the environmental wrongs of their borrowers. To limit their risk, bankers are beginning to consider eco-efficiency in their lending decisions, on the assumption that companies with a bad environmental performance pose a high financial risk. They are beginning to understand that a company's creditworthiness depends more and more on its eco-efficiency.

Leading banks have largely mitigated their own environmental risk exposure, but we suggest that bankers now look more closely for opportunities to provide financial products and services that help others reduce their risks too.

**Insurers** have already suffered direct financial damage from environmental problems. Claims against general liability policies for damages from asbestos exposure and hazardous waste dumping in the United States are estimated to cost the insurance industry \$2 trillion. Now insurers are worried about the possibility of climate change and how this could, in the future, damage their business. Some in the industry argue that insurers should recognize that their interests are different from those who sell carbon fuel or use it in large quantities—the so-called carbon club. One view now gaining support in the industry is that insurers should lobby for policies that reduce the risks of climate change.

We recommend that the insurance industry use its experience with hazardous waste as a model for how to deal with the threat of climate change. At the very least, this industry should recognize that its interests are different from those of the more vocal and politically astute in heavy industry.

**Accountants** know that many of their colleagues in the financial community are looking to them to devise systems that put numbers to environmental risks and opportunities. Auditors, especially, are aware of their role in verifying that company accounts truly reflect a company's viability in a changing world. But accountants are caught in a difficult position. They can play only according to the rules of the game, which exclude most environmental concerns. They realize, too, that it is their job to find a way of valuing what society values—and this means putting a price on those things that are now considered external to the accounts, such as damage to common resources.

Some on the academic side of the accounting profession are highly articulate on sustainability and have already provided sound ideas on how the profession can accommodate this concept. Some practitioners, especially those advising companies involved in mergers and acquisitions, have been quick to identify environmental risks that devalue companies, and these decisions have been reflected in the markets.

We suggest that accountants strive to help eco-efficient companies communicate their progress (and the business benefits) to the markets, and then help the markets understand the benefits so that they can, bestow the necessary rewards.

Accountants could be helped by **raters**—those who judge the creditworthiness of companies and countries, and who are slowly beginning to include environmental issues in their judging process. Their slow progress has provided an opportunity for others who have been experimenting with ways to put a price on the environment, and with how to make life easier for their colleagues in the financial community who might need that information.

We see opportunity for eco-efficient companies to communicate their progress to the markets through ratings. We think it probable that traditional ratings agencies will make even greater efforts to reflect environmental risk in their products. We urge them to identify opportunities too.

Our society and its financial markets are caught between the short-term tendencies of individuals and civilization's longer-term need to sustain itself. Society must take a longer view and create the necessary frameworks to reward businesses for adding ever more value while using fewer resources and producing less pollution. Only then can society expect the markets to support sustainable development.

## 2. First Chapter:

### ECO-EFFICIENCY AND THE FINANCIAL MARKETS

*Will financial markets soon be systematically rewarding environmentally successful companies while penalising offenders? Some serious people think so.*

—*Institutional Investor*,  
March 1995

This book addresses a burning question that almost no one seems to be asking: Are the workings of the world's financial markets—stocks, bonds, debt, currency instruments—and the financial community a force for sustainable human progress, or are they an impediment against it?

In other words, do the financial markets encourage a short—terms, profits—only mentality that ignores much human and environmental reality? Or are they simply tools that: reflect human concerns, and so will eventually reflect concerns over poverty and the degradation of nature by rewarding firms, and projects that increase equity of opportunity and that rationally manage environmental resources?

These are crucial questions. The world stock market capitalization (the sum of all stock markets) at the end of 1994 totalled more than \$15 trillion (\$15,000 billion)—more than 2.5 times the gross national product (GNP) of the United States. The world bond market at the end of 1993 held more than \$16 trillion in publicly issued debt. It is a little frightening not knowing whether such vast sums are working for or against sustainable progress.

There are several other closely related reasons why these questions need early answers.

First, the world's population is growing rapidly and may double to more than 11 billion sometime next century unless serious measures are taken to slow the increase. And there are roughly 1 billion very poor people on the planet today. The concept of sustainable human progress has come to be summed up in the ideal of "sustainable development", best defined as a style of progress or development that "meets the needs of the present without compromising the ability of future generations to meet their own needs".

Obviously, economic "no growth" is not an option if the needs of the present poor or of future, larger, generations are to be met. The World Commission on Environment and Development (WCED) argued that sustainable development does imply limits—"not absolute limits but limitation imposed by the present state of technology and social organization". Growth, then, will. have to be extremely "eco-efficient," a term the Business Council for Sustainable Development (BCSD) coined to describe a process of adding ever more value while steadily decreasing resource use, waste, and pollution.

Second, major investments are being made now that will determine the sustainability of today's economic growth: investments in energy, transport, agricultural, water, and sewage systems. Asia (excluding Japan)—perhaps the fastest growing "developing" region on earth—needs to invest about \$1 trillion (\$1,000 billion) in its infrastructure between 1994 and 2004, with about 70 percent of this total being power—and transport—related, according to an estimate by Standard & Poor's. Much of this capital must come from the financial markets: the equity markets, bond markets, and the banks. But will these investments reflect environmental realities? To take one example, coal has traditionally offered the lowest costs for generating electricity. Yet burning coal also emits a large amount of carbon dioxide (CO<sub>2</sub>). A great many of the power plants being planned and financed in Asia are traditional coal ones at a time when the governments of the world have agreed to stabilize their CO<sub>2</sub> emissions at 1990 levels by the year 2000.

Third, sustainable development means passing along to future generations certain stocks of environmental capital: productive topsoil, clean air, predictable climate, an intact ozone layer, fertile forests, abundant fish stocks, and genetic diversity of both plants and animals. Scientists warn that all these resources are under threat by the activities of the present generation. Again, to cite but one example, over the past century the extinction rates among plant and animal species have risen to 100 to 1,000 times "natural" or "background" rates. These human—caused extinction rates are expected to accelerate, even without global warming. What, if anything, can the financial community do to reverse such trends?

Fourth, more than 3 billion people in Eastern Europe, Asia, and Latin America are changing from more or less centrally planned economies to market economies. If economic growth continues to follow patterns predicted by the World Bank for the coming decade, by the year 2020 the present "rich world" share of global output could shrink to less than 40 percent from more than 55 percent today, measured in terms of purchasing power parities. By then, China, India, Indonesia, Brazil, and Mexico will be on the list of the world's 15 biggest economies. All are countries with high population growth rates; in all, natural resources are already under great pressure. In a warning that could apply to several other rapidly developing nations, the World Bank reported to Indonesia in 1994 that growing pollution and congestion in its main urban centers could make it "increasingly difficult for Indonesia to compete for foreign investment, especially in the higher technology industries needed to enhance the productivity of the labor force". How can these countries see to it that the financial markets back projects that favor sustainable, long—term progress rather than a "get—rich—quick" approach?

Fifth, "socialism" appears to be dead. The "market" is taking over as the determiner of the direction of investments. Markets are being deregulated; they are becoming global, which severely limits the ability of individual governments to control them; and goods and services once provided by governments are being privatized. Private investment has taken over from "foreign aid" as the main mover of capital into the developing world. Let us look at some figures.

Flows of private capital to developing countries quadrupled between 1986 and 1994, by which point they had reached more than \$170 billion a year, according to the World Bank. This included such things as foreign direct investment (such as investment by foreign companies into joint ventures), private debt (such as loans by commercial banks or proceeds from the sale of bonds internationally), and portfolio equity investment (such as purchases of shares by pension funds or mutual funds).

The Organisation for Economic Co-operation and Development (OECD) put the 1994 flow of official development assistance (ODA) from members of its Development Assistance Committee (most of the world's aid-giving countries) at \$57.3 billion. For the fourth, consecutive year, private flows rose and official flows fell in real terms. These trends are expected to continue. An international group of development charities reported in 1995 that ODA that year represented a smaller proportion of wealthy nations' GNPs than at any time over the past 20 years. Should the U.S. government follow through on some U.S. lawmakers' efforts to slash its aid budget, the decline would accelerate sharply. Given that other countries, such as Canada, are threatening to follow the U.S. lead, "foreign aid" as traditionally practiced may be virtually over.

Governments, both donor and recipient, have never really managed to make aid flows environmentally sound. But at least with these government-to-government transfers it is clear that this responsibility lies with governments. How are the environmental quality and sustainability content of the

new private investment flows to be assured? This is an important issue because, according to Brad Gentry at Yale University's Center for Environmental Law and Policy, "these private investments are often made in projects with immediate environmental implications, such as privatizations of government-owned manufacturing enterprises; concessions to private developers of power, water, transportation and other infrastructure facilities; joint ventures for the operation of existing or the construction of new manufacturing plants; as well as energy and natural resource projects". Thus if the market is taking over from governments as the coordinator of human progress, it is crucial that the market tend toward sustainability.

There are even those who argue that the increasing power of financial markets is actually threatening the power of national governments. According to British journalist Hamish McRae:

The rise of the Power of the financial markets, together with their increasingly international nature, has inevitably reduced the power of the individual national governments. They have to frame their economic policies with an eye to the way these will be received by the world's financial community. If they fail to do so, they will be punished by either a run on the currency or higher interest rates, or both.

### Seven Key Assumptions

To some readers, worrying about how the financial community can support sustainable development will seem as farfetched as wondering how stock market results can help them pick horse race winners. But as we make clear in part 11, such work is already being done within all sectors of that community. Our purpose is largely to report the current efforts of market players.

But first we want to set out some thoughts on how difficult such work can be. There are seven suppositions that helped us think about the questions asked in the preceding section. We do not offer these as truths, or even as strong beliefs, but as assumptions that emerged in our discussions with experts as we researched this book. Taken together, they are worrying, and suggest how much change will be required before financial markets encourage, rather than discourage, sustainable development.

- Sustainable development requires investments with long payback. Financial markets seek short-term payback.
- Efforts toward eco-efficiency by a company often reduce present earnings in favor of future potentials. Financial markets favor companies with high present earnings over those with future potentials.
- Given low resource prices and the ability of businesses to keep costs for much environmental damage "external" to their own balance sheets, the profitability of becoming eco-efficient is reduced. Eco-efficient companies are often not preferred by financial markets.
- Sustainable development requires massive investments in developing countries. Financial markets put a high risk premium on investments in developing countries.
- High taxes on employment encourage labor productivity, thereby enhancing unemployment, while low resource prices discourage resource efficiency.
- Accounting and reporting systems do not adequately convey potential environmental risks or opportunities. Financial markets are compelled to make decisions based on biased information.
- Sustainable development is concerned with the importance of the future. Financial markets discount the future routinely and heavily.

We shall be dealing with these assumptions at various places in subsequent chapters, and return to them specifically in part III, The Scorecard.

No discussion of the relationships between markets and sustainability would be complete without reference to some academic work that seems to suggest that markets virtually always work against sustainability. In 1976, Colin Clark's *Mathematical Bioeconomics: The Optimal Management of Renewable Resources* was published as a volume in a series on pure and applied mathematics. Clark was particularly concerned with the concept of maximum sustainable yield (MSY). This is the highest number of trees, fish, nuts, or any other renewable resource that can be harvested year after year. If you harvest any more, the resource cannot produce such a high annual "surplus". But harvest any less and you are below the maximum. The MSY is essentially the highest "interest" to be gained from a renewable resource.

Clark has a great deal to say about the limits of the MSY approach, but he offers a hypothetical case early on. Assume there are 75,000 blue whales in the oceans, and that the MSY is 2,000 whales per year. Imagine for simplicity's sake that only one company can hunt this stock, and that each processed whale has a market value of \$10,000. By whaling sustainability—2,000 whales a year—the company would produce an annual revenue of \$20 million.

Now assume that it is possible for the company to catch all 75,000 whales in a single year, producing a lump sum revenue of \$750 million. If this were invested at a modest rate of return of 5 percent a year, it would yield an annual return of \$35.7 million, considerably above the \$20 million figure and without the inconvenience of whaling. Although this is a simplistic model, in 350 pages of highly mathematical discussions of the complexities of market elasticity, discount rates, and so on, Clark shows that: the basic findings remain the same for most renewable resources.

Basically, the profitability of harvesting a renewable resource rarely encourages sustainable harvesting; it stimulates the opposite, even where there is a single owner and no poorly controlled competition, as in most fisheries today. To make matters worse, the MSY of long-lived, slow-reproducing species such as whales or tropical hardwoods is very low, on the order of 2 percent. Only short-lived, fast-reproducing species such as shrimp have an MSY beginning to equal market interest rates. The large unpredictable fluctuations of some stocks, such as many fish species, also encourage exploitation sooner rather than later.

"The argument illustrates one of the fundamental aspects of the economics of resource management," Clark wrote. "The owner of a resource stock tends to view that stock as a *capital asset*; this is equally true for exhaustible resources and for renewable resources. He expects the asset to earn dividends at the 'normal' rate of return; otherwise, the owner would attempt to dispose of the asset". He adds that this result may be thought of as "the first fundamental theorem of resource economics", and was developed as early as 1931.

Today this syndrome is best seen in the activities of many international logging companies, which acquire from governments the rights to log natural forests at prices far below any reasonable market rates. One study of this phenomenon found that although obligations to reforest presented liabilities, they rarely appeared on balance sheets, and in fact frequently the obligations were ignored. Given the companies' windfall profits and few announced liabilities, their shares have performed extremely well over the past few years. It is not clear whether the shareholders understand the unsustainable nature of the companies' activities—from both a profitability and an ecological point of view—and are poised to sell out before windfall profits cease. But it is clear that the globalization of investment flows is speeding the destruction of natural forests.

## Business and the Environment

Yet the picture may not be as bleak as we have suggested. Although concern about the relationships between the financial markets and sustainable development is still very much in its infancy, it is growing. Even more important, a number of business leaders, investors, analysts, bankers, insurers, accountants, and raters have moved beyond a focus solely on downside risk toward one of taking advantage of upside opportunities. In each sector, a few actors are making a good business out of society's search for sustainability.

In the rest of this chapter we examine how these sustainability issues got onto the agendas of business in general and of the financial community in particular. To do so, we must look at how the business view of "the environment" has changed rapidly over the past decade.

Until fairly recently, the environment was discussed as something separate from human activities except where those activities damaged it. A small minority—often referred to as environmentalists—were deeply worried over that damage; the vast majority were not. Businesses' concern for the environment expressed itself through efforts to comply with environmental regulations and to lobby against them.

During the eighties, increasing evidence of global carbon pollution, ozone depletion, and the loss of species, forests, and fertile soils suggest that environmental damage was more global and more serious than previously expected. It also became clear that the environment was not a place outside of the human sphere but rather a set of processes affected by all human activities: business, manufacturing, consuming, farming, fishing, mining, and so on. Thus the old battle between those championing the environment and those advocating "development" began to die down slightly when the two goals were seen more and more as inseparable sides of the same coin. It became harder to worry about the natural environment and not be concerned about people's needs and aspirations. It also became harder to worry about people and not be concerned about their impact on the natural environment.

This new view was best encapsulated in the concept of sustainable development. Since the modern form of the concept (an idea as old, in fact, as the earliest hunter-gatherer societies) emerged in the mid-eighties, there have been many books written and organizations established on sustainable development. There is broad agreement that it is not a goal restricted to "developing" countries. All nations are developing in the dictionary sense of "evolving the possibilities of", and many industrial nations are evolving their possibilities in ways that make the planet less sustainable, both because of consumption patterns there and because of their release of global pollutants.

Yet the concept remains ill defined. It is much more obvious in the negative than the positive. Present rates of population growth appear unsustainable, but it is less clear what a sustainable human population might be. We may be burning too much coal, oil, and gas for the climate's sake, but it is not clear precisely what a sustainable energy path might be.

Imprecise as it is, the concept is very powerful. People instinctively feel that the first duty of parents is to provide for their children. Unsustainable development is the opposite; it means that the present generation takes resources away from future generations. It is stealing from our children.

The idea of sustainable development has been an effective force in bringing new groups into debates about progress and the environment. A growing number of economists are busy defining sustainability in economic terms. Jurists are wrestling with the legal basis for equity between this generation and those to come. Some politicians worry about how the craft of politics can be made to peer beyond the next election to concern itself with the needs of our progeny.

Business has been slow to come to terms with sustainable development, partly due to a traditional resistance toward organized forms of environmental concerns and partly due to an inability to see what business has to do with the non-market needs of people today or the necessities of people in the future, who do not participate in today's markets.

But business is beginning to take an interest in these issues. The journal *Tomorrow* recently listed 40 organizations bringing businesses together for environmental and sustainable development purposes. It even gave these bodies their own acronym: GBN (Green Business Network). Business is also taking part in many organizations that combine leaders from the corporate world with those from politics, science, and other non-business groups; examples of these include the (U.S.) Presidents Council on Sustainable Development and the Round Tables on the Environment and the Economy in Canada.

Business has made progress in grappling with these issues along what can be seen, with hindsight, as a predictable path. First came the more progressive companies in sectors with the most obvious environment/development concerns: multinational chemical and energy companies and the big manufacturers. Retailers got involved next, largely in response to "green consumerism." Then big service companies realized that they were not immune, given their use of energy, paper and transport.

In the financial community there had long been a few "green investment" services offering portfolios containing the shares of companies not associated with excessive pollution or misuse of environmental resources. But the first mainstream concern in the sector came from insurance companies being hit by cleanup costs for contaminated industrial sites and by costs of damage from what seemed to be an alarming rise in weather—related natural disasters. (See chapter 6.)

Most banks resisted engagement in the issue, arguing that they use virtually no natural resources and emit little pollution. When the BCSD first started looking for members in 1990, it could not find a single banker in the industrial world willing to join. (In 1995, the BCSD merged with the World Industry Council for the Environment (WICE) to become the World Business Council for Sustainable Development (WBCSD). It is affiliated with all national BCSDs.)

Since then, however, a series of U.S. court cases suggested that banks might be held responsible for the environmental damage to industrial sites caused by companies in which the financial bodies had certain types of ownership or management functions. (See chapter 5.) These rulings concentrated the minds of the international banking community profoundly. By the beginning of the U.N. Conference on Environment and Development (the Earth Summit) in June 1992, bankers had produced, and many had signed, an international "Statement by Banks on the Environment and Sustainable Development". (See appendix.)

Just as different companies and sectors of business have been drawn into environmental concerns at different times, depending on their circumstances, so too have officers within companies. Most firms first tried to contain the environment in a special environmental office". It soon became apparent that this was as unworkable as the political approach of creating a weak Ministry of the Environment, and then holding it responsible for the damage done by the more powerful Ministries of, for example, Transport, Industry, Mining, and Agriculture. So in progressive companies, the chief executive officer (CEO) became in practice also the chief environmental officer.

The task then became one of getting the CEO's new environmental concerns spread throughout the firm. Much has been written about this process in different companies. But it is intriguing to note that it is apparently easier to inculcate environmental thinking into the work force than into financial directors. The U.S. manufacturing company 3M is famous for drawing from its work force over the past 20 years ideas for more than 3,000 pollution—prevention projects, which have saved the company more than \$500 million. It is not hard to see why workers were ahead of the financial officers. Most have a daily close-up view of corporate resource waste and pollution. Once asked to consider these problems—and appropriately rewarded for doing so—they are perfectly placed to provide sound ideas.

Only much more recently have company financial officers begun to take an interest in sustainable development issues. These individuals are, traditionally cut off from environmental concerns that do not get on the balance sheets. A report of the One Hundred Group of Financial Directors (the financial officers of the 100 top British companies) argued that this has been largely because of the difficulties of quantifying and measuring the costs of these risks and the costs and benefits of avoiding them. But the report warned that companies lax in these matters can cause investors and banks considerable losses.

For much the same reasons, sustainable development concerns have been slow to infiltrate the financial markets. The general view is, "If we can't measure it, don't tell us about it".

Pick up any textbook on financial markets and banking and look in the index; you are unlikely to find an entry for the "environment" or "liabilities, environmental." (This was also true for the majority of business texts published before about 1990; now most of them have a lengthy list of subheadings under "environment".)

As we researched this book, we spoke to many members of financial market firms, basically asking them how they or their companies lined up in terms of environmental or sustainable development issues. The first reaction was usually surprise. This gave way to what looked a little like fear—a fear that the financial community was going to be dragged into the same messy environmental discussions and publicity that have affected other businesses.

Not only do investment banks, stockbrokerage firms, and most other financial market institutions not release toxic wastes, they do not foreclose on firms owning contaminated property and face the associated

financial liabilities. Environmental risks are hard to quantify in such businesses, and it is only now becoming obvious why merchant bankers and stockbrokers should bother to look at such numbers for businesses they are considering investing in.

"We are not a major devourer of natural resources like a chemical company or a paper company", said a spokesperson for a global stockbrokerage firm, when asked if they had an environmental policy. "But we have policies on most things, so I suppose we must have an environment policy," he added. In contrast, Salomon Brothers, the investment bank, has complex programs on recycling, waste reduction, energy efficiency, environmental education, and environmental financial risk management.

But most of the market participants' answers to the question of the relationship between sustainable development and the financial community can be summed up in yet another question: "Why should I care?" One purpose of this book is to offer some practical answers to that question.

One answer, but far from the most important one, is that environmental groups are now trying to achieve their goals by putting pressure on the financial community.

Some groups have protested against Initial Public Offerings on stock (IPOs). In 1993, a consortium of environmental pressure groups tried to dissuade fund managers from investing in an offering of Barito Pacific, an Indonesian timber company. (See chapter 4.) After its 1994 annual meeting, Greenpeace International announced that it was going to spend more effort influencing the public and private cash flows for projects that affect the environment. The organization did not make clear how it intended to do this, but earlier that year it had started issuing press releases and writing to investment companies when it saw a market event that it considered harmful.

In October 1994, for example, Greenpeace warned European fund managers about plans to float a polyvinyl chloride company, European Vinyls Corporation (EVC), on the Amsterdam stock exchange. The group, which has campaigned against the use of chlorine, argued that "environmental concerns are fundamental to EVC's market prospects and profitability and that ignoring these concerns could be ruinous for investors and the company itself". Thus when it involves itself in the markets, Greenpeace wisely emphasizes financial damage rather than environmental damage. The group has also organized several meetings with insurers, bankers, and other financial people, mainly to warn them about investments that could accelerate climate change.

"And of course we still have our in—the—street confrontational tactics," said a Greenpeace representative. "The commercial banks, which rely on the general public for business, would be deeply embarrassed by that sort of bad publicity." I quote Greenpeace a number of times in this book, not because we necessarily agree with them, but because they have been by far the most sophisticated green group in trying to get their issues onto the agenda of the financial community.)

When Michael Heseltine was president of Britain's Board of Trade, he told the British financial community in a 1992 lecture: 'Sooner or later, even the most naive environmentalist is going to grasp the extent to which companies, who are their most accustomed targets, operate within a context set by shareholders, lenders and insurers. At that time, the green searchlight will be turned directly on the way in which you discharge your environmental responsibilities.'

Thus for various reasons, commercial banks, investment banks, insurers, and others in the financial community who are apparently far from the front lines of environmentalism are now being drawn into the fray. But how far can businesses go in promoting sustainable development and still be acting as businesses?

## **Eco-efficiency Versus Sustainability**

Business has only a relatively narrow band in which to modify its environment—affecting activities. Too little action, and a company may not be complying with regulations. But too much action, and it may be spending money in ways that weaken its competitiveness. Many companies that are driven more by values than by strict profit considerations will go ahead and spend some of that money to move beyond

compliance". But there are tight limits, even for such companies; a business that does not make money ceases to be a business.

Thus most of the impetus for progress toward sustainable development must come from voters, the governments they elect, consumers, parents, and citizens' groups. All of these will have to cooperate to build a new societal framework in which business will act.

When the BCSD was formed to offer the 1992 Earth Summit a "business perspective", it faced the problem of finding something to say that made sense in terms of environment and development but that also honored the basic realities of the marketplace. Thus the 50 original members, all CEOs or equivalent, spent much of their report to the Rio conference advising governments on which policies and rules of the game needed changing.

It also held a contest to come up with a phrase that most neatly summed up the idea of sustainable development at the company level.

The winner was "eco-efficiency", which denotes both economic and ecological efficiency. According to the World Commission on Environment and Development, sustainable development "is not a fixed state of harmony, but rather a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development, and institutional change are made consistent with future as well as present needs". Much the same could be said for eco-efficiency: it is not a fixed state of harmony, but rather a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development, and corporate change maximize value—added while minimizing resource consumption, waste, and pollution.

But eco-efficiency should not be confused with sustainable development, which is a goal for society as a whole. Though it may also require some encouragement from society in setting frameworks, eco-efficiency is a task for each entity within society. It is even possible to have a world in which every company was becoming ever more eco-efficient and yet the planet's resource base was deteriorating due to population growth and the sheer increase in business and industry.

Virtually all companies cause pollution, if only through their energy use. The U.N. Conference on Trade and Development (UNCTAD) proposed a strict definition of a "sustainable business": one that "leaves the environment no worse off at the end of each accounting period than it was at the beginning of that accounting period". It then offered the obvious conclusion: It is perfectly clear that few, if any, businesses, especially in the developed economies, come anywhere near to anything that looks remotely like sustainability".

It went on to quote a number of multinational corporations that had come to grips with this fact. The Body Shop, a cosmetics company that trades on its green image, wrote, for example: "We challenge the notion that any business can be 'environmentally friendly'. This is just not possible. All businesses involve some environmental damage. The best we can do is clear up our own mess while searching hard for ways to reduce our impact on the environment".

UNCTAD had conducted a survey in 1994 among multinational firms on their views of sustainable development; the results were based on responses from 73 companies in 14 countries, mostly in Europe, but including South Africa, South Korea, Hong Kong, and Japan. The questionnaires were filled out by the officers most knowledgeable about environmental issues, usually the senior environmental managers. The results were extremely contradictory.

Eighty-two percent of the respondents said that their companies formally recognized sustainability; yet the majority of these "formal recognitions" did not define sustainability. Ninety-six percent thought it required a partnership approach among government, business, and society; 86 percent believed it meant tackling both social and environmental problems; and 82 percent found it compatible with the profit ethic. However, 59 percent believed that sustainability did not involve the needs of future generations; 45 percent said it was synonymous with environmental management systems; and 37 percent felt that their organizations had already achieved sustainability.

So although most companies state formally that sustainability is a "Good Thing," there is some confusion over what it actually entails.

"Over 70 per cent of respondents were influenced by, *inter alia*, the ICC [International Chamber of Commerce], Agenda 21 [the summary statement of the 1992 U.N. Conference on Environment and Development and the Rio Summit, their own company, books and economic journal articles, the media, the Brundtland [WCED] report, their national government, and professional or trade associations", UNCTAD reported. "Of these, easily the most influential were the first four", and environmental pressure groups were among the least influential. It also noted that the fact that the ICC's Charter for Sustainable Business does not actually mention or define sustainability "goes some way towards explaining what looks like naive understandings of the concept amongst many of the respondent businesses."

The survey also quoted, anonymously, some remarks of the respondents. The differences in views are striking; for example:

People need to get back to the old religion of making money and risking things. If industry went back to risking things, sustainable development would happen. (Italy)

The quest for economic growth, as demanded by national and international financial institutions, is the cause of much environmental and human exploitation. (United Kingdom)

Governments need to set clear, consistent, tax neutral and common sense targets for environmental performance and then give business the freedom to innovate and deliver the desired performance. This will lead to sustainability within a time frame of approximately 10-30 years ... ultimately there will be a new generation of products that will build a sustainable future. (Switzerland)

It does not pay to be sustainable. Good housekeeping saves money, but the pursuit of sustainability is beyond good housekeeping—and can cost. (United Kingdom)

The survey suggests that although most multinationals say publicly that they work toward sustainable development, few have decided how to make it a part of corporate strategies. This is hardly surprising, as sustainable development does require concern for future generations and for needs that cannot easily be met by market transactions. These are issues that business has just as much trouble with as anyone else. So business joins scientists, jurists, political leaders, philosophers, and environmentalists in agreeing that "it is unsustainable to be unsustainable" and in having difficulty figuring out what activities are "sustainable." Some company directors—the ones who have moved "beyond compliance"—are therefore working on "good housekeeping" or eco-efficiency and calling it sustainability because that is the current word.

## ***Beyond Environment***

One of several revolutions occurring in the world today might be called the "participation revolution." The communications part of the technology revolution allows people to know instantly what is happening in the far reaches of the globe. So children in New York hear of and to some extent care about what is happening in the rain forests of Brazil. This knowledge and concern lead people to want to participate—in more or less serious or trivial ways. The "green consumer" movement is just one example of this.

Many people want to take part in what business is doing in new ways, such as influencing what companies produce as well as how they produce it and how they treat their employees and their neighbors. This can be local or global—and business may be targeted through no fault of its own. When France announced in 1995 that it was going to resume nuclear weapons testing in the South Pacific, protesters in North America, Europe, and Australia organized boycotts against French products. A recent survey found that 75 percent of U.S. households were boycotting some products—nearly half of these because of displeasure with company policies.

In June 1995, Shell UK set out to dispose of a large oil storage buoy by sinking it in the deep ocean. It had the backing of the British government and many scientists, who had decided—after careful consideration of the environmental, safety, and economic considerations and of the toxic materials involved—that deep—water disposal was a better option than bringing the buoy to shore and dismantling it. Yet other European governments opposed the disposal plan, as did environmental groups and a large

segment of public opinion. The general public seemed to feel strongly that if they were being asked to recycle cans and bottles and not throw trash in waterways, it was simply not appropriate to drop such a very large oil installation into the depths of the ocean.

Shell UK gave up its disposal strategy and as of this writing was studying alternative disposal options. Future events may prove that, practically and scientifically, Shell UK was right in its original scheme. Its mistake—aside from building a large object without clear, agreed plans for its disposal or recycling—was in not taking into sufficient account the great mass of the European public who feel they have a say in Shell's operations.

In what may be a new trend, Shell was criticized not only by environmental groups but by other companies. The Danish biotechnology firm Novo Nordisk, as a signatory of the ICC Business Charter for Sustainable Development (which called upon signatories to take some account of their suppliers' environmental policies), issued a statement saying it objected in principle to the dumping of industrial wastes at sea. It urged Shell to inform its various "publics," including its business partners, about the logic of its disposal plan.

John Elkington, author of *The Green Capitalists*, wrote of the Shell case: "The controversy, which has been more about public perception of the environmental priorities than about ecological impacts, marks the emergence of a new era which requires business to focus on a triple bottom line: economics, environment and social equity."

Sustainable development does go beyond environmental management into issues of equity of opportunity, so that people both now and in the future have a greater chance of meeting their needs. Calling upon business to worry about equity of opportunity and future generations may seem farfetched, but in a sense business is already doing so. Several U.S. companies have been stung by reports revealing that their products are being made by children in what North Americans regard as "sweatshop" conditions. Children are certainly real-life representatives of future generations.

Child labor is an extremely complex issue, because in many developing countries the choice for a child might not be between making shirts and going to school. It may be between making shirts and taking tip prostitution or working in a quarry or a dangerous factory. It has been estimated that in 1993/94 between 30,000 and 50,000 children were thrown out of work in textile mills in Bangladesh because suppliers were worried about losing business. Many of those fired went into prostitution or welding jobs. But in business, public perception remains as important as reality.

The Boston—based ethical investment firm Franklin Research and Development estimates that less than 5 percent of U.S. retailers and branded—goods companies are getting involved in human rights issues, but these include some of the biggest and best known, such as Levi, Wal-Mart, Sears Roebuck, Reebok, The Gap, Nike, and Nordstrom. IKEA, the Swedish home products store, has decided the carpets it sells must be certified as made without child labor. The British—based National Provident Institution, which offers a selection of "ethical" investment programs, found in a 1995 poll of British consumers that concerns about modern slavery and abuse of workers' rights had risen above concerns for the environment and animal welfare.

In fact, many companies are involved in what might be called the "social" side of sustainable development, without labelling it as such. They usually call it something like "community relations." A recent survey in Britain of companies involved in community relations work found that in the eighties this was driven by just a few enthusiastic board chairs regarded as "dotty" by their peers. But "getting involved in community is no longer idiosyncratic philanthropy, not least because real commercial benefits have been seen to accrue from it," the survey concluded. It noted the case of the glass group Pilkington, which had pioneered community involvement in its region of Britain. This record was widely credited for the success of its defense against a hostile takeover in 1986-87 by a company that disdained corporate community involvement.

"Community involvement" was once restricted to big, Northern—based multinational companies. But now more developing—world companies are also practicing it. Aracruz Celulose S.A. of Brazil produces more than 1 million tons of bleached eucalyptus pulp every year from plantations on land in southern Brazil that had been deforested by farming and charcoal—making decades ago. But the company also plants 27

percent of its land area in native, noncommercial tree and plant species, in order to preserve ecosystems. It supplies seedlings to local farmers and buys back the wood, but it also gives seedlings out free so farmers can meet their own wood needs without destroying the native forests. Aracruz invested \$120 million to combat air and water pollution over 1992-95, and has secured international quality control certification. It has put a total of \$125 million into schools, hospitals, and housing in the region, both. Those used by its own workers and others. It even runs ecological programs to protect the reproductive cycles of five threatened species of sea turtles.

A lot of this work is enlightened local self-interest, such as trying to keep its workers and their families healthy and well educated. Aracruz also realizes that because it is involved in forestry work and running paper mills in the developing world, it will automatically draw the attention of environmental groups. Thus it needs to be cleaner than many timber operations and paper mills operating in the remoter parts of North America. It spends a great deal of money communicating its environmental and social programs to the rest of the world. As trade and markets become more open and global, a growing number of developing—world companies will pursue similar strategies.

### Coming to Terms with Eco-efficiency

In grappling with the immediate goal of eco-efficiency and the more ambitious and all—embracing goal of sustainable development, business groups have had to consider several complex issues. These include such things as internalizing environmental costs, the polluter pays principle, and greater use of economic instruments.

The concept of internalizing environmental costs has an important bearing on the relationship between financial markets and eco-efficiency. At the first BCSD meeting, in 1991, the group had difficulty knowing what advice to offer the 1992 Earth Summit, given the political, scientific, and financial uncertainties surrounding environment development issues. What could a group of CEOs, all of whom were dedicated to free and open market systems, helpfully say?

At this point, one member argued that, as the group favored open, competitive markets, it should recommend the internalizing of environmental costs, so that markets would better reflect environmental as well as economic truths. This provided the Council with a logical way into the debate.

The concept is simple, the reality much more complex. The idea is that the price of a good or service should reflect all the costs associated with it. For example, the cost of electricity from a coal—fired power station rarely reflects the costs of the damage done by the acid rain it causes, or the health problems related to its pollution. These are real costs. It has been estimated that every ton of sulfur dioxide emitted into the atmosphere in the United States causes more than \$3,000 worth of health—related damage in affected communities. Thus the sulfur dioxide emissions from midwestern coal—fired power plants cost society nearly \$25 billion per year. This figure is merely a rough guess, but it is clear that real money is involved and that someone must pay these costs, which have traditionally been "external" to the financial considerations of the utilities.

There appears to be an inevitable move toward more internalization of costs. In late 1994, Britain's Royal Commission on Environmental Pollution recommended that the price of gasoline should double over the coming decade. It said the cost of driving a car must increase because at the moment "it does not reflect the damage done to health and the environment. The Commission even suggested that new technology be used that would allow fuel pumps to "read" a car's technical data, so that a motorist driving a highly polluting car would pay more at the pump for its fuel.

As early as 1972, OECD members agreed to the polluter pays principle (PPP), which says simply that polluters should bear the full costs of any damage caused by their production of goods and services. The principle, though ever more widely accepted, has been unevenly applied. Indeed, governments even subsidize many forms of environmental damage, such as the overuse and misuse of water, energy, pesticides, and fertilizer. In early 1994, the German government renewed until the end of the century its subsidies for coal, which had been due to expire in 1995.

The BCSD has endorsed PPP and the notion of internalizing environmental costs. The Council wrote in its 1992 book *Changing Course* that "the cornerstone of sustainable development is a system of open, competitive markets in which prices are made to reflect the costs of environmental as well as other resources".

The Council went on to endorse the idea of a greater use of economic instruments as a way of achieving these goals. Traditionally, governments' main tool for achieving environmental goals has been command-and-control regulations; these often tell a company precisely what technology to use and precisely what can be emitted and in what quantities. There will always be a need for such restrictions in situations where major risks and uncertainties exist. Yet environmental goals may also be achieved through economic instruments such as taxes, charges, and tradable permits. Properly applied, such instruments can help meet four needs: "to provide incentives for continuous improvements and continuous rewards, to use markets more effectively in achieving environmental objectives, to find more cost-effective ways for both government and industry to achieve these same objectives, and to move from pollution control to pollution prevention," according to *Changing Course*.

A regulation requires a company to reach a certain standard and then do no more. A tax or charge on pollution or resource use encourages a company to become ever more eco-efficient by producing a steady effect on that company's profit and loss figures.

There is a growing consensus that the use of economic instruments is increasing and that—if the instruments are well constructed and combined well with other approaches—this is a good thing.

"One example of new approaches to environmental management is the increasing use in recent years of market-based instruments such as pollution charges, or user fees and taxes on environmental goods and services", noted a 1995 U.N. Environment Programme report. "The concept of using economic instruments to solve environmental problems is compelling: unless the pricing and market failures associated with environmental degradation are tackled, environmental policy will continue to work on the insufficient level of addressing the *symptoms* of environmental problems, without addressing the economic causes".

"Market based instruments are best in principle and often in practice," wrote the World Bank in 1992. "Most now agree that market based instruments have been under-utilized. They are particularly promising for developing countries, which cannot afford to incur the unnecessary extra costs of less flexible instruments that have been borne by OECD countries".

Business seems to agree. "Making market forces work to protect and improve the quality of the environment—with the help of performance, based standards and the judicious use of economic instruments in a harmonious regulatory framework—is one of the greatest opportunities that the world faces in this decade," wrote the International Chamber of Commerce in 1992.

Another "internalizing" activity is being carried out at both national and international levels as governments experiment with ways of making national accounts better reflect environmental reality. Standard national accounts (SNAs) follow internationally agreed rules so that they are comparable. Yet it has long been recognized that such activities as spending money on cleaning up pollution or treating people with illnesses caused by pollution increases GNP, and a growing GNP is often mistaken for "progress".

Money earned from harvesting natural resources also adds to the GNP, yet there is no accounting for the depletion of those resources, such as oil, timber, water, or topsoil. This approach should seem odd to anyone who thinks about it. It is like a person estimating how prosperous he or she is by looking only at income, not at net worth, not at assets such as a home or savings. It is perfectly possible to increase your income by selling off assets, but it is usually done only after careful consideration. Yet through such accounting devices as GNP, countries estimate how well off they are without considering how fast they are ploughing through key resources.

Individual countries such as Norway, France, and Japan have experimented with new forms, of national accounting that get around some of these faults. The United Nations, which is the main standards body for SNAs, is also working on a new system of national accounting. 43 To change these accounts will

require governments to seek from companies ever more information on resource use and pollution. These revelations may have an effect on how customers value some companies, and in turn on how they are valued by the financial markets.

Another idea whose time seems to be coming is that of a "tax shift." Again, the basic idea is simple: move away from taxing, and therefore discouraging, good things such as employment and the creation of capital, and move toward taxing, and discouraging, pollution and the misuse of resources. In reality it is extremely difficult to tax the misuse of resources without taxing their use in general. The political Right argues that raising taxes on such things as fossil fuels, or even on the carbon they emit, would be bad for the economy. The Left argues that it would be bad for the relatively poor, who usually spend a higher proportion of their income than the wealthy on heating their homes and fuelling their cars. Those in favor of a tax shift maintain that it is possible to devise a system that benefits the economy and the environment without overtaxing the poor.

One fact probably sums up the reason why more and more political and business leaders are willing to discuss, and even promote, the idea of a tax shift: widespread unemployment. The environment topped German opinion polls through the eighties as the main issue of concern. By late 1994 it had fallen to third; crime was second, and unemployment first. Germany taxes employment harder than most countries, but such rates are high throughout Europe. It was with the aim of decreasing unemployment that former European Union head Jacques Delors—not known as an environmental or any other type of radical—called for a shift from employment tax to resource tax.

BCSD members could not bring themselves in 1992 to support the idea, partly because of its novelty and partly because of suspicion that any resource/pollution tax would be an add-on and not a shift. Changing Course insists on revenue neutrality: any new pollution tax must be balanced by a decrease in another tax.

Yet a 1994 BCSD report called on governments to adopt a number of national sustainable development strategies incorporating "new and flexible market based approaches" including "a tax shift away from labour and investment to value"—depleting activities such as pollution and the inefficient use of environmental resources.

Tax shifts have been talked about—and so far defeated—in both the United States and the European Union. But there is a widespread feeling that they are inevitable. If other CEOs change their minds as quickly as many of those who belong to the WBCSD have, then a tax shift may be a reality in much of the world by the turn of the century or soon after.

### ***All This ... and the Financial Markets***

Imagine for a moment that the majority of environmental costs are internalized so that they are borne by companies and passed along to consumers. Imagine that governments make greater use of economic instruments to reward continuously companies that are becoming increasingly more eco-efficient, while punishing those that are not. Imagine that growing numbers of governments revise national accounting systems to reflect environmental damage and resource depletion accurately. Finally, imagine tax shifts toward the discouragement of pollution and resource overuse.

Then it is not hard to imagine that the balance sheets of companies would also change strikingly. Whole business sectors would change the ways in which they do business.

As these changes occurred, the financial markets would change the basis on which they decide whether to invest in, lend to, and insure companies. Financial markets would not have to care about "the environment"; they could assume that if a company were financially successful in a world of internalized environmental costs and taxes on pollution, then it must also be eco-efficient.

This is not going to happen quickly. In fact, it would be a mistake if such a complex set of changes were pushed along too fast. Business in general and the WBCSD in particular want to see a gradual, scheduled, predictable introduction of changes to allow business time to plan and adapt.

The various trends outlined here—internalizing environmental costs, greater use of economic instruments, new national accounts, new bases of taxation, new attention to financial markets by "the greens" are clearly the direction society is moving in. The more forward-looking firms are investing in eco-efficiency, and then joining groups calling for more economic instruments and the internalizing of environmental costs so that their investments will pay off sooner in financial terms. Change will, as always in major societal shifts, accelerate and decelerate and will occur faster in some places and some business sectors than in others. But businesses that do not keep up with such changes will suffer.

So, too, will the lagging players in the financial community. They will become more prone to risk and liabilities, and they will miss opportunities as they fail to see closer links between environmental quality and financial quality.

We worried at the beginning of this chapter that the workings of the financial markets encourage short-terms. But managers of pension funds are today making equity investments on behalf of people who will not collect the benefits for decades. It is quite probable that these trends will have shifted the bottom lines of many businesses considerably within a single decade. That is why the more progressive actors in the financial markets will begin to consider the implications of sustainable development now, rather than waiting for these implications to be forced on them by changes in fiscal, legal, and business realities.

"In a way, it is not even much of a stretch," wrote Richard House in *Institutional Investor*, "If you believe in the advance of free markets, and you acknowledge that economic activity has environmental costs for which business is increasingly (if imperfectly) being held accountable, doesn't it seem likely that the financial markets will begin to systematically consider those costs when they value businesses? For acquisitions, this is already standard practice."

In the next chapter, we take a very general look at the roles of the financial markets in sustainable economic development in the developing world. Then in part II we go on to see how the trends discussed here are affecting various key players in the financial community. Part III offers a summary of some of the book's themes.