

## **Can The Environment Benefit from The Profit Factor?**

by Mark J. Spalding (November 2000)

### **The Hunt for Hope Amid Environmental Pessimism<sup>1</sup>**

Despite the doom and gloom that hangs over any discussion of the environment these days—climate change, species extinction, loss of arable land, over-fishing—I live in hope because I believe people can and will change. We have only two choices: change our lives through the exercise of restraint, or change in response to environmental catastrophe. I believe we will choose the former. My optimism is based on the knowledge that, because most of us do not live anywhere near the poverty level, we have room to reduce our consumption without undercutting our quality of life — “all but the poorest of us could choose to lead materially simpler lives, and thereby do less harm and reap more joy.”<sup>2</sup> Admittedly, it will be a hard sell to the general public unless such “joy” is truly and clearly attainable. Our policymakers need to find the right incentive structures to get everyone, both the general public and business, to move in the right direction.

One incentive structure that has been remarkably successful in achieving a movement towards environmental protection is environmental law. It has promoted new business philosophies, linking efficiency and environmentalism. Inevitably, however, environmental law comes into conflict with sovereignty. Any landholder – whether a private individual or a state, tribal, or federal government – asserts a right to use property as the owner deems appropriate. What has too often been missing from that scenario is acceptance of the responsibility that accompanies sovereignty: an owner’s “rights” must surely end at the point that they harm others. There is, however, some move toward reconciling environmental rights with human rights and a growing recognition of the need for this to happen at the international level. Although many of our leaders and decision makers are still unskilled in dealing with environmental issues, change is happening. For example, the North American Free Trade Agreement (NAFTA) achieved a new benchmark in addressing environmental matters. Its two environmental side agreements have at least begun the process of balancing the impact of trade liberalization.

Although environmental law has been helpful, the real imperative must be protection of our environment, not because we have to, but because of its own inherent value: in other words, nature for nature’s sake. The wildness, beauty, and simplicity of nature that attract us to it should encourage us to value it enough to change our habits. I believe we can. I do not doubt the indomitable human spirit or the ability of the human brain. We are not only capable of change, but we can figure out how to accomplish it.<sup>3</sup> Certainly many young people believe this. Events such as the Seattle protests against the World Trade Organization and the tree-sitting of Julia Butterfly demonstrate the energy and enthusiasm that young people worldwide are willing to devote to making globalism compatible with environmental protection.

Many have discussed the resilience of nature. If we give it a chance, it can recover from the indignities we have made it suffer. For example, between the late 1800s and the mid-1900s humans nearly exterminated the Pacific Gray Whale in their quest to reduce its blubber to oil for foodstuffs and to make corsets from its baleen. By 1946, there were fewer than 2,500 Gray Whales left. Since then, merely by virtue of a moratorium on hunting, the Gray Whale has recovered to what some believe to be its pre-exploitation population level of over 25,000. This is a ten-fold population increase in about 50 years!

It can be done. It must be done. As marine biologist Roger Payne is fond of saying, “the environmental crises we face provide us with the most singular opportunity for greatness ever offered to any generation in any civilization.”<sup>4</sup> The challenge for all of us is to find those environmental causes that are peculiarly our own, those to which we are clearly called, and then to embrace them wholeheartedly.<sup>5</sup> For industry, the opportunity lies in what has come to be called Natural Capitalism.

### **The Business of Saving the Environment<sup>6</sup>**

The good news is Natural Capitalism provides economic vitality without continuing to create unmanageable environmental problems. Simple changes to the way businesses are run, built on advanced techniques for using resources more productively, can yield benefits both for today’s shareholders and for future generations. This new approach is what capitalism becomes when businesses behave as if their largest category of capital—Nature’s ecosystem services—were properly valued.

Everyone knows that living systems provide us with indispensable *products*—such natural resources as oil, water, trees, fish, soil, and air. Less obvious is the fact that they also provide us with such equally essential *services* as storage and cycling of fresh water, flood control, climatic stability, and detoxification of human and industrial waste. Though these services are fundamental to business and to human life, unfortunately, the cost of destroying them may become apparent only when the services break down.

Pressures to move toward Natural Capitalism are mounting. As human needs expand, the costs engendered by deteriorating ecosystems rise and the environmental awareness of consumers increases. Consumer perceptions of corporate environmental practices are today dramatically affecting major companies and their suppliers. Home Depot’s recent positive response to public calls for it to buy its lumber from certified sustainably managed forests is just the latest example of successful consumer muscle-flexing. Through lobbying, industry can do much to head off government regulation and enforcement, but it is much more difficult to respond to sudden shifts in marketplace perceptions. Pressure from millions of consumers whose ideas about environmental and health issues differ from corporate conventional wisdom can and does cause rapid changes in the fortunes of major multi-national corporations. Smart companies are trying to stay one step ahead: it is no longer enough merely to increase efficiency, it must be done in ways that are environmentally friendly. Some are now improving their operations by reducing inputs and waste and at the same time accelerating the use and

reuse of byproducts. Interestingly, such environmentally wise moves are increasing profitability while reducing the risk of exposure to public ire.

Thus, the rapidly emerging practice of Natural Capitalism offers new hope: it seems it is possible to enhance business profitability even while protecting ecosystem services. Because it improves profits, it is even attractive to those who have not yet recognized the value of ecosystem services.

The journey to Natural Capitalism involves four strongly intertwined and synergistic shifts in business practices which are briefly reviewed here.<sup>7</sup>

### **1. Dramatically increase the productivity of natural capital**

Reducing the wasteful and destructive flow of resources represents a major business opportunity. Through fundamental changes in both production and technology design, far-sighted companies are developing ways to make such natural resources as energy, minerals, water, and forests stretch 5, 10, even 100 times further than they do today. Practices that actively preserve natural resources often yield higher profits than those based on the use of apparently low-cost natural resources. The necessary investments are not only paid for over time from the saved resources, but also, in many cases, may actually require less initial capital investment.

Increased resource productivity is driven by the same logic as the Industrial Revolution. A couple of centuries ago, the relative scarcity of people was limiting progress. Early capitalism replaced ecosystem services with machines, which made people 100 times more productive. Today the pattern of scarcity has shifted: we have abundant people and scarce natural capital. Profit-maximizing capitalists will now economize on the scarce resource—namely, natural capital.

### **2. Shift to biologically inspired production models**

Natural Capitalism seeks not merely to reduce waste, but also to eliminate the very concept of it. In closed-loop production systems modeled on nature's designs, every output is either returned harmlessly to the ecosystem as a nutrient, like compost, or becomes an input to manufacturing another product. Such systems can often be advantageously designed to eliminate the use of toxic and hazardous materials, which hamper nature's ability to reprocess materials.

The rapidly maturing discipline of industrial ecology is closed-loop production applied at the scale of a facility or an industrial park.

### **3. Move to a solutions-based business model**

The business model of traditional manufacturing rests on the sale of goods. In the new Natural Capitalist model, businesses instead deliver a continuous flow of services—such as providing illumination rather than selling light bulbs. For example, most offices already buy copying services, not copiers. Companies that are part of such a “solutions economy” provide what customers truly want: quality, utility, and continuous performance instead of just more goods.

The solutions model does not suggest that durable goods will no longer be produced. On the contrary, in the solutions economy, goods are so durable and valuable that companies prefer to keep and lease them, rather than sell them. Smart companies would be advised to adopt this approach ahead of the sort of legislation now entering law in Germany and Japan that requires manufacturers to take back their products after their useful life and recycle or remanufacture them.

When a company shifts from selling to leasing a product, it then owns the product throughout its lifecycle. As a result, its relationship to the materials in that product shifts too. Durability, reusability, and non-toxicity become attractive attributes that enhance profitability.

#### **4. Reinvest in natural capital**

In some circles, damage to the environment is regarded only as a loss of non-essential amenities—luxuries that are insignificant compared to the benefits of business and economic development. Efforts to protect these “luxuries” have been characterized as elitist and as unrealistic constraints on business. However, although some environmental concerns may be aesthetic, the depletion of natural capital is increasingly being recognized as a limiting factor on future economic productivity.

Air and water pollution, and the accumulation of hazardous materials, negatively affect human, business, and living systems. As any prudent capitalist would do, business must reinvest in restoring and enhancing the natural capital so that it can continue to produce both vital life-support services and biological resources even more abundantly.

In this fashion we have set forth the four parts of the practice of Natural Capitalism. Because they are realistic pragmatic steps that the private sector can undertake, they offer real hope for the environment. Businesses can now become part of the solution, playing one of the most constructive roles in environmental protection without sacrificing the bottom line. In fact, they should be able to consistently parallel their improved environmental protection with improved profits.

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<sup>1</sup> This section is generally adapted from “The Impact of Globalization on Environmental Sustainability in San-Diego-Tijuana,” by Mark Spalding.

<sup>2</sup> Sanders: 168.

<sup>3</sup> See generally Jane Goodall, *Reason for Hope*.

<sup>4</sup> Payne: 351.

<sup>5</sup> Sanders: 88.

<sup>6</sup> This section is generally adapted from “Natural Capitalism on the U.S.-Mexican Border,” by Kinsley, Lovins, and Spalding.

<sup>7</sup> Those readers with heightened interest can find more detail, including examples, in the book *Natural Capitalism* by Hawken, Lovins and Lovins.

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