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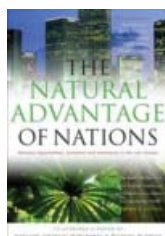
"The Natural Advantage of Nations... shows that what many people saw as impossible just 15 years ago is now already happening."

**William McDonough, Co-Author 'Cradle to Cradle: Remaking the Way We Make Things', Partner, William McDonough & Partners**

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## The Natural Advantage of Nations (Vol. I): Business Opportunities, Innovation and Governance in the 21st Century



*This book is about innovation, solutions, competitiveness and profitability. It is also about building environmental integrity and sustainability now and for future generations. It draws a bold vision for the future and tells us how to get there by building on the lessons of competitive advantage theory and the latest in sustainability, economics, innovation, business and governance theory and practice. The authors incorporate innovative technical, structural and social advances, and explore the role that governance can play in both leading and underpinning business and communities in the shift towards a sustainable future. The result is nothing less than the most authoritative and comprehensive guide to building the new ecologically sustainable economy. ([more...](#))*

### Chapter 1 (Part 1) - Progress, competitiveness and sustainability

M. Scott Peck, respected psychiatrist and bestselling author of *The Road Less Travelled*, writes in *The Road Less Travelled and Beyond* (1997) that one of the biggest problems in the world today is people not thinking well:

*One of the major dilemmas we face both as individuals and as a society is simplistic thinking - or the failure to think at all. It isn't just a problem, it is the problem... Thinking well is more urgent now - perhaps more urgent than anything else - because it is the means by which we consider, decide and act upon everything in our increasingly complex world... If we are to think well, we must be on guard against simplistic thinking in our approach to analysing crucial issues and solving the problems of life.*

He continues:

*In Ireland, the Middle East, Somalia, Sri Lanka and countless other war torn areas around the world prejudice, religious intolerance, greed and fear have erupted into violence that has taken the lives of millions. In America the damage caused by institutionalized racism is perhaps more subtle but no less devastating to the social fabric. Rich vs. poor, black vs. white, straight vs. gay - all are social, political and economic conflicts found under the banner of some ideology or deeply held belief. But given the divisive and destructive results, are these ideologies and beliefs rational or mere rationalizations for otherwise unreasonable acts? How often in fact do we stop to think about what we believe?*

According to Peck, so many of these logjams and stalemates could be overcome if only we took more time to think through the assumptions underpinning our beliefs, and made the effort to understand the other point of view; take the time to see the world from someone else's perspective. If people did that, they would see that the points on which they agree by far outweighed the points on which they don't.

In the mind of the public, another eternal conflict is that between business and the environmentalists. In the public mind most assume that environmentalists and developers do not agree on much. But until the 1980s, most did agree on one thing: that the more you do for the environment the worse off the economy will be, or the more you promote development and growth the worse off the environment will be. In other words, major trade-offs are required between the two objectives and there is little possibility of significant win-win outcomes. Since no one book can cover all these areas of genuine disagreement and conflict, this latter area of seeming conflict is primarily what this book focuses on. We will show that, unless this conflict between development and the environment is resolved, our generation will leave a grim legacy to future generations. Significant concern for this was given expression in the 1980s when a range of major initiatives to find common ground were started.

One outcome of this process was the Brundtland Report, *Our Common Future*, published in 1987 by the United Nations' World Commission on Environment and Development. This landmark report proposed that it was possible to reconcile the concerns of developers and ecologists through better balancing of short- and long-term needs and government leadership. It coined the new phrase 'sustainable development' to sum up this new paradigm of development. It defined Sustainable Development as 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs'. This report was and remains instrumental in achieving the acceptance of the emerging paradigm of sustainable development in mainstream governmental structures, departments and programmes. Support for this new form of development was demonstrated by the attendance at the first world summit on sustainable development (known as the Earth Summit) in Rio de Janeiro in 1992 of more than 100 world leaders and representatives from 167 countries.

However, despite the groundbreaking work presented in *Our Common Future* and the optimism displayed at Rio in 1992, there was sharp disappointment that no binding agreement had been reached at the summit.<sup>[1]</sup> In addition, there was great concern regarding potential areas of conflict arising from the interaction of the emerging principles of 'sustainable development' with the short-term pressures on businesses' financial bottom line. Since the mid-1990s, business corporations have constituted the majority of the 100 largest 'economies' in the world.<sup>[2]</sup> Today, the largest business corporations have higher incomes than the GDP of many developing countries. It will be impossible, therefore, to achieve sustainable development without their involvement. In the 2000 publication, *Global Business Regulation*, Braithwaite and Drahos highlight that until the 1980s the dominant attitude amongst business leaders regarding environmental regulation was that globalization will provide ways to 'get around it': that globalization would make it easier to move to countries, with the lowest regulatory costs, known as 'pollution havens'.<sup>[3]</sup>

If the majority of companies in a sector were doing this, then to be competitive many business people wondered if they would have a real choice not to move to pollution havens as well. There are those within government who still assume that if OECD (Organisation for Economic Co-operation and Development) nations tighten their environmental regulation, then companies will be compelled to move operations to countries with the lowest regulatory costs. Furthermore, if developing nations were 'burdened' with environmental regulation, this would hinder their development and remove opportunities for achieving competitive advantage. This perceived dilemma is emerging as the crux of the debate regarding sustainable development: namely, can businesses be both competitive and achieve sustainable development in an increasingly globalized, competitive world? The answer to this question is a qualified 'YES'. This book will outline how many business and political leaders, researchers, practitioners and public servants are turning their attention, insight and creativity towards how to achieve this synergy. The assumption, namely that it is inevitable that business will have to relocate to lowest regulatory cost havens, is disputed by mounting evidence to the contrary.<sup>[4]</sup>

Since the 1980s, there has been a rapidly growing body of work showing that win-win outcomes are not just possible, but are already happening. Evidence is also mounting that demonstrates that companies and nations which wisely pursue best practice in sustainable development, far from reducing the productivity and competitive advantage of their firms, can in fact improve it.<sup>[5]</sup> As Michael Porter wrote:

*[Countries should] establish norms exceeding the toughest regulatory hurdles or product standards. Some localities (or user industries) will lead in terms of the stringency of product standards, pollution limits, noise standards and the like. Tough regulatory standards are not a hindrance but an opportunity to move early to upgrade products and processes. [And that firms should] find the localities whose regulations foreshadow those elsewhere. Some regions and cities will typically lead others in terms of their concern with social problems such as safety, environmental quality and the like. Instead of avoiding such areas, as some companies do, they should be sought out. A firm should define its internal goals as meeting, or exceeding, their standards. An advantage will result as other regions and ultimately other nations modify regulations to follow suit. Firms like governments are often prone to see the short-term cost of dealing with tough standards and not their long-term benefits in terms of innovation. Firms point to foreign rivals without such standards having a cost advantage. Such thinking is based on an incomplete view of how competitive advantage is created and sustained.*

Michael Porter, Harvard Business School, *The Competitive Advantage of Nations*[6]

The most elegant example of this is the story of the Montreal Protocol, and how it significantly progressed the phasing out of ozone destroying chemicals internationally. Early adoption, in the US, of regulations to reduce the emissions of ozone depleting chemicals, had given American-based firms a head start on the rest of the world in innovating alternative chemicals. Rather than resisting the US regulations, companies harnessed their innovation to develop alternative chemicals to those that destroy the ozone layer. Dupont and other leading US companies then successfully lobbied the Reagan administration literally to take the lead in establishing the Montreal Protocol. The Reagan administration could see the moral, scientific and economic benefits for the US in the globalization of their legislation, and played a significant role in generating the political will for the Montreal Protocol's establishment. Sixty US embassies were instructed to lobby for a strong ozone Protocol, first by issuing information and media kits to convince other nations of the validity of the science and the risks.[7] At the 1987 G-7 Summit in Venice, President Reagan successfully influenced the meeting to make protection of the ozone layer the highest priority environmental issue. History shows that, through the adoption of the Montreal Protocol, Dupont achieved a significant increase in global market share for its alternative ozone friendly chemicals.[8]

There are numerous other examples from around the world. For instance, Porter wrote about how Japanese Energy Conservation Laws in 1979 set demanding energy efficiency standards for refrigerators, air-conditioning and automobiles, stimulating product improvements that strengthened the international position of Japanese firms in these markets. [9] Analyses by the German Environment Ministry have found that its higher environmental standards have been not only an environmental asset to the country, but an economic one as well.[10] Pollution control accounts for roughly 700,000 jobs in the German economy. Growth trends in employment in this area are similar across the OECD nations.[11]

*As other nations have pushed ahead, US trade has suffered. Germany has had perhaps the world's tightest regulations in stationary air-pollution control, and German companies appear to hold a wide lead in patenting and exporting air pollution and other environmental technologies. As much as 70 per cent of the air pollution-control equipment sold in the US today is produced by foreign companies. Britain is another case in point. As its environmental standards have lagged, Britain's ratio of exports to imports in environmental technology has fallen from 8:1 to 1:1 over the past decade. In contrast, the US leads in those areas in which its regulations have been the strictest, such as pesticides and the remediation of environmental damage. Such leads should be treasured and extended. Environmental protection is a universal need, an area of growing expenditure in all the major national economies and a major export industry. The strongest proof that environmental protection does not hamper competitiveness is the economic performance of nations with the strictest laws.*

Professor Michael Porter, excerpt from April 1991 *Scientific American*

Such a shift towards 'ecological modernization' amongst policy élites in government, NGOs and international bodies was identified in 1992 by Albert Weale in the publication, *New Politics of Pollution* where Weale stated that 'Instead of seeing environmental protection as a burden upon the economy, the ecological modernist sees it as a potential source of growth. Since environmental amenity is a superior good, the demand for pollution control is likely to increase and there is, therefore, a considerable advantage to an economy to have the technical and production capacity to produce low-polluting goods or pollution control technology'. [12]

In 1993, the US Secretaries of Commerce and Energy, together with the Environmental Protection Agency (EPA) Administrator, produced a *Strategic Framework for US Leadership*[13] in environmental exports. It made the admission that US companies have operated in a laissez-faire climate which did not recognize the positive connection between environmental stewardship and economic competitiveness, especially when compared to foreign competitors. The report stated: 'Environmental technologies play a central role in our drive to move beyond the outdated notion that jobs must be traded off against sound environmental policies. Indeed, environmental technologies are a powerful engine for the creation of national wealth and high paying jobs.' The experience of sustainable development related research and consultancy bodies, like Rocky Mountain Institute in Colorado, is that the right strategies can result in large resource productivity improvements often more cheaply than incremental change. [14] Such new strategies are opening up new ways to achieve further competitive advantage for firms. While these new methods assist firms' competitiveness, there are also multiple benefits for the nations within which

they do business. For example, designing production processes to eliminate the generation of pollutants is often much cheaper for governments, who frequently have to clean up the impact. There are phenomenal business opportunities for innovation in the development of sustainable solutions that can assist companies to gain an increase in market share.

Examples of Eco-Innovation in Australia enabling gains in market share include:

- Chemical giant Dupont and CSIRO (Commonwealth Scientific and Industrial Research Organisation) have pioneered a new range of coatings that are cheaper to make, cleaner, 'greener' and more durable than today's car paints. CSIRO sold a US\$40 million patent to Dupont, who in turn have won the contract with the lucrative US auto paints market.
- Rockcote, Australia's foremost manufacturer of Architectural coatings, inspired by books such as *Natural Capitalism* have developed the 'Eco Style' range of non-toxic paint, a scientific breakthrough that means healthier conditions for builders, tradespersons and consumers.
- Caroma is a Brisbane-based Australian-owned subsidiary of GWA International Limited, and is regarded as the leader in the Australasian sanitary ware industry. Caroma products, including the 6/3 litre dual flush toilet system, which it developed, are shipped to over 30 countries.

This new paradigm is bringing environmental improvement and competitiveness together. As the previous US President Bill Clinton<sup>[15]</sup> stated in 1997, 'The lesson here is simple: Environmental initiatives, if sensibly designed and flexibly implemented, cost less than expected and provide unforeseen economic opportunities. If we do it right, protecting (the climate) will yield not costs, but profits; not burdens, but benefits; not sacrifice, but a higher standard of living. There is a huge body of business evidence now showing that energy savings give better service at lower cost with higher profits.' More recently Yale University, Columbia University and the World Economic Forum have undertaken a project to rank nations according to a Environmental Sustainability Index (ESI).<sup>[16]</sup> The ESI provides a basis for addressing a number of pressing policy questions, such as: does good environmental performance come at a price in terms of economic success? The ESI suggests it does not. Finland and Belgium, for example, have similar GDP (gross domestic product) per capita, but are ranked widely apart by the ESI. Interestingly, Finland, as of October 2003, is at the top of both the World Economic Forum's Competitiveness Index and the new Environmental Sustainability Index showing that, if done correctly, there is not an inevitable trade-off. Finland's place at the top of the ESI 2002 ranking is due particularly to its strength in three key areas of environmental protection: success in minimizing air and water pollution, high institutional capacity to handle environmental problems and comparatively low levels of greenhouse gas emissions.

Thus, if enacted wisely, it is possible for the paradigms of sustainable development and competitiveness to merge. There does not have to be an inevitable trade-off. This merger is being motivated by the following six facts (please note that this list is not intended to be exhaustive, but rather to set a structure for further discussion of the topics):

- 1) Throughout the economy there are widespread untapped potential resource productivity improvements to be made to be coupled with effective design.
- 2) There has been a significant shift in understanding over the last three decades of what creates lasting competitiveness of the firm.
- 3) There is now a critical mass of enabling technologies in eco-innovations that make integrated approaches to sustainable development economically viable.
- 4) Since many of the costs of what economists call 'environmental externalities' are passed on to governments, in the long-term sustainable development strategies can provide multiple benefits to the tax payer.
- 5) There is a growing understanding of the multiple benefits of valuing social and natural capital, for both moral and economic reasons, and including them in measures of national well-being.
- 6) There is mounting evidence to show that a transition to a sustainable economy, if done wisely, may not harm economic growth significantly, in fact it could even help it. Recent research by

ex-Wuppertal Institute member Joachim Spangenberg, working with neo-classical economists, shows that the transition, if focussed on improving resource productivity, will lead to higher economic growth than business as usual, while at the same time reducing pressures on the environment and enhancing employment.

Next Part 

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*Foundation Partners in the research, development and review of the book.*



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