Capitalism At the Crossroads

...a pioneering roadmap to responsible corporate growth.

—Clayton Christensen
NY Times best-selling author of The Innovator’s Dilemma

The unlimited business opportunities in solving the world's most difficult problems

Stuart L. Hart

Foreword by Dr. H. Fisk Johnson, Chairman and CEO of S.C. Johnson & Son, Inc.
Praise for *Capitalism at the Crossroads*

“*Capitalism at the Crossroads* is built on strong theoretical underpinnings and illustrated with many practical examples. The author offers a pioneering roadmap to responsible macroeconomics and corporate growth.”

—Clayton Christensen, Professor of Business Administration, Harvard Business School and author of *The Innovator's Dilemma*

“*Capitalism at the Crossroads* clearly reveals the essence of what sustainability means to today’s business world. Hart’s analysis that businesses must increasingly adopt a business framework based on building sustainable value speaks to the entire sustainability movement’s relevance. Sustainability is more than today’s competitive edge; it is tomorrow’s model for success.”

—Don Pether, President and CEO, Dofasco Inc.

“Stuart Hart has written a book full of big insights painted with bold strokes. He may make you mad. He will certainly make you think.”

—Jonathan Lash, President, The World Resources Institute

“A must-read for every CEO—and every MBA.”

—John Elkington, Chairman, SustainAbility

“This book provides us with a vast array of innovative and practical ideas to accelerate the transformation to global sustainability and the role businesses and corporations will have to play therein. Stuart Hart manages to contribute in an essential way to the growing intellectual capital that addresses this topic. But, beyond that, the book will also prove to be a pioneer in the literature on corporate strategy by adding this new dimension to the current thinking.”

—Jan Oosterveld, Professor, IESE Business School, Barcelona, Spain Member, Group Management Committee (Ret.), Royal Philips Electronics
“Capitalism at the Crossroads captures a disturbing and descriptive picture of the global condition. Dr. Hart constructs a compelling new corporate business model that simultaneously merges the metric of profitability along with societal value and environmental integrity. He challenges the corporate sector to take the lead and to invoke this change so that the benefits of capitalism can be shared with the entire human community worldwide.”

—Mac Bridger, CEO of Tandus Group

“Stuart L. Hart makes a very important contribution to the understanding of how enterprise can help save the world’s environment. Crucial reading.”

—Hernando de Soto, president of The Institute for Liberty and Democracy and author of The Mystery of Capital

“Stuart Hart’s insights into the business sense of sustainability come through compellingly in Capitalism at the Crossroads. Any businessperson interested in the long view will find resonance with his wise reasoning.”

—Ray Anderson, Founder and Chairman, Interface, Inc.

“This stimulating book documents the central role that business will play in humanity’s efforts to develop a sustainable global economy. Professor Hart presents an attractive vision of opportunity for those corporations that develop the new technologies, new business models, and new mental frames that are essential to a sustainable future.”

—Jeffrey Lehman, President of Cornell University and former Dean of the University of Michigan Law School
Capitalism at the Crossroads

The Unlimited Business Opportunities in Solving the World’s Most Difficult Problems
Capitalism at the Crossroads

The Unlimited Business Opportunities in Solving the World’s Most Difficult Problems

Stuart L. Hart
Johnson Graduate School of Management
Cornell University
To all the children, yet unborn.
## CONTENTS

About the Author  \hspace{1em} xv  
Acknowledgments  \hspace{1em} xvii  
Foreword: Fisk Johnson, Chairman and CEO, S.C. Johnson & Son, Inc. \hspace{1em} xxix  
Prologue: Capitalism at the Crossroads \hspace{1em} xxxiii  

### PART ONE  MAPPING THE TERRAIN

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>From Obligation to Opportunity</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>The Great Trade-Off Illusion</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>The Greening Revolution</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Shattering the Trade-Off Myth</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Breaking Free of Command-and-Control</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Beyond Greening</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Raging Against the Machine</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>Smart Mobs Versus Smart Globalization</td>
<td>19</td>
</tr>
</tbody>
</table>
## PART TWO  BEYOND GREENING

### chapter 4  Creative Destruction and Sustainability  85

Continuous Improvement Versus Creative Destruction  86  
*Greening = Continuous Improvement*  87  
*Beyond Greening = Creative Destruction*  89  
From Textile Dyes to Biomaterials  93  
Using Carbon Dioxide to Change the World  95  
Whole Systems Thinking  96  
Reinventing the Wheels  99  
Technologies of Liberation  102  
Eating Your Own Lunch  103  
Notes  105

### chapter 5  The Great Leap Downward  107

On the Horns of a Dilemma  109  
The Tip of the Iceberg  110  
Creative Creation  113  
Driving Innovation from the Base of the Pyramid  117  
Connecting the World  119  
Power to the People  122  
Food, Health, and Hope?  126  
A New Development Paradigm  129  
Taking the Leap  131  
Notes  132

### chapter 6  Reaching the Base of the Pyramid  135

BOP Pioneers  136  
It’s the Business Model, Stupid  138  
*Removing Constraints*  140  
*Increasing Earning Power*  144  
*Creating New Potential*  148  
Assessing Sustainability Impact  151  
Village Phones: The Triple Bottom Line  153
PART THREE BECOMING INDIGENOUS

chapter 7 Broadening the Corporate Bandwidth 163
Learning from Ladakh 164
The Post-Development Challenge 167
Radical Transactiveness 171
Fanning Out: Extending the Scope of the Firm 173
Fanning In: Integrating Diverse and
Disconfirming Information 176
From Transparency to Transactiveness 180
From Alien to Native 181
Notes 183

chapter 8 Developing Native Capability 185
Expanding Our Concept of the Global Economy 186
Engage First, Design Second 190
Coinvent Custom Solutions 194
Experiment with Low-Cost Probes 196
Fly Under the Radar 199
Work with Nontraditional Partners 201
Build Social, Not Legal, Contracts 204
Moving Beyond the Transnational Model 207
Notes 209

chapter 9 Toward a Sustainable Global Enterprise 213
Draining the Swamp 214
The Next Tsunami 216
Becoming Indigenous 218
Avoid the Top-Down Bias 221
Think as a Disrupter 223
Reinvent Cost Structures 224
CONTENTS

Transform the Meaning of Scale 226
Align the Organization 227
Building the Cathedral 233
Postscript 235
Notes 236

Index 239
This page intentionally left blank
Stuart L. Hart is one of the world’s top authorities on the implications of sustainable development and environmentalism for business strategy. He is currently SC Johnson Chair of Sustainable Global Enterprise and Professor of Management at Cornell’s Johnson Graduate School of Management. Previously, he taught strategic management and founded both the Center for Sustainable Enterprise (CSE) at the University of North Carolina’s Kenan-Flagler Business School, and the Corporate Environmental Management Program (CEMP) at the University of Michigan. His consulting clients range from DuPont and Hewlett-Packard to Procter & Gamble and Shell.

He wrote the seminal article “Beyond Greening: Strategies for a Sustainable World,” which won the McKinsey Award for Best Article in *Harvard Business Review* in 1997, and helped launch the movement for corporate sustainability. With C.K. Prahalad, Hart also wrote the path-breaking 2002 article “The Fortune at the Bottom of the Pyramid,” which provided the first articulation of how business could profitably serve the needs of the four billion poor in the developing world.
This book pulls together and extends work I have been doing in the area of sustainability and business over the past 15 years, but it has actually been 35 years in the making. Indeed, there is no doubt that this work was influenced, shaped, and determined, to a large extent, by my prior experiences in college, graduate school, and the real world. I owe a great debt, therefore, to a number of people—mentors, professors, benefactors, colleagues, associates, and students—as well as friends and family.

As an undergraduate student at the University of Rochester, I would have never embarked on the path of environmental studies and management were it not for the inspiration of professors Larry Lundgren and Christian Kling. These two professors were the ones who awakened my interest and stirred my passion for this domain and set me on a course that has continued to this day. I am living proof that college professors really do have an enormously important shaping influence on their students. To them I owe a huge debt of gratitude.

At Yale, during my time at the School of Forestry and Environmental Studies, I am very thankful to have had the honor to work with the late Professor Joe Miller, as well as professors Lloyd Irland and Garth Voight. These three, in particular, helped to shape my interest and deepen my knowledge in environmental policy and man-

ACKNOWLEDGMENTS
agement. They also enabled me to develop a much broader intellectual grasp of the history of the environmental movement and how it fit into the larger pattern of societal evolution toward greater inclusiveness.¹

My first encounter with the “real world” (in the form of an actual job) came at the Institute on Man and Science in upstate New York in the late 1970s. As a research associate in economic and environmental studies, I worked with Dr. Gordon Enk—my first boss. This job resulted in a professional and personal relationship that continues to this day. In fact, if I had to name the one person who has had the biggest impact on me, it would have to be Gordon Enk. With his background and deep commitment both to the environment and to the economic system (Gordon holds a Ph.D. from Yale in natural resource economics), he was the first person to show me that we need not accept trade-offs when it comes to societal and economic performance. Gordon was also way ahead of his time when it came to stakeholder involvement in strategic decision making. Under his guidance, we embarked on a series of projects that sought to involve diverse voices in important social and strategic decisions. We wrote about the learnings from these experiences in a range of publications that stand the test of time to this day.²

Since that time in the late 1970s, Gordon and I have continued to work together: He served on my dissertation committee at Michigan;³ I served as a consultant to him during his years as an executive at International Paper Company. More recently, he has been an active participant in the advisory boards for the Corporate Environmental Management Program at Michigan, the Center for Sustainable Enterprise at UNC, and now the Center for Sustainable Global Enterprise at Cornell. In reading the pages of this manuscript, Gordon will no doubt see the shaping effect he has had on my point of view. He should take satisfaction in knowing that he has taught me well.

During my time in the doctoral program at Michigan, I was mentored and influenced by several key faculty members. Professors Pete Andrews (now at UNC), Rachel Kaplan, Jim Crowfoot, Kan Chen, Paul
Nowak, and (the late) Bill Drake were of particular influence and importance. Rachel Kaplan deserves special mention for her encouragement and support of my dissertation work. After completing my doctoral work in 1983, I was appointed post-doctoral fellow and research scientist at the Institute for Social Research in Ann Arbor. During this time, I worked closely with Dr. Mark Berg, Dr. Don Michael, and professors Donald Pelz and Nate Kaplan. This was also the time that I met and established life-long personal and professional relationships with two other highly influential people: Professor Dan Denison (now at IMD in Switzerland) and Professor Jac Geurts (at Tilburg University in the Netherlands). They had an enormous influence on my intellectual development, especially when it came to combining interests in strategy and organizational change with a concern for social impact and environmental management. I continue to work with both of them to this day.4

My career as a professor of strategic management began in the mid-1980s at the University of Michigan Business School. There, I was greatly helped by relationships with professors Jane Dutton, Bob Quinn, and Noel Tichy. Professor Jim Walsh has also been a particularly helpful and special friend, confidant, and advisor over the years. Without him, it would have been much more difficult to work up the courage to take the career risks that I have taken. However, there is one faculty mentor, in particular, who deserves special mention: Professor C. K. Prahalad. By the late 1980s, I was becoming frustrated with my career: I was increasingly spending time on research and teaching that did not reflect my real interests or passions. My performance in both research and teaching was, as a result, mediocre. Where most senior faculty advised me to forget about my background and interest in environment and sustainable development, C. K. was one of the few supportive voices. I still remember how he urged me to pursue my passion and leverage my unique background in this area. Were it not for C. K., I never would have made the conscious decision (which I did in 1990)
to devote the rest of my professional career to the connections between business and sustainability. C. K.’s unique perspective on strategy as innovation has also had a huge impact on how I have formulated my ideas about sustainable enterprise. For this, and much more, I owe C. K. a huge debt of gratitude.

Other early contributors who had important influence on my thinking included Paul Hawken, particularly his work *The Ecology of Commerce*; Ed Freeman, with his important book *Strategic Management: A Stakeholder View*; John Elkington, with his concept of the “triple bottom line,” first published in *Cannibals With Forks*, and professors Dick Vietor and Forest Reinhardt at the Harvard Business School, who produced most of the early teaching cases on environmental management and business in the early 1990s.

Two other faculty members also deserve special mention for inspiring me to pursue this path: Professor Paul Shrivastava, of Bucknell University, and Professor Tom Gladwin (then at NYU, now at Michigan). In my view, Paul and Tom were the academic pioneers in this area. They were both working this space before most others in business schools even gave it a second look. Like C. K. Prahalad, Paul and Tom provided both the example and encouragement that led me to take the bold step of dedicating my professional life to this topic. It was the best decision I ever made, and I am tremendously thankful to both of them.

Were it not for two other people, it would have never been possible to successfully develop the Corporate Environmental Management Program (CEMP) at Michigan, a dual-degree program between two previously disconnected entities. Garry Brewer, who came to Michigan from Yale as the Dean of the School of Natural Resources and Environment in 1990, and Joe White, who became the new Dean of the Business School at the same time. Garry Brewer, in particular, was instrumental in forging the relationship between the two schools and helping to secure the early support for the program.
commitment of Garry and Joe, the CEMP Program would have never happened. Both also helped me to better understand the challenges and opportunities in attempting to bring these two worlds together.

At the University of North Carolina, I am indebted to professors Hugh O’Neill, Rich Bettis, and Ben Rosen, and, later, Dean Robert Sullivan for giving me the opportunity to develop the Center for Sustainable Enterprise. However, it was really Professor Anne Illinitich (now York) who deserves the most credit for attracting me to UNC in the first place. It was her passion, vision, and persistence that helped to make it a reality. With regard to the center itself, however, my professional and personal relationship with Professor Jim Johnson has been especially fruitful. In his role as faculty co-director of the center with me, Jim has taught me a great deal about the social aspects of sustainability, particularly those relating to minorities and the economically disadvantaged. I also owe Jim a debt of thanks for helping to create the title for this book: For several years, the two of us discussed (but never completed) an article together entitled (tentatively) “Capitalism at the Crossroads.” For Jim’s unswerving support as both a friend and a close colleague, I am very grateful.

As with the creation of CEMP at Michigan, the Center for Sustainable Enterprise at UNC would have never been possible if it were not for the visionary support of two people: Professor Jack Kasarda (Director of the Kenan Institute for Private Enterprise) and Professor Bill Glaze (Director of the Carolina Environmental Program). Both showed the willingness to financially support the fledgling concept for a new Center before anyone else at either the business school or the university would pay any attention. Without them, the body of new work generated over the past seven years would have not been possible. Nor would the establishment of an MBA concentration at Kenan-Flagler Business School that, by the early 2000s, attracted nearly one-third of the admitted students each year to the school. For this accomplishment, I should also thank Jim Dean, who was Dean of the MBA program during the creation of the concentration.
For the opportunity at Cornell, I am indebted to several people: Dean Robert Sweiringa; Senior Associate Dean Joe Thomas; and professors Alan McAdams, Norm Scott, Bob Libby, Beta Mannix, and Bob Frank, to name but a few. However, the ultimate acknowledgement must be made to the late Sam Johnson, Chairman Emeritus of S.C. Johnson & Son, Inc. It was Sam and the Johnson Family who had the vision to endow both the S.C. Johnson Chair in Sustainable Global Enterprise and the new Center for Sustainable Global Enterprise. Other pioneering benefactors also deserve recognition: Dr. Hans Zulliger, Swiss scientist and businessperson, for endowing the Chair in Sustainable Enterprise at UNC; and Fred Erb and the Max McGraw Foundation for endowing the Erb Environmental Management Institute and Max McGraw Chair, respectively, at Michigan. It is important to recognize the crucial contribution that such gifts make to the legitimacy and institutionalization of this work at major universities and business schools.

There are also a number of people from the corporate and not-for-profit sector who deserve recognition for both their support and influence over the years. Paul Tebo at Dupont, in particular, deserves special recognition. Like Gordon Enk, Paul and DuPont have been involved with the initiatives at Michigan, UNC, and now Cornell. DuPont has also financially supported the initiatives at all three institutions. Dawn Rittenhouse, John Lott, John Hodgson, and Eduardo Wanick, all of DuPont, have also been key supporters of our work. Matt Arnold, originally of the Management Institute for Environment and Business (MEB) and later the World Resources Institute (WRI), has been enormously influential over the years. We began together on this adventure in the early 1990s, as he was forming MEB and I was developing the CEMP Program at Michigan. Like DuPont, WRI has been a long-term partner for more than a decade, with people like Jonathan Lash, Rick Bunch, Jennifer Layke, Rob Day, Meghan Chapple, Al Hammond, and Liz Cook providing key support. Dow Chemical Company, in general, and Dave Buzzelli and Scott Noesen, in particular, also deserve special
mention. Dow was among the early supporters of the CEMP Program at Michigan and has since endowed a chair jointly between the Business School and the School of Natural Resources and Environment. Jane Pratt and Jed Schilling of the World Bank and (later) the Mountain Institute have also been key long-term collaborators and partners. Both have been indispensable champions of the content area and the programs over the years. For their business leadership and program involvement, I am also indebted to Lee Schilling and Mac Bridger of Tandus Group (Collins & Aikman Floorcoverings), as well as Sam Moore of Burlington Chemical Company, Dan Vermeer from Coca Cola, and Debbie Zemke at Ford. Jim Sheats, Barbara Waugh, and Gary Herman from Hewlett-Packard also deserve acknowledgement, as do Greg Allgood, Chuck Gagel, Keith Zook, and George Carpenter at Procter & Gamble.

While this list of acknowledgments has grown long, I would be terribly remiss if I did not directly recognize the crucial contributions of coauthors and colleagues in influencing and shaping both my thought and, in some instances, the actual words written in this book. Although the conceptual foundation for this book was clearly laid in several single-authored articles during the 1990s, later collaborations were of critical importance. I would like to recognize Professor C. K. Prahalad (University of Michigan Business School) for his important influence in our joint work that developed the original idea of the bottom of the pyramid as a business opportunity. This work can be found in parts of Chapters 5, 6, and 9. Professor Clayton Christensen (Harvard Business School) also deserves special note. He and I have coauthored two articles that join his theory of disruptive innovation with my work on sustainable development and the base of the pyramid. This joint work can be found in Chapter 5. I have also worked closely with Professor Sanjay Sharma (Wilfred Laurier Business School) in recent years. Our joint work on engaging fringe stakeholders and radical transactiveness can be found in the pages of Chapter 7.
Several doctoral students at the University of North Carolina have also been important colleagues and collaborators over the past seven years. I have known Mark Milstein for 10 years, beginning at Michigan, where he was a student in the CEMP Program. During his tenure as a doctoral student at UNC, he and I coauthored two articles.\(^\text{10}\) Our joint work on creative destruction and sustainability can be found in the pages of Chapters 2 and 4; portions of Chapter 3 are also directly attributable to our collaboration on creating sustainable value. Collaboration with Ted London, given his extensive international experience, has also been extremely valuable. Joint work with Ted examining emerging market strategies for the base of the pyramid business entry can be found in parts of Chapters 6 and 8.\(^\text{11}\) Finally, although Erik Simanis and I have yet to publish an article together, he has had a significant influence on my thinking over the past few years. The mark of his work, which brings economic anthropology into the business strategy field, can be found in parts of Chapters 7 and 8.

All three of these doctoral students have also made tremendous contributions to the Center for Sustainable Enterprise at UNC over the past several years: Mark Milstein has served as research director for the center and, with Monica Touesnard, has essentially run the Center for the past four years. Erik Simanis helped me to conceive the original idea for the Base of the Pyramid Learning Laboratory at UNC in 2000 as a recently minted MBA, prior to starting the doctoral program. And Ted London has served with great effectiveness as the Director of the BOP Learning Lab since 2001 and has been a close collaborator in our international work in Asia, Africa, and Latin America. Look for these three to make important independent contributions in the near future as they join the faculty ranks.

My participation as a core faculty member in the Sustainable Enterprise Academy (SEA) these past five years has also provided a wonderful venue for trying out new ideas—and learning, in the process. In this regard, I would like to recognize and thank my faculty
colleagues in SEA, particularly Brian Kelly, David Wheeler, Bryan Smith, John Ehrenfeld, David Bell, and Nigel Roome, for their honest feedback and support in helping me develop and present my ideas in such a way to achieve maximum impact.

Finally, I would like to acknowledge the patience, support, and editorial skills of my publisher, Prentice Hall—in particular, my editor, Jim Boyd (fellow University of Rochester classmate); developmental editor, Elisa Adams; copy editor, Krista Hansing; project editor, Kristy Hart; and Wharton representative Professor Paul Kleindorfer. The book has been vastly improved as a direct result of their skilled eyes—and pens. My colleagues Gordon Enk, Ted London, Erik Simanis, Paul Tebo, Bob Frank, Alan McAdams, and Mark Milstein also provided invaluable feedback on early drafts of the manuscript.

Clearly, the writing of a book like this “takes a village,” as Hillary Clinton would say. While I have done my best to recognize as many of the important contributors to my professional life as space allows, there are many more who could have been included. For my friends and colleagues in this group, please forgive me! However, no acknowledgment would be complete without recognizing my parents, Lloyd and Katherine Hart, for their support of my education, and, I’m sure what seemed to be aimless wanderings, for the better part of a decade during the 1970s and 80s. I’m just sorry that my father did not live to see this book finally come to fruition. I’d also like to recognize my brother, Paul, who set the example for me in pursuing the academic route long before I ever imagined doing doctoral work.

Finally, my wife, Patricia, has been nothing short of an inspiration over the years. She has been the ultimate enabler of my work for 30 years. Without her love and support, none of this would have been possible. She is also a very talented editor and confidante. I shudder to think how much time she has spent reading and commenting on my work.
I dedicate this book to my two daughters, Jaren and Jane, in the hopes that it is of some use to them in navigating the troubled waters ahead. For better or worse, it will be their generation that will ultimately have to ensure our transition toward a sustainable world. I wish them Godspeed and hope it is not too late.

Stuart L. Hart
Ithaca, NY
October 2004

Notes


5. Some of my earliest published work in the area was done with Paul Shrivastava. See, for example, his (and Stuart Hart’s) Greening Organizations, Academy of Management Best Paper Proceedings, 52 (1992): 185–189.


This page intentionally left blank
For those of us unwilling to stick our heads in the sand like an ostrich, Stuart L. Hart’s new book gives voice to an inescapable reality: that the corporate sector can be the catalyst for a truly sustainable force of global development for all on the planet.

As the chairman and CEO of a consumer products company with global operations, I see every day the value that business can bring. I see that its products can improve the health and safety of people around the world. I see that its jobs enable parents to support their children, and allow children to achieve dreams not even imagined by their parents.

I also recognize that business has provided fuel for the growing antiglobalization outcry. But despite what some see as the inevitable stain of “progress,” I know there are many business leaders who share my belief that you cannot purely pursue greater profitability every quarter and have that be an acceptable mission statement. Or that improving the lives of workers in one country while degrading the environment in another is an unacceptable demonstration of civic responsibility. Short-term quarterly profits cannot trump long-term sustainability.

As the author makes clear in Capitalism at the Crossroads, there is no inherent conflict between making the world a better place and achieving economic prosperity for all. Maintaining a principled commitment to global sustainability is not a soft approach to business—
it is, in fact, the only pragmatic approach for long-term growth.

*Capitalism at the Crossroads* presents a scenario in which business can generate growth and satisfy social and environmental stakeholders. By focusing on the four billion people currently at the “base of the pyramid,” Hart contends that companies can reap incredible growth while sowing tremendous improvement in people’s lives and at the same time preserving the other species that live on this planet.

Business driving sustainability is not a new concept to me. The seed was planted and then cultivated throughout a lifetime of conversations with my father, Samuel C. Johnson. He shared stories about my grandfather, who traveled to Brazil in the 1930s in search of a sustainable source of wax for our products. He described his own 1975 decision to voluntarily and unilaterally ban CFCs from our products despite fervent opposition from colleagues and competitors alike.

My father’s pioneering social and environmental efforts led to his selection as an original member of the President’s Council on Sustainable Development and as a founding member of the World Business Council on Sustainable Development. He led our family company, SC Johnson, to new heights of corporate environmental and social achievement.

Perhaps most important, my father ensured that the dialogue on sustainability would continue. In 2000, he endowed the Samuel C. Johnson Chair in Sustainable Global Enterprise, and it is this Chair that Hart now so ably and deservedly occupies. He also endowed the new Center for Sustainable Global Enterprise of the Johnson School at Cornell University. By doing so, he was fulfilling a vital obligation that Hart sets forth for business in this book: being optimistic about the future and the opportunities inherent in the global challenges we face.

I share that optimism. That is why in 2001 our company unilaterally developed the Greenlist™ environmental classification system to institutionalize the selection of environmentally preferred raw materials and packaging components, far exceeding government regulation and
driving our business with better products. It is why in 2003 we launched programs to attack the menace of malaria in sub-Saharan Africa and the misery of asthma among Hispanic children in Miami. It is why in 2004 we joined with Conservation International’s Carbon Conservation Program to help save one of the world’s most critically threatened hotspots of biodiversity. Yet we still are in the early stages of truly addressing “base of the pyramid” products.

Optimism underlies all the arguments in Capitalism at the Crossroads, and the author presents us with a call to optimistic action. He asks us to involve the full range of stakeholders in crafting solutions to the issues of sustainability. He demands that we embrace a new business paradigm built not on incremental change, but on creative destruction and reinvention. He challenges us to base our policies and businesses on the unassailable truth that shareholder value can be created while solving social and environmental problems.

Some might say linking “global business” and “sustainable development” is an oxymoron, but they would be sorely mistaken. All of us are tied together: the radical environmentalist and the corporate CEO, the Sudanese refugee and the British socialite, the U.S. factory worker and the Argentine farmer. We all share a stake in the future of our global environment and economy. That is the undeniable truth of Capitalism at the Crossroads: We are all fundamentally linked, dependent on the same finite resources and driven by the same hopes for ourselves and our children.

I steadfastly believe there is honor and value in business. In Capitalism at the Crossroads, Stuart Hart demands that we embrace that truth. I’m convinced this may well be the best opportunity global businesses have to ensure their long-term sustainability. And I am tremendously optimistic about the future.

Dr. H. Fisk Johnson
Chairman and CEO
S.C. Johnson & Son, Inc.
This page intentionally left blank
Each human generation believes that it is endowed with special importance, that it faced a particularly important challenge (for example, the “greatest” generation and World War II), that it has a special quality or character (for example, the baby boomers), or that it lived at a particularly important time (for example, the age of enlightenment). The term for this is *chronocentrism*. Although each generation earnestly believes in its own significance, there is objective evidence that those of us alive today will witness the most important time in human history. We truly stand at a crossroads.

From the dawn of our species some 2 million years ago until roughly 12,000 years ago, there were never more than some tens of millions of our brethren walking the planet at any one time. With the advent of agriculture and surplus food production, however, our species embarked on a path of population expansion that continues to this day. By the time of the American Revolution, the human family had grown to approximately one billion. Propelled further by the expansion to the New World and the industrial revolution, the population continued to grow so that by the close of World War II, there were two billion people on the planet.¹
As a baby boomer born in 1952, I entered a world of about two billion people. In less than half a century, that population had ballooned to more than six billion. If I live to a ripe old age, I could easily see eight billion or more people on the planet. Thus, in a single lifetime, the human population will have grown from two billion to more than eight billion. This growth is truly unprecedented. Never before in human history has a single generation witnessed such explosive change. It seems self-evident, therefore, that the policies we adopt, the decisions we make, and the strategies we pursue over the next decade or two will determine the future of our species and the trajectory of the planet for the foreseeable future. That is an awesome responsibility, to say the least. It is also a huge opportunity.

The Best of Times, The Worst of Times

We are truly poised at the threshold of a historic moment. During the past decade, we have witnessed the fall of communism and the birth of a planetary economy and civilization. The United States has emerged as the world’s only superpower, championing a message of liberty and democracy rather than conquest and subjugation. Multinational corporations, international institutions, and global civil society have exploded onto the world stage, bringing with them state-of-the-art technology, advanced business practices, and a new accountability. Life expectancy and literacy are on the rise throughout the world.²

A revolution in information and communication technologies has unfolded before our eyes, changing the way we live and speeding the spread of information and ideas. The new information-based economy has greatly increased transparency, fostered local self-help, and facilitated the spread of democracy throughout the world. Technological innovation has also led to dramatic reductions in the material and energy intensity of the economy. Consider, for example, that the U.S. economy “weighed” about the same (in terms of material intensity) at
the end of the twentieth century as it did at the beginning of the century, despite being approximately 20 times larger in real terms. As the Iron Age gives way to the Information Age, there is no question that we have much to be thankful for.

Yet fault lines and fissures are also readily visible. Although U.S. consumers did a yeoman’s job of driving the world economy during much of the 1990s, it appears that there may be a limit even to Americans’ ability to consume goods and services (witness the record levels of consumer debt). Indeed, despite some recent signs of life, the global economy has been sputtering, raising the question of where the growth will come from in the future. With few exceptions (such as oil and pharmaceuticals), most major industries have been mired in an extended slowdown, with no apparent end in sight.

In fact, a decade of economic globalization, privatization, and free trade has produced mixed results, at best. Whereas the wealthy in developed countries have grown richer, the vast majority of nations and people in the world have yet to benefit from the apparent triumph of capitalism and liberal democracy. The $40 trillion–plus world economy is simply not growing fast enough to provide jobs for the tens of millions of young people from around the world joining the labor force each year. Contrary to popular belief, the so-called “roaring ‘90s” was actually the slowest-growing decade in the world economy in the past 40 years. In fact, the poorest countries in the world have had zero or negative economic growth since the early 1980s.

And whereas developed country economies have indeed become more information- and service-intensive, globally, the use of materials and energy has exploded during the past 50 years, with dire consequences for the world environment. The underlying natural systems supporting human economies—forests, fisheries, soils, ecosystems, and climate—have all experienced significant disruption and decline. The proliferation of new diseases such as AIDS, Ebola, and SARS also reminds us that the potential for a global scourge is only one plane ride away. Already our cows are mad and the birds are sick with the flu.
The Russian fiasco, the Asian financial crisis, and, most recently, the Argentinean crisis have made it clear that the so-called Washington Consensus is coming apart at the seams: The International Monetary Fund, the World Bank, and the World Trade Organization are all under increasing fire, even from insiders such as Jeffery Sachs, Joseph Stiglitz, and George Soros. Lack of an international standard of value, currency instability, and wild swings in the business cycle have contributed to simultaneous recession in the three major world economies, a lack of investment in the developing world, and an ongoing conflict between the short-term financial demands of shareholders and long-term sustainability. Across the developing world, there is less enthusiasm for globalization’s potential to bring prosperity to the masses.

A rising tide of antiglobalization has emerged that combines concerns about environmental degradation, inequity, human rights, cultural imperialism, and loss of local autonomy. Wealthy protesters organize massive demonstrations against multinational corporations and the institutions of global capitalism, such as the WTO and the World Economic Forum. The disenfranchised become increasingly organized—and militant—in their desire to assert their autonomy. Indian-led movements in Bolivia, for example, succeeded in toppling the Western-friendly government in that country and have joined a continent-wide backlash against free-market reforms. Many, in fact, assert that the whole concept of “development” must be abandoned, in favor of a new concept that gives a greater voice to the views and aspirations of local people.

Two recent events, in particular, have fueled anticorporate and antiglobalization sentiments: the Enron debacle, which has eroded the public’s already low level of trust in corporate conduct; and the events of September 11, 2001, which have proven that unrest in one part of the world will not remain geographically isolated. Indeed, terrorism—the ultimate expression of antiglobalization—is on the rise, driven by poverty and hopelessness and, in the Muslim world, by a growing sense
of defiance and polarization. And despite the United States’ best intentions, it is not clear that a doctrine of “preventive war” can bring about democratization, empowerment, or self-determination.\textsuperscript{10}

### Implications for Corporations

The global dynamics just described have significant implications for large multinational corporations (MNCs), given their centrality to the global economy. There are now more than 60,000 MNCs (defined as any corporation with operations in more than one country) with more than a quarter-million affiliates around the world. MNCs account for more than 25 percent of world economic output. During the 1990s, foreign direct investment (FDI) by MNCs overtook official development assistance (ODA); by 2000, it exceeded ODA by more than a factor of 5. Indeed, MNCs have become the primary instruments of economic globalization, facilitating the diffusion of more efficient and competitive business practices throughout the world.\textsuperscript{11}

However, a growing chorus of voices points out that the process of economic globalization driven by MNCs over the past decade has also had a dark side.\textsuperscript{12} For example, the 10 largest MNCs have annual sales of more than the GNPs of the 100 smallest, poorest countries in the world, raising concerns about sovereignty and the ability of governments to determine their own fate.\textsuperscript{13} Given the ability of MNCs to shift resources and production across borders, many have also suggested that they encourage a global “race to the bottom” by chasing subsidies, incentives, and lower costs wherever they might lead, at the expense of national and community interests.\textsuperscript{14}

Of the top 200 MNCs in the world, the vast majority have their origins in the most affluent, developed countries of the world—in the United States, in European countries, and Japan. A growing number of critics have voiced concern that such corporate dominance is leading to a worldwide commercial monoculture based upon the values of Western
consumerism and bringing with it the decline of local cultures, products, and traditions. Others decry the environmental consequences associated with spreading the energy- and material-intensive industries associated with global capitalism to the rest of the developing world.

And although MNCs account for a quarter of global economic activity, they employ less than 1 percent of the world’s labor force, while one-third of the world’s willing-to-work population is either unemployed or underemployed. Furthermore, while a substantial number of Americans now hold shares in companies either directly or through pension accounts, less than 1 percent of the world’s population participates in the financial markets as shareholders. As a consequence, the wealth created by MNCs accrues almost exclusively to a relatively small number of wealthy people in the world—corporate executives, employees, and Western shareholders.

We can also discern a similar trend on the corporate investment side, where the vast majority of FDI occurs within the richest countries. Investment in emerging markets has been limited largely to the wealthiest of the poor countries or those with the largest potential markets, such China, India, and Brazil. Even there, most MNC products are aimed at the wealthy, elite customers or those in the rising middle-class segments of the market. Virtually no commercial attention has been paid to serving the needs of those at the base of the economic pyramid.

The result is that, during the past 40 years, the gap between the richest and the poorest in the world has continued to widen. In 1960, for example, the richest 20 percent accounted for 70.2 percent of global GDP, while the poorest 20 percent controlled 2.3 percent (a ratio of 30:1). By 2000, however, this gap had widened considerably: The richest quintile controlled 85 percent of global GDP, while the poorest accounted for only 1.1 percent (a ratio of 80:1).

Clearly, MNCs alone are not responsible for all these problems: International financial institutions such as the International Monetary
Fund and the World Bank have played a central role. Corrupt and repressive regimes in the poorest countries have also been major contributors to the problem. Still, these dynamics are increasingly being viewed as unacceptable. MNCs, for better or worse, are on the “front line” of globalization. If current trends continue, they can only become more frequent targets of antiglobalization protests, sabotage, and terrorism.

The Fork in the Road

Global capitalism now stands at a crossroads: Without a significant change of course, the future for globalization and multinational corporations appears increasingly bleak. It might be argued, in fact, that global capitalism stands at a juncture similar to the one faced in 1914. Between 1914 and 1945, world war, depression, fascism, and communism almost succeeded in eliminating capitalism from the face of the Earth. The problems global capitalism now faces (international terrorism, the backlash against globalization, global-scale environmental change) are no less daunting. Constructively engaging these challenges will be the key to ensuring that capitalism continues to thrive in the coming century—to everyone’s benefit.

The Brundtland Commission defined sustainable development as that which “meets the needs of the present without compromising the ability of future generations to meet their own needs.” By creating a new, more inclusive brand of capitalism, one that incorporates previously excluded voices, concerns, and interests, the corporate sector could become the catalyst for a truly sustainable form of global development—and prosper in the process. To succeed, however, corporations must learn how to open up to the world: Strategies need to take into account the entire human community of 6.5 billion, as well as the host of other species with which we share the planet.
Sustainable global enterprise thus represents the potential for a new private sector–based approach to development that creates profitable businesses that simultaneously raise the quality of life for the world’s poor, respect cultural diversity, and conserve the ecological integrity of the planet for future generations. Making such a societal contribution while simultaneously creating shareholder value will take real imagination and a fresh approach to business strategy. These exciting and uplifting challenges are the focus of the pages that follow.

Notes

8. This point is made convincingly by Hernando DeSoto, *The Mystery of Capital* (New York: Perseus Books, 2000).
12. Perhaps the best articulation of this point of view can be found in David Korten, *When Corporations Rule the World* (San Francisco: Berrett-Koehler, 1995).
13. As Jagdish Bhagwati points out in his book In Defense of Globalization (New York: Oxford University Press, 2004), this comparison, while appealing, is conceptually flawed. When we compare sales volumes, which are gross values, with GDP, which includes only value-added figures for the goods and services, we are comparing apples and oranges. In other words, corporate sales figures across an entire economy will add up to numbers that vastly exceed the GDPs of the countries where these sales occur.


16. Allen Hammond, Which World?


This page intentionally left blank
This book takes the contrarian’s view that business—more than either government or civil society—is uniquely equipped at this point in history to lead us toward a sustainable world in the years ahead. I argue that corporations are the only entities in the world today with the technology, resources, capacity, and global reach required. Properly focused, the profit motive can *accelerate* (not inhibit) the transformation toward global sustainability, with nonprofits, governments, and multilateral agencies all playing crucial roles as collaborators. The book is written with a practical focus and should be of direct use to executives, entrepreneurs, and technologists, as well as business school faculty and students. The contents are equally appropriate, however, for those from the nonprofit world, the public sector, and society at large, especially those interested—and inclined—to collaborate with the private sector.
The book carries an optimistic message. Despite the gathering storm of environmental degradation, antiglobalization protest, and terrorism, it envisions a central and expanding role for commerce, particularly multinational corporations, in fostering global sustainability. It foresees massive opportunities for companies both to make money and to make the world a better place, particularly among the four billion poor at the base of the economic pyramid. This book is the result of an intellectual journey that began for me more than three decades ago. My own personal evolution is reflected in its structure and flow. Allow me to explain.

Having grown up in western New York in the 1950s and ‘60s, I have memories of family vacations spent at destinations like Niagara Falls. Although the Falls themselves were indeed magnificent, equally memorable for a 10-year-old was the soot from nearby factories that accumulated on the porch furniture, requiring that we clean the furniture daily, lest we ruin our clothes. The accompanying stench was also something to experience. I still remember asking why, in a place of such natural beauty and splendor, did it have to be so polluted? The answer, accepted wisdom in those days, was that this was “the smell of money.” If we were going to have economic prosperity, then we would have to put up with some minor inconveniences, such as soot, stench, rivers that catch fire, and mountains of waste. It was the cost of progress. I remember being singularly unsatisfied by this response.

Fast-forward to 1974. As a freshly minted college graduate headed to Yale for graduate work in the School of Forestry and Environmental Studies, I was convinced that corporations were the “enemy” and that the only way to deal effectively with environmental problems was to “make them pay” through regulation—to internalize their externalities, in the jargon of economics. This was probably a correct perception at that point in history: Large corporations, by and large, had been unresponsive to environmental issues, and it appeared that the only way to deal with the problem was to force them to clean up the mess they were making. The Environmental Protection Agency, along with scores of
other regulatory agencies, was created precisely for this purpose. A mountain of command-and-control regulation was passed during the decade of the 1970s, aimed at forcing companies to mitigate their negative impacts.

Regulators and citizen activists, buoyed by their newfound power, increased the pressure on companies through fines, penalties, campaigns, and consent decrees. The courts became clogged with lawsuits aimed at halting projects that were deemed unacceptable due to their environmental or social impacts. Economists of the “environmental” variety wrote books about externalities and the public policies that would be required for them to be “internalized” most efficiently by companies. In the process, companies became convinced that social and environmental issues were necessarily costly problems, usually involving lawyers and litigation. For better or worse, the message was that environmental and social issues were “responsibilities” that companies were required to deal with—and it was going to be expensive.

**The Great Trade-Off Illusion**

There can be no question that command-and-control regulation was of enormous importance; it required, perhaps for the first time, that business address directly its negative societal impacts. Since the time of the industrial revolution, enterprises had relied upon the extraction of cheap raw materials, exploitation of factory labor, and production of mass quantities of waste and pollution (think of those “dark, satanic mills”). Indeed, pollution was assumed to be part of the industrialization process. When economists conceived the concept of externalities, in other words, it seemed virtually impossible that firms could behave in any other manner. For the better part of 200 years, industrial firms engaged in what might be described as “take, make, waste” as an organizing paradigm. Command-and-control regulation seemed a necessary and appropriate counter to the prevailing industrial mindset.
Paradoxically, this mindset also resulted in what I call the “Great Trade-Off Illusion”—the belief that firms must sacrifice financial performance to meet societal obligations. A massive wall of environmental and social regulation has been spawned over the past 30 years, most of which has been written in a way that makes the Great Trade-Off Illusion a self-fulfilling prophesy. Just track the thickness (and lack of flexibility) of the Code of Federal Regulations in the United States for confirmation. Too often, command-and-control regulations prescribed specific treatment technologies without regard to their efficiency or cost-effectiveness.

A generation of businesspeople was shaped by this framing of the situation. Not surprisingly, the managers and executives who rose to prominence during the postwar years were predisposed to think of environmental and social issues as negatives for business. A socially minded executive or company might “give back” to the community through philanthropy or volunteering, but such concerns would certainly never be part of the company’s core activities! The social responsibility of business was to maximize profits, as Milton Friedman advocated, and it seemed clear that social or environmental concerns could only serve to reduce them.

Even today, this mindset lingers. Try the following thought experiment: Imagine that you are a general manager in a business or company of your choosing. Your assistant calls saying that the environment, health, and safety (EHS) manager and the public affairs director are in your outer office, and they say the matter is urgent. What is your first reaction? If you are honest with yourself, you will have to admit that the first thoughts that come to mind are something like: problem, crisis, spill, incident, accident, boycott, protest, lawsuit, fine, or jail time. Your first instinct was probably to head for the back door of your office to escape.

But now try a second thought experiment: Your assistant calls saying that the heads of marketing and new product development are in
your outer office and they are anxious to meet with you. Now, what is your first reaction? What thoughts or issues come to mind? In all likelihood, your mind probably flashes to images like: breakthrough, opportunity, blockbuster, innovation, or growth. Your first instinct is to run to the front door of the office to let them in.6

The Great Trade-Off Illusion trained a generation of corporate, business, and facility-level managers to assume that societal concerns could only be drags on their business. As a consequence, their attitude tended to be reactive—they would do only the bare minimum necessary to avoid legal sanction. Unfortunately, when lawmakers and activists unfamiliar with operations or market dynamics write the rules for compliance, it is a virtual certainty that the rules will not integrate well with company strategy or operations. Taking a reactive posture thus doomed companies to a decade or more of onerous regulations that treated the symptoms rather than the underlying problems. These regulations targeted specific wastes, emissions, pollutants, and exposure levels through command-and-control-style rules that forced companies to deal with problems “at the end of the pipe” rather than addressing them as part of their core strategy or operations. Unfortunately, pollution-control devices can never improve efficiency or produce revenue; they can only add cost.

The Greening Revolution

The decade of the 1980s brought with it a growing sense of unease with command-and-control regulation. Despite enormous expenditures, it was not at all clear that the end-of-the-pipe approach to pollution control and regulation was working.7 Alternatives such as market-based incentives and tradable emission permits demonstrated that pollution levels could be reduced in a dramatically more efficient and cost-effective manner. In Europe, a more collaborative and goal-oriented
approach to regulation was the norm; the focus was on actual environmental and social improvement rather than the specification of particular treatment technologies or pollution control devices.

I, too, was undergoing a transformation of sorts. In 1986, I joined the faculty at the University of Michigan Business School, having completed my doctoral work in strategy and planning in 1983. My transition from a regulatory to a business strategy orientation reflected my own growing disenchantment with the command-and-control approach to dealing with environmental and societal problems. Rather than simply trying to halt polluting projects or mitigate damage, I became increasingly interested in understanding why such seemingly bad projects were being proposed in the first place.

This change proved fortuitous: By the late 1980s, there was a growing receptivity to environmental and social issues within companies—and business schools. As luck would have it, this openness developed through innovation in another arena: quality management. As you might recall, in the late 1970s and early 1980s, Japanese companies were literally overrunning their American and European competitors with higher-quality and lower-cost goods. From steel makers to automobile firms, to consumer electronics manufacturers, companies were scrambling to match the Japanese quality advantage. Because of widespread plant closures and downsizing, there was palpable concern that the West would lose to “Japan, Inc.”

After three glorious postwar decades of high-volume, standardized mass production with quality inspected in (after the fact) rather than built in (as part of the design and production process), Western companies were being out-competed by a new and better way. Instead of countering with their own unique strategies, American and European companies became obsessed with learning and copying the ways of Japanese quality management. Among other things, they built the capacity for “continuous improvement” (kaizen) into the management system by empowering workers to improve their work processes rather
than blindly following prescribed procedures. Managers’ mindsets changed from a fixation on centralized control and a “results” orientation (detecting defects and fixing them) to a preoccupation on decentralization and a “process” orientation (improving the management system so that employees could prevent quality problems from occurring in the first place).\textsuperscript{10}

**Shattering the Trade-Off Myth**

The confluence of the quality and environmental movements was a marriage made in heaven: By the late 1980s, it had become clear that preventing pollution and other negative impacts was usually a much cheaper and more effective approach than trying to clean up the mess after it had already been made. The emergence of market-based incentives such as tradable emission permits made prevention even more appealing. Furthermore, the discipline of quality management could be easily expanded to incorporate social and environmental issues. In the early 1990s, this confluence produced a flurry of so-called environmental management system (EMS) approaches and “total quality environmental management” protocols, culminating in the advent of ISO 14001, the environmental equivalent of ISO 9000 for quality.

Community advisory panels and stakeholder dialogues, intended to involve affected parties in company affairs instead of doing battle in court, proved to be a much more effective way to maintain legitimacy and the “right to operate.” Indeed, in designing its self-regulation program called Responsible Care, the chemical industry enshrined the principles of pollution prevention and community engagement as part of its product stewardship process. In short, the quality revolution taught us that muda (waste) was the enemy of good management. Pollution and litigation were the ultimate forms of muda.

As social and environmental issues became more deeply embedded in the ongoing operations of enterprises, managers began to see that
corporate and societal performance need not be separated. Whereas companies previously sought to first make money through their business operations and then give back to society through philanthropy, now these two agendas could be merged. What had been a virtual firewall separating business from philanthropy was now transforming into a host of new and creative approaches to combining the two through corporate partnerships with nongovernmental organizations, strategic philanthropy, and other forms of social innovation.\textsuperscript{11}

Furthermore, in certain situations, preventing pollution through process or product redesign could actually save money, reduce risk, and even improve products for the firm. An extensive body of research began to document the situations and contexts in which pollution prevention and product stewardship resulted in superior financial performance.\textsuperscript{12} Not surprisingly, parlaying environmental and social performance into improved business performance required a set of supporting or complementary capabilities, such as employee empowerment, quality management, cross-functional cooperation, and stakeholder engagement. This meant that the greening revolution had not only succeeded in elevating the significance of social and environmental issues, but it also had converted them from expensive problems into strategic opportunities for certain firms with the necessary skills, capabilities, and leadership vision.\textsuperscript{13}

**Breaking Free of Command-and-Control**

Accompanying the greening revolution in the corporate sector was the emergence of a new philosophy in regulation and public policy that recognized the limitations (and expense) of conventional regulation and the end-of-the-pipe mentality. In response, a slew of new voluntary initiatives were introduced that recognized the power of information disclosure and transparency.\textsuperscript{14} The pioneering initiative was the Toxic Release Inventory (TRI) in the US. Passed in 1988 as a rider on the Superfund
Reauthorization (the law establishing strict liability for toxic waste sites), the TRI received relatively little attention in its early days. This seemingly innocuous provision required only that manufacturers disclose their use, storage, transport, and disposal of more than 300 toxic chemicals (all of which were perfectly legal at the time). Much to everyone’s surprise, this data, maintained by the U.S. Environmental Protection agency, became an important new source of information for activist groups, the media, and third-party analysts to track corporate environmental performance. Top 10 lists of corporate polluters became de rigeur.

The TRI also provided, for the first time, a metric for corporate and facility managers to track their own firms’ performance and benchmark it against competitors. What gets measured gets done. Ten years later, toxic emissions in the United States had been reduced by more than 60 percent, even though the U.S. economy boomed during the 1990s. Indeed, many companies actually saved tens of millions of dollars in the process of reducing or eliminating their toxic emissions. We could argue that the TRI was one of the most important and effective pieces of social legislation ever passed. And it required nary a lawsuit, court battle, or inspector to make it happen. Since then, many developing countries have adopted a similar philosophy of transparency and information disclosure as the basis for their environmental policies, since these can be implemented at a fraction of the cost of command-and-control regulations.

Equally important was the advent of “extended producer responsibility” laws, primarily in Europe. Quite simply, these laws stipulate that manufacturers are responsible for the products they create all the way to the end of their useful lives. Beginning with regulations on packaging waste in Germany in the late 1980s, these laws now extend to several industrial sectors, including automobiles, consumer electronics, and computers. Requiring that producers take back their products after they have reached the end of their life has obvious effects on the way
companies go about designing products in the first place. This simple requirement has fomented a revolution in product stewardship and “green design” protocols, using life-cycle management as its core principle. Rather than focusing only on the phase of the product’s life cycle that the company controls (manufacture or assembly), product stewardship means designing products to take account of their entire life cycle, from the sourcing of raw materials and energy from the Earth to the reuse, remanufacture, or return of the materials to the Earth. Rather than thinking linearly, in terms of “cradle to grave,” increasingly, designers think cyclically, in terms of “cradle to cradle.”

In the process, companies have discovered that life-cycle design principles can yield competitively superior products. During the early 1990s, for example, Xerox pioneered take-back, remanufacturing, and design-for-environment strategies in the photocopier business and reaped significant competitive benefits. Given the company’s extensive field presence for servicing commercial copiers, it was relatively easy to take back used machines, refurbish parts and components, and produce a line of remanufactured machines. However, it was not until the mid-1990s that Xerox actually began to design copiers with an eye toward taking them back. This program, dubbed Asset Recycle Management, was founded on the notion that by reusing assets as many times as possible (recall that most Xerox commercial copiers were leased, not owned by customers), the company would not only reduce its environmental footprint, but also lower its costs and increase its return on assets. It set the goal of producing “waste-free products from waste-free factories.” By the late 1990s, Xerox was saving close to $500 million per year through this program, a figure approaching 2.5 percent of company sales. In fact, it can be argued that, given Xerox’s failure to shift its strategy toward printers (since documents were increasingly being stored electronically and printed rather than duplicated), the Asset Recycle Management Program kept the company afloat for much of the 1990s.
As the green revolution progressed, leading companies began to shift their energy and attention more toward proactive strategies that reduced waste, emissions, and impacts while simultaneously reducing costs and risks. Paying real money for raw materials and inputs only to dump substantial amounts of these into the environment in the form of waste made little economic sense. In fact, Dow Chemical estimated in the early 1990s that reactive efforts such as regulatory compliance, cleanup, and remediation result in returns in the range of –60 percent while proactive initiatives typically produce positive returns in excess of 20 percent. The problem was that most corporate activity (perhaps as much as 90 percent) was still of the reactive variety. The challenge was to transform the portfolio so that more was of the proactive sort. Ultimately, the goal is to get out of the regulatory compliance business entirely.

It was becoming clear that, under the right circumstances, firms could actually improve their own competitive position by creating societal value. They could, for example, lower costs by internalizing externalities through pollution prevention. Furthermore, through product stewardship, it was sometimes possible to supply public goods and achieve superior performance. Witness Volvo’s new radiator that actually cleans the air as it cools the engine, or BP’s climate-change policy that reduces its greenhouse gas emissions while reducing its costs. We should emphasize, however, the caveat “under the right circumstances:” Only through creativity, imagination, and the persistent development of particular skills and capabilities can firms simultaneously optimize financial, social, and environmental performance.

By the early 1990s, the greening revolution had led to the creation of a new dual-degree program at the University of Michigan involving both the Business School and the School of Natural Resources and Environment: the Corporate Environmental Management Program (CEMP). Integrating pollution prevention and product stewardship into the management curriculum was the backbone for this program. As the
founding director of CEMP, I had completed a virtual turnabout: It was now clear to me that the corporate sector itself was the key leverage point for achieving substantial and lasting change in societal performance, and that financial performance need not suffer in the process. I could finally put aside the demons from the past associated with “the smell of money.” I came to realize instead that pollution was the smell of waste and poor management.

Beyond Greening

Yet, this personal reconciliation was by no means the end of the road. The corporate “greening” initiatives of the late 1980s and early 1990s—pollution prevention and product stewardship—were important first steps. They shattered the myth that business should treat societal issues as expensive obligations. Instead, seen through the prism of quality and stakeholder management, these issues could become important opportunities for the company to improve its societal and operating performance simultaneously. A growing body of research pointed to the potential for enhanced financial performance through well-executed pollution prevention and product stewardship strategies. Pioneers such as 3M, Dow, and Dupont realized significant cost reductions and enhanced reputations as a result of their activities. The World Business Council for Sustainable Development, with its mantra of “eco-efficiency,” helped to erase the false dichotomy between business and environmental performance.

However, greening alone fell well short of what was possible—and needed: Incremental improvements to current product systems and production processes only slowed the rate of environmental damage. Sustainability means inventing a new form of “natural capitalism.” As University of Virginia architect Bill McDonough points out, greening is akin to heading in the wrong direction, but at a slower rate of speed—being less bad. Sustainability, however, means actually turning around
and heading in the right direction—being more good. It is, as McDonough and his colleague Michael Braungart point out, the difference between being eco-efficient and being eco-effective.21

Furthermore, most corporations continued to serve the needs of the wealthy exclusively while exploiting the developing world primarily for its abundant resources and cheap labor pool. A sustainable global enterprise would instead seek to create corporate and competitive strategies that simultaneously deliver economic, social, and environmental benefits for the entire world.22 By the mid-1990s, it was clear that the corporate agenda was much bigger than just greening—and that the business opportunity was much more substantial as well. This was the key message of my 1997 McKinsey award-winning article in the *Harvard Business Review*, “Beyond Greening: Strategies for a Sustainable World.” It was also my primary motivation for moving to the University of North Carolina at Chapel Hill in 1998 to become the founding director of the Center for Sustainable Enterprise at the Kenan-Flagler Business School.

Corporations were being challenged to move beyond greening, first by pursuing new technologies that had the potential to be inherently clean (renewable energy, biomaterials, wireless IT), and second by reaching out to bring the benefits of capitalism to the entire human community of 6.5 billion people (rather than just the 800 million at the top of the economic pyramid). In recognition of this challenge, my colleagues at UNC and I launched in 2000 The Base of the Pyramid Learning Laboratory, a consortium of large corporations, new ventures, and nongovernmental organizations (NGOs) all focused on how best to serve the needs of the four billion people at the base of the economic pyramid (BOP) in a way that is culturally appropriate, environmentally sustainable, and economically profitable.

By moving beyond greening, companies hope not only to address mounting social and environmental concerns, but also to build the foundation for innovation and growth in the coming decades. In so doing,
they would outperform their competitors in today’s businesses and, even more important, outrun them to tomorrow’s technologies and markets. In short, sustainable global enterprises would create competitively superior strategies that simultaneously move us more rapidly toward a sustainable world.

Exhibit 1.1 summarizes the evolutionary path that corporations have followed over the past 50 years. Crossing the chasm from seeing societal performance as a trade-off or obligation (the left side of the figure) to a possible win-win opportunity (the lower-right side) was the major breakthrough of the 1980s. By the mid-1990s, many large corporations had internalized the capabilities and disciplines associated with greening, although some still had a long way to go. As a result, the competitive front migrated to the “beyond greening” domain (the upper-right portion).

Exhibit 1.1
The Long and Winding Road

1945-1960s
Pollution
Denial
“Smell of money”
(oblivious)

1970-1980s
End-of-pipe regulation
“Pay to reduce negative impact”
(trade-off)

Mid-1990s- Present
Beyond greening
• Clean technology
• Sustainability vision
“Eco-effectiveness”
(positive force)

Mid-1980s-1990s
Greening
• Pollution prevention
• Product stewardship
“Eco-efficiency”
(win-win)

Rather than seeking incremental improvements to what already exists, moving beyond greening often means pursuing innovations that may make obsolete what currently constitutes the company’s core business—it is an inherently disruptive act. Thus, given its focus on new technologies and markets, the “beyond greening” space is blessed with
much greater opportunities, but also fraught with bigger risks. One case in particular—Monsanto’s controversial entry into genetically modified seeds—illustrates the potential opportunities and pitfalls of pursuing such strategies.23

Raging Against the Machine

In the mid-1990s, new CEO Robert Shapiro sought to revolutionize Monsanto. Through the power of his vision, he hoped to convert the firm from a chemicals manufacturer to a life-sciences company focused on “Food, Health, and Hope.” Consistent with this vision, Shapiro spun off several strategic business units (SBUs) associated with the organization’s chemicals business heritage, retaining only those closely tied to its life sciences focus. Simultaneously, he took the company on an acquisition binge, aggressively buying up biotech and seed companies, and huge debt in the process. The more focused—and leveraged—company then set out on a rapid growth strategy to make agricultural biotechnology a practical reality.

Shapiro also articulated how Monsanto’s genetically engineered seeds gave the firm an advantage in the drive toward sustainability because they could increase farmers’ yields, reduce pesticide use, and help to deliver nutrients to the world’s chronically undernourished poor. In the space of a few years, Monsanto convinced farmers to plant nearly 60 million acres in the U.S. in genetically modified crops. In 1997, Shapiro also launched a new Sustainable Development Sector, empowering dozens of internal champions to identify and grow the new businesses of the future that would address global social and environmental concerns in an economically profitable manner. Between 1995 and 1997, Monsanto’s stock price soared amid rosy projections of blockbuster products and rapidly expanding markets for agricultural biotechnology.
As a result of these developments, Monsanto was thrust into the public eye in a way that few companies had ever been in the past. Shapiro’s portrayal of biotechnology’s role in the future of agriculture generated unprecedented levels of public attention and scrutiny. This scrutiny resulted in problems for Monsanto as critics cast bright lights on incidents in which company actions did not match the spirit of Shapiro’s vision.

For example, when Monsanto attempted to launch its genetically modified seeds in Europe, it met intense resistance from organic farmers and environmentalists, despite the fact that all the necessary regulatory approvals had been secured. Some Monsanto managers hired private investigators to ensure that customers (farmers) were not illegally saving Monsanto’s genetically modified seed for replanting the following year. These actions and others alienated many who called into question Monsanto’s true dedication to sustainable development and environmental stewardship. Shapiro’s vision, in other words, did not always align with the actions taken by people in the company.

Other stakeholder groups included the millions of small farmers in developing countries such as India. These farmers protested against Monsanto in the streets, fearing that the company would enforce patents on essential grains and make them pay international prices for the seed they planted. Moreover, the farmers were concerned that Monsanto’s patent ownership (via acquisition) of the “terminator” gene (seed-sterilization technology) would not allow them to practice the age-old tradition of propagating seeds from their own crops.

Regrettably, Monsanto did not enable these voices to reach business decision makers. The firm consulted with its immediate customers (large-scale farmers), regulators, and consumer groups in the United States. Despite efforts by the company’s Sustainable Development Sector to access other voices, the business decision makers did not consider consumer groups in Europe or small farmers in developing countries to be legitimate or persuasive, even if their claims seemed urgent.
Instead of becoming a more open, innovative culture, the firm became more defensive and had to back away publicly from several of its biotechnology initiatives under pressure from growing protest. Indeed, in October 1999, Monsanto publicly apologized for its behavior: “Our confidence in this technology (genetic engineering) and our enthusiasm for it has, I think, been widely seen, and understandably so, as condescension and indeed arrogance.” External support for the firm’s strategy had eroded, and in late 1999, the company followed through on merger talks with pharmaceutical maker Pharamcia & Upjohn. This move effectively ended the Shapiro era of sustainability-driven corporate strategy at Monsanto.

**Smart Mobs Versus Smart Globalization**

How do we account for the rapid rise—and even more precipitous fall—of a major corporation such as Monsanto, which had done nothing wrong according to society’s legal and regulatory institutions and had, in fact, transformed its business model to add value to its customers while reducing environmental impact? Certainly, the emergent nature of biotechnology had something to do with the problems that Monsanto experienced. Indeed, an accelerating pace of technological change appears to be generating ever-faster cycles of creative destruction.

Yet there is even something more fundamental at work here. The power of governments has eroded in the wake of globalization and the growth of transnational corporations with global supply chains that span several continents. NGOs and civil society groups have stepped into the breach, assuming the role of monitor and, in some cases, enforcer of social and environmental standards. Today, for example, there are more than 50,000 international NGOs, compared to fewer than 20,000 only a decade ago.
At the same time, the spread of the Internet and other information technologies has enabled not only these groups, but also millions of individuals, to communicate with each other in ways that were unimaginable even a decade ago. Indeed, Internet-connected coalitions of NGOs and individuals—smart mobs—are now making it impossible for governments, corporations, or any large institution to operate in secrecy. The varied claims of these smart mobs have created a dynamically complex business environment in which organizations find it difficult to determine what knowledge is relevant for managing strategic change; just ask senior managers at Shell, Nike, the World Trade Organization, or the World Economic Forum.

Unfortunately, as the Monsanto case illustrates, most companies still tend to focus management attention only on known, powerful, or “salient” stakeholders—those who can directly impact the firm. Even recent efforts at “radical transparency,” the complete and truthful disclosure of an organization’s plans and activities, appear inadequate because they entail reporting only what has already been decided or, in fact, accomplished. Yet in a world of smart mobs, firms cannot manage stakeholders. Instead, swarms of stakeholders self-organize on the Net in chaotic and unpredictable ways.

Groups at the “fringe” of a firm’s stakeholder network can acquire an important voice in such swarms. To avoid the wrath of the smart mob, it has now become essential to proactively seek out the voices from the fringe that had previously been ignored. To survive and compete for the future, firms must harness these voices to identify creative new business models and opportunities. The tyranny of the smart mob can yield to a new form of what might be called “smart globalization:” growth via disruptive business models that address the social and environmental concerns of fringe stakeholders.
Becoming Indigenous

The Monsanto experience holds an important lesson: If corporate sustainability strategies are narrowly construed, they will fall seriously short. It is not enough to develop revolutionary technology with the potential to leapfrog currently unsustainable methods. Antiglobalization demonstrators have made it apparent that if corporate expansion is seen to endanger local autonomy, it will encounter vigorous resistance. Multinationals seeking new growth strategies to satisfy shareholders increasingly hear concerns from many quarters about consumer monoculture, labor rights, and cultural hegemony. As long as multinational corporations persist in being outsiders—alien to both the cultures and the ecosystems within which they do business—it will be difficult for them to realize their full commercial, let alone social, potential. It was with this realization that I embarked on a new professional challenge in 2003, having accepted the SC Johnson Chair in Sustainable Global Enterprise at Cornell University’s Johnson School of Management.

Today corporations are being challenged to rethink global strategies in which one-size-fits-all products are produced for the global market using world-scale production facilities and supply chains. Even so-called locally responsive strategies are often little more than pre-existing corporate solutions tailored to “fit” local markets: Technologies are frequently transferred from the corporate lab and applied in unfamiliar cultural and environmental settings; unmet needs in new markets are identified through demographic (secondary) data. The result is still-born products and inappropriate business models that fail to effectively address real needs.

The next challenge will thus be for corporations to become “indigenous” to the places in which they operate (see Exhibit 1.2). Doing so will require that they first widen the corporate bandwidth by admitting voices that have, up to now, been excluded; this means becoming radically transactive rather than just radically transparent. It will also entail the development of new “native” capabilities that enable a company to
develop fully contextualized solutions to real problems in ways that respect local culture and natural diversity. When combined with multinational corporation’s (MNC) ability to provide technical resources, investment, and global learning, native capability can enable companies to become truly embedded in the local context.

Unilever’s Indian subsidiary, Hindustan Lever Limited (HLL), provides an interesting glimpse of the development of native capabilities in its efforts to pioneer new markets among the rural poor. HLL requires all employees in India to spend six weeks living in rural villages, actively seeks local consumer insights and preferences as it develops new products, and sources raw materials almost exclusively from local producers. The company also created an R&D center in rural India focused specifically on technology and product development to serve the needs of the poor. HLL uses a wide variety of local partners to distribute its products and also supports the efforts of these partners to build local capabilities. In addition, HLL provides opportunities and training to local entrepreneurs and actively experiments with new types of distribution, such as selling via local product demonstrations and village street theaters.

By developing local understanding, building local capacity, and encouraging a creative and flexible market entry process, HLL has been able to generate substantial revenues and profits from operating in low-income markets. Today more than half of HLL’s revenues come from customers at the base of the economic pyramid. Using the approach to product development, marketing, and distribution pioneered in rural India, Unilever has also been able to leverage a rapidly growing and profitable business focused on low-income markets in other parts of the developing world. Even more important, through its new strategy, HLL has created tens of thousands of jobs, improved hygiene and quality of life, and become an accepted partner in development among the poor themselves.
The Road Ahead

To summarize, the greening initiatives of the late 1980s and early 1990s were revolutionary, if insufficient, steps: They repositioned social and environmental issues as profit-making opportunities rather than profit-spending obligations. More recent “beyond greening” strategies are even more significant: They hold the potential to reorient corporate portfolios around inherently clean technologies and create a more inclusive form of capitalism that embraces the four billion poor at the base of the economic pyramid. If narrowly construed, however, such strategies still position MNCs as outsiders, alien to both the cultures and the ecosystems within which they do business. The challenge is for multinationals to move beyond “alien” strategies imposed from the outside to become truly indigenous to the places in which they operate. To do so will require companies to widen their corporate bandwidths and develop entirely new “native” capabilities that emphasize deep listening and local codevelopment. A more inclusive commerce thus requires innovation not just in technology, but also in business models and mental frames.
Thus, as we enter the new millennium, capitalism truly does stand at a crossroads. The old strategies of the industrial age are no longer viable. The time is now for the birth of a new, more inclusive form of commerce, one that lifts the entire human family while at the same time replenishing and restoring nature. The path to a sustainable world, however, will be anything but smooth. It will be a bumpy ride strewn with the remains of companies that variously dragged their feet, made promises they could not keep, bet on the wrong technology, collaborated with the wrong partners, and separated their social and business agendas. Only those companies with the right combination of vision, strategy, structure, capability, and audacity will succeed in what could be the most important transition period in the history of capitalism.

Overview of the Book

This chapter has provided a guided tour of the argument contained in the book. The book itself is divided into three parts. Part One, “Mapping the Terrain,” provides the background and context for the chapters that follow; it describes the global situation and establishes the business case for pursuing strategies that aim to solve social and environmental problems. It also outlines the challenges and opportunities that remain to be addressed, particularly those that involve the development of new, more sustainable technologies and the needs of the four billion people who have been largely bypassed thus far by globalization. Part Two, “Beyond Greening,” then develops the logic and content of these “beyond greening” strategies in more depth. Finally, in Part Three, “Becoming Indigenous,” I suggest how corporations might begin to move beyond even these strategies for sustainability by learning to become more embedded in the local context. Learning to become indigenous, I argue, is the next strategic challenge on the road to building a sustainable global enterprise.
Chapter 2, “Worlds in Collision,” places the global challenges associated with sustainability in the larger context. It seeks to cut through the complexity by providing a readily digestible framework for thinking about the current global situation, characterizing it as the collision of three economies or worlds—the money economy, the traditional economy, and nature’s economy. Ultimately, the challenge is to develop a sustainable global economy: an economy that the planet is capable of supporting indefinitely, while simultaneously providing for the entire human community in a way that respects cultural, religious, and ethnic diversity. This chapter seeks to put this challenge into perspective and offers some thoughts about appropriate roles for multinational corporations.

Chapter 3, “The Sustainable Value Portfolio,” closes out the first section of the book by developing a detailed framework for connecting the agendas of sustainability and value creation. Just as companies must succeed on many fronts in order to create shareholder value, so, too, must they master economic, social, and environmental challenges to achieve sustainability. These challenges affect virtually every aspect of a firm’s strategy. The chapter makes clear that although the biggest opportunity for the future lies in moving beyond greening, most companies still focus virtually all their attention on greening or (worse) mere compliance.

Part Two of this book develops the strategies that move beyond greening in greater depth. Chapter 4, “Creative Destruction and Sustainability,” articulates the strategic logic for pursuing leapfrog strategies to clean technology in ways that open exciting new growth markets but also often make the firms’ existing technologies and products obsolete. The chapter also shows how the lens of whole-systems thinking can help to prioritize investment in the new technologies and capabilities that will be important to the future competitiveness of the enterprise.
Chapter 5, “The Great Leap Downward,” demonstrates why the four billion people at the base of the world economic pyramid represent the most attractive early market for many of the most exciting new clean technologies. Because most such technologies are disruptive and will, therefore, be resisted by established markets, the vast underserved populations in shantytowns and rural villages offer the most promising places to incubate and grow the technologies of tomorrow. In the process, they also provide platforms for new growth industries that hold the potential to revolutionize markets at the top of the pyramid—and move us much more rapidly toward a sustainable world.

Chapter 6, “Reaching the Base of the Pyramid,” articulates some basic principles for successfully tapping into these emerging markets and shows how effective strategies will generate not only corporate growth and profits, but also local jobs, incomes, and solutions to social and environmental problems. By removing the constraints imposed on the poor, increasing their earning power, and creating new potential in poor communities, companies can identify and pursue previously invisible opportunities. To be successful in these new markets, however, companies must pursue business model innovation just as avidly as technological innovation.

Finally, Part Three of this book critically evaluates early “beyond greening” experiences and offers some prescriptions for how to move toward a more indigenous and inclusive form of commerce. Chapter 7, “Broadening the Corporate Bandwidth,” first describes how the existing conceptions of “development” and “modernization” reflect a Western cultural bias and a preoccupation with simply raising income and GDP per capita. Together, these shortcomings significantly hinder efforts to imagine and build healthy communities and markets at the base of the pyramid. To successfully serve the needs of the entire human community, therefore, corporations must broaden their bandwidth. Radical transactiveness is the tool proposed to enable companies to hear the true voices of those who have been marginalized or ignored by globalization.
Chapter 8, “Developing Native Capability,” then shows how critical it is to expand our conception of the global economy to include not just the transactions that occur in the formal economy, but also the myriad other forms of economic activity that are typically ignored—the informal economy, household production, and the barter economy, for example. Native capability means bridging the formal and informal sectors: Development at the base of the economic pyramid does not follow traditional patterns found in the developed world. Indeed, the chapter shows that success in this space means focusing on what is positive in the BOP, not just what is negative (corruption), or missing (Western-style institutions). Native capability then enables global firms to move beyond the existing transnational model, with its emphasis on global supply chains, world scale, and centrally developed—and often alien—solutions.

In the final chapter, “Toward a Sustainable Global Enterprise,” the problem of terrorism is shown to be, at base, a problem of unsustainable development. Only by removing the underlying conditions that lead to extremist movements will we be able to move toward global sustainability. The Middle East thus represents the biggest immediate challenge—and opportunity—on the road to a sustainable global enterprise. Most of the book focuses on what companies might do to pursue the sustainability path—the strategies, practices, and capabilities that are required. What is less clear is how to pursue this path, particularly within the context of large, incumbent, multinational corporations. This chapter therefore closes with some thoughts on what it will take to make this happen in the real world of budgets, quarterly earnings reports, discounted cash flow analysis, and the discipline of the investor community.
Notes


3. It is not my intention here to suggest that trade-offs do not exist between corporate economic and societal performance. Clearly, in some situations, command-and-control regulation is the only viable solution. In others, however, it is possible to internalize externalities or even supply public goods in a way that facilitates economic performance. The problem has been blind adherence to the belief that such “win-win” situations are generally not possible.

4. Again, my intention here is not to suggest that command-and-control regulation does not serve an important purpose. For laggards and criminals, there is no option. However, for those firms seeking to move beyond compliance, such regulation can sometimes limit degrees of freedom and slow the rate of innovation.


6. My thanks to Paul Tebo at DuPont for this wonderful illustration.

7. Indeed, the Reagan administration in the United States was bent on reforming—or, better yet eliminating—these regulations.


9. Ironically, quality management was an American invention in the first place, but it was rejected in the 1950s by U.S. companies who were making too much money through high-volume, standardized mass production. Proponents such as Deming and Crosby found willing adopters, however, in the struggling companies of post-war Japan.

10. See, for example, Masaki Imai, *Kaizen: The Key to Japan’s Competitive Success* (New York: Random House, 1986).


13. For an excellent and in-depth treatment of greening as business opportunity and strategy, see Forest Reinhardt, Down to Earth (Cambridge, MA: Harvard Business School Press, 2000).


19. Personal communication with Dave Buzzelli, Dow Chemical Company, 1996.


21. William McDonough and Michael Braungart, Cradle to Cradle.


23. Erik Simanis and Stuart Hart, Monsanto Company (A) and (B): Quest for Sustainability (Washington, D.C.: World Resources Institute, 2000).


32. See, for example, Anil Gupta and Eleanor Westney, eds., *Smart Globalization* (San Francisco: Jossey-Bass, 2003).

Symbols
2x2 matrix, 59
buzzwords, 63-64
innovation, 61
sustainability, performance drivers, 61
3P (Pollution Prevention Pays), 66

A
acid rain, 35
affluence, 31-32
antiglobalization demonstrators, 21
ApproTEC (Appropriate Technologies for Enterprise Creation), providing consumer surplus to BOP, 147
Aracruz Celulose, 48
Asian tsunami, economic effect of, 216-217
Asset Recyle Management, 12
auto industry, clean technology initiatives, 77-78
AUTOonomy project, 99

B
Bah Abba, Mohammed, 192
banking, multicredit loans, 72
base of pyramid (BOP), 15
becoming indigenous, 219-221
beggars, extending loans to, 174
benefits of greening initiatives, 14
Benyus, Janine, 173
“beyond greening” strategies, 14-16, 90
biomimicry, 33
birth rates, 32
BOP (base of pyramid), 15
business creation, 145-147
business model innovation, evaluating sustainability impact, 151-153
consumer surplus, providing through business model innovation, 145-147
developing market opportunities, 136-144
engaging, 190-193
Great Leaps Downward, Grameen Telecom, 122
as MNC business target, 158-159
as target for disruptive technologies, 117 “unfreedoms,” 141
BOP Learning Laboratory, 108
Braungart, Michael, 15
Brundtland Commission, xli
Burlington Chemical Company, “creative destruction” strategy, 94

capitalism, 24. See also global capitalism
carbon dioxide and waste reduction, 95
cause-related marketing, 68
Cemex, constraint identification, 141-144
CEMP (Corporate Environmental Management Program), 13
Center for Sustainable Enterprise, 15
Christensen, Clay, 109, 198
chronocentrism, xxxv
clean technology, 69-71, 77-78
CMA (Chemical Manufacturers Association)
  Responsible Care, 88-89
coinventing custom solutions, 194-196
collaboration
  after Asian tsunami, 216-217
  with nontraditional partners, 201-204
Collins & Aikman Floorcovering, 46
collision course of three economies, 40-41, 47-50
command-and-control regulation, 5
consumer surplus, providing to BOP through business model innovation, 145-147
continuous improvement (kaizen), 8
core versus fringe stakeholders, 171
Corporate Environmental Management Program (CEMP), 13
corporate footprints, reducing (developed markets), 44-46
corporations, downfall of, 19-20. See also MNCs
cost structures, lowering, 225
Coyle, Diane, 102
“cradle to cradle,” 12
“cradle to grave,” 12
creative creation, 114
creative destruction, 86-87, 94-95, 114
custom solutions, coinventing, 194-196

D
Daewoo, 53
de Soto, Hernando, 37, 112
DeSimone, Joe, 95
developed economies, 34, 42-46
dG (distributed generation of power), 122-124
direct-distribution business model, developing for BOP market, 140
disequilibrium, 85
disruptive innovation, 113
devolving, need for divergent thinking, 173
  GM crops, backlash against, 126-129
  nonconsumption as competition, 117
  PCs, 115
  targeting BOP, 117
Dow Chemical, 13
downfalls of corporations, 19-20
DuPont, 44

E
e-choupals initiative, 150
economic effect of Asian tsunami, 216-217
EHS (environment, health, and safety), 6
emerging economies, 34
EMS (environmental management system), 9
Enron, xxxviii
enterprise-based model of reconstruction, 217
environment, health, and safety (EHS), 6
environmental management system (EMS), 9
EPA (Environmental Protection Agency), 5
Escobar, Arturo, 169
Evaluating sustainability impact of business models for BOP market, 151-153
experimenting with low-cost probes, 196-198
extralegal sector, connecting with formal economies, 113

F
facilitating local capability, 194-209
FDI (foreign direct investment), xxxix
Fingerlakes Aquaculture, 49
Fisher, Martin, 145
FLA (Fair Labor Association), 69
foreign direct investment (FDI), xxxix
Frank, Bob, 232
Friedman, Tom, 191, 215
fringe stakeholders, identifying, 173

G
Galanz, success with disruptive innovation, 117-118
General Motors, AUTOonomy project, 99
Gibson-Graham, J.K., 187
global capitalism, xli-xlii
global economy, expanding concept of, 186, 189
global enterprise sustainability, reliance on organizational alignment, 227-231
globalization, downfall of corporations, 19-20
GM (genetically modified) crops, backlash against, 126, 129
GrameenPhone, 120
Grameen Telecom, village phones, 119-121
  sustainability assessment, 153-156
“Great Trade-Off Illusion,” 6-7
green manufacturing with carbon dioxide, 95
greenhouse gas emissions, reducing, 46
greening revolution, 12-16, 87
“greenwash” portfolios, 75

H
Hammond, Al, 141
Hawken, Paul, 97
Henderson, Hazel, 187
HLL (Hindustan Lever Limited), 22, 136-140
Hollliday, Chad, 44
home construction, whole systems thinking, 98
Honey Care Africa, 202

I
“i-communities,” 73
identifying fringe stakeholders, 173
incremental innovation, Responsible Care, 88-89
indigenous societies, recognizing to provide sustainability, 219-221
infrastructure development, effect on Ladakhi society, 165-167

J-K
Jackson, Wes, 186
Japan, 8
kaizen, 8
Khanna, Tarun, 201
Korten, David, 169
KX Industries, 52

L
Liang, Qingde, 118
Lieberthal, Ken, 107
life-cycle design principles, 12
life-cycle management, 68
locally responsive strategies, 21
London, Ted, 189
Lovins, Amory, 97
Lovins, Hunter, 97
low-cost probes, experimenting with, 196-198
LUTW (Light Up the World), 124

M
mandis, 150
Mao Zedung, 113
marginal analysis, 96
McDonough, Bill, 14
McMillan, John, 233
Micell Technologies, 95
Milstein, Mark, 58
MNCs (multinational corporations), xxxix, xli, 22, 223-226
bypassed BOP market opportunities, 111
cost structures, lowering, 225
duplicating ownership, 233
failure of emerging market strategy, 110
Hindustan Lever, Ltd. (HLL), developing BOP market opportunities, 136-140
impetus for developing BOP business opportunities, 157-159
outreach, 148-149
outreach programs, POEMA, 149
ownership of ideas, 234
product development, focusing on functionality, 224-225
scale, redefining, 226-227
money economy, 34-35
Moneymaker Microirrigation Pump, 200
monolithic entities, 42
Monsanto, 17-19
Moore, Sam, 93
muda, 9
multicredit loans, 71
multinational corporations. See MNCs

N
NAFTA (North American Free Trade Agreement), 93, 130
natural capitalism, 14
nature’s economy, 38-39
NGOs (nongovernmental organizations), 15, 19
Nike, “World Shoe” initiative, 178
nonconsumption as competitor to disruptive innovation, 117
nongovernmental organizations. See NGOs
nontraditional partners, working with, 201-204
Norberg-Hodge, Helena, 164
North American Free Trade Agreement. See NAFTA

O
ODA (official development assistance), xxxix
organizational alignment as prerequisite for global enterprise sustainability, 227-231
outreach programs, 148-149
ownership of ideas, 233-235

P
Patrimonio Hoy, 143
peer lending, multicredit loans, 72
perchloroethylene, 95
Pharmacia & Upjohn, 19
POEMA (Poverty and Environment in Amazonia Research and Development), 149
pollution prevention, 9-10, 66-67. See also clean technology
postwar development paradigm, 169-172
Poverty and Environment in Amazonia Research and Development (POEMA), 149
poverty of dignity, 215
Prahalad, C.K., 107, 141
preventing pollution, 9-10
proactive strategies, 13
Proctor & Gamble, PuR, 52
product development, focusing on functionality, 224-225
product stewardship, 67-69
progress, cost of, 4
“Project Shakti,” 139
pyrethrum, 146

Q-R
Quadir, Iqbal, 119
quality management, 8-9
radical transactiveness (RT), 170, 180-181
Rajan, Raghuram, 220
Raynor, Michael, 198, 230
reconstruction, enterprise-based model, 217
renewable resources, 38
research and development as hindrance to sustainability, 223
Responsible Care, 9, 88-89
Rodick, Anita, 224
RT (radical transactiveness), 170, 180-181
Ruckelshaus, William, 57

S
SC Johnson Company, xxxi-xxxiii, 21, 46, 68, 146-147
Sachs, Jeff, xxxviii, 169
Sachs, Wolfgang, 169
Samara, Noah, 195
Save Money and Reduce Toxins (SMART), 66
SBUs (strategic business units), 17
Schumpeter, Joseph, 85
Sen, Amartya, 141
SEs (Shakti Entrepreneurs), 139
Shapiro, Robert, 17, 230
shareholder value, increasing through product stewardship, 67-69
Sharma, Sanjay, 170
Simanis, Erik, 163
SMART (Save Money and Reduce Toxins), 66
social contracts, building, 204-207
Soros, George, xxxviii, 169
stakeholders, core versus fringe, 171
static equilibrium, 85
Stiglitz, Joseph, xxxviii, 169
strategic business units (SBUs), 17
subcapabilies of RT, 172
Superfund Reauthorization, 11
sustainability
2x2 matrix, 59-64
assessing for village phone initiative, 153-156
in auto industry, clean technology initiatives, 76-78
avoiding top-down implementation, 221-222
Burlington Chemical Company’s commitment to, 94
challenges confronted by, 218-221
developing a vision for, 71-75
disruptive technologies, 87, 129
emerging markets, 48
enterprise-based model of reconstruction, 217
of global enterprise, organizational alignment as prerequisite, 227-231
increasing through product stewardship, 67-69
performance drivers, cost and risk reduction, 61
R&D as hindrance to, 223
top-down sustainability implementation, 221-222
Toxic Release Inventory (TRI), 10
traditional markets, 36-38, 42-43, 50-53
transnational model, moving beyond, 207-209
TRI (Toxic Release Inventory), 10
Truman, Harry, 168
tsunami in Asia, economic effect of, 216-217

U-V
“unfreedoms,” 141
unsustainable development, terrorism as symptom of, 214-215
urbanization, 35
Ureta, Hector, 142
village phones, 119-121
sustainability assessment, 153-156
voluntary initiatives, 10-14

W-Z
Washington Consensus, xxxviii, 129
choices to confront, 180
choices to confront, 180-181
Waste Reduction Always Pays (WRAP), 66
water, 52
water tables, 39
Xerox, life-cycle design principles, 12
Yunus, Muhammad, 71
Zingales, Luigi, 220