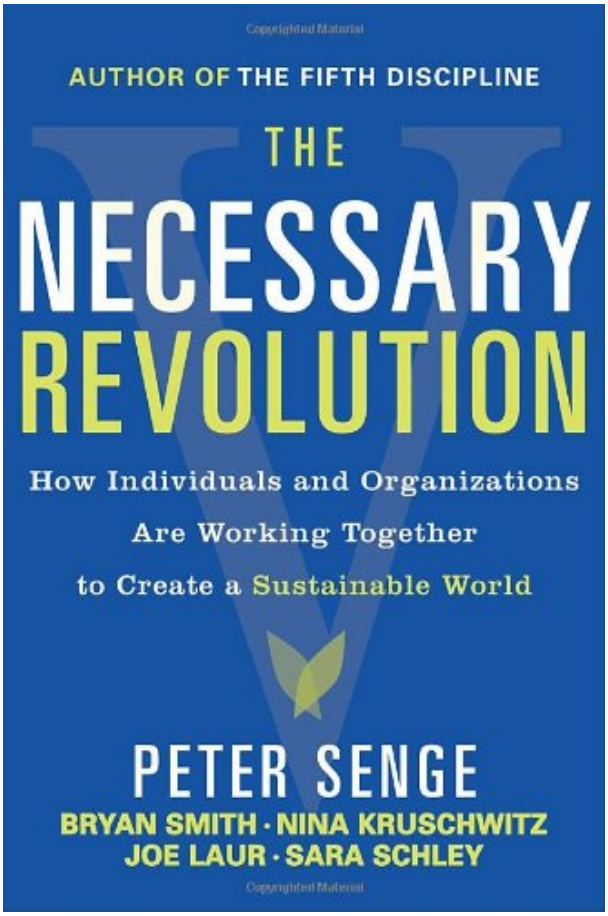
THE NECESSARY REVOLUTION: HOW INDIVIDUALS AND ORGANIZATIONS ARE WORKING TOGETHER TO CREATE A SUSTAINABLE WORLD BY PETER M. SENGE, BRYAN S

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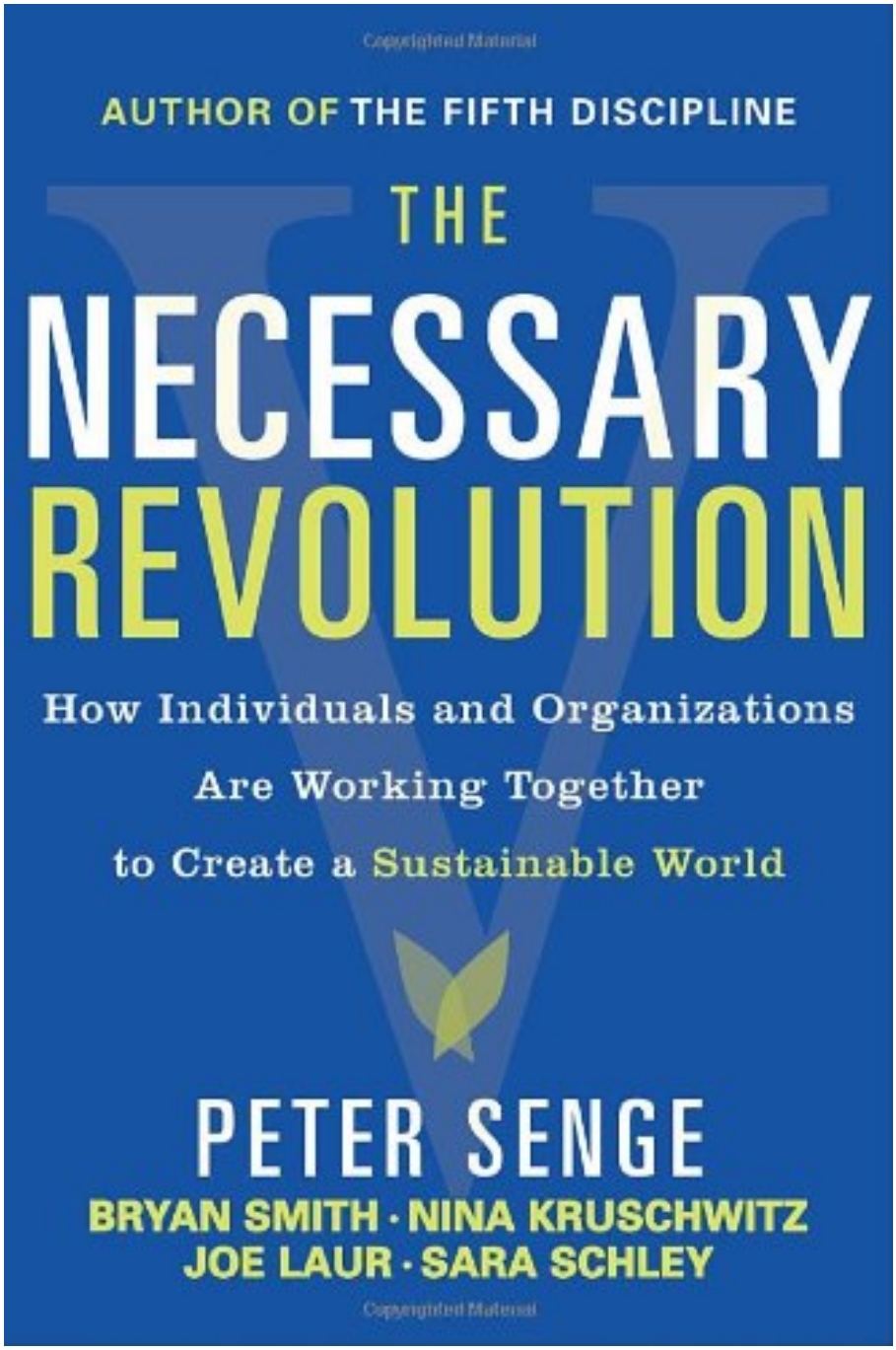

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Based upon some experiences of lots of people, it remains in reality that reading this **The Necessary Revolution: How Individuals And Organizations Are Working Together To Create A Sustainable World By Peter M. Senge, Bryan S** could help them making far better option as well as offer more encounter. If you want to be among them, let's acquisition this publication The Necessary Revolution: How Individuals And Organizations Are Working Together To Create A Sustainable World By Peter M. Senge, Bryan S by downloading the book on link download in this website. You can get the soft documents of this book The Necessary Revolution: How Individuals And Organizations Are Working Together To Create A Sustainable World By Peter M. Senge, Bryan S to download and install and also deposit in your offered digital gadgets. Exactly what are you waiting for? Let get this book The Necessary Revolution: How Individuals And Organizations Are Working Together To Create A Sustainable World By Peter M. Senge, Bryan S on-line and read them in at any time and also any location you will certainly check out. It will not encumber you to bring heavy book The Necessary Revolution: How Individuals And Organizations Are Working Together To Create A Sustainable World By Peter M. Senge, Bryan S within your bag.

Review
Acclaim for The Fifth Discipline by Peter Senge, Honored As One of The Five Greatest Business Books of All Time by The Financial Times

“A management classic.” –Boston Globe

“One of the seminal management books of the past seventy-five years.”—Harvard Business Review

About the Author

Peter Senge was named as one of the 24 people who had “the greatest influence on business strategy over the last 100 years” by the Journal of Business Strategy

PETER SENGE, senior lecturer at MIT and the founding chair of the Society for Organizational Learning (SoL), is the author or co-author of several bestselling books, including The Fifth Discipline, Schools That Learn, and Presence. BRYAN SMITH, coauthor with Senge of The Dance of Change and two other Fifth Discipline fieldbooks, is a member of the faculty at York University’s Sustainable Enterprise Academy, and president of Broad Reach Innovations, Inc. NINA KRUSCHWITZ, manager of the Fifth Discipline Fieldbook Project, is the editor of Reflections: The SoL Journal on Knowledge, Learning, and Change. JOE LAUR and SARA SCHLEY co-founded the SoL Sustainability Consortium in 1998; Joe is vice president of

content for Greenopolis.com, and Sara is a mentor for the Harold Grinspoon Foundation.

1

A Future Awaiting Our Choices

Anyone visiting Australia today cannot help but notice massive billboards in all the major cities encouraging people to conserve water. A natural response would be to think these are the result of recent drought conditions, and indeed they are–in a way. But though the signs are new, the drought they were erected in response to has gone on for years and shows no sign of improvement. Across the nation, water reservoirs are at roughly one-quarter of capacity and have been declining for a decade–thanks to a combination of subnormal rainfall and rising temperatures widely attributed by leading scientifi c panels to climate change. (1) Starting in 2007, water became the focus of national debates;
one popular suggestion even called for the complete elimination of the nation's large citrus crop. This sounds drastic, but when there is simply not enough water to go around, hard choices need to be made, even if that means sacrifi cing an important crop in an industry that accounts for roughly 3 percent of GDP. The country's national election in fall 2007 was the first in the world in which climate change was the number one issue
(and the candidate deemed most dedicated to addressing it won), a possible harbinger for other countries in the coming years, including the United States.

But in addition to conserving resources such as water, innovative Australians everywhere are also seizing the opportunity to rethink and re-create their lives and the infrastructures that govern them. They are working together in communities across the country to come up with renewable energy solutions, and beginning to consider sweeping changes in energy and water industries. Business, long dominated by mining and minerals industries, has become a vocal advocate for investment in innovative alternative energy technologies, such as wind and solar.

Half a world away, Sweden has parted ways with other industrial economies to completely sever their dependence on imported oil–and the vulnerability that goes along with it. Under former prime minister Göran Persson, a commission was established in 2006 that laid out a fifteen-year plan to cut fossil fuel use to zero by 2020. This momentous shift was, in fact, the outcome of decades of work by remarkable networks of public and private sector leaders committed to making northern Sweden the world's first "bioregion," in which all energy needs are met from sustainably produced biofuels.

Similar changes are occurring in businesses the world over. In response to the turmoil of world oil markets and oil-producing regions, DuPont, one of the largest and oldest companies in America, has set itself on a course to shift its product line from petroleum-based to bio-based feedstocks. Like many companies around the world, DuPont has worked for years to reduce waste, including carbon dioxide (CO_2) emissions. But it now sees that the real innovation opportunities lie in the creation of new products that break the company's dependency on conventional oil and gas entirely. Similarly, Nike has reduced its "carbon footprint" by more than 75 percent. But, again, by looking for the truly innovative opportunities for the future, the company has declared its intent to achieve zero waste, zero toxicity, and 100 percent recyclability across its entire product line by 2020. "Our company and our customers care about health; our products and ways of producing them should embody this," says Darcy Winslow, former head of the women's footwear division. "But to do this we are having to completely rethink how we design, produce, and distribute those products and how we recover them at the end of their lifetime."

There are many types of revolutions. History talks mostly of political revolutions, dramatic events that all too often represent little real change over the long term: The cast of players in power shifts and new political philosophies come into vogue, but when it comes to the daily realities of most people, little changes. But occasionally something different happens, a collective awakening to new possibilities that changes everything over time–how people see the world, what they value, how society defines progress and organizes itself, and how institutions operate. The Renaissance was such a shift, as was the Industrial Revolution. So, too, is what is starting to happen around the world today.

Perhaps surprisingly, the most visible signs of this new revolution are a mounting series of environmental and social crises.

While Australia's water situation may seem extreme, it is hardly unique. Both the southeast and southwest regions of the United States are facing a similar need for rationing and possible permanent cutbacks. In developed countries around the world, previously taken-for-granted aspects of daily life–food, water, energy, predictable weather–seem less and less reliable.

Each of the last several summers has brought record heat waves to much of Europe, as well as other strange occurrences such as extreme flooding, crops that come to season a month early, and the appearance of mosquito-borne diseases previously known only to the Southern Hemisphere–events that scientists have linked to global warming and increased atmospheric CO2. (2)

In the United States, there have been repeated scares about contaminated food imported from Asia and E. coli outbreaks from crops grown in our own backyard, recent warnings to parents about the rapid spread of poison ivy caused by higher CO2 levels in the atmosphere (which both speed the plant's growth and increase its toxicity), and a historic shift in the politics of energy. Even former protectors of the oil-fueled economic status
quo now recognize that America's energy consumption (we consume 25 percent of the world's fossil fuels with only 5 percent of the population) cannot continue. (3) Our rampant consumption and protect-the-source foreign policies no longer offer a reliable path for the future. As President Bush admitted, "America is addicted to oil."

While environmental crises get most of the headlines today, the simple fact that the wealth of the 200 richest people in the world exceeds the combined annual income of the world's 2.5 billion poorest people should give anyone pause, as should the knowledge that almost half of the world's population lives on less than $2 per day while the average American earns $130 per day. (4) The belief that economic growth alone will solve the problems of poverty is simply not borne out by the facts. And the drive to satisfy legitimate ambitions for material progress is forcing developing countries such as China and India toward unprecedented rates of fossil fuel consumption–a poignant reminder that our social and environmental crises are joined at the hip.

But the real problem is not these crises per se but the likelihood that our responses will be completely inadequate.

If we see each problem–be it water shortages, climate change, or poverty–as separate, and approach each separately, the solutions we come up with will be short-term, often opportunistic, "quick fixes" that do nothing to address deeper imbalances. Take the recent frenzy in the U.S. over ramping up production of corn-based ethanol as an alternative to imported oil. The number of ethanol plants is expanding rapidly (there will be almost 200 by the end of 2008) and vast amounts of corn are being grown to supply them.5 Not only is this driving up food prices around the world, but ethanol from corn arguably takes us in the wrong

direction in terms of reducing greenhouse gases. Greenhouse gas emissions from using corn ethanol in cars do not differ substantially from emissions from using gasoline in cars. The net effect of using corn-based ethanol may even increase greenhouse gases due to land-use changes, as farmers worldwide clear forests and grasslands to grow corn in response to higher prices and demand.6 More sustainable alternatives such as cellulose-based biofuels from forestry and crop wastes are being developed, but the search for a quick fix, as opposed to creating a truly environmentally sound energy system, has put the attention on corn ethanol.

Fortunately, more and more people are beginning to sense that the mounting sustainability crises are interconnected–symptoms of a larger global system that is out of balance. As soon as people understand this, their view of the problems shifts. They start to see the extraordinary opportunities for innovation that can occur when we abandon fearful, reactive mentalities. They start to realize the deep problems we face today are
not a result of bad luck or a greedy few. They are the result of a way of thinking whose time has passed.

All ages end–from the Iron Age to the Bronze Age, from the age of the Renaissance to the Reformation, from the rise and reign of empires such as Rome's to more modern empires such as Britain's. No era–no matter how influential or how far-reaching–lasts forever. The Industrial Age, which has shaped our lifestyles and our worldview for generations, is no different.

To many, the term industrial itself seems rather quaint, since most of us in the developed nations appear to live in a world dominated by bits and bytes, not smokestacks and coal mines. Seventy percent of the American economy, for example, is driven by the spending of consumers, people who for the most part work in service or white-collar industries.7 Relatively few Americans work in factories today, fewer still in mines or on farms.

But immediate circumstances can be misleading. In fact, the last quarter century has seen the most dramatic increase in industrial activity the world has ever known. The number of automobiles in use in the world has grown from about 50 million in 1950 to about 800 million in 2008. The annual growth rate in the global production of automobiles (over 6 percent) is now at least four times the growth of human population in percentage
terms. (8) Since 1980, annual steel production worldwide has almost doubled. While U.S. industrial production grew by only half a percent in 2007, China posted a 13 percent increase in industrial production in 2007, Vietnam 17 percent, and India 10 percent. (9) More coal is mined than ever before. As customers and consumers, we are tied to industrial production for our computers and PDAs, cars and trucks, and fl at-panel televisions. And we are dependent on the energy required to make them work, over 70 percent of which comes from burning fossil fuels, as it has for the past 150 years. Yes, products and industrial processes are far more information-intensive than ever before, but such shifts in the mix of dominant technologies, such as the move from gaslights to electrifi cation or from mainframe computers to the Internet and personal computing, have been a recurring feature of the Industrial Age, not a signal of its demise.

But something important has happened in this last stage of the industrial era that sets it apart from the past: Globalization has brought a level of interdependence between nations and regions that has never existed before, along with truly global problems that also have no precedent. This includes environmental crises such as increasing levels of waste and toxicity (which often spill over from one country to another) and growing stresses on a host of fi nite natural resources, but also the widening gaps between the wealthy and the poor and alarming political reactions to these imbalances in the form of global terrorism. Just as the Iron Age didn't end because we ran out of iron, the Industrial Age isn't ending because of the decline in opportunities for further industrial expansion. It is ending because individuals, companies, and governments are coming to the realization that its side effects are unsustainable.

Ages do not end abruptly. Everyone does not just wake up one day and say, “This isn’t working. We must change.” Quite the contrary. When faced with challenges of this magnitude, the vast majority of people and institutions try harder to maintain the status quo. As neuroscientists say, the brain “downshifts” under stress–in other words, we revert to our most habitual (and more primitive) modes of behavior. Societies are no different.

Fortunately, societies are not monolithic. At the same time that many companies resist change to outdated methods and technologies, governments refuse to implement needed regulations, and individuals resist change to their established lifestyles, others wonder instead about what could be. What would an economy look like that operated entirely on “our energy income rather than our energy capital,” as the pioneer systems thinker and inventor Buckminster Fuller used to say? Or that embraced the natural systems principle, as articulated by William McDonough and Michael Braungart, that “all waste equals food for another system”? Or one in which Marshall McLuhan’s image of the “global village” was not merely a clever metaphor–but a principle for a world of interdependence, where the unilateral pursuit of “national security” is like chasing a shadow; none of us is secure if all of us are not secure?

Endings are also beginnings. The Industrial Age has brought extraordinary improvements in public education, human rights, and material wellbeing, but it has also destroyed ecosystems, swallowed up traditional cultures that had thrived for centuries, and created a way of life that cannot continue for much longer. With regard to each of these interconnected problems, the same fundamental choice exists: Do we protect the ways of
the past or join in creating a different future?

People and organizations around the world are already planting the seeds for new ways of living and working together. Yes, they are a minority. No, they are not part of the mainstream, either within their industries or usually within their own organizations. But, unlike previous periods of profound change, it is unlikely these seeds will take centuries to mature and spread, because in today’s interconnected world, the problems are global, and the changes will be as well. Pressures for change are building rapidly, and solutions and opportunities–and news of what works and how to build on it–are spreading equally rapidly.

CREATING THE FUTURE

Amid all the uncertainties, three guiding ideas stand out as essential for
creating a more sustainable future:

1. There is no viable path forward that does not take into account the needs of future generations. The term sustainability is widely used to express the need to live in the present in ways that do not jeopardize the future. When a process is sustainable, it can be carried out over and over again without negative environmental effects or impossibly high costs to anyone involved. The belief that we can attend only to our own needs and
goals is tantamount to discounting the value of the children, families, communities, and businesses who will inhabit that future. Businesses can no longer expect to compete in the future without taking into account the larger problems that stand between now and then.

2. Institutions matter. Today’s world is shaped not by individuals alone, but by the networks of businesses and governmental and nongovernmental institutions that influence the products we make, the food we eat, the energy we use, and our responses to problems that arise from these systems. No one person could destroy a species or warm the planet no matter how hard he or she tried. But that is exactly what we are doing

collectively, as our individual actions are mediated through the web of institutions that interconnect the world. It is folly to think that the changes needed in the coming years will not involve fundamental shifts in the way institutions function, individually and collectively. Ironically, despite increasing interdependence, most institutions are more consumed than ever by short-term thinking, frenzy, and opportunism. The gap between
the need to think and act interdependently and our abilities to do so sits at the heart of all the most difficult problems we face today. Still, as you will see from the stories below, the leadership needed to close that gap is now emerging from business and non-business organizations alike, and often in partnership.

3. All real change is grounded in new ways of thinking and perceiving. As Einstein said: “We can’t solve problems by using the same kind of thinking we used when we created them.” While institutions matter, how they operate arises from how we operate, how people think and interact. In short, to shape a sustainable future, we all need to work together differently than we have in the past. And that is what we will be describing
in the pages ahead.

In The Necessary Revolution, we will talk about the challenges we face in three interconnected areas–energy and transportation, food and water, material waste and toxicity (what we make and discard)–and the consequent imbalances that result when too many resources are concentrated in too few hands.

From the Hardcover edition.

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Imagine a world in which the excess energy from one business would be used to heat another. Where buildings need less and less energy around the world, and where “regenerative” commercial buildings – ones that create more energy than they use – are being designed. A world in which environmentally sound products and processes would be more cost-effective than wasteful ones. A world in which corporations such as Costco, Nike, BP, and countless others are forming partnerships with environmental and social justice organizations to ensure better stewardship of the earth and better livelihoods in the developing world. Now, stop imagining – that world is already emerging.

A revolution is underway in today’s organizations. As Peter Senge and his co-authors reveal in The Necessary Revolution, companies around the world are boldly leading the change from dead-end “business as usual” tactics to transformative strategies that are essential for creating a flourishing, sustainable world. There is a long way to go, but the era of denial has ended. Today’s most innovative leaders are recognizing that for the sake of our companies and our world, we must implement revolutionary—not just incremental—changes in the way we live and work.

Brimming with inspiring stories from individuals and organizations tackling social and environmental problems around the globe, THE NECESSARY REVOLUTION reveals how ordinary people at every level are transforming their businesses and communities. By working collaboratively across boundaries, they are exploring and putting into place unprecedented solutions that move beyond just being “less bad” to creating pathways that will enable us to flourish in an increasingly interdependent world. Among the stories in these pages are the evolution of Sweden’s “Green Zone,” Alcoa’s water use reduction goals, GE’s ecoimagination initiative, and Seventh Generation’s decision to shift some of their advertising to youth-led social change programs.

At its heart, THE NECESSARY REVOLUTION contains a wealth of strategies that individuals and organizations can use — specific tools and ways of thinking — to help us build the confidence and competence to respond effectively to the greatest challenge of our time. It is an essential guidebook for all of us who recognize the need to act and work together—now—to create a sustainable world, both for ourselves and for the generations to follow.

- Sales Rank: #109682 in Books
- Published on: 2010-04-06
- Released on: 2010-04-06
- Original language: English
- Number of items: 1
- Dimensions: 9.18" h x .89" w x 6.09" l, 1.27 pounds
- Binding: Paperback

- 416 pages

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While environmental crises get most of the headlines today, the simple fact that the wealth of the 200 richest people in the world exceeds the combined annual income of the world’s 2.5 billion poorest people should give anyone pause, as should the knowledge that almost half of the world’s population lives on less than $2 per day while the average American earns $130 per day. (4) The belief that economic growth alone will solve the problems of poverty is simply not borne out by the facts. And the drive to satisfy legitimate ambitions for material progress is forcing developing countries such as China and India toward unprecedented rates of fossil fuel consumption–a poignant reminder that our social and environmental crises are joined at the hip.

But the real problem is not these crises per se but the likelihood that our responses will be completely inadequate.

If we see each problem–be it water shortages, climate change, or poverty–as separate, and approach each separately, the solutions we come up with will be short-term, often opportunistic, “quick fixes” that do nothing to address deeper imbalances. Take the recent frenzy in the U.S. over ramping up production of corn-based ethanol as an alternative to imported oil. The number of ethanol plants is expanding rapidly (there will be almost 200 by the end of 2008) and vast amounts of corn are being grown to supply them.5 Not only is this driving up food prices around the world, but ethanol from corn arguably takes us in the wrong direction in terms of reducing greenhouse gases. Greenhouse gas emissions from using corn ethanol in cars do not differ substantially from emissions from using gasoline in cars. The net effect of using corn-based ethanol may even increase greenhouse gases due to land-use changes, as farmers worldwide clear forests and grasslands to grow corn in response to higher prices and demand.6 More sustainable alternatives such as cellulose-based biofuels from forestry and crop wastes are being developed, but the search for a quick fix, as opposed to creating a truly environmentally sound energy system, has put the attention on corn ethanol.

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All ages end–from the Iron Age to the Bronze Age, from the age of the Renaissance to the Reformation, from the rise and reign of empires such as Rome’s to more modern empires such as Britain’s. No era–no matter how influential or how far-reaching–lasts forever. The Industrial Age, which has shaped our lifestyles and our worldview for generations, is no different.

To many, the term industrial itself seems rather quaint, since most of us in the developed nations appear to live in a world dominated by bits and bytes, not smokestacks and coal mines. Seventy percent of the American economy, for example, is driven by the spending of consumers, people who for the most part work in service or white-collar industries.7 Relatively few Americans work in factories today, fewer still in mines or on farms.

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But something important has happened in this last stage of the industrial era that sets it apart from the past: Globalization has brought a level of interdependence between nations and regions that has never existed before, along with truly global problems that also have no precedent. This includes environmental crises such as increasing levels of waste and toxicity (which often spill over from one country to another) and growing stresses on a host of fi nite natural resources, but also the widening gaps between the wealthy and the poor and alarming political reactions to these imbalances in the form of global terrorism. Just as the Iron Age didn't end because we ran out of iron, the Industrial Age isn't ending because of the decline in opportunities for further industrial expansion. It is ending because individuals, companies, and governments are coming to the realization that its side effects are unsustainable.

Ages do not end abruptly. Everyone does not just wake up one day and say, "This isn't working. We must change." Quite the contrary. When faced with challenges of this magnitude, the vast majority of people and institutions try harder to maintain the status quo. As neuroscientists say, the brain "downshifts" under stress–in other words, we revert to our most habitual (and more primitive) modes of behavior. Societies are no different.

Fortunately, societies are not monolithic. At the same time that many companies resist change to outdated methods and technologies, governments refuse to implement needed regulations, and individuals resist change to their established lifestyles, others wonder instead about what could be. What would an economy look like that operated entirely on "our energy income rather than our energy capital," as the pioneer systems thinker and inventor Buckminster Fuller used to say? Or that embraced the natural systems principle, as articulated by William McDonough and Michael Braungart, that "all waste equals food for another system"? Or one in which Marshall McLuhan's image of the "global village" was not merely a clever metaphor–but a principle for a world of interdependence, where the unilateral pursuit of "national security" is like chasing a shadow; none of us is secure if all of us are not secure?

Endings are also beginnings. The Industrial Age has brought extraordinary improvements in public education, human rights, and material wellbeing, but it has also destroyed ecosystems, swallowed up traditional cultures that had thrived for centuries, and created a way of life that cannot continue for much longer. With regard to each of these interconnected problems, the same fundamental choice exists: Do we protect the ways of
the past or join in creating a different future?

People and organizations around the world are already planting the seeds for new ways of living and working together. Yes, they are a minority. No, they are not part of the mainstream, either within their industries or usually within their own organizations. But, unlike previous periods of profound change, it is unlikely these

seeds will take centuries to mature and spread, because in today's interconnected world, the problems are global, and the changes will be as well. Pressures for change are building rapidly, and solutions and opportunities–and news of what works and how to build on it–are spreading equally rapidly.

CREATING THE FUTURE

Amid all the uncertainties, three guiding ideas stand out as essential for creating a more sustainable future:

1. There is no viable path forward that does not take into account the needs of future generations. The term sustainability is widely used to express the need to live in the present in ways that do not jeopardize the future. When a process is sustainable, it can be carried out over and over again without negative environmental effects or impossibly high costs to anyone involved. The belief that we can attend only to our own needs and goals is tantamount to discounting the value of the children, families, communities, and businesses who will inhabit that future. Businesses can no longer expect to compete in the future without taking into account the larger problems that stand between now and then.

2. Institutions matter. Today's world is shaped not by individuals alone, but by the networks of businesses and governmental and nongovernmental institutions that influence the products we make, the food we eat, the energy we use, and our responses to problems that arise from these systems. No one person could destroy a species or warm the planet no matter how hard he or she tried. But that is exactly what we are doing collectively, as our individual actions are mediated through the web of institutions that interconnect the world. It is folly to think that the changes needed in the coming years will not involve fundamental shifts in the way institutions function, individually and collectively. Ironically, despite increasing interdependence, most institutions are more consumed than ever by short-term thinking, frenzy, and opportunism. The gap between the need to think and act interdependently and our abilities to do so sits at the heart of all the most difficult problems we face today. Still, as you will see from the stories below, the leadership needed to close that gap is now emerging from business and non-business organizations alike, and often in partnership.

3. All real change is grounded in new ways of thinking and perceiving. As Einstein said: "We can't solve problems by using the same kind of thinking we used when we created them." While institutions matter, how they operate arises from how we operate, how people think and interact. In short, to shape a sustainable future, we all need to work together differently than we have in the past. And that is what we will be describing in the pages ahead.

In The Necessary Revolution, we will talk about the challenges we face in three interconnected areas–energy and transportation, food and water, material waste and toxicity (what we make and discard)–and the consequent imbalances that result when too many resources are concentrated in too few hands.

From the Hardcover edition.

Most helpful customer reviews

109 of 121 people found the following review helpful.
Value Priced, Superb Overview, Isolated from Other Literatures

By Robert David STEELE Vivas
At the end of this review following the links to other recommended books, I specify why this book receives four stars instead of five. Shortly I will load several images that will augment my written review, a couple of them recreated from this book, a couple my own original work.

I found this book absorbing, and while I recognized many many areas where the authors could have identified and respected the work of others more explicitly, I also found this to be the single best book for a manager of any business, any non-profit, any educational institution, any citizen advocacy group, with respect to the changing paradigm of business from industrial era obsess on profit and waste wantonly, to the information era of integrated full life cycle with total transparency of all costs (social, environmental, and financial) and ZERO footprint on Earth and society. There is ample original work from the authors, and this book is priced just right as a vehicle for energizing groups of any kind.

Following from my extensive notes:

+ A handful of top global businesses "get it" and have been pioneering footprint free zero waste business model: BP, GE, Coca-Cola, Dupont, even Nike.

+ Non-governmental organizations (NGO) know more about local needs and the emerging marketplace (four billion of the five billion poor, I am very disconcerted to see the business world "writing off" the one billion extreme poor) than any market "intelligence" firm.

+ With credit to Jared Diamond, I read for the first time about the unreal financial reality "bubble," and the "real real" world bubble that is catching up with it. See John Bogle's book below for a deeper explanation of how the financial mandarins have stolen one fifth of the value and misdirected the Main Street economy while doing so.

+ Although I have read Stewart Hart's work, this book helped me appreciate in detail his Sustainability Value Matrix.

+ Other "big ideas" by others that are integrated into this book include that of civil society stakeholders; ethical consumerism, stabilization wedges (Palala and Socolow),ladder of inference (an anthropological practice), peacekeeping circles, requisite organization, and law of limited competition (Daniel Quinn)

PROBLEM STATEMENT:

1. Industrial Waste (USA wastes 100 billion tons a year, 90% of inputs)

2. Consumer/Commercial Waste & Toxicity (of 8B/year, 5B not absorbable)

3. Non-Renewable Resources in Sharp Decline

4. Renewable Resources down 30-70% and in some cases close to extinction tipping point (fresh water, topsoil, fisheries, forests)

THREE GUIDING IDEAS:

1. No viable path neglects future generations

2. Institutions matter

3. Real change must be grounded in new ways of thinking (see Durant below, capstone lessons from their ten volume history of civilization was that the only real revolution is in the mind of man, and that morality has a strategic value of incalculable proportions).

THREE AREAS OF BUSINESS CONCERN:

1. Energy & Transportation

2. Food & Water

3. Material Waste & Toxicity

THREE PRE-REQUISITES FOR NEW THINKING:

1. Seeing Systems Within Systems (Full Cycle Closed Earth)

2. Collaborating Across Boundaries (No one has it all)

3. Creating & adjusting instead of problem solving in isolation

SIX BASIC IDEAS:

1. Natural system encloses social and economic systems

2. Industrial system must operate in that context

3. Regenerable resources have harvest limits

4. Non-renewable resources are finite.

5. Waste is a cancer on the Earth

6. Socio-cultural community is the vessel for change

THREE SKILLS FOR CREATING THE SUSTAINABLE FUTURE:

1. Convening diversity of viewpoints

2. Listening to all, avoiding advocacy

3. Nurturing relationships over time and above money

EXPLICIT INCENTIVES FOR GOING GREEN:

1. Save dollars internally

2. Make dollars externally

3. Provide customers with competitive value

4. Sustainability as point of differentiation

5. Shape the future of your industry, win market share

6. Become a preferred supplier for giants like Home Depot

7. Change image and brand for better (70%+ of market value)

The book is full of examples of successful change implementation, and includes a number of "toolbox" pages that could be made into a protable booklet or distributed broadly across corporate networks.

I was struck throughout the book with the value of this work in identifying specific personalities and specific companies who could be drawn into the broader holistic work of emerging meta-strategic networks such as Reuniting America, the Transpartisan Institute, and Earth Intelligence Network. Two women in particular jumped out as future global leaders on the order of Lee Kuan Yew and Nelson Mandela:

1. Vivienne Cox of BP

2. Lorraine Bolsinger of GE

I put the book down deeply impressed with its concluding sections, and thinking to myself: China, CHINA, CHINA! That is the center of gravity for getting right on a massive scale in the near term.

Other important books NOT mentioned by this book:
The Story of Civilization by Will Durant with The Lessons of History (Complete in 10 Vols. plus The Lessons of History which was written by Durant to accompany the 10-volume set)
Organizational Intelligence (Knowledge and Policy in Government and Industry)
The Knowledge Executive
The Battle for the Soul of Capitalism
High Noon 20 Global Problems, 20 Years to Solve Them
The Fortune at the Bottom of the Pyramid: Eradicating Poverty Through Profits (Wharton School Publishing Paperbacks)
The New Age of Innovation: Driving Cocreated Value Through Global Networks
One from Many: VISA and the Rise of Chaordic Organization
The Wealth of Networks: How Social Production Transforms Markets and Freedom
Collective Intelligence: Creating a Prosperous World at Peace

I resolved to rate this book as a four for the following reasons, in relative order of annoyance:
1) Crummy index for what could have been a brilliant REFERENCE book, not just an orientation book for leaders that do not read a lot. This index is SO BAD it fails to list all the individuals mentioned, and completely blows off numerous key phrases (e.g. sustainability wedges) that would be in any properly created professional index.
2) No literature search and total isolation from the major literatures of Collective Intelligence, Wealth of Networks, Organizational Intelligence, Integral Consciousness, Closed Systems Engineering, Fortune at the Bottom of the Pyramid, and so on.
3) Understandable use of the iconic name of the lead author, but in all probability actually written by the other four authors.

4) Really marginal reference section and no bibliography (even more valuable would have been an annotated bibliography).
5) Absolutely clueless on the means of visualizing and using world-class visualization to create compelling multi-dimensional mental images (this is not to say I am any better, just that they missed a chance to be "the" reference work for the next seven years).

Bottom line on the deficiency: I read very broadly, and am increasingly distressed at the continuing isolation of authors from one another's work. It's time every work of this importance do a proper job of connecting to other works.

0 of 0 people found the following review helpful.
I love this book
By Amazon Customer
Peter Senge is the man, man. I love this book, and his other books.

20 of 21 people found the following review helpful.
Conversations and collaboration are the way forward
By John Inman
This long awaited book fulfills all of my expectations for a manual to help us create the conversations and collaboration necessary to reclaim our world's health. Over the years there have been quite a few high impact books helping us understand the extent of the challenges we face as we look forward to create a sustainable world. "The Necessary Revolution" steps forward and outlines how to create the partnerships that are needed to unleash the pent up creativity that millions of team members across the world and in all enterprises have been holding back. Peter Senge and team from his organization Society for Organizational Learning come at the subject as world leaders in the austere world of business. It is going to be very difficult for business leaders across the world to read this work and write it off as rantings of an extremist. Peter is one of the top business minds in the world and I do not believe this work can be easily ignored.

For those of us who are disbursed across enterprises and feel like we have little impact on moving our enterprises towards a more sustainable future, this book provides outstanding case studies of work being done across the world by enterprises large and small. Some of the work and the visions of the leaders chronicled in this text are not only enlightening but surprising. After many chapters a "toolbox" is provided to help set the stage for the conversations and collaboration needed to move change forward. And of course, all of this work is set in a framework of systems thinking which is so necessary to be able to see beyond the silos so many are bound by.

"The Necessary Revolution" should be required reading for community leaders of all types, NGO, religious, Government, and corporate alike. As we start to create these critical partnerships and conversations focused on sustainability, I believe that we can quickly change the course that we are on. A must for every person who wants to see a change in our direction. Thank you Peter, Bryan, Nina, Joe, and Sara for this extraordinary work.

See all 31 customer reviews...

THE NECESSARY REVOLUTION: HOW INDIVIDUALS AND ORGANIZATIONS ARE WORKING TOGETHER TO CREATE A SUSTAINABLE WORLD BY PETER M. SENGE, BRYAN S PDF

Even we talk about the books **The Necessary Revolution: How Individuals And Organizations Are Working Together To Create A Sustainable World By Peter M. Senge, Bryan S**; you might not discover the printed publications below. Numerous collections are given in soft data. It will precisely offer you much more benefits. Why? The initial is that you may not need to lug guide all over by satisfying the bag with this The Necessary Revolution: How Individuals And Organizations Are Working Together To Create A Sustainable World By Peter M. Senge, Bryan S It is for the book remains in soft data, so you can save it in gadget. After that, you could open up the gizmo all over and check out guide effectively. Those are some couple of advantages that can be got. So, take all advantages of getting this soft documents book The Necessary Revolution: How Individuals And Organizations Are Working Together To Create A Sustainable World By Peter M. Senge, Bryan S in this website by downloading in web link given.

Review
Acclaim for The Fifth Discipline by Peter Senge, Honored As One of The Five Greatest Business Books of All Time by The Financial Times

“A management classic.” –Boston Globe

“One of the seminal management books of the past seventy-five years.”—Harvard Business Review

About the Author

Peter Senge was named as one of the 24 people who had “the greatest influence on business strategy over the last 100 years” by the Journal of Business Strategy

PETER SENGE, senior lecturer at MIT and the founding chair of the Society for Organizational Learning (SoL), is the author or co-author of several bestselling books, including The Fifth Discipline, Schools That Learn, and Presence. BRYAN SMITH, coauthor with Senge of The Dance of Change and two other Fifth Discipline fieldbooks, is a member of the faculty at York University’s Sustainable Enterprise Academy, and president of Broad Reach Innovations, Inc. NINA KRUSCHWITZ, manager of the Fifth Discipline Fieldbook Project, is the editor of Reflections: The SoL Journal on Knowledge, Learning, and Change. JOE LAUR and SARA SCHLEY co-founded the SoL Sustainability Consortium in 1998; Joe is vice president of content for Greenopolis.com, and Sara is a mentor for the Harold Grinspoon Foundation.

1
A Future Awaiting Our Choices

Anyone visiting Australia today cannot help but notice massive billboards in all the major cities encouraging people to conserve water. A natural response would be to think these are the result of recent drought conditions, and indeed they are–in a way. But though the signs are new, the drought they were erected in response to has gone on for years and shows no sign of improvement. Across the nation, water reservoirs are at roughly one-quarter of capacity and have been declining for a decade–thanks to a combination of subnormal rainfall and rising temperatures widely attributed by leading scientifi c panels to climate change. (1) Starting in 2007, water became the focus of national debates;
one popular suggestion even called for the complete elimination of the nation's large citrus crop. This sounds drastic, but when there is simply not enough water to go around, hard choices need to be made, even if that means sacrifi cing an important crop in an industry that accounts for roughly 3 percent of GDP. The country's national election in fall 2007 was the first in the world in which climate change was the number one issue
(and the candidate deemed most dedicated to addressing it won), a possible harbinger for other countries in the coming years, including the United States.

But in addition to conserving resources such as water, innovative Australians everywhere are also seizing the opportunity to rethink and re-create their lives and the infrastructures that govern them. They are working together in communities across the country to come up with renewable energy solutions, and beginning to consider sweeping changes in energy and water industries. Business, long dominated by mining and minerals industries, has become a vocal advocate for investment in innovative alternative energy technologies, such as wind and solar.

Half a world away, Sweden has parted ways with other industrial economies to completely sever their dependence on imported oil–and the vulnerability that goes along with it. Under former prime minister Göran Persson, a commission was established in 2006 that laid out a fifteen-year plan to cut fossil fuel use to zero by 2020. This momentous shift was, in fact, the outcome of decades of work by remarkable networks of public and private sector leaders committed to making northern Sweden the world's first "bioregion," in which all energy needs are met from sustainably produced biofuels.

Similar changes are occurring in businesses the world over. In response to the turmoil of world oil markets and oil-producing regions, DuPont, one of the largest and oldest companies in America, has set itself on a course to shift its product line from petroleum-based to bio-based feedstocks. Like many companies around the world, DuPont has worked for years to reduce waste, including carbon dioxide (CO_2) emissions. But it now sees that the real innovation opportunities lie in the creation of new products that break the company's dependency on conventional oil and gas entirely. Similarly, Nike has reduced its "carbon footprint" by more than 75 percent. But, again, by looking for the truly innovative opportunities for the future, the company has declared its intent to achieve zero waste, zero toxicity, and 100 percent recyclability across its entire product line by 2020. "Our company and our customers care about health; our products and ways of producing them should embody this," says Darcy Winslow, former head of the women's footwear division. "But to do this we are having to completely rethink how we design, produce, and distribute those products and how we recover them at the end of their lifetime."

There are many types of revolutions. History talks mostly of political revolutions, dramatic events that all too often represent little real change over the long term: The cast of players in power shifts and new political philosophies come into vogue, but when it comes to the daily realities of most people, little changes. But occasionally something different happens, a collective awakening to new possibilities that changes everything over time–how people see the world, what they value, how society defines progress and organizes itself, and how institutions operate. The Renaissance was such a shift, as was the Industrial Revolution. So, too, is what is starting to happen around the world today.

Perhaps surprisingly, the most visible signs of this new revolution are a mounting series of environmental and social crises.

While Australia's water situation may seem extreme, it is hardly unique. Both the southeast and southwest regions of the United States are facing a similar need for rationing and possible permanent cutbacks. In developed countries around the world, previously taken-for-granted aspects of daily life–food, water, energy, predictable weather–seem less and less reliable.

Each of the last several summers has brought record heat waves to much of Europe, as well as other strange occurrences such as extreme flooding, crops that come to season a month early, and the appearance of mosquito-borne diseases previously known only to the Southern Hemisphere–events that scientists have linked to global warming and increased atmospheric CO2. (2)

In the United States, there have been repeated scares about contaminated food imported from Asia and E. coli outbreaks from crops grown in our own backyard, recent warnings to parents about the rapid spread of poison ivy caused by higher CO2 levels in the atmosphere (which both speed the plant's growth and increase its toxicity), and a historic shift in the politics of energy. Even former protectors of the oil-fueled economic status
quo now recognize that America's energy consumption (we consume 25 percent of the world's fossil fuels with only 5 percent of the population) cannot continue. (3) Our rampant consumption and protect-the-source foreign policies no longer offer a reliable path for the future. As President Bush admitted, "America is addicted to oil."

While environmental crises get most of the headlines today, the simple fact that the wealth of the 200 richest people in the world exceeds the combined annual income of the world's 2.5 billion poorest people should give anyone pause, as should the knowledge that almost half of the world's population lives on less than $2 per day while the average American earns $130 per day. (4) The belief that economic growth alone will solve the problems of poverty is simply not borne out by the facts. And the drive to satisfy legitimate ambitions for material progress is forcing developing countries such as China and India toward unprecedented rates of fossil fuel consumption–a poignant reminder that our social and environmental crises are joined at the hip.

But the real problem is not these crises per se but the likelihood that our responses will be completely inadequate.

If we see each problem–be it water shortages, climate change, or poverty–as separate, and approach each separately, the solutions we come up with will be short-term, often opportunistic, "quick fixes" that do nothing to address deeper imbalances. Take the recent frenzy in the U.S. over ramping up production of corn-based ethanol as an alternative to imported oil. The number of ethanol plants is expanding rapidly (there will be almost 200 by the end of 2008) and vast amounts of corn are being grown to supply them.5 Not only is this driving up food prices around the world, but ethanol from corn arguably takes us in the wrong direction in terms of reducing greenhouse gases. Greenhouse gas emissions from using corn ethanol in cars do not differ substantially from emissions from using gasoline in cars. The net effect of using corn-based ethanol may even increase greenhouse gases due to land-use changes, as farmers worldwide clear forests and grasslands to grow corn in response to higher prices and demand.6 More sustainable alternatives such as cellulose-based biofuels from forestry and crop wastes are being developed, but the search for a quick fix, as opposed to creating a truly environmentally sound energy system, has put the attention on corn ethanol.

Fortunately, more and more people are beginning to sense that the mounting sustainability crises are

interconnected–symptoms of a larger global system that is out of balance. As soon as people understand this, their view of the problems shifts. They start to see the extraordinary opportunities for innovation that can occur when we abandon fearful, reactive mentalities. They start to realize the deep problems we face today are
not a result of bad luck or a greedy few. They are the result of a way of thinking whose time has passed.

All ages end–from the Iron Age to the Bronze Age, from the age of the Renaissance to the Reformation, from the rise and reign of empires such as Rome's to more modern empires such as Britain's. No era–no matter how influential or how far-reaching–lasts forever. The Industrial Age, which has shaped our lifestyles and our worldview for generations, is no different.

To many, the term industrial itself seems rather quaint, since most of us in the developed nations appear to live in a world dominated by bits and bytes, not smokestacks and coal mines. Seventy percent of the American economy, for example, is driven by the spending of consumers, people who for the most part work in service or white-collar industries.7 Relatively few Americans work in factories today, fewer still in mines or on farms.

But immediate circumstances can be misleading. In fact, the last quarter century has seen the most dramatic increase in industrial activity the world has ever known. The number of automobiles in use in the world has grown from about 50 million in 1950 to about 800 million in 2008. The annual growth rate in the global production of automobiles (over 6 percent) is now at least four times the growth of human population in percentage
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From the Hardcover edition.

Based upon some experiences of lots of people, it remains in reality that reading this **The Necessary Revolution: How Individuals And Organizations Are Working Together To Create A Sustainable World By Peter M. Senge, Bryan S** could help them making far better option as well as offer more encounter. If you want to be among them, let's acquisition this publication The Necessary Revolution: How Individuals And Organizations Are Working Together To Create A Sustainable World By Peter M. Senge, Bryan S by downloading the book on link download in this website. You can get the soft documents of this book The Necessary Revolution: How Individuals And Organizations Are Working Together To Create A Sustainable World By Peter M. Senge, Bryan S to download and install and also deposit in your offered digital gadgets. Exactly what are you waiting for? Let get this book The Necessary Revolution: How Individuals And Organizations Are Working Together To Create A Sustainable World By Peter M. Senge, Bryan S on-line and read them in at any time and also any location you will certainly check out. It will not encumber you to bring heavy book The Necessary Revolution: How Individuals And Organizations Are Working Together To Create A Sustainable World By Peter M. Senge, Bryan S within your bag.