

A Better Planet: 40 Big Ideas for a Sustainable Future

Daniel C. Esty (Ed.).
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 412 pages (ISBN:
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Imagine—just imagine—that someone asked you: “What could be the most important idea to ensure a sustainable future?”

That’s what Daniel Esty, a professor of law at Yale University, asked 53

colleagues. The final outcome is this book.

In the introduction, the editor starts from a rather pessimistic position. While America has made great strides in the environmental realm in past decades, environmental protection in recent years has become an arena for bitter partisan battles. Although some progress has been made in addressing the most grievous environmental damages, the pace of progress has been drastically slowed.

Esty asked an extraordinary collection of thought leaders, environmental activists, and graduate students—spanning a wide range of disciplinary perspectives, issue expertise, and political beliefs—to present their ideas for reigniting environmental progress. The 40 essays in this volume provide a menu of innovative suggestions on which the world might build over the next decades in reimagining the response to pollution, land use, natural resources, and energy challenges.

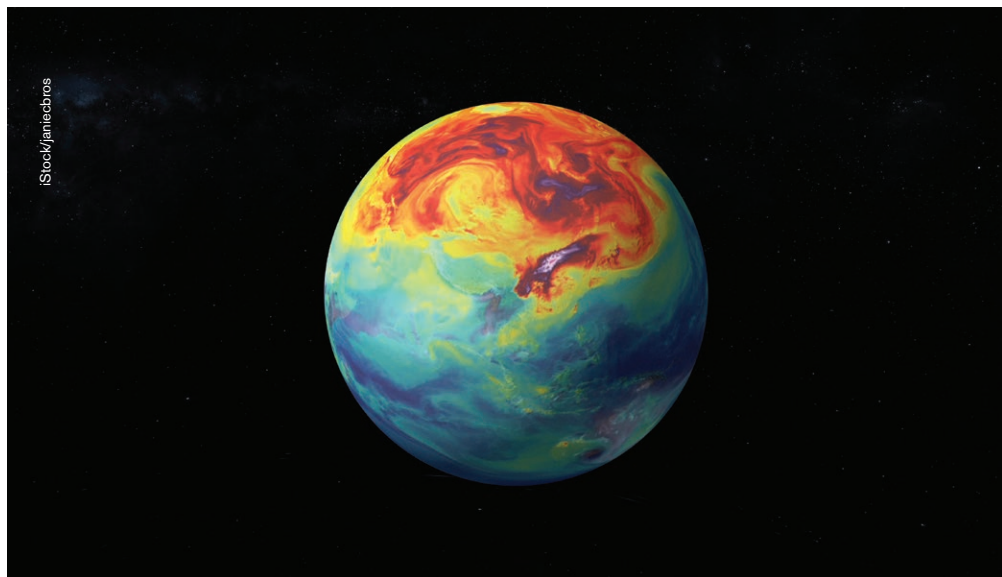
Esty arranged the book in five parts. Part One is “Sustaining Humans and Nature as One.” There are two different views on this question. The reigning view is a despairingly stark one: It sees humankind existing apart from nature. An alternative inspires hope by imagining the possibility of humankind (the

social) and nature (the *ecological*) existing together, entwined as a “socioecological system,” in which each part requires the other for its existence.

A similar idea is presented in the essay “Habitable Earth,” on protecting biodiversity through natural systems. Scientists and diplomats have begun to set targets for biodiversity protection. The parties to the UN Convention on Biological Diversity suggest that 30 percent of the terrestrial and marine ecosystems of the planet should be put under strict protection by 2030—known as the “30 by 30 target.”

The world’s biodiversity will require deepening the public’s understanding of Earth as a living planet made up of *functional landscapes*—of self-sustaining systems that allow the vast variety of species to thrive, and provide ecosystem services. The Amazon River Basin and the Mekong River are presented as important starting points for thinking more seriously about functional landscapes that consequently need management as an ecological system, and not just as forests or freshwater resources.

The authors of “A Restoration Agenda for Native Forests” plead for better understanding of forest diversity and forest succession, and they do so by looking at case examples that illustrate the decisive principles. Unfortunately, the authors neglect the surprisingly positive study, debated worldwide, by Jean François Bastin on the global tree restoration potential (*Science*, Vol. 365, Issue 6448, 2019).



What could be the most important idea to ensure a sustainable future?



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The Amazon River basin and the Mekong River are thought to represent important starting points for thinking more seriously about functional landscapes, which consequently need management as ecological systems, and not just as forests or freshwater resources.

“Water” is another chapter in this book. We are quite well informed about water stock, current water use, and water shortages. The Organization for Economic Cooperation and Development (OECD) regularly projects long-term global water demand. The most recent OECD report showed a possible increase of 55 percent, due to growing demand from manufacturing, thermal electricity generation, and domestic use. Many states and regions of the world have made solid progress in reducing water consumption in recent years. Still, the question remains: Can water utilities keep up with growing populations, drought, and climate change?

There are new technologies, referred to as *water reuse*, that provide new opportunities to discover “found water” in a community’s wastewater stream and convert it into clean water.

The author of “People and the Ocean” concedes that a new narrative does not automatically change the status quo, but if widely adopted, it can alter people’s sense of what is possible. So she starts a short, but fascinating historical journey about people’s relationship with the ocean, and makes the chapter a masterpiece of thought and dedication:

People and the Ocean 1.0: The ocean is so vast, bountiful, and endlessly resilient, it is simply too big to fail.

People and the Ocean 2.0: The ocean is doomed. Massively and fatally polluted, deleted and disrupted, the ocean is too big to fix it.

People and the Ocean 3.0: The ocean is so central to our future, it is too big and too important to ignore. If we heal the ocean, we can solve multiple global problems and heal ourselves. It is our path forward.

Part Two of the book is “Innovation and Technology.” Esty pleads for more innovation-oriented sustainability strategies. His conclusion is straightforward: “We need to complement our system of red lights with an expanded set of *green lights*.” The author is clever enough not to condemn red lights but to look for adequate solutions—making red and green equivalent colors, shining in different cases of decision making. This would make careful policy design—balancing control and adequate incentives—obligatory. When it comes to meeting the demands of the “sustainability imperative,” this may indeed be a big idea.

The last essay in Part Two is “Bracing for Impact—Transforming the National Weather Service for the Climate Change Challenges Ahead.” The number of articles on the difference between weather and climate goes into the millions. And a good point is made here: “The United States is weather-ready,” but the “United States is not climate-change-ready.”

Part Three of the book is “Law and Policy.” “Building Public and Political Will for Climate Change Action” is a major task in all parts of the globe. The author calls it a “massive collective action problem” and declares the “public will” expressed through citizen activism to be the most important influence of



The ocean is so central to our future, it is too big and too important to ignore.

the policymaking process. He describes the conditions for “windows of opportunity,” mentions the different public forums within a population and their motivations to reduce global warming, and quotes traditional environmental groups like the Sierra Club or the Environmental Defense Fund—but finds no words for the young generation and the globally active “Fridays for Future” movement.

“Broadening Action on Climate Change” is an essay in which the strengths and the weaknesses of the 2015 Paris Agreement on climate change are carefully considered, with its prevailing weaknesses. The author looks at the possibilities of other international regimes that could “help out”: most significantly, the Montreal Protocol and the World Trade Organization, but also sectoral regimes like the International Civil Aviation Organization and the International Maritime Organization, which have started making a (somewhat) “greener sector.”

In terms of financial assistance to developing countries, the picture is mixed. The “Green Climate Fund” has had a somewhat rocky start but is now about to deliver funding for both mitigation and adaptation. The author, however, is right in saying that this type of funding, in contrast to the high promises made, is but a drop in the bucket compared to the overall financial flows that need to be “greened.”

A more drastic reform of climate policy is presented by William Nordhaus, the Nobel Prize winner of 2018, in his short, two-page essay “International Carbon Pricing.” The

most effective incentive for change in his view is a high price for carbon. As a means of projecting carbon pricing into the international space, he proposes a “climate club.” The notion is that one can overcome the syndrome of free-riding by adopting the club model rather than the voluntary, nationally determined contributions (NDCs) foreseen in the Paris Agreement. A climate club is an agreement in which nations would be penalized if they did not meet their obligations. Unfortunately, the international community is a long way from adopting the climate club model; most discussions are still focused on the doomed voluntary model.

Part Four of the book is “Resources, Economics, and Sustainable Business.” The text “Next-Generation Corporate Sustainability Leadership” reflects on the American history of nonregulatory pathways to progress, the extraordinary promise, today, of stronger accountability between investors and corporations, and the need to transform whole sectors and to begin to secure the next generation of innovative regulatory and governance frameworks.

The main conclusions are that today’s shareholders and investors increasingly expect early disclosure of long-term risks due to climate change and more regularly discuss the issues of emerging environmental risks. In turn, the author expects corporate leaders to increasingly disclose the long-term risks of climate change and environmental damage, with “sustainability committees” providing credible oversight, and to work proactively to secure governance systems to reduce



Damage to Louisiana's coast from Hurricane Delta in 2020. The United States is weather-ready, but the United States is not climate-change-ready.



Could high carbon prices incentivize lower emissions?

their business risks and the risks to society at large. Is this wishful thinking or future reality?

“Making Companies Work for Society” is a closely related essay. Shareholder primacy stands, no doubt, in stark contrast to sustainable finance. The tension between shareholder primacy and sustainable finance models has become acute over the last decades as a result of two trends. There is a growing awareness among companies that they need to address environmental as well as social challenges. The second arises from the growing awareness that shareholder primacy increases the gap between the wealthy and the poor.

The next essay comes closer to the title of the book. The question it asks is: “Can We Define Planetary Boundaries on the Human Use of Materials?” If not, we should certainly try. The author suggests, as the first duty, choosing the materials and material groups important for human activities, identifying potential rates of demand over time for those materials, and specifying “safe operating demand,” “zones of uncertainty,” and “thresholds of high-risk demand for each.” This exercise is intended to define levels of materials use that are sustainable over the long term, while simultaneously permitting progress toward realization of the UN-initiated Sustainable Development Goals (SDGs).

Right away, the author establishes a list of “potentially critical” materials, containing six groupings, including (a) those materials used most widely, (b) those with lower use rates but that appear crucial in enabling sustainable technologies, and (c) those for which processing and product fabrication result in heavy environmental impacts.

Part Five, “Society, Equity, and Process,” is the longest but weakest part of the book. What is “Hip-Hop Sustainability”? It could perhaps be a big idea, if there were many hip-hoppers around!

“Why Big Ideas So Often Fail” is the last essay of the book. Astonishingly, it is written by three youngsters. This I found daring: “Big ideas, by their nature, rally attention to urgent problems of seemingly universal significance. Their scale and audacity make them compelling—but also vulnerable to failure. The best way to avoid ... pitfalls is to

be aware of them and plan for them in problem diagnosis, project design, and implementation.”

I had expected more specific contributions on where American society and where individual countries and the international community stand, and where they should go. In environmental policy, there are forerunners, latecomers, remainers, and even those blocking any progress. Why is this so, and what would be needed to make progress?

Some final remarks. Readers of the book (and of this review) might ask whether the story of “a better planet” could have been told in a quite different way. Well, a lot could be said here and many books could be quoted as proof. To make the answer short, I would like to suggest four strategic transformation projects: first, the need for a comprehensive renaturalization of Planet Earth; second, the need for a strict decarbonization of the energy systems to prevent climate catastrophe; third, the need for a far-reaching dematerialization of economy and society to respect planetary boundaries and to prevent physical collapse; and fourth, a strong need for a peace-devoted Earth system governance.

To a certain extent, this four-projects focus on the issue of global sustainability is reflected in several of the 40 ideas presented in this book—on renaturalization at its best, the book offers the section “Nature, Land, and Water.” On dematerialization I found nothing in particular, and on Earth system governance nothing specific. In contrast to these deficits, on climate change and decarbonization there were many interesting and relevant texts; the most challenging presented the ideas of William Nordhaus, who doesn’t trust the voluntary national arrangements of the Paris Agreement and favors instead a strictly ruled “carbon club.”

Udo E. Simonis

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