Introduction

John C. Dernbach and Scott E. Schang

Sustainable development may be one of the most important and potentially transformational ideas to come out of the last century. Some scholars have described it as an idea or principle of the same level of fundamental importance as freedom, equality, and justice. This book is about what sustainable development means—and could mean—for the United States, particularly in this decade.

Sustainable development is a transformational idea because it sets out a normative conceptual framework for integrating environmental protection with economic development, social well-being, and peace and security. It does so in a way that more fully realizes all of them, instead of treating them as inherently opposing or unrelated concepts. The ultimate objectives of sustainable development are freedom, opportunity, justice, and quality of life for everyone in this and future generations. While the United States has a substantial body of environmental and social protection laws, we are far from being a sustainable society.

The United States faces significant headwinds with economic and racial inequality, spikes in hunger and poverty, political polarization, a changing climate, and declines in infrastructure reliability and environmental protection. Some climate change indicators are expected to meet or exceed the high-end (worst-case) of climate models, more Americans have fallen into poverty as average American life-spans stagnated even before the pandemic, and economic and social injustice are growing, not receding.

The question is what to do. This book provides a detailed set of recommendations for federal, state, tribal, territorial, and local governments, as well as the private sector and civil society. These recommendations are intended to help all U.S. stakeholders collaborate to govern for sustainability. (Many of the state recommendations can be employed by tribal governments and U.S. territories.) By governance, we mean not only public governance—the work of government—statutes, regulations, and the like. We also mean private governance—actions by private corporations and businesses as well as nonprofit organizations, including policies, auditing, labeling, and reporting programs. And we also include the various contributions that personal behavior can make toward both public and private governance.

This book is informational and analytical, but it is also a guide to action. These recommendations would help make America a better place for all. Every American has a role to play.

1. Sustainable Development and the Sustainable Development Goals

Nations of the world, including the United States, first endorsed sustainable development at the United Nations (U.N.) Conference on Environment and Development (or Earth Summit) in Rio de Janeiro in 1992, and have endorsed it many times since. The twin problems that led to the Earth Summit were widespread environmental degradation and large-scale extreme poverty. There was a growing realization that the prevailing development model—which emphasized economic development, peace and security, and to some degree social well-being—generally treated environmental protection as an afterthought at best. As environmental degradation grows in scope and severity around the world, it also compromises the well-being of people who depend on the environment for air, water, and sustenance, as well as their descendants.

The basic idea of sustainable development is not to abandon development, but to make environmental protection part of the development process. The central action principle endorsed at the Earth Summit is thus integrated decisionmaking—making decisions that further both development and environmental protection. The Earth Summit was not about the environment alone;

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it was about the environment and development. Increased attention to the environmental dimension of development has also led to greater focus on its social dimension, in part because adverse environmental impacts hurt people who depend on the environment, and in part because economic development by itself does not automatically improve social conditions. Since that time, sustainable development has become the internationally recognized framework for maintaining and improving human well-being.

The practical effect of integrated decisionmaking is that decisions have more than one type of benefit. In the siloed decisionmaking that characterizes conventional development, projects or activities have primarily one type of benefit (generally economic), and adverse environmental and social impacts are tolerated because the benefits are said to outweigh the costs. In sustainable development, projects or activities also have environmental and social benefits (and, where relevant, peace and security benefits). Sustainable development thus has more benefits, and fewer costs, than conventional development. This broader frame has another benefit as well—it expands the range of legal and policy choices available to decisionmakers to achieve any particular objective. Economic development or job creation tools, for example, can and should be used to drive environmental protection.

From the time of the Earth Summit in 1992, the objective of international conferences has not been simply to define sustainable development but to encourage and inspire action. Indeed, countries at the Earth Summit committed to a long and detailed plan of action for achieving sustainable development. They also committed to similar action plans for sustainable development in international meetings or conferences held in 1997, 2002, and 2012 on the fifth, 10th, and 20th anniversaries of the Earth Summit. For the most part, these action plans were cast in broad terms, and there were few timetables.

For years, efforts to move in a more sustainable direction in the United States and other countries have been weakened by uncertainty concerning the definition and meaning of sustainable development and actions under these action plans, the general lack of timetables, and the lack of common metrics for progress. These are not the only barriers; opposition from economic interests that benefit from unsustainable development (e.g., fossil fuel

8. *Agenda 21, supra note 5.*
interests), political polarization, and simple inertia, among other things, have played a role. And it is also true that particular agreements, such as the U.N. Framework Convention on Climate Change, contain more specific objectives and processes. But these treaties and agreements do not cover the full range of issues embraced by sustainable development. In the absence of specifics, individual governments (federal, state, local) and companies drew their own conclusions about how to proceed, at what pace, and what kinds of data they would use to measure progress.

In 2000, at the dawn of the new millennium, the U.N. General Assembly adopted the Millennium Development Goals, which were aimed at achieving significant poverty reduction by 2015. These goals laid the foundation for a profound change in thinking about how to achieve sustainability. They did so because they demonstrated that specific goals and timetables could mobilize all parts of the international community, governmental and non-governmental, to achieve shared objectives. The final U.N. report assessing the effectiveness of the Millennium Development Goals noted that they “produced the most successful anti-poverty movement in history,” even though they were not fully achieved. As part of that effort, they drove improvements in child mortality, maternal health, and free primary education. They also spurred an effort to broaden the next round of goals beyond poverty to the overall sustainable development agenda.

In 2015, at the 70th anniversary of the founding of the U.N., all 192 Member States agreed upon the 2030 Agenda for Sustainable Development, which at its core includes 17 Sustainable Development Goals (SDGs) to be achieved by 2030. They recognized that the scale and ambitiousness of this agenda effort are unprecedented: “Never before have world leaders pledged common action and endeavor across such a broad and universal policy agenda.” Drawing on the experience of the Millennium Development Goals, the SDGs were adopted to accelerate progress on sustainable development. The SDGs do not replace the integrated decisionmaking con-

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ceptual framework that is the foundation for sustainable development. But they translate this framework into goals, more specific targets, a timetable, and indicators for measuring progress.

Agenda 2030 is “a plan of action for people, planet and prosperity.”\(^{17}\) It addresses poverty as well as the broader range of sustainable development issues. Agenda 2030 has four basic parts, as shown in Figure 1 below. The first part, the declaration, calls poverty the “greatest global challenge” in achieving sustainable development.\(^{18}\) But it also recognizes the critical role of protecting the environment, sustaining rule of law in just societies, and working together in partnership to achieve these goals. Member States resolved by 2030:

to end poverty and hunger everywhere; to combat inequalities within and among countries; to build peaceful, just and inclusive societies; to protect human rights and promote gender equality and the empowerment of women and girls; and to ensure the lasting protection of the planet and its natural resources. We also resolve to create conditions for sustainable, inclusive and sustained economic growth, shared prosperity and decent work for all, taking into account different levels of national development and capacities.\(^{19}\)

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**Figure 1. The 2030 Agenda for Sustainable Development\(^{20}\)**

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17. *Id.* pmbl.
18. *Id.*
19. *Id.* ¶3.
The Agenda is operationalized through 17 SDGs and 169 targets that are applicable to each Member State; they constitute the second part of the Agenda shown in Figure 1. The United States took an active role in the development of these goals and endorsed them. These goals aim to integrate government, private-sector, and civil society strategies across areas such as poverty, hunger, infrastructure, education, gender and racial equity, and environmental degradation for the purpose of achieving sustainable development. Each of the goals is accompanied by a set of more discrete targets as well as indicators for measuring progress. They thus provide a clear lens for all countries, whether developing or developed, to identify, prioritize, measure, and report on concrete targets and indicators on making progress toward sustainability. The goals, metrics, and the 2030 timetable “add detailed content to the concept of sustainable development.”

Implementation, as well as follow-up and review, are the remaining parts of Agenda 2030. The Agenda states that implementation within individual countries will take “into account different national realities, capacities and levels of development” as well as “national policies and priorities.” Countries are called to voluntarily publish national SDG progress reports called voluntary national reviews (VNRs). There is no set frequency for submitting VNRs; instead it is incumbent on Member States to voluntarily submit their reports. The U.N. posts these VNRs online. To assist the SDG implementation effort, and encourage comparable reporting on outcomes among countries, the U.N. General Assembly adopted a resolution in 2017 that sets out 231 indicators for measuring performance in achieving the SDGs, and urges countries to report progress using these indicators.

24. Id. ¶72.
26. Id.
Figure 2 above depicts the SDGs. As Figure 2 shows, each goal has its specific focus area, which can vary from social to economic to environmental to governance. But as this book will make clear, they are “integrated and indivisible”\(^{29}\) in practice. This is consistent with, and furthers, the integrated decisionmaking framework of sustainable development in which decisions should further multiple objectives. Thus, actions to further one goal should be designed and implemented to further other goals. It is possible to treat the SDGs as creating 17 separate silos, but that is not how they were intended, and not how they are treated here.

The 169 targets are component parts of the 17 SDGs, and there is at least one indicator for every target. Many indicators cut across more than one goal.

The use of common indicators across countries allows for meaningful comparisons of progress or lack of progress. It also allows transparency, and therefore accountability, for action or inaction toward achieving the indicators. For many indicators, such as “proportion of agricultural area under productive and sustainable agriculture,”\(^ {30}\) countries may not already be using, let alone have, relevant data. By asking themselves to generate data on these 231 indicators, countries are making a significant step toward understanding what they need for sustainable development.

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28. United Nations, Sustainable Development Goals, https://www.un.org/sustainabledevelopment/ (last visited Dec. 6, 2022). The content of this publication has not been approved by the United Nations and does not reflect the views of the United Nations or its officials or Member States.


30. G.A. Res. 71/13, supra note 27, Indicator 2.4.1.
While the goals are taken on by national governments, they are achievable only by creating partnerships across all levels of government and with civil society, the private sector, academia, and the public. For example, the Agenda calls for making fundamental changes in the way that our societies produce and consume goods and services. Governments, international organizations, the business sector and other non-state actors and individuals must contribute to changing unsustainable consumption and production patterns, including through the mobilization, from all sources, of financial and technical assistance to strengthen developing countries’ scientific, technological and innovative capacities to move towards more sustainable patterns of consumption and production.31

Sustainable development is not just the responsibility of government, but of all of us.

II. The SDGs Are Critical to U.S. Policymaking

The SDGs provide an important framework for taking account of current U.S. progress toward sustainability and setting benchmarks and marking forward progress or backsliding. While the COVID-19 pandemic has been an enormous setback for public health, economic development, and other SDGs, the SDGs provide a framework for recovery, including inclusive growth, a strengthened public health system, and clean energy.32 The SDGs also present an integrated approach to achieving climate change goals.

As Tony Pipa discusses in the Overview, applying the SDGs to the United States was controversial when the Obama Administration first negotiated them, and they remain a somewhat foreign concept to many domestic policymakers. Within the United States, they are often thought of as goals for developing countries. But as Pipa explains, the SDGs were drafted knowing they would apply to the United States and other developed countries. While some targets are not directly applicable to the U.S. context, many are. For example, the Biden Administration’s initial four priority areas were COVID-19, economic recovery, racial equity, and climate change, which the Administration understands as interrelated. The SDGs themselves reflect these areas through Goals 3 (Good Health and Well-being), 8 (Decent Work and Economic Growth), 10 (Reduced Inequalities), and 13 (Climate Action).

Progress toward each of these can and should result in progress toward the others. This interrelationship is nicely captured by economist Kate Raworth, who describes sustainable development as “human prosperity in a flourishing web of life.” The SDGs thus provide relevant insights and guides for domestic policymakers today and tomorrow.

The Obama Administration committed the United States to the SDGs and to reporting on national progress. The Trump Administration largely ignored the SDGs, but at least did not denounce them. The United States has yet to submit a VNR. By rejoining the international effort to implement the SDGs, the United States would also encourage greater progress in other countries.

The SDGs matter, or should matter, to this country. They provide a set of actions that, if successfully undertaken, would improve human quality of life and opportunity—for current and future generations. They would strengthen our economy, improve our national security, provide more and better opportunities for all citizens, and better protect the environment on which we all depend. Importantly, they also give citizens a set of goals and metrics by which to judge national progress toward, or backsliding from, key social, economic, and environmental outcomes. Repeated analyses of U.S. environmental policy over the past decades have concluded that U.S. policymaking suffers from a lack of common goals and metrics, which are basic elements of good governance.

III. Sustainable Development and American Values

The goals of sustainable development—human freedom, quality of life, opportunity, and justice—are also the underlying values of the American experiment. The nation’s founding documents proclaim that people have the


34. As this book goes to press, the Administration is already carrying out many of the recommendations it contains, such as rejoining the Paris Agreement and directing that regulatory review processes be revamped to “promote public health and safety, economic growth, social welfare, racial justice, environmental stewardship, human dignity, equity, and the interests of future generations.” See Statement, The White House, Paris Climate Agreement (Jan. 20, 2021), https://www.whitehouse.gov/briefing-room/statements-releases/2021/01/20/paris-climate-agreement/; Memorandum From President Biden to the Heads of Executive Departments and Agencies, Modernizing Regulatory Review (Jan. 20, 2021), https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/modernizing-regulatory-review/. The book includes many of these recommendations anyway to give readers a complete sense of what the authors believe is most needed to achieve the SDGs.

“unalienable Rights to Life, Liberty, and the pursuit of Happiness.” Our government was formed to “establish Justice, insure domestic Tranquility, provide for the common defense, promote the general Welfare, and secure the Blessings of Liberty to ourselves and our Posterity.” American history, arguably, is an attempt to more perfectly realize these values in the face of both internal and external challenges. These challenges have covered the entire sustainable development spectrum: social (subjugation of native peoples, slavery, civil rights, inequity); economic (gross domestic product (GDP) growth, economic booms, recessions and depressions), environmental (deforestation, dust bowl, extermination of species, reduction in pollution), and peace and security (world wars, international relations, Cold War, assistance to Ukraine). Across time, Americans continue to pursue these values, even as they have not yet been perfected in practice. Because sustainable development is directed at achieving social well-being, economic development, environmental protection, and peace and security at the same time, it provides a way of more fully realizing these goals and values. It also provides a rubric that demonstrates the interconnectedness of economic, environmental, and social justice.

Americans are also known for both their love of the natural environment and their keen ability to innovate in order to protect it. Americans, both free and enslaved, built tremendous wealth from America’s bounty of natural resources. After experiencing extreme environmental degradation, the nation in the 19th century began to protect key places and species. Americans pioneered modern environmental law in the mid-20th century to address other impacts of the booming economy and population growth.

Americans have recognized that they cannot protect the environment without also achieving economic, social, and peace and security goals. The country’s foundational environmental statute, the National Environmental Policy Act of 1969 (NEPA), essentially declares sustainable development to be national policy. It states a national policy to use all practicable means and measures, including financial and technical assistance, in a manner calculated to foster and promote the general welfare, to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans.

36. The Declaration of Independence (U.S. 1776).
37. U.S. Const. pmbl.
38. 42 U.S.C. §4331(a).
The challenge of realizing economic, environmental, social, and peace and security goals continues to be vitally important. Increased global competition for resources shows we cannot grow our economies and create jobs without also protecting the environment. The 1970 Clean Air Act has reduced air pollution by almost 80% during a period in which GDP increased by more than 275% (see Figure 3).\textsuperscript{39} If we are to reduce reliance on fossil fuels while building a clean energy economy, then Americans’ ability to innovate while protecting the environment will be more important than ever. We also need to be able to do this in a way that creates jobs and builds communities, particularly in places that are historically dependent on fossil fuels. Repeated crises tied to American reliance on fossil fuels from abroad also demonstrate that sustainable development is a patriotic act that is vital to the national defense, not simply a feel-good exercise.\textsuperscript{40}

Pursuing sustainable development is not just paramount to meeting internal U.S. goals; it is critical to fostering a more secure world. America’s economy and security are inextricably linked with other nations and peoples.

\begin{itemize}
\item \textsuperscript{39} U.S. Environmental Protection Agency, \textit{Our Nation's Air: EPA Celebrates 50 Years}, https://gispub.epa.gov/air/trendsreport/2020/ (last visited June 18, 2022).
\item \textsuperscript{40} See Lloyd Austin, \textit{Foreword} to \textit{Department of Defense, Department of Defense Climate Risk Analysis 4} (2021) (“To keep the nation secure, we must tackle the existential threat of climate change.”).
\end{itemize}
Climate change underscores this fact. To ensure a world in which American values can thrive, we need to support the satisfaction of basic human rights (including nutrition and education) and also foster peace and stability, democracy, expansion of trade and markets, and environmental protection.

America’s strong religious and ethical foundations also anchor sustainability as a fundamentally American proposition. Americans’ generosity and core values reflect the texts and beliefs of each of the world’s major religions. The growth of “Creation Care” and other religious approaches to environmental protection and environmental justice demonstrate the deep connection between spiritual values and sustainability.

A final core American value—and a common theme in all of these values—is seeking to provide for our children and future generations. The Great Law of the Haudenosaunee (Iroquois) declares that decisions made today should be based on their effect on the next seven generations.42 This principle is echoed in the U.S. Constitution, which calls for consideration of “ourselves and our posterity,” and in NEPA’s focus on “present and future generations of Americans.” Americans routinely say they want to provide their descendants greater opportunities and a better quality of life than they enjoyed. Sustainable development, with its explicit attention to future generations, is essential for this purpose.

IV. U.S. Progress on SDGs

U.S. performance on the SDGs is modest at best. The Sustainable Development Solutions Network (SDSN), a nonprofit organization that brings together individuals and organizations from around the world to advance efforts on the SDGs, has published a series of reports assessing global and U.S. performance on the SDGs (see, for example, Figure 4). Its most recent international assessment, published in 2021, is a detailed report ranking each country on its “overall performance on the 17 SDGs, giving equal weight to each Goal.”43 In that report, the United States ranks 32 out of 165 countries, between Chile (30) and Lithuania (31), on one hand, and Malta (33) and Serbia (34) on the other.44 The top-ranking countries are Finland (1), Sweden (2), and Denmark (3).45

44. Id. at 10-11. See also id. at 464 (summary of U.S. data and trends for specific targets and indicators).
45. Id. at 10.
SDSN also analyzes and compares individual U.S. states in separate reports. Its 2021 report on states concludes that “on average U.S. states are less than halfway to achieving the SDGs” by 2030. In summary:

States are not improving quickly enough to meet the SDGs by 2030 and at least 20 percent of indicators in every state are going in the wrong direction. US states are not doing what needs to be done to protect the environment, end inequality, or provide for healthy lives, among other things. In contrast to so many other places around the globe where progress is visible, US states are getting worse across a myriad of areas.

The report also ranks state performance on the SDGs. The highest-ranking states are Vermont (1), Massachusetts (2), and Washington (3), while the lowest ranking states are Louisiana (48), West Virginia (49), and Mississippi (50).

48. Id.
49. Id. at 9.
V. Plan of This Book

This book focuses on the law and policy needed to achieve the SDGs in the United States, and appears to us to be the first book of its kind, even though the SDGs were adopted in 2015. It collects the recommendations of experts across the 17 SDGs on steps major stakeholders should take now to advance sustainable development in the United States. The recommendations focus on suggested actions for federal, state, tribal, territorial, and local governments as well as corporate and civil society actors. As noted above, many of the state recommendations can be applied to tribal and territorial governments.

The authors were asked to consider five key questions in shaping their chapters:

1. What are the most important or relevant targets in this goal for the United States, and why are they important?
2. What progress has the United States already made toward this goal (up to the present)?
3. What changes in federal, state, local, or private law do you recommend to accelerate U.S. progress toward achievement of this SDG by 2030?
4. What nonlegal changes do you recommend to accelerate U.S. progress toward achievement of this SDG by 2030?
5. In what ways can progress toward this SDG also further progress on other SDGs?

Thus, this work provides actionable, policy-relevant suggestions for moving the United States toward a more sustainable future, looking not just to government actions but actions by all major stakeholders. The authors were also asked to limit the length of their chapters and to focus on what they believed to be the most important parts of targets of their particular SDGs. This necessarily means that authors did not address many potentially relevant issues.

This book begins, as suggested earlier, with an Overview by Tony Pipa, who was central to the Obama Administration’s efforts to negotiate the SDGs. He helps the reader understand the origin, creation, and finalization of the SDGs as well as their path in the ensuing several years. The book then...
turns to each of the 17 SDGs, with a chapter on each goal. The number of each chapter corresponds to the number of the goal to which it pertains. As noted above, the authors focus on the most pressing aspects of these goals, and limit their recommendations to those that have some prospects of being adopted. These chapters are not exhaustive treatments of the SDGs. In a concluding section, we use these chapters to emphasize the two themes that are at the core of this book—that the SDGs provide a practical governance framework for the United States to achieve greater prosperity for all in a flourishing web of life, and that the recommendations made by the contributing authors provide an achievable agenda for the United States to accelerate the transition to a sustainable and more attractive future.

This book has an index of recommendations by actor instead of a conventional index. This index collects all of the recommendations in the book in a single place. The recommendations directed to each particular type of actor (e.g., local governments) are indexed under a heading for that actor. Our purpose is to make it easier for advocates and policymakers to easily find all of the recommendations relevant to any particular type of actor, regardless of the chapter in which the recommendations are made. This index should help make the book a more effective guide to action.

VI. Public Discussion—and Action—Needed on Recommendations

We need to have a robust public discussion in the United States about how to accelerate the transition to sustainability and how to achieve “human prosperity in a flourishing web of life.”51 That discussion, in turn, needs to inspire both advocacy for, and adoption of, new public and private measures to accelerate the transition. The analysis and recommendations contained in this book can be a basis for that discussion and action. Thirty years after the 1992 Earth Summit, and seven years after the adoption of the SDGs, Americans are far less aware of sustainable development—and the opportunities it presents—than they should be.

That discussion needs to include everyone—business and labor, young people, farmers, scientists, technology developers, religious and spiritual leaders, educators, and even social media celebrities. Many Americans get their news from social media as opposed to their political leaders, and take cues from the pulpit or yoga mat on how to translate their beliefs into action. Progress on the SDGs will depend in part on those not traditionally consid-

51. Raworth, supra note 33.
ered part of the policymaking process being aware of the SDGs and embracing the idea of a sustainable America.

We hope this book—and the recommendations it contains—helps to inspire and ground both discussion and action.