

How Lawyers Can Help Save The Planet

By **Michael Gerrard and John Dernbach** (May 21, 2019, 4:21 PM EDT)

Scientific reports, coming in a steady stream, are highlighting the urgency of reducing greenhouse gas emissions so as to avoid the worst impacts of climate change. Already, hurricanes, coastal and inland flooding, wildfires, heat waves and other extreme weather events are causing severe economic damage and loss of life, and their increasing severity has been attributed to climate change. The decades to come promise to be even worse.

Engineers, economists and others have long been proposing ways to cut back on emissions and thereby prevent an excessive rise in global temperatures. However, some of these methods have faced legal obstacles, and others have not enjoyed sufficient incentives.

Now we are making a legal toolkit available with more than 1,000 specific recommendations for actions at the federal, state and local levels and in the private sector that could help advance the technical tools already available. Many lawyers are needed to help these recommendations become reality. As discussed below, we are setting up a system for lawyers to volunteer to undertake this work.

The Technical Underpinning

In November 2015, the Sustainable Development Solutions Network and the Institute for Sustainable Development and International Relations published two detailed reports on how the United States could reduce its greenhouse gas emissions 80% below 1990 levels by 2050. (Similar reports were prepared for 15 other countries; altogether, these 16 countries represent about three-fourths of the world's greenhouse gas emissions.)

The authors required that all the methods they suggested be technologically feasible and not require the premature retirement of equipment. They identified three pillars of the overall effort:

- Doubling the efficiency of energy use;
- Making electricity without releasing greenhouse gases; and
- Shifting liquid and gaseous fuel sources (including gasoline, diesel and fuel oil) to electricity for transportation, heating and cooling.



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Despite the greatly increased efficiency, the overall demand for electricity would double, because so much additional electricity would be needed for motor vehicles, heating and cooling, and other uses that would no longer employ liquid fuels. The authors constructed four scenarios for making electricity. One relied heavily on nuclear; one on carbon capture and sequestration; one on renewables; and one on a mix of the three.

The Legal Challenge

In late 2015, the two of us started asking how U.S. law needs to change in order to move us onto these pathways.

To answer this question, we assembled a team of nearly 60 legal experts — mostly law professors and practitioners — to identify the available legal tools. We looked at what could be done either with or without new legislation.

The result is an 1,100-page book, "Legal Pathways to Deep Decarbonization in the United States," which has just been published by the Environmental Law Institute. It contains more than 1,000 specific recommendations. We recognize that little that relates overtly to climate change will be adopted under the current president and Congress (though some are not controversial and may get through now), but more may be possible in Washington in the next few years. And meanwhile, many states, cities and businesses are eager to act.

Scope and Types of Legal Tools

The legal tools recommended by the book's authors are broad in both scope and type. The first category of tools identified in the book's 35 chapters are those that improve energy efficiency and fuel switching — lighting, appliances and other equipment; new buildings; existing buildings; and the industrial sector.

Next are those concerning transportation — light-duty vehicles; heavy-duty vehicles and freight; transforming transportation demand; aviation; and shipping. This is followed by electricity decarbonization — utility-scale renewables; distributed renewable energy; transmission, distribution and storage, and grid integration; nuclear energy; hydropower; electricity charges, mandates and subsidies; and phasing out the use of fossil fuels for the generation of electricity.

Acknowledging that liquid and gaseous fuels will still be needed, another section covers bioenergy feedstocks; the production and delivery of low-carbon gaseous fuels; and the production and delivery of bioenergy fuels. Methods of keeping greenhouse gases out of the atmosphere, or removing them once they are there, are covered in a section with chapters on carbon capture and sequestration; negative emissions technologies and direct air capture; agriculture; and forestry.

Since carbon dioxide is not the only climate pollutant, other chapters concern black carbon, methane, fluorinated gases and nitrous oxide. Additional chapters cover such cross-cutting approaches to reducing emissions as carbon prices; behavioral techniques; technological innovation; financing of large-scale projects and projects at the "grid edge;" materials consumption and solid waste; and international trade.

This wide range of subject matter for tools falls into a dozen types or categories. The most familiar are putting a price on carbon (such as through a carbon tax or a cap and trade system) and creating additional regulations. But they also include reducing or removing unnecessary legal barriers to clean

energy; removing subsidies to dirty energy; public information; building facilities and infrastructure, and improving their operations; research and development; special insurance products; and adjusting property rights. Special attention is devoted to assisting those who could suffer as a result of the needed energy transition.

This volume amounts to a playbook of available legal options. Not all tools are politically or economically viable in all places. But all who are concerned about climate change, or about air pollution, or about energy costs and security, will find ways they can contribute to the solutions.

Legal Help Needed

We don't want this book just to sit on the shelf. Implementing the recommendations requires a great deal of legal work — drafting federal and state statutes and regulations and model local ordinances, and the accompanying detailed memoranda in support; preparing model transactional agreements; and more.

The wide variety of types of recommended legal tools makes it clear that, while environmental and energy lawyers are needed, transactional lawyers, property lawyers, corporate lawyers, property and land use lawyers, and other lawyers are also needed. We have begun recruiting lawyers — mostly in big firms, but some in smaller firms or on their own, or in nongovernmental organizations — to do this work. The law clinics at several law schools have also expressed interest in helping.

Richard Horsch, who recently retired as an environmental partner in the New York office of White & Case, has undertaken to coordinate this large and growing effort. We are creating a website where the resulting work product and associated resources will be posted for the benefit of anyone who cares to use them.

All of this is being done on a pro bono basis. The two of us waived any royalties for the book. The chapter authors weren't paid, nor were the many peer reviewers, and nor will be the lawyers who undertake the drafting work. The Environmental Law Institute, which undertook a massive editorial effort to bring the book to print, is selling it below cost. It has made a 160-page summary of the book, with the key recommendations, available for free download.

More than a dozen major law firms have already signed up to undertake significant work on this project, and several more are considering it. Each of these firms agrees to take on one of the 35 chapters in the book (though some have taken on two chapters, and others a portion of a chapter). Every chapter contains numerous specific recommendations, all of which involve the adoption of federal, state or local laws or regulations or private transactional agreements.

In consultation with the two of us, with Richard Horsch, and with the author(s) of the relevant chapter in the book, the firms assign priorities to the recommendations. The firms then prepare a template for each recommendation — a one- or two-page document that summarizes the recommendation, the type of legal document to be drafted (e.g. local ordinance, state law, amendment to existing statute, transactional agreement) and other pertinent information.

This template serves as the basis for the assignment to be given to the lawyer undertaking the work. The lawyer then drafts the document and an accompanying explanatory memorandum. After the firm has reviewed and is happy with the work product, it goes to us.

We subject it to peer review to make sure it is the best it can be. After any further revisions, we then post the documents on the web site we are creating.

We hope that the initial drafting for the third of the recommendations with the highest priority will be completed within three months of the firm's signing up for this project; the second third within six months; and the third third, within nine months.

We invite firms that are unable to take on the drafting, and individual lawyers, to volunteer to join our peer review panels to review particular documents. Many lawyers in law firms, corporations, government agencies and nonprofits have deep expertise in particular areas, and are welcome to join this effort — in their individual capacities, if they wish — to help ensure that the project's work product is of the highest quality.

A later phase of this project, which we are just now beginning to think through, will be to reach out to state legislatures, city councils and other bodies to let them know about these documents and help customize them for their particular jurisdiction. Help from lawyers around the country will be needed.

Related Renewables Project

One of the central needs identified in the book is a massive program for the construction of wind, solar and other renewable energy facilities, and the associated storage, distribution and transmission. Unfortunately this program is often impeded by local opposition. Some people may not like the sight of wind turbines or solar arrays, or have other objections, but we will never adequately address the climate problem if there are too many obstacles to these facilities.

To address this, the Sabin Center for Climate Change Law has launched the Renewable Energy Legal Defense Initiative, whose purpose is to provide pro bono legal representation to community groups and others who want renewable energy projects that are being impeded by opposition. The law firm of Arnold & Porter has seconded a litigation associate, Laura Cottingham, to spend half her time over the next year working on this project. Here, too, volunteer help from other law firms and lawyers would be most welcome.

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[1] See <https://www.eli.org/legal-pathways-deep-decarbonization-united-states-summary-and-key-recommendations>.