

Solving the Climate Crisis through Social Change

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Solving the Climate Crisis through Social Change

*Public Investment in
Social Prosperity to
Cool a Fevered Planet*

GAR W. LIPOW

New Trends and Ideas in American Politics

Raymond A. Smith and Jon Rynn, Series Editors

 PRAEGER

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Sometimes harsh criticism is an act of true friendship;
this book is dedicated to all the new friends it will make me.



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CHAPTER 1

Introduction

This is an optimistic book about a gloomy subject: the massive political and economic change needed to solve the climate crisis. Without illusions about the barriers to change, it outlines realistic means to address and overcome them. The discussion is not confined to analysis, criticism, and policy wonkery, but tackles the hard questions of organizing and winning.

The core point is that greenhouse gas (GHG) emissions and destruction of our planetary ecosystem's ability to absorb carbon are side effects. The root causes that lead to pollution and ecological disruption, which, in turn, create the climate crisis, are atomization and inequality.

Atomization refers to disconnections that reduce incentives or ability to cooperate, generate information, and share information among people who significantly affect one another. It represents a weakening of our ability to act collectively as a society rather than as disconnected individuals. Inequality occurs when the few receive most of the benefits of social production, and the many bear most of the costs. For example, if a small percentage of the population owned most of the wealth while being exposed to less cancer-causing pollution than the average American, that would be an example of inequality.

Solving the Climate Crisis will document step-by-step how various forms of inequality and atomization lead to our current crisis, and how social

change to reverse and mitigate inequality and atomization is critical to reducing the scale of the climate crisis and surviving climate disruption, already locked into place. This is not because inequality and atomization directly release carbon or other GHG pollution. Rather, as will be documented in future chapters, atomization and inequality in turn lead to practices that waste physical resources on a large scale. Our buildings, factories, farms, and means of transport all avoidably throw away energy and energy-consuming resources that could be saved at profit. However, we will see that avoiding these kinds of waste will require social change.

This relates to, but differs from, climate justice studies. Climate justice studies mostly analyze how the climate crisis affects different groups unequally, usually harming most those with the least power and lowest share of the world's wealth. In contrast, *Solving the Climate Crisis* focuses on how unequal power and wealth and weakening of the social bonds between people help create the climate crisis.

Inequality and atomization as root causes of climate disruption have implications for policy and politics alike. On the policy side, such a definition of the problem suggests that only solutions that effectively disrupt the current distribution of wealth and power will prove effective. On the political side, the need for such fundamental change in turn suggests that this is not something peripheral that can be achieved through deal making. Real solutions to the climate crisis will require a strong and numerous grassroots movement. Such a grassroots movement in turn cannot come into existence independent of other grassroots movements, but needs to be part of a coalition or network tackling multiple issues. What follows documents its premises empirically, largely from peer-reviewed studies and authoritative data sources. It then uses easy-to-follow and hopefully rigorous logic to reach the conclusions referred to.

The book begins with peer-reviewed documentation of the weakness of carbon pricing as a tool to reduce GHG emissions and shows that weakness stems from the deeper roots of the climate crisis. Examples range from lettuce fields of California in the 1970s to the 2008 economic crash. Research shows that neither cost nor technical barriers prevent drastic and speedy reductions in greenhouse emissions.¹ Slowing global warming is no longer a technical problem, if it ever was.

Because the flaws that create the climate crisis are institutional, social, and political, the chapter that immediately follows this introduction de-

1. This is documented in chapter 14, "Technological Solutions."

scribes the structural barriers to change. It marshals empirical data to support Amory Lovins's assertion that businesses leave "thousand dollar bills lying all over the factory floor" by neglecting energy savings that would pay back investments at an extraordinary rate (Lovins, 1996, 331–43). It presents evidence that various types of structural inequality and atomization (in power, access to capital and information, gaining the benefits of energy savings, and suffering the consequences of energy waste) are responsible for such neglected opportunities. It describes the interests—such as fossil fuel companies and automobile manufacturers—that would directly suffer from a reduction in fossil fuel use, but only as a secondary factor.

Subsequent historical and social analysis ranges across centuries. Destruction of the 17th-century forests of New England for fuel and timber that built America destroyed one of the world's great carbon sinks. The Guano industry in 19th-century Bolivia, Chile, and Peru helped provide external fertilizer that transformed agriculture into a significant emitter of GHG. The same analysis connects the evolution of housework over two centuries to 21st-century dependence on the automobile and the failure of Walter Reuther's struggle for post–World War II peacetime conversion to war in the Middle East today.

The next chapters outline policy options that would let us transform wasteful infrastructure distorted by centuries of poor choices. They argue for public investment and efficiency regulations as the primary means to effectively reduce emissions. Chapter 14 outlines some of the evidence that a transition to an emission-free economy would cost less than \$250 billion a year, around a third of the Pentagon budget. That \$250 billion annual expenditure would pay for the difference between business-as-usual and a future based on wind and solar energy powering more efficient buildings, transport, and factories along with sustainable agriculture and forestry. The book goes on to point out that policies that can actually solve the climate crisis will tend to merge with a broader social justice agenda.

The final section outlines the politics of winning this fight. It makes the case that the battle is too big to win as an environmental issue, especially in an increasingly reactionary political climate, but that the very size of the crisis gives reason for hope. Other groups are facing problems that stem from the same root causes: atomization, inequality, lack of justice. Just as baboon troops tend to keep closer together in the face of pressure from predators, various progressive groups are realizing they need to find some way to coalesce. Thus, the final chapter outlines what the climate justice movement has to contribute to a larger progressive movement and

suggests why future progressive coalition building may prove more successful and permanent than it has in the past.

Solving the Climate Crisis is really two books in one. Read from first to last chapter, ignoring extended discussion sections and appendices, it is short and accessible. Extended discussion sections and appendices contain more detailed and in-depth analysis.²

This book does not shrink from the difficult problems we need to solve on the level of policy and of nitty-gritty politics. And, in facing those problems, it finds reason to hope both on an abstract and on a very practical level.

One subject that you will not find discussed much in this book is the science of global warming. It is past time that we stop allowing delayers and deniers to derail the conversation. The nature of the problem is well known. The important discussion at this point is what we do about it. However, it does seem only fair that we devote a couple of paragraphs to describe the problem we seek to solve.

Fossil fuel use, industrial processes, and many forms of agriculture, forestry, mining, and waste disposal emit GHG such as CO₂. Some of those processes also disrupt biological and physical systems that absorb CO₂. When GHG in the atmosphere increase, either due to emissions or reduced absorption, they trap energy from sunlight, warming Earth's atmosphere slightly. That slight increased temperature increases atmospheric water vapor, itself a GHG. That water vapor, in turn, multiplies the warming effect.

Warming the planet, in turn, disrupts the biosphere's natural ability to remove CO₂ from the atmosphere via plant growth, ocean absorption, and soil absorption. This warming also releases ancient soil, ice, and ocean reservoirs of CO₂ and methane. If this process continues too long, these and other feedbacks will begin to dwarf human emissions and lead to unstoppable climate destabilization.

Already-visible consequences from climate destabilization include significant food supply disruption, increases in pests and diseases, long-term displacement of millions of people, and an increase in dangerous storms,

2. Most extended discussion sections will appeal to anyone who finds the subject described in their titles worth exploring in more depth and to those with professional interests in those topics. The appendices, chapter 18, "Energy Demand Elasticity," chapter 19, "The Energy Efficiency Gap," and chapter 20, "Accounting for Resource Flows," are mainly of interest to economists, social scientists, and business professionals.

droughts, floods, and other extreme weather conditions. There is still time to stop this crisis before cities are lost, before the ability to feed most of the world is lost, before the climate becomes so different from the one in which modern agriculture and industry developed that civilization cannot survive the extreme change (Hansen et al., 2008).

If you want to know more about the science of climate change, you can hunt down the IPCC reports at <http://www.ipcc.ch/>. Popular discussion of major topics by climate scientists can be found at RealClimate.Org. Informal refutations of major denier arguments can be found on the book-length post “How to Talk to a Climate Skeptic” on the *A Few Things Ill Considered* blog at http://scienceblogs.com/illconsidered/2008/07/how_to_talk_to_a_sceptic.php.

I think of climate change as analogous to a fire. This book will not discuss whether or not the fire is real. It will not debate whether what looks like a fire is really just a holographic illusion accompanied by smoke and heat. It will talk about how to fight the fire and how to survive it.

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