

# Foreword

The effects of global climate change on human health can be grouped into two main categories: the acute impact of extreme weather events on whole communities, but especially the most vulnerable groups within a community, and the increased severity of chronic air pollution exposure in areas where smog and soot are already well-known threats to children, the elderly, and persons with heart and lung ailments.

Little of the public debate about potential action to reduce human-caused release of greenhouse gas emissions has focused on health. The vacuum may be explained partially by concern on the part of established health advocacy groups that global warming is literally too hot to address. Some community-based organizations worry that working on climate change is a distraction from the ongoing efforts to maintain political support for measures to clean up existing sources of air pollution. Further, professionals who treat patients are appropriately cautious about speaking out on an issue that has become so politicized, especially if they are not well equipped to discuss the science.

The fact is that we have plenty of public policy tools—and some genuine success stories—to build on. In California, efforts began with a solid inventory of emissions from major sources as mandated by annual reporting requirement for major emitters. The winning struggle to require manufacturers to reduce emissions of greenhouse gases from new cars and light trucks led to the 2012 adoption by the U.S. Environmental Protection Agency and the National Highway Traffic Safety Administration of linked fuel economy and emission standards. These criteria will save consumers money and double gas mileage for the new car fleet over the next decade.

Measures adopted by California pursuant to ASB32, the Global Warming Solutions Act of 2006, include mandatory industrial audits, a Renewable Portfolio Standard requiring electric utilities to provide 33 % of their electricity from renewable solar, wind, and geothermal generation; a low-carbon fuel standard designed to push for investment in cleaner fuels; and a cap-and-trade regulation that establishes a price on carbon as a way to incent further cleanup.

California's program is more comprehensive than other states, but a recent inventory indicated that almost two-thirds of the states have enacted one or more

measures designed to promote energy efficiency or promote renewable energy, and nearly half the states as well as hundreds of local governments have made explicit commitments to reduce greenhouse gases. While federal government lags behind even voluntary action by many businesses, there are signs that once again the federal administration will pursue measures to promote meaningful reductions.

Many of the actions mentioned above fit the agenda that environmental and clean energy groups have been promoting for many years. Achieving drastic cuts in emissions relies on the same types of measures that are needed to meet health standards for air pollution—burning cleaner fuels and using less energy per unit of output. We need to promote technologies that can be diffused through the developing world to help those societies whose economies are growing rapidly to do so without increasing their carbon footprint. Breakthroughs are needed in both policy and technology if we are to bend the upward emissions curve to something more sustainable.

One lesson that we air pollution regulators have learned from our decades-long, highly effective but always contentious campaign to clean the air is that once the public is persuaded that their own health and that of their families is at risk, they are willing to accept additional cost (a few cents on the price of gasoline) and some inconvenience (annual inspection of older cars and trucks). Even better, we have learned to use both financial and behavioral carrots (access to carpool lanes for the cleanest vehicles) to achieve measurable reductions with lower friction. But what underlies the whole enterprise is that the public understands that the goal is improved health. If the same case can be made for climate action, we will have a real chance to make progress in the next few years on the most significant environmental issue of our time.

This book can help bring a broader range of voices into the discussion and increase the chance of effective action by governments to both mitigate the causes and buffer the impacts of ongoing climate change.

Sacramento, CA

Mary D. Nichols

Global Climate Change and Public Health

Pinkerton, K.E.; Rom, W.N. (Eds.)

2014, XII, 406 p. 71 illus., 61 illus. in color., Hardcover

ISBN: 978-1-4614-8416-5

A product of Humana Press