



- SUBSCRIBE
- RENEW
- GIVE A GIFT
- DIGITAL EDITION

[Print](#) | [Close](#)

How to Talk About Climate Change So People Will Listen

ENVIRONMENTALISTS WARN US THAT APOCALYPSE AWAITS. ECONOMISTS TELL US THAT MINIMAL FIXES WILL GET US THROUGH. HERE'S HOW WE CAN MOVE BEYOND THE IMPASSE.

By Charles C. Mann

Not long ago, my newspaper informed me that glaciers in the western Antarctic, undermined by the warmer seas of a hotter world, were collapsing, and their disappearance “now appears to be unstoppable.” The melting of these great ice sheets would make seas rise by at least four feet—ultimately, possibly 12—more than enough to flood cities from New York to Tokyo to Mumbai. Because I am interested in science, I read the two journal articles that had inspired the story. How much time do we have, I wondered, before catastrophe hits?

One study, in *Geophysical Research Letters*, provided no guidance; the authors concluded only that the disappearing glaciers would “significantly contribute to sea level rise in decades to centuries to come.” But the other, in *Science*, offered more-precise estimates: during the next century, the oceans will surge by as much as a quarter of a millimeter a year. By 2100, that is, the calamity in Antarctica will have driven up sea levels by almost an inch. The process would get a bit faster, the researchers emphasized, “within centuries.”

How is one supposed to respond to this kind of news? On the one hand, the transformation of the Antarctic seems like an unfathomable disaster. On the other hand, the disaster will never affect me or anyone I know; nor, very probably, will it trouble my grandchildren. How much consideration do I owe the people it *will* affect, my 40-times-great-grandchildren, who, many climate researchers believe, will still be confronted by rising temperatures and seas? Americans don't even save for their own retirement! How can we worry about such distant, hypothetical beings?

Worse, confronting climate change requires swearing off something that has been an extraordinary boon to humankind: cheap energy from fossil fuels. In the 3,600 years between 1800 B.C. and 1800 A.D., the economic historian Gregory Clark has calculated, there was “no sign of any improvement in material conditions” in Europe and Asia. Then came the Industrial Revolution. Driven by the explosive energy of coal, oil, and natural gas, it inaugurated an unprecedented three-century wave of prosperity.

Artificial lighting, air-conditioning, and automobiles, all powered by fossil fuels, swaddle us in our giddy modernity. In our ergonomic chairs and acoustical-panel cubicles, we sit cozy as kings atop 300 years of flaming carbon.

In the best of times, this problem—given its apocalyptic stakes, bewildering scale, and vast potential cost—would be difficult to resolve. But we are not in the best of times. We are in a time of legislative paralysis. In an important step, the Obama administration announced in June its decision to cut power-plant emissions 30 percent by 2030. Otherwise, this country has seen strikingly little political action on climate change, despite three decades of increasingly high-pitched chatter by scientists, activists, economists, pundits, and legislators.

The chatter itself, I would argue, has done its share to stall progress. Rhetorical overreach, moral miscalculation, shouting at cross-purposes: this toxic blend is particularly evident when activists, who want to scare Americans into taking action, come up against economists, with their cool calculations of acceptable costs. Eco-advocates insist that only the radical transformation of society—the old order demolished, foundation to roof—can fend off the worst consequences of climate change. Economists argue for adapting to the most-likely consequences; cheerleaders for industrial capitalism, they propose quite different, much milder policies, and are ready to let nature take a bigger hit in the short and long terms alike. Both envelop themselves in the mantle of Science, emitting a fug of charts and graphs. (Actually, every side in the debate, including the minority who deny that humans can affect the climate at all, claims the backing of Science.) Bewildered and battered by the back-and-forth, the citizenry sits, for the most part, on its hands. For all the hot air expended on the subject, we still don't know how to talk about climate change.

As an issue, climate change was unlucky: when nonspecialists first became aware of it, in the 1990s, environmental attitudes had already become tribal political markers. As the Yale historian Paul Sabin makes clear in *The Bet*, it wasn't always this way. The votes for the 1970 Clean Air Act, for example, were 374–1 in the House, 73–0 in the Senate. Sabin's book takes off from a single event: a bet between the ecologist Paul R. Ehrlich and the economist Julian Simon a decade later. Ehrlich's *The Population Bomb* (1968), which decried humankind's rising numbers, was a foundational text in the environmental movement. Simon's *Ultimate Resource* (1981) was its antimatter equivalent: a celebration of population growth, it awakened opposition to the same movement.



Activist led by Bill McKibben, the founder of 350.org, protest the building of the Keystone XL pipeline at the White House, February 2013. (AP)

Ehrlich was moderately liberal in his politics but unrestrained in his rhetoric. The second sentence of *The Population Bomb* promised that “hundreds of millions of people” would starve to death within two decades, no matter what “crash programs” the world launched to feed them. A year later, Ehrlich gave even odds that “England will not exist in the year 2000.” In 1974, he told Congress that “a billion or more people” could starve in the 1980s “at the latest.” When the predictions didn’t pan out, he attacked his critics as “incompetent” and “ignorant,” “morons” and “idiots.”

Simon, who died in 1998, argued that “human resourcefulness and enterprise” will extricate us from our ecological dilemma. Moderately conservative in his politics, he was exuberantly uninhibited in his scorn for eco-alarmists. Humankind faces no serious environmental problems, he asserted. “All long-run trends point in exactly the opposite direction from the projections of the doomsayers.” (*All? Really?*) “There is no convincing economic reason why these trends toward a better life should not continue indefinitely.” Relishing his role as a spoiler, he gave speeches while wearing red plastic devil horns. Unsurprisingly, he attracted disagreement, to which he responded with as much bluster as Ehrlich. Critics, motivated by “blatant intellectual dishonesty” and indifference to the poor, were “corrupt,” their ideas “ignorant and wrongheaded.”

In 1980, the two men wagered \$1,000 on the prices of five metals 10 years hence. If the prices rose, as Ehrlich predicted, it would imply that these resources were growing scarcer, as *Homo sapiens* plundered the planet. If the prices fell, this would be a sign that markets and human cleverness had made the metals relatively less scarce: progress was continuing. Prices dropped. Ehrlich paid up, insisting disingenuously that he had been “schnookered.”

Schnookered, no; unlucky, yes. In 2010, three Holy Cross economists simulated the bet for every decade from 1900 to 2007. Ehrlich would have won 61 percent of the time. The results, Sabin says, do not prove that these resources have grown scarcer. Rather, metal prices crashed after the First World War and spent most of a century struggling back to their 1918 levels. Ecological issues were almost irrelevant.

The bet demonstrated little about the environment but much about environmental politics. The American landscape first became a source of widespread anxiety at the beginning of the 20th century. Initially, the fretting came from conservatives, both the rural hunters who established the licensing system that brought back white-tailed deer from near-extinction and the Ivy League patricians who created the national parks. So ineradicable was the conservative taint that decades later, the left still scoffed at ecological issues as right-wing distractions. At the University of Michigan, the radical Students for a Democratic Society protested the first Earth Day, in 1970, as elitist flimflam meant to divert public attention from class struggle and the Vietnam War; the left-wing journalist I. F. Stone called the nationwide marches a “snow job.” By the 1980s, businesses had realized that environmental issues had a price tag. Increasingly, they balked. Reflexively, the anticorporate left pivoted; Earth Day, erstwhile snow job, became an opportunity to denounce capitalist greed.

The result, as the Emory historian Patrick Allitt demonstrates in *A Climate of Crisis*, was a political back-and-forth that became ever less productive. Time and again, Allitt writes, activists and corporate executives railed against each other. Out of this clash emerged regulatory syntheses: rules for air, water, toxins. Often enough, businesspeople then discovered that following the new rules was less expensive than they had claimed it would be; environmentalists meanwhile found out that the problems were less dire than they had claimed.

Throughout the 1980s, for instance, activists charged that acid rain from midwestern power-plant emissions was destroying thousands of East Coast lakes. Utilities insisted that anti-pollution equipment would be hugely expensive and make homeowners’ electric bills balloon. One American Electric Power representative predicted that acid-rain control could lead to the “destruction of the Midwest economy.” A 1990 amendment to the Clean Air Act, backed by both the Republican administration and the Democratic Congress, set up a cap-and-trade mechanism that reduced acid rain at a fraction of the predicted cost; electric bills were barely affected. Today, most scientists have concluded that the effects of acid rain were overstated to begin with—fewer lakes were hurt than had been thought, and acid rain was not the only cause.

Rather than learning from this and other examples that, as Allitt puts it, “America’s environmental problems, though very real, were manageable,” each side stored up bitterness, like batteries taking on charge. The process that had led, however disagreeably, to successful environmental action in the 1970s and ’80s brought on political stasis in the ’90s. Environmental issues became ways for politicians to signal their clan identity to supporters. As symbols, the issues couldn’t be compromised. Standing up for your side telegraphed your commitment to take back America—either from tyrannical liberal

elitism or right-wing greed and fecklessness. Nothing got done.

As an issue, climate change is perfect for symbolic battle, because it is as yet mostly invisible. Carbon dioxide, its main cause, is not emitted in billowing black clouds, like other pollutants; nor is it caustic, smelly, or poisonous. A side effect of modernity, it has for now a tiny practical impact on most people's lives. To be sure, I remember winters as being colder in my childhood, but I also remember my home then as a vast castle and my parents as godlike beings.

In concrete terms, Americans encounter climate change mainly in the form of three graphs, staples of environmental articles. The first shows that atmospheric carbon dioxide has been steadily increasing. Almost nobody disputes this. The second graph shows rising global temperatures. This measurement is trickier: carbon dioxide is spread uniformly in the air, but temperatures are affected by a host of factors (clouds, rain, wind, altitude, the reflectivity of the ground) that differ greatly from place to place. Here the data are more subject to disagreement. A few critics argue that for the past 17 years warming has mostly stopped. Still, most scientists believe that in the past century the Earth's average temperature has gone up by about 1.5 degrees Fahrenheit.

Rising temperatures per se are not the primary concern. What matters most is their future influence on other things: agricultural productivity, sea levels, storm frequency, infectious disease. As the philosopher Dale Jamieson points out in the unfortunately titled *Reason in a Dark Time*, most of these effects cannot be determined by traditional scientific experiments—white-coats in laboratories can't melt a spare Arctic ice cap to see what happens. (Climate change has no lab rats.) Instead, thousands of researchers refine ever bigger and more complex mathematical models. The third graph typically shows the consequences such models predict, ranging from worrisome (mainly) to catastrophic (possibly).

Such charts are meaningful to the climatologists who make them. But for the typical citizen they are a muddle, too abstract—too much like 10th-grade homework—to be convincing, let alone to motivate action. In the history of our species, has any human heart ever been profoundly stirred by a graph? Some other approach, proselytizers have recognized, is needed.

To stoke concern, eco-campaigners like Bill McKibben still resort, Ehrlich-style, to waving a skeleton at the reader. Thus the first sentence of McKibben's *Oil and Honey*, a memoir of his climate activism, describes 2011–12, the period covered by his book, as “a time when the planet began to come apart.” Already visible “in almost every corner of the earth,” climate “chaos” is inducing “an endless chain of disasters that will turn civilization into a never-ending emergency response drill.”

The only solution to our ecological woes, McKibben argues, is to live simpler, more local, less resource-intensive existences—something he believes is already occurring. “After a long era of getting big and distant,” he writes, “our economy, and maybe our culture, has started to make a halting turn toward the small and local.” Not only will this shift let us avoid the worst consequences of climate change, it will have the happy side effect of turning a lot of unpleasant multinational corporations to ash. As we

“subside into a workable, even beautiful, civilization,” we will lead better lives. No longer hypnotized by the buzz and pop of consumer culture, narcotized couch potatoes will be transformed into robust, active citizens: spiritually engaged, connected to communities, appreciative of Earth’s abundance.

For McKibben, the engagement is full throttle: The *Oil* half of his memoir is about founding 350.org, a group that seeks to create a mass movement against climate change. (The 350 refers to the theoretical maximum safe level, in parts per million, of atmospheric carbon dioxide, a level we have already surpassed.) The *Honey* half is about buying 70 acres near his Vermont home to support an off-the-grid beekeeper named Kirk Webster, who is living out McKibben’s organic dream in a handcrafted, solar-powered cabin in the woods. Webster, McKibben believes, is the future. We must, he says, “start producing a nation of careful, small-scale farmers such as Kirk Webster, who can adapt to the crazed new world with care and grace, and who don’t do much more damage in the process.”

Poppycock, the French philosopher Pascal Bruckner in effect replies in *The Fanaticism of the Apocalypse*. A best-selling, telegenic public intellectual (a species that hardly exists in this country), Bruckner is mainly going after what he calls “ecologism,” of which McKibbenites are exemplars. At base, he says, ecologism seeks not to save nature but to purify humankind through self-flagellating asceticism.

To Bruckner, ecologism is both ethnocentric and counterproductive. Ethnocentric because eco-denunciations of capitalism simply give new, green garb to the long-standing Euro-American fear of losing dominance over the developing world (whose recent growth derives, irksomely, from fossil fuels). Counterproductive because ecologism induces indifference, or even hostility to environmental issues. In the quest to force humanity into a puritanical straitjacket of rural simplicity, ecologism employs what should be neutral, fact-based descriptions of a real-world problem (too much carbon dioxide raises temperatures) as bludgeons to compel people to accept modes of existence they would otherwise reject. Intuiting moral blackmail underlying the apparently objective charts and graphs, Bruckner argues, people react with suspicion, skepticism, and sighing apathy—the opposite of the reaction McKibbenites hope to evoke.

The ranchers and farmers in Tony Horwitz’s *Boom*, a deft and sometimes sobering e-book, suggest Bruckner may be on to something. Horwitz, possibly best known for his study of Civil War reenactors, *Confederates in the Attic*, travels along the proposed path of the Keystone XL, a controversial pipeline intended to take oil from Alberta’s tar-sands complex to refineries in Steele City, Nebraska—and the project McKibben has used as the rallying cry for 350.org. McKibben set off on his anti-Keystone crusade after the climatologist-provocateur James Hansen charged in 2011 that building the pipeline would be “game over” for the climate. If Keystone were built, Hansen later wrote, “civilization would be at risk.” Everyone Horwitz meets has heard this scenario. But nobody seems to have much appetite for giving up the perks of industrial civilization, Kirk Webster–style. “You want to go back to the Stone Age and use only wind, sun, and water?” one person asks. A truck driver in the tar-sands project tells Horwitz, “This industry is giving me a future, even if it’s a short one and we’re all about to toast

together.” Given the scale of the forces involved, individual action seems futile. “It’s going to burn up anyhow at the end,” explains a Hutterite farmer, matter-of-factly. “The world will end in fire.”

Whereas McKibbenites see carbon dioxide as an emblem of a toxic way of life, economists like William Nordhaus of Yale tend to view it as simply a by-product of the good fortune brought by capitalism. Nordhaus, the president of the American Economic Association, has researched climate issues for four decades. His *The Climate Casino* has an even, unhurried tone; a classic Voice of Authority rumbles from the page. Our carbon-dioxide issues, he says, have a “simple answer,” one “firmly based in economic theory and history”:

The best approach is to use market mechanisms. And the single most important market mechanism that is missing today is a high price on CO₂ emissions, or what is called “carbon prices” ... The easiest way is simply to tax CO₂ emissions: a “carbon tax” ... The carbon price [from the tax] will be passed on to the consumer in the form of higher prices.

Nordhaus provides graphs (!) showing how a gradually increasing tax—or, possibly, a market in emissions permits—would slowly and steadily ratchet down global carbon-dioxide output. The problem, as he admits, is that the projected reduction “assumes full participation.” Translated from econo-speak, “full participation” means that the Earth’s rich and populous nations must simultaneously apply the tax. Brazil, China, France, India, Russia, the United States—all must move in concert, globally cooperating.

Alas, nothing like Nordhaus’s planetary carbon tax has ever been enacted. The sole precedent is the Montreal Protocol, the 1987 treaty banning substances that react with atmospheric ozone and reduce its ability to absorb the sun’s harmful ultraviolet radiation. Signed by every United Nations member and successfully updated 10 times, the protocol is a model of international eco-cooperation. But it involves outlawing chemicals in refrigerators and spray cans, not asking nations to revamp the base of their own prosperity. Nordhaus’s declaration that a global carbon tax is a simple answer is like arguing that the simple answer to death is repealing the Second Law of Thermodynamics.

Does climate change, as Nordhaus claims, truly slip into the silk glove of standard economic thought? The dispute is at the center of Jamieson’s *Reason in a Dark Time*. Parsing logic with the care of a raccoon washing a shiny stone, Jamieson maintains that economists’ discussions of climate change are almost as problematic as those of environmentalists and politicians, though for different reasons.

Remember how I was complaining that all discussions of climate change devolve into homework? Here, sadly, is proof. To critique economists’ claims, Jamieson must drag the reader through the mucky assumptions underlying cost-benefit analysis, a standard economic tool. In the case of climate change, the costs of cutting carbon dioxide are high. What are the benefits? If the level of carbon dioxide in the atmosphere rises only slightly above its current 400 parts per million, most climatologists believe, there is (roughly) a 90 percent chance that global temperatures will eventually

rise between 3 and 8 degrees Fahrenheit, with the most likely jump being between 4 and 5 degrees. Nordhaus and most other economists conclude that humankind can slowly constrain this relatively modest rise in carbon without taking extraordinary, society-transforming measures, though neither decreasing the use of fossil fuels nor offsetting their emissions will be cheap or easy. But the same estimates show (again in rough terms) a 5 percent chance that letting carbon dioxide rise much above its current level would set off a domino-style reaction leading to global devastation. (No one pays much attention to the remaining 5 percent chance that the carbon rise would have very little effect on temperature.)

In our daily lives, we typically focus on the most likely result: I decide whether to jaywalk without considering the chance that I will trip in the street and get run over. But sometimes we focus on the extreme: I lock up my gun and hide the bullets in a separate place to minimize the chance that my kids will find and play with them. For climate change, should we focus on adapting to the most *probable* outcome or averting the most *dangerous* one? Cost-benefit analyses typically ignore the most-radical outcomes: they assume that society has agreed to accept the small but real risk of catastrophe—something environmentalists, to take one particularly vehement section of society, have by no means done.

On top of this, Jamieson argues, there is a second problem in the models economists use to discuss climate change. Because the payoff from carbon-dioxide reduction will occur many decades from now, Nordhausian analysis suggests that we should do the bare minimum today, even if that means saddling our descendants with a warmer world. Doing the minimum is expensive enough already, economists say. Because people tomorrow will be richer than we are, as we are richer than our grandparents were, they will be better able to pay to clean up our emissions. Unfortunately, this is an ethically problematic stance. How can we weigh the interests of someone born in 2050 against those of someone born in 1950? In this kind of trade-off between generations, Jamieson argues, “there is no plausible value” for how much we owe the future.

Given their moral problems, he concludes, economic models are much less useful as guides than their proponents believe. For all their ostensible practicality—for all their attempts to skirt the paralysis-inducing specter of the apocalypse—economists, too, don’t have a good way to talk about climate change.

Years ago, a colleague and I spoke with the physicist Richard Feynman, later a national symbol of puckish wit and brash truth-telling. At the frontiers of science, he told us, hosts of unclear, mutually contradictory ideas are always swarming about. Researchers can never agree on how to proceed or even on what is important. In these circumstances, Feynman said, he always tried to figure out what would take him forward no matter which theory eventually turned out to be correct. In this agnostic spirit, let’s assume that rising carbon-dioxide levels will become a problem of some magnitude at some time and that we will want to do something practical about it. Is there something we should do, no matter what technical arcanæ underlie the cost-benefit analyses, no matter when we guess the bad

effects from climate change will kick in, no matter how we value future generations, no matter what we think of global capitalism? Indeed, is there some course of action that makes sense even if we think that climate change isn't much of a problem at all?

As my high-school math teacher used to say, let's do the numbers. Roughly three-quarters of the world's carbon-dioxide emissions come from burning fossil fuels, and roughly three-quarters of that comes from just two sources: coal in its various forms, and oil in its various forms, including gasoline. Different studies produce slightly different estimates, but they all agree that coal is responsible for more carbon dioxide than oil is—about 25 percent more. That number is likely to increase, because coal consumption is growing much faster than oil consumption.

Although coal and oil are both fossil fuels, they are used differently. In this country, for example, the great majority of oil—about three-quarters—is consumed by individuals, as they heat their homes and drive their cars. Almost all U.S. coal (93 percent) is burned not in homes but by electric-power plants; the rest is mainly used by industry, notably for making cement and steel. Cutting oil use, in other words, requires huge numbers of people to change their houses and automobiles—the United States alone has 254 million vehicles on the road. Reducing U.S. coal emissions, by contrast, means regulating 557 big power plants and 227 steel and cement factories. (Surprisingly, many smaller coal plants exist, some at hospitals and schools, but their contributions are negligible.) I've been whacking poor old Nordhaus for his ideas about who should pay for climate change, but he does make this point, and precisely: “The most cost-effective way to reduce CO₂ emissions is to reduce the use of coal first and most sharply.” Note, too, that this policy comes with a public-health bonus: reining in coal pollution could ultimately avoid as many as 6,600 premature deaths and 150,000 children's asthma attacks per year in the United States alone.

Different nations have different arrangements, but almost everywhere the basic point holds true: a relatively small number of industrial coal plants—perhaps 7,000 worldwide—put out an amazingly large amount of carbon dioxide, more than 40 percent of the global total. And that figure is rising; last year, coal's share of energy production hit a 44-year high, because Asian nations are building coal plants at a fantastic rate (and, possibly, because demand for coal-fired electricity will soar as electric cars become popular). No matter what your views about the impact and import of climate change, you are primarily talking about coal. To my mind, at least, retrofitting 7,000 industrial facilities, however mind-boggling, is less mind-boggling than, say, transforming the United States into “a nation of careful, small-scale farmers” or enacting a global carbon tax with “full participation.” It is, at least, imaginable.

The focus of the Obama administration on reducing coal emissions suggests that it has followed this logic. If the pattern of the late 20th century still held, industry would reply with exaggerated estimates of the cost, and compromises would be worked out. But because the environment has become a proxy for a tribal battle, an exercise in power politics will surely ensue. I've given McKibben grief for his apocalyptic rhetoric, but he's exactly correct that without a push from a popular movement—without

something like 350.org—meaningful attempts to cut back coal emissions are much less likely to yield results.

Regrettably, 350.org has fixated on the Keystone pipeline, which the Congressional Research Service has calculated would raise this nation's annual output of greenhouse gases by 0.05 to 0.3 percent. (James Hansen, in arguing that the pipeline would be “game over” for the climate, erroneously assumed that all of the tar-sands oil could be burned rapidly, instead of dribbling out in relatively small portions year by year, over decades.) None of this is to say that exploiting tar sands is a good idea, especially given the apparent violation of native treaties in Canada. But a popular movement focused on symbolic goals will have little ability to win practical battles in Washington.

If politics fail, the only recourse, says David Keith, a Harvard professor of public policy and applied physics, will be a technical fix. And soon—by mid-century. Keith is talking about geo-engineering: fighting climate change with more climate change. *A Case for Climate Engineering* is a short book arguing that we should study spraying the stratosphere with tiny glittering droplets of sulfuric acid that bounce sunlight back into space, reducing the Earth's temperature. Physically speaking, the notion is feasible. The 1991 eruption of Mount Pinatubo, in the Philippines, created huge amounts of airborne sulfuric acid—and lowered the Earth's average temperature that year by about 1 degree.

Keith is candid about the drawbacks. Not only does geo-engineering involve tinkering with planetary systems we only partially understand, it can't cancel out, even in theory, greenhouse problems like altered rainfall patterns and increased ocean acidity. The sulfur would soon fall to the Earth, a toxic rain of pollution that could kill thousands of people every year. The carbon dioxide that was already in the air would remain. To continue to slow warming, sulfur would have to be lofted anew every year. Still, Keith points out, without this relatively crude repair, unimpeded climate change could be yet more deadly.

Planet-hacking does have an overarching advantage: it's cheap. “The cost of geoengineering the entire planet for a decade,” Keith writes, “could be less than the \$6 billion the Italian government is spending on dikes and movable barriers to protect a single city, Venice, from climate change–related sea level rise.”

That advantage is also dangerous, he points out. A single country could geo-engineer the whole planet by itself. Or one country's geo-engineering could set off conflicts with another country—a Chinese program to increase its monsoon might reduce India's monsoon. “Both are nuclear weapons states,” Keith reminds us. According to *Forbes*, the world has 1,645 billionaires, several hundred of them in nations threatened by climate change. If their businesses or homes were at risk, any one of them could single-handedly pay for a course of geo-engineering. Is anyone certain none of these people would pull the trigger?

Few experts think that relying on geo-engineering would be a good idea. But no one knows how soon reality will trump ideology, and so we may finally have hit on a useful form of alarmism. One of the

virtues of Keith's succinct, scary book is to convince the reader that unless we find a way to talk about climate change, planes full of sulfuric acid will soon be on the runway.

This article available online at:

<http://www.theatlantic.com/magazine/archive/2014/09/how-to-talk-about-climate-change-so-people-will-listen/375067/>

Copyright © 2014 by The Atlantic Monthly Group. All Rights Reserved.