

Cutting carbon: A strategy to stabilize the atmosphere

by [Bill McKibben](#) in the [July 1, 2008](#) issue

In the last year or so, the data about climate change has grown steadily darker. The scale and the pace of global warming seem larger and faster than we realized even a few years ago. Perhaps the most powerful proof was the rapid melt of Arctic sea ice last summer. By the time the long Arctic night descended in October, the Northwest Passage had been wide open for weeks, and the old record for minimum sea ice had been broken by 25 percent, a result so off the charts that scientists were shaken.

While change was accelerating on the macro level, one could see the results on a micro level too. The small *Aedes aegypti* mosquito, carrying the much tinier germ for dengue fever, has spread rapidly across Asia and South America—a fact that even a conservative journal like the *Economist* blamed squarely on global warming. A few weeks ago, the Brazilian army was called out to open field hospitals across the center of the country because many emergency rooms were reporting 80 new cases of dengue fever an hour. Meanwhile, drought and heat waves were helping to trim grain harvests, adding to the food shortages created by our ill-considered efforts to turn America's corn crop into gasoline so we could maintain our lifestyle unaffected.

And here's the bottom line: in late winter the nation's foremost climatologist, NASA's James Hansen, published a new paper. Hansen was the man who first blew the whistle on global warming, testifying 20 years ago that climate change was for real. Now he offered a number: 350, as in parts per million of carbon dioxide in our atmosphere. We need to stabilize the level of carbon in the atmosphere below that number, he says, "if humanity wishes to preserve a planet similar to that on which civilization developed and to which life on Earth is adapted."

We're already past that number, at 385 parts per million CO₂, and it's rising two parts per year as we burn ever more coal and gas and oil. We're like the patient who finds out from his doctor that his cholesterol is too high. We're out of the zone of

safety, and into the zone where heart attacks and strokes (ice-shelf collapses? epic droughts?) become more likely. We've got to scramble back. *If* we cut way down on the amount of carbon we're pouring into the atmosphere, then the Earth will clear some of it away into the deep ocean, just like our bodies can filter away some cholesterol if we stop with the cheese.

But we've got to do it very quickly, before anything irreversible happens—like a massive sea-level rise. Scientists have begun to worry about the rapid collapse of the great ice sheets above Greenland and the West Antarctic, each capable of dumping so much water into the oceans that sea level would rise many meters, drowning our coastal cities and our most fertile lands. There's no more important task; when Hansen, a careful scientist, talks about preserving “a planet similar to that on which civilization developed,” he's choosing his words carefully.

So how do we do it? The obvious first impulse is to cut down on the amount of energy we use as individuals and congregations. And that impulse is both correct and noble; it's been amazingly satisfying to watch the rise of Interfaith Power and Light and other such groups in recent years, helping churches do the very real work of switching to low-energy lightbulbs and stuffing in insulation. I believe in that work with every bone in my body—I've done it in my house and in my community.

But we can't make the math work if we go after global warming one lightbulb at a time, or even one town or state at a time. We need quick, very basic change on the national and international levels. We need the federal government to put a price on carbon—to say that we can no longer emit this most dangerous of gasses for free. If Congress does that, then it won't require nobility or even environmental awareness to get the lightbulbs changed. It will require only economic logic. Markets will perform a good deal of the work for us, with a speed and power we'll never be able to manage with moral persuasion one household at a time. The choice is between convincing every house to change—and convincing the House to change.

This battle is halfway won in the United States. Last year, working with congregations and campuses and citizen activists in all 50 states, some 1,400 demonstrations demanded that Congress cut carbon emissions 80 per cent by 2050. Supporters included Al Gore and the upstart climate group 1sky.org. Both Hillary Clinton and Barack Obama endorsed that goal as the centerpiece of their energy and environmental platforms.

But that's only half the battle, and the easier half. They don't call it global warming for nothing—we have to come together as a planet to agree on the same kinds of change, a task made infinitely harder by the fact that so many regions of the Earth are so poor and would like to burn cheap coal to escape that poverty. The planet's leaders are now embarked on that process; beginning last December in Bali they began work on an international treaty to follow the soon-to-expire Kyoto accords. Given the recent science, it's probably our last real bite at this apple: if this current round of talks, scheduled to conclude in December of 2009 in Copenhagen, doesn't produce something powerful, then we will have lost our last real chance to shape the planet's future. The window for averting massive climate chaos will have passed, and we'll be left to deal with the results.

At the moment, those talks aren't going very well. The chance of producing a treaty that gets us anywhere near 350 are slim. We've got to somehow change the climate of global public opinion.

The same crew that organized those 1,400 demonstrations last year has just launched 350.org, an attempt at a global grassroots campaign. Its goal is to tattoo that number into every human brain, to make every child of God understand that, even if they know nothing else about climate change, 350 represents some kind of safety. We need to make it the most widely known number on earth, as intuitive as the freezing point of water.

The team at 350.org conceived a worldwide effort at conceptual art. People have already come up with amazing plans: 350 bicyclists rode through the streets of Salt Lake City for a few hours, winning great coverage in the local papers; surfers formed the numbers on a Maui beach with their bodies for aerial photographs. At Berea College in Kentucky (center of the Appalachian crafts revival), volunteers stitched a 350-square quilt with a huge 350 in the middle. Actions are taking place in China, in Sweden, in Rwanda.

Every action accomplishes many things. Perhaps a church decides to ring its bells 350 times. The action requires educating neighbors about the state of the world, letting church leaders know what's going on, and sending stories to local papers—so the message and the sense of urgency begins to travel through your town. And if a group uploads pictures and sounds of its action to 350.org, they spread across the planet, inspiring others to take action and create momentum. The publicity builds; the word spreads. Of course, a ringing bell is just one example for churches—maybe

there are 350 lightbulbs in the church to change, or 350 choristers in town who'd sing "Once to Every Man and Nation."

No guarantees, but maybe these efforts will help. The forces on the other side (big oil, OPEC, inertia) are strong, but if we can make 350 the mark of success for international negotiators, then they will be pulled in that direction. The treaty will be stronger than it would have been. And we will have acted on faith.