The big headache of climate change

By BRIAN HELMUTH
Guest columnist

I’d like to give you an introduction to the “scientific method.” First, put down this article and walk over to the nearest wall. Now, slam your forehead into the wall. That sudden rush of pain is an “experimental result.”

Now, is it possible that you were just on the verge of getting a headache anyway and that it had nothing to do with our little experiment? Of course. So take a break and repeat the experiment in a few hours. More or less, this is analogous to how we (the hard-headed scientists) conduct experiments.

The point is, science works by posing questions and then testing them, again and again. Only if we see the expected results enough times does an idea progress from “hypothesis” to “theory.”

Which brings me to my point. Among the people who study this sort of thing, there is a broad consensus that global climate change is a “theory” that has been shown again and again to be correct, and that it undeniably is having an enormous impact on the world’s ecosystems. Nevertheless, a surprising percentage of Americans (about 20 percent) don’t “believe” that global climate change is actually occurring. Even worse, the science of climate change has become a partisan issue.
Greenhouse gases such as carbon dioxide act exactly as their name implies, forming a blanket of sorts over the earth, reflecting infrared heat energy back to the earth’s surface just as the glass of a greenhouse does. It is a natural process, and in fact is what makes life on our planet possible. By measuring levels of carbon dioxide and indicators of temperature from ice cores deposited over the last 420,000 years, we see that each time carbon dioxide levels rise, so do global temperatures (bang goes your head on the wall).

But here’s the kicker. Since we started burning fossil fuels, levels of carbon dioxide in the atmosphere have skyrocketed. In fact, amounts of greenhouse gases (think panes of glass) today are 31 percent higher than they were just 100 years ago; this is the fastest rate of carbon dioxide increase that has occurred in at least the last 20,000 years. As a result, temperatures have increased about 1 degree Fahrenheit in the past century alone (and quite a bit more at the poles), and sea level has risen about 20 centimeters.

Subsequently, there is no debate among scientists that climate change is real and that we are contributing to it. Every major scientific society in the United States has issued statements affirming that the Earth’s climate is changing and that humans have influenced this process. We can keep banging our heads on the wall a few more times, but, really, how much more evidence do we really need here?

In the past 10 years as much as 25 percent of the world’s coral reefs have been destroyed or irreversibly damaged. This wholesale destruction has not only affected tourism worldwide, but has further worsened the condition of people already affected by overfishing and pollution. Last year alone, over 3 million people, mostly children, died of malaria, a disease directly related to climate, and this is only one of a host of climate-related diseases.

Entire island nations are poised to be swallowed up as a result of rising sea levels, and coastlines of major continents are beginning to experience similar effects. Keep in mind that these are not doomsday predictions, but actual, recorded observations (bang!).

To members of the scientific community, our path is crystal clear: The evidence for climate change is overwhelming, and stubborn refusals to take an unbiased look at the data already at hand will not delay the inevitable. The time has come to stop debating whether global climate change is happening, but rather to have an open and honest discussion about what we’re going to do about it. I don’t pretend that the answers are going to be easy or politics-free.

However, the science underlying climate change need not be, indeed cannot be, a partisan issue. Recognizing that we as a society are having a major impact on our climate, and that the environment will in turn have an impact on our economy, our society and our way of life, is not an anti-business position, and it is not a Republican or a Democratic platform.

Unfortunately, it’s the world we live in, whether we like it or not. To believe otherwise is simply to bury our heads in the sand, waiting for the consequences to hit us in the backside. The good news is that we can do something about it. We need to join the bipartisan fight led by open-minded political leaders like Sens. John McCain, a Republican, and Joe Lieberman, a Democrat, to enact smart national decisions regarding greenhouse gas emissions. Above all, we need to join the rest of the world community in ratifying the Kyoto protocol.
Now, go take two aspirin. The headache of global climate change is only going to get worse.

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