United States business interests must step up pressure for our participation in the Kyoto Protocol or risk getting left behind.

After a tenuous seven years of negotiations, the global climate change treaty known popularly as Kyoto went into force Feb. 16, with the United States conspicuously absent.

This is a mistake. Sound environmental and economic policy, for both global and U.S. interests, necessitates our participation. One can even make an extended international security argument, given our dependency on petroleum and the dominance of the Middle East in providing that energy resource.

Yet we Americans, from the highest national government positions to the local, individual levels, operate with a mindset that is largely oblivious to these connections. The issue is too big, too complex and fraught with uncertainty. And the time lag between cause and effect at least seems long enough that we can wait to see how bad things really will become.

But I think something else is at work here as well. We as a society simply don't understand the very complex issue of climate change, one where the Earth's temperature is rising due to human influence. This is widely accepted in the scientific community. Data from Hawaii's Mauna Loa Observatory to the U.N.'s internationally respected Inter-Governmental Panel on Climate Change confirm this.

What is not accepted, what is unknown, is what this means.

Will there be four or five major hurricanes that hit Florida every year, a question Republican Sen. John McCain raised this past fall? Will African droughts and Latin American floods be more frequent? More intense? Will species diversity worldwide decline? Will polar bears become extinct in 20 years, as some scientists have predicted? This is all unknown.

So what do we do? Some complain about a "chicken little" mentality, that environmental alarmists run around screaming the sky is falling. Others assume an ostrich mentality and stick their heads in the sand, saying "We need to study the matter more," hoping the problem simply goes away.

Most of us are not this dismissive, but we are waiting to react rather than act. We read about disagreements in the newspaper. Seeing one group of scientists contends it's a problem while another "group" asserts climate change is natural, that we should not worry.

Those who caution against emissions restrictions by arguing climate change is natural are partly right. Some climate change is natural. But what is alarming today is the rate of change and the reason that it is happening. We have known for at least 10 years that people -- namely our greenhouse gas emissions -- are artificially raising global
temperatures.

When 700 members of the National Academy of Sciences wrote President Bush Sr. during his tenure in office and urged action on climate change, we should keep in mind that this left six or seven members of the academy on the other side of the argument. That doesn't sound like much of a disagreement to me.

Kyoto has notable flaws. The two most common critiques are that the steps it requires will be expensive to implement and the treaty does not adequately deal with developing economies. Southern hemisphere nations are exempt from initial emissions-reduction requirements, yet will likely account for more than half of global emissions by 2020.

These are problems that must be fixed, but that does not mean Kyoto is completely useless. After all, 141 countries and regional economic organizations, including all of the industrial world with the exception of Australia and the United States, have signed on.

But Kyoto does need the United States, as we account for 36 percent of industrial world carbon-dioxide emissions. And, as much as we might hate to admit it, the United States also needs Kyoto. Stepping up and beginning payments now will make later costs much more manageable.

Finally, we need not act out of fear alone. Legitimate commercial opportunities also exist. DuPont Chemical, for example, did very well in the 1990s when the Montreal Protocol on Substances that Deplete the Ozone Layer went into effect. Why? In the late 1970s it was "encouraged" to develop alternatives to CFCs; then, when an international treaty banned these substances, DuPont had a built-in, competitive advantage.

U.S. business interests have not had the same level of "encouragement" when it comes to Kyoto. They would be wise to provide it themselves, to push for research and development in lower-carbon technologies as well as market-based policy instruments like emissions trading and carbon taxes.

Our government is behind the curve this time around. Business needs to get ahead of it or risk getting left behind.

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