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Leading the way out of global climate change is vital

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Friday was an important day for those of us who work on the science of climate change.

The Intergovernmental Panel on Climate Change, a collective of 2,500 international climate scientists, released a long-awaited summary report on what is and isn't known about global warming. It paints a picture of a world that has warmed predominantly due to human activity and a future that will see an acceleration of this trend unless mitigating steps are taken.

It reconfirms what many scientists have known with increasing certainty for almost two decades: Global warming is occurring. It is caused primarily by human activity, and it will very likely accelerate.

Friday was far more important for those who may have only heard of global warming in passing conversation or have gravitated to skeptical editorials and blogs claiming that it is due to solar activity or one of the many arguments that have been countered by the scientific community.

Friday was important because it will hopefully shift the discussion regarding climate change from one of debate and denial to one of challenges and opportunities.

A few important conclusions from the report merit repeating: 11 of the last 12 years are among the 12 hottest years on record; the number of heavy precipitation events has increased over most land areas; more intense and longer droughts have been observed over wider areas since 1970; summer Arctic sea ice extent has shrunk by more than 20 percent since 1978; it is likely that hurricanes will become more intense; it is likely that longer, more intense heat and rainfall events will become more numerous; some work shows that late-summer Arctic sea ice will disappear this century; and by the end of the 21st century, global average sea level will rise by 7 inches to 23 inches above recent levels.

This sobering assessment is remarkable not because of its conclusions but because of the increasing confidence of the observations and projections. This moves the challenge from one of scientific research to the arena of policy, leadership and private action. It is this mixture of public and private choices that make the challenge of climate change an opportunity.

ADVERTISEMENT To most, the use of "opportunity" is a surprising way to describe such a serious environmental problem. The near-term needs to slow climate change involve actions and policies that have cobenefits.

For example, replacing home incandescent bulbs with compact fluorescent bulbs not only cuts the pollutant emissions associated with your home lighting, but it cuts your home electric lighting bill by roughly three-quarters, putting those savings in your pocket.

Tackling this problem will not be solved solely by consumers. Policies constructed at the community to national level are needed. Examples: Flexible limits on greenhouse gas emissions and more use of biofuel

sources and incentives to unleash the creative ability of the private sector to offer new energy systems or emission-reducing technologies.

The key is the need for honest leadership on this issue. The challenges and opportunities that climate change poses must be part of the dialogue of those running for city council and the presidency. We need an honest dialogue reflecting the seriousness of this issue combined with a confidence that we can solve this problem with the same inventiveness and creativity that the U.S. economy has exhibited in facing acid rain and ozone depletion.

A newcomer to Indiana, I have been impressed with the political pragmatism and history of industrial problem-solving the Midwest is known for. Why should California go unchallenged in its quest to capture the market on clean, alternative energy technologies?

I hope to someday look back at Feb. 2, 2007, as the day we went from wringing our hands to rolling up our sleeves; the day we admitted that global warming was a serious problem but one that presented us with the opportunity to build a better, cleaner future.

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