BEHIND GORE, SCIENCE

Congratulations to the Intergovernmental Panel on Climate Change and to Al Gore for sharing the 2007 Nobel Peace Prize. By extension, congratulations to the many thousands of scientists and who have worked on climate change issues, and to the thousands of environmental groups who have responded accordingly.

In its announcement, the Nobel committee cited the IPCC ahead of Gore, inverting the alphabetical order. Yet, in the media coverage, Gore is usually cited ahead of the IPCC. This is because we human beings are more easily drawn to the emotionally arousing messages delivered by Gore than to the complex realities delivered by the IPCC.

We also anoint individuals, rather than committees, to champion a message. My purpose today is to help keep the scientific horse of the IPCC ahead of the political cart, which is Al Gore.

The link between greenhouse gas concentrations, fossil fuel emissions and global warming was made in 1896 by the Swedish chemist Svante Arrhenius (1859-1927), before Gore's parents were born. Arrhenius later won the 1903 Nobel Prize in chemistry.

In 1958, when young Al was only 10 years old, Charles Keeling of the Scripps Institution of Oceanography at U.C. San Diego began taking measurements of the carbon dioxide concentration in the earth's atmosphere from Mauna Loa Observatory in Hawaii. This data set would prove that atmospheric concentrations were rising steadily in response to human activities.

During the next three decades, climate scientists made astonishing progress on many fronts. Computer programmers developed sophisticated numerical models to run various climate scenarios. Chemists developed ways to measure the paleo-concentrations of CO$_2$ and methane for the last half-million years using ice-core records.

Oceanographers became greenhouse gas accountants, able to track the flux of carbon between the biosphere, oceans and atmosphere. Glaciologists developed melt-down scenarios for the Antarctic and Greenland ice sheets, projecting how fast the released water would raise sea level, in addition to the rise caused by thermal expansion. Ecologists tracked the response of ecosystems to 20th century warming and projected these trends into the future.

The IPCC began its hard work in 1988. The original goal, which Ronald Regan supported, was to create a committee of interdisciplinary experts prestigious enough to negate the doomsday scenarios being made by climate alarmists and the head-in-the-sand claims to the contrary by climate change skeptics.

More important, the organizers of the IPCC understood that a truly global problem required a truly international consensus. The IPCC began its work four years before Gore published his 1992 environmental manifesto "Earth In Balance."

Officially, there are roughly 2,000 scientists on the IPCC committee. Practically all of them have colleagues who help sharpen their ideas and a home institution that supports their efforts, usually with federal or state funds.

The committee's work is infused with help from the entire climate science establishment, regardless of whether the specific contribution was an important peer-reviewed publication or a pointed question asked at an academic seminar. This establishment also includes armies of anonymous
support personnel in grant management, warehouse, payroll, custodial services and academic administration.

Albert Einstein once remarked "In science ... the work of the individual is so bound up with that of his scientific predecessors and contemporaries that it appears almost as an impersonal product of his generation." This is especially true of global climate science.

Though prestigious, work on committees such as the IPCC doesn't come naturally for most scientists, whose curiosities are usually larger than their egos. Typically, they prefer the outdoor detective work of natural science to indoor conference rooms, and the zesty competition between opposing ideas, rather than the political reductionism of finding lowest-common-denominator consensus statements. Additionally, few scientists have a natural immunity to political venom.

Congratulations to Al Gore. I hope he doesn't run for president. Not because I wouldn't vote for him in a heartbeat, but because he stands above all that now. His effort is better spent saving a whole planet than the reputation of a country increasingly seen as arrogant and obsessed with the conspicuous consumption of energy.

Even greater congratulations to the IPCC and to the scientific and environmental infrastructure that makes its continuing work possible. That infrastructure probably includes you. Thanks.