

ENVIRONMENT

Balance the books on global warming

When scientists estimate the dangers of the greenhouse effect, they could take a lesson from accountants.

SCIENCE is a powerful way of knowing. It is based on the replacement of subjective, emotional experience with objective observation free of distortions of personality and replicable anywhere and any time.

The environmental crisis has put scientists in a quandary because degradation of the planet and its consequences cannot be accurately anticipated or even verified.

Take the issue of global warming.

It has been known since the last century that carbon-bearing compounds are transparent to sunlight but opaque to infrared. In other words, sunlight passes through carbon-containing air, whereas infrared heat rays tend to be reflected by the carbon.

We are familiar with this effect in a car that has sat in the sun. The interior becomes hot because the carbon in the glass keeps the heat in. This is the basis for predicting "greenhouse" effects of atmospheric compounds like carbon dioxide and methane.

Since the industrial revolution, human activity has been putting more carbon-based compounds into the atmosphere than can be removed naturally. As well, novel chemicals such as chlorofluorocar-

Most atmospheric scientists agree that warming will occur and accelerate and that if it continues, the planetary consequences will be catastrophic.

But now, a small group of scientists claims their computer models show the warming will stop and may even be followed by a cooling.

The prediction is based on greater evaporation to form clouds that will spread laterally and shield the planet from sunlight. But it is just as possible clouds will be swept up into vertical columns instead of lateral sheets and thus accelerate the warming process.

Nevertheless, because some models predict there is no threat of global warming, U.S. President George

Bush has been convinced that there should not be any international targets set for reducing carbon emissions until scientists have a better idea of what is going to happen.

But that could take decades, if ever, and those countries that are anxious to cut emissions are not willing to do so unilaterally because the added costs will increase the price of their goods.

We don't know enough about the properties of the planet and its atmosphere to predict weather from day to day, so it's no

surprise that models of global climate yield such disparate results.

What we do know is that we are adding unprecedented amounts of greenhouse gases to the upper atmosphere and there will be effects even though we can't accurately predict what they will be.

We should follow the example of accountants. In making financial

OPINION



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