

26 March 2007

Note for Colleagues:

The accompanying paper, *Climate Change is Nothing New*, is being published in the March 2007 issue of the journal, *New Concepts in Global Tectonics*.

I was invited to prepare the paper by the Editor as a scientific response to the IPCC report, *Climate Change 2007: The Physical Science Basis, Summary for Policy Makers*, issued by the Intergovernmental Panel on Climate Change, February 2007. The paper can also be regarded as a response to the movie by Al Gore, and to the report on carbon trading by the London financier, Sir Nicholas Stern.

The key points of the paper are:-

1. The Earth, the Sun, and indeed the Cosmos, comprise an inter-acting, dynamic, and evolving system. It is all in a state of continuing change. There is no steady state. In contrast, the IPCC assumes that the Earth was in a steady state until 250 years ago, which was upset by Man through increasing use of carbon fuels, and that led to atmospheric changes and consequential global warming.
2. In geological time, the climate of the Earth has been influenced by the immediate environment of the solar system as it travels through our Milky Way Galaxy. There were times when the solar system was enveloped in vast clouds of gas and dust, causing extreme cooling on Earth, and ice ages lasting for millions of years. In recent times the solar system has been travelling through space that is virtually empty, enabling a benign climate in which our civilization has flourished.
3. The Sun is the dominating influence on the climate of the Earth. That simple fact is not recognised by IPCC. The Sun is a churning, quivering body of hot plasma, generating intense electromagnetic fields in space that envelop the Earth. The electromagnetic behaviour of the Sun dominates and determines the electromagnetic and geotectonic response of the Earth, and thereby climate.
4. The climate of the earth has always changed. There have been times lasting centuries when the Earth was warmer or colder than now. The period of 500 years from 800 to 1300 AD was warmer. It brought prosperity to Europe. It is known as the *Medieval Warm Period*. Many great cathedrals were built, the Vikings discovered a verdant land they called Greenland, and there were vineyards in England. After that, for the next 450 years from 1300 to 1750 AD, Europe experienced a progressively colder climate. It is known as the *Little Ice Age*. It was especially cold for 100 years from 1600 to 1700 AD, when there was famine and starvation in the northern parts of Europe. In London, the River Thames often froze in winter.

5. A key part of the IPCC report is the presentation of evidence of parallel increases in both global temperatures and levels of carbon dioxide in the atmosphere. It is claimed by IPCC that the increased carbon dioxide emitted by Man is causing global warming. In my paper it is shown that the cause and effect relation is exactly the opposite; that natural global warming has caused an increase in the level of carbon dioxide in the atmosphere, simply because of the reduction in solubility of carbon dioxide in sea water with increasing sea temperatures.
6. It is the vast surface area of the oceans that determines the interchange of gases between the oceans and the atmosphere. The oceans breathe carbon dioxide and methane in and out with the seasons, and the oceans release carbon dioxide and methane with the natural warming caused by the Sun. If in the future there is a significant decrease in the electromagnetic radiation from the Sun, the Earth will cool down, and the levels of carbon dioxide and methane in the atmosphere will then decline.
7. IPCC refers to a rise in sea levels over the past century as evidence of global warming caused by Man. I show that the rise is due to the great exploitation of non-rechargeable groundwater over the past century which has led to a net addition to the hydrosphere, and thereby, the oceans.
8. Air pollution and global warming are scientifically separate issues. Global warming is natural and global. Atmospheric pollution is man-made and mostly close to the sources of emission. The IPCC have locked themselves into a scientifically untenable position by interweaving air pollution and global warming.
9. The deadly pollution of dust, acid gases, and water vapour entering the atmosphere in many cities of the world should be the focus of action. A large number of cities are most unhealthy places, with a lower expectation of life. The problems are not global but local. The correction of the problems must be industry and city-centred.
10. Carbon dioxide is not a pollutant, it is essential to all life. There is no need for carbon trading or geosequestration. The concept of carbon trading has been advocated by IPCC, and by many governments signing the Kyoto agreement, and is being welcomed by the financial community. But carbon trading has not arisen from the normal operation of the market. It is the result of fears about global warming created by IPCC and others. It thereby presents risks to investors. If it comes to be recognised that global warming has a natural cause, and the fears subside, the value of carbon credits will then drop to zero, and the market in carbon trading will collapse.

The paper and this memorandum are circulated for your information.

Lance Endersbee