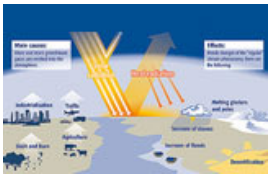
Facing the Greatest Environmental Threat of the Century

Human-induced climate change is - as governments and most scientists working in this field now acknowledge - the greatest environmental threat of this century. It is also an issue with dire implications for humanity.



"Climate change is the only thing that I believe has the power to fundamentally end the march of civilization as we know it, and make a lot of the other efforts that we're making irrelevant and impossible," said former US President Bill Clinton at the 2006 World Economic Forum in Davos, Switzerland.

Today there is little doubt that climate change is occurring, and that negative consequences are beginning to emerge. Many observers point to the increasing number of severe storms, floods, and heat waves in recent years as indicators of changing climatic conditions. According to a report published by the European Commission, climate change already accounts for around 160,000 deaths a year worldwide.

The vast majority of related scientific research confirms a direct relationship between human activity, the rising levels of greenhouse gases (GHG) in the atmosphere, and climate change in the form of global warming. When we burn fossil fuels to generate energy or heat, GHG is emitted into the atmosphere. These gases (principally carbon dioxide, or CO2) trap some of the sun's energy within our atmosphere – like a greenhouse roof – increasing the temperature at which the earth achieves energy balance. This phenomenon is commonly known as the greenhouse effect.

Alarming data

The earth's average temperature has risen by around 0.6 °C over the past century years due to human activity. Although it may not sound like much, this slight change has already altered rain and snowfall patterns, and has resulted in a rise in sea levels and the gradual retreat of most non-polar glaciers.

The rate of climate change is increasing. According to the Third Assessment Report of the Intergovernmental Panel on Climate Change (IPCC; 2001), GHG emissions are likely to raise global temperatures somewhere between 1.4 and 5.8 °C during the 21st century, depending on the efforts made to combat climate change.

In August 2005, the Max Planck Institute for Meteorology in Germany predicted that a temperature increase of 2 °C above the pre-industrial level could trigger the melting of the Greenland ice sheet, which would have considerable consequences for sea levels and biodiversity. At the current level of climate change, this scenario could become a reality in 10-15 years.

The costs of climate change

Although some sectors and regions may benefit from small (about 1 °C) increases in temperature – for example, agriculture in the northern hemisphere – the overall impact on the developed world is likely to be overwhelmingly negative.

Large insurance firms have already observed the financial impacts of a warming climate. Munich Re reports that the economic cost of natural catastrophes has risen 7-fold and insured losses have increased 16-fold since 1960. Dramatic increases in economic costs were clearly visible in the aftermath of the 2005 hurricane season. The damage of that year's devastating hurricanes – including Hurricane Katrina – cost insurers around 60 billion US dollars, more than double any previous year.

Meanwhile, the Zurich-based reinsurance company, Swiss Re, has found that losses from natural disasters are doubling approximately every ten years. If this trend continues, losses are likely to reach up to 150 billion US dollars in ten years.

The financial and insurance sectors will certainly not be the only ones to feel the heat of climate change. It is those least able to cope with climate change – people in developing countries – who are likely to be among the worst affected. Climate change will further reduce access to drinking water, negatively affect the health of those living in poverty, and pose a threat to food security in many countries.

Observing the long list of potential impacts, Bill Clinton identified climate change as "the world's biggest worry."

Encouraging dialogue

What is needed is not only a dialogue among environmental experts, NGOs, and governments, but also the engagement of individuals around the world who are concerned about the potential global and local effects of climate change. Only through broad participation and cooperation will we be able to find innovative solutions.

"We receive many questions about the climate. People are concerned about it," says Ralf Schmerberg, co-founder and executive director of dropping knowledge, an international organization that collects questions about social issues from the global public.

In September 2006, dropping knowledge will put 100 of these questions before a panel of "inspiring individuals" - scientists, writers, artists, and activists from many different countries. The answers from this "Table of Free Voices" will be freely available online. As the founding partner of dropping knowledge, Allianz shares the view that questions are essential to finding solutions.

"By asking questions, people around take part in a dialogue," says Schmerberg. "There is no better way to discover new viewpoints and fresh ideas about important issues - including our climate."

publishing date: Feb-08-2006

editor: JL

