## Will Steger, Letter of Concern

"Global warming is going to dominate the future lives of our young people and we have a responsibility to prepare them for this by teaching them what it is and where the solutions lie"

- Will Steger, 2006

Global warming is a reality. It threatens both our society and life as we know it on earth. The overwhelming consensus of the scientific community for the past decade has been that the planetary warming we are now experiencing, and the resulting climate change, is largely a human induced phenomenon. This was reconfirmed with overwhelming consensus in 2007 with the release of the fourth report by the Intergovernmental Panel on Climate Change (IPCC). Global warming is brought on mainly by the release of carbon dioxide through the burning of fossil fuels, which blankets our atmosphere raising the earth's surface temperature.

Environmentally, we see dramatic signs of global warming in our polar regions. Yet, because these regions are remote and go unseen by most people, it's easy to ignore the potent warnings. I have been to both poles numerous times and I've seen catastrophic consequences caused by climate change. I crossed both the Ward Hunt Ice Shelf in the Arctic and Larsen A and B Ice Shelves on Antarctica. The latter, to the astonishment of scientists, abruptly collapsed into the sea in the last decade as a result of climate changes. I experienced firsthand the melting of the sea ice on the Arctic Ocean. In March 2007, while in Baffin Island, just days after we crossed Cumberland Sound, the entire pack ice broke up and was blown out to sea. A radio story by the CBC reported that the Sound had the worst conditions in recorded history. If this had happened a day earlier or if the team traveled a day later, the situation could have been serious. For the local people who live and hunt around Cumberland Sound the situation is serious; the poor ice conditions mean dangerous or impossible travel between outpost camps and an inability to fish and hunt for subsistence.

The polar sea has lost one fourth of both its thickness and area in the last two decades. Its once reflective surface is now exposing the darker ocean surfaces; because darker surfaces absorb more energy than lighter ones, warmth is accelerated. The summer sea ice is predicted to virtually disappear by 2030,

dooming animals like the polar bear and walrus to probable extinction; this has been reconfirmed by the IPCC. In 1990, I testified before Congress about the danger of global warming thawing the northern permafrost releasing methane gas, a dangerous greenhouse gas, into the atmosphere. This process is now in motion. The record warm summers in the Arctic are advancing the thawing of the high elevations of the Greenland icecap. The loss of ice that we are now experiencing worldwide is the fingerprint of global warming.

Morally, we see very real impacts on the human race. The Inuit hunting culture depends on Arctic ice. The melting sea threatens to obliterate this culture. With melting, low lying island nations sink. Intense hurricanes and other global warming related disruptions bankrupt economies and threaten to end the march of civilization as we know it.

The Arctic and the Antarctic regions have been my home for over 40 years. To survive in these lands, I have become intimately familiar with their vast lands, wildlife, and climates. The changes I see deeply affect me in a way neither a scientific study nor a satellite image could. Without action, life in the Arctic faces extinction. With action, we can address the root causes and limit the impact. The latest findings by the IPCC are that the world has the capacity to reduce global warming in less than 30 years, using existing technology. They again stress the importance of taking action now to reduce the worst impacts to the world's most vulnerable populations.

How can we act to avert the worst consequences? Throughout the next ten years, we must significantly reduce our emissions from today's levels. By the year 2050, we must have cut those emissions by 80 percent.

Action begins with education. Global warming must be an essential topic in the K-12 educational agenda. This agenda begins with a sound educational curriculum based on best practices in educational research and pedagogy and continues with teacher



education and professional development. Because we are dealing with an immediate threat, we must launch a public education campaign to engage everyone. Congregations, environmental groups, youth organizations, campuses, clubs of all kinds will play a pivotal role informing and engaging their members and moving them towards action. We must expect that our leaders in government, industry, congregations, and schools, are well informed about global warming and its consequences. To this end, we need to develop and offer an interactive-based program to those in leadership positions that would consist of a panel of authorities, such as scientists and other experts, who would discuss global warming and solutions at all levels of society.

Action continues by exploring diverse energy sources, continuing our search for increased fuel efficiency, and increasing our domestic production of transportation fuels. The IPCC confirms that many technologies, especially those aimed at energy efficiency and the building sector are needed. Economic incentives are needed to help drive this transformation.

Significantly increasing the use of domestic produced biofuels offers both immediate and potential long-term solutions to national security, economic competitiveness of the United States, and price and supply vulnerabilities for families and businesses. Domestically produced biofuels and energy also benefit the United States by creating jobs, keeping dollars in the country, and lowering the environmental impacts associated with fossil fuel production and use. We can reduce global warming pollution through: conservation, existing technologies that make power plants and factories more efficient, and cleaner technologies (e.g., hybrid automobiles, wind power, and solar power).

Global warming, an environment and moral issue, is also a unifying issue. It affects all of us; therefore, the solution requires all of us. Individual action leads to collective action. Soon we are unified in this fight. But individual action alone will not solve the problem. We need to demand that our elected officials act to solve the global warming problem. Cities, states, and individuals are adopting solutions that reduce our dependence on oil. These solutions, in turn, reduce

air pollution and protect our pristine environments from oil drilling and mining. State and local initiatives are proving that answers exist. To reinforce and expand these efforts, we need federal action that triggers solutions on a national scale. U.S. businesses can and should lead the world in developing new energy technologies, but many of these businesses will not lead without the guidance of mandatory limits. The US Climate Action Partnership is one such example of diverse businesses taking leadership and demanding the federal government take immediate action to enact mandatory national legislation to achieve significant reductions of greenhouse gas emissions.

In 2005 the U.S. Senate recognized that global warming is real and that the time has come for strong federal policy. Now in 2007 we are beginning to see states take legislative action to mandate a percentage of renewable energy and specific emissions reduction targets on a set timeline.

The effects of global warming are pervasive. We humans continue to burn fossil fuels. The burning creates a blanket and the blanket forms a greenhouse over our earth. We cannot delay in slowing and reversing this trend. Our health, economy, national security and the environment demand it.

- Will Steger, November 2007

