



CLIMATE CHANGE BACKGROUND

The Torah teaches us that we have a responsibility for future generations (Deuteronomy 30:19) and that we must tend to the earth (Genesis 2:15). This obligation compels us to protect the integrity of ecological systems so that all creatures can thrive – now and in years to come.

On February 2, 2007, the Intergovernmental Panel on Climate Change ("IPCC") released its Fourth Assessment Report, which concluded that climate change is "unequivocal." This report reflects the collaboration of more than 2,500 scientists from 130 countries and relies on research published in peer-reviewed journals. Carbon dioxide concentrations are higher than they have been in more than half-a-million years. Since the advent of the Industrial Revolution, carbon dioxide levels have risen 30 percent. During that same period, global temperature has increased by nearly 1-degree Fahrenheit. If we do nothing to reduce carbon emissions, the earth will warm an additional 2-10 degrees Fahrenheit by the end of the 21st century. Such a drastic increase in temperature would have severe impacts on our environment, our security, and the global economy. Some of the likely adverse effects include:

- Rising sea levels due to ocean heating and the melting of polar ice;
- Hunger and malnutrition due to impaired food production in many developing countries;
- An increase in floods, droughts, and forest fires due to climatic shifts (for example, the IPCC has reported that since 1970, there has been a trend of more intense hurricanes such as the ones that ravaged the Gulf Coast in 2005);
- Illness due to heat stress and air pollution;
- Species extinction due to the disruption and migration of ecosystems.

Climate change also threatens our national security. Environmental changes associated with climate change will spark unprecedented human migrations, increased border tensions, conflicts over essential resources, and greater international demands for rescue and evacuation efforts. Rising sea levels threaten to displace tens of millions of people. The IPCC predicts that declining rainfall may reduce agricultural yields in parts of Africa by 50% by 2020. These national security threats have prompted the Center for Naval Analysis to declare that climate change is a "threat multiplier." Our continued dependence on foreign oil compounds these national security concerns. Indeed, the more the United States depends on carbon-emitting fossil fuels, the more our foreign policy is subject to the will of nations who do not share our values.

Reducing carbon emissions is also good for our economy. In March 2008 the Environmental Protection Agency released an economic analysis of The America's Climate Security Act and concluded that the bill was consistent with a growing economy. This analysis found that U.S. GDP would continue to grow by 80% -- even with an economy-wide cap on greenhouse gas emissions. Taking steps to clean up our environment creates opportunities for entrepreneurs, engineers and scientists. Today, America's environmental technology sector hosts 1.6 million jobs in more than 50,000 firms and generates \$220 billion annually for the US economy. Capping carbon emissions will provide incentives to industry to develop alternative fuels and conservation technologies, fostering economic development and promoting energy security.

For more information, contact Jennifer Kefer, Jennifer@coejl.org