

Climate Change

Almost a decade ago, in his bestselling book *An Inconvenient Truth* (2006), Al Gore argues that humanity's role in **climate change** is an issue that can no longer be denied and must be addressed by governments, businesses, and individuals. Increasing attention has been drawn by scientific data about upward shifts in overall global temperature, rising sea levels, and extreme weather events. The vast majority of scientists now agree that recent changes in our climate—caused by the phenomenon known as global warming—can be attributed to the activities of individuals and organizations. Marlon, Leiserowitz, and Feinberg (2013) report that 97% of scientific papers on the topic of climate science stated a position that global warming is happening and is—at least in part—caused by human activities. The U.S. Environmental Protection Agency explains this in very basic terms:

Our Earth is warming. Earth's average temperature has risen by 1.4°F over the past century, and is projected to rise another 2 to 11.5°F over the next hundred years. Small changes in the average temperature of the planet can translate to large and potentially dangerous shifts in climate and weather ... Humans are largely responsible for recent climate change. Over the past century, human activities have released large amounts of carbon dioxide and other greenhouse gases into the atmosphere ... Greenhouse gases act like a blanket around Earth, trapping energy in the atmosphere and causing it to warm. This phenomenon is called the greenhouse effect and is natural and necessary to support life on Earth. However, the buildup of greenhouse gases can change Earth's climate and result in dangerous effects to human health and welfare and to ecosystems. ("Climate Change," Environmental Protection Agency, 2013)

Scientists have already observed widespread effects from climate change. Sea levels are rising, glaciers are shrinking, and permafrost is melting. These changes in the natural environment lead to additional changes in plant and animal life, as growth patterns change in response to shifting environmental conditions. These changes are occurring on land and underwater, as climate change affects vast ecosystems and threatens the survival of some, such as coral reefs. Global warming also influences weather events, such as hurricanes, which gain strength over warmer ocean waters. But these changes are not necessarily consistent across the globe or even predictable. For example, the year 2012 included record winter cold in Europe, record spring heat in the United States, wildfires in Chile, massive flooding in Australia, extreme drought in the U.S. Southwest and parts of South America, torrential rains in China, and Superstorm Sandy in the eastern U.S. coast.

The role of organizational communication in climate change and global warming is widespread. Much of the human contribution to climate change can be traced to factors that began with the Industrial Revolution, such as our systems of energy production, factory manufacturing, and petroleum-fueled transportation. Thus, when searching for ways to reverse or at least slow the process of climate change, these industrial organizations play key roles. Organizational communication is also implicated in the debates about global warming and what to do about it. These debates are global ones because countries such as China and India are rapidly becoming increasingly industrialized, and there are arguments about nations' obligations to reduce greenhouse gases. In all countries, including the United States, debates about the balance between economic opportunity and environmental health