

The Earth's climate has changed throughout history. Because of population growth and increasing consumption of fossil fuels, emissions of greenhouse gases have been rising steadily for decades. Since the Industrial Revolution, the human population has grown rapidly, more and more land has been cleared for agriculture, and industrial activity has increased, all of which have contributed to climate change. Some scientists estimate that average global temperatures could rise by 3 to 10 degrees Fahrenheit (1.7 to 5.5 degrees Celsius) over the next century if greenhouse gases continue to rise. The oceans are expanding and becoming warmer, coral reefs are dying, and sheets of ice in the Arctic and Antarctica are melting. This includes building sea walls to protect against rising sea levels, developing drought-resistant crops, and creating early warning systems for extreme weather events. But during the last 150 years, humans have added large amounts of greenhouse gases to the atmosphere, mainly through the burning of fossil fuels such as coal, oil, and gas. The Intergovernmental Panel on Climate Change estimates that between 20 and 30 percent of species evaluated so far may be at risk of going extinct as a result of climate change. This can be done by increasing energy efficiency, switching to renewable energy sources, and reducing deforestation and other land-use changes. The amount of snow cover in the Northern Hemisphere has decreased about 10 percent since the late 1960s, and mountain glaciers have receded worldwide. In Africa, the African elephant population is declining because of changes in rainfall patterns and temperature. Greenhouse gases also come from sources like deforestation and raising livestock. Since the late 1800s, Arctic temperatures have climbed more than 4 degrees Fahrenheit (2.2 degrees Celsius).