

## Climate Change/Environment

Some basic facts:

1. Global warming is the increase of Earth's average surface temperature due to greenhouse gases that collect in the atmosphere like a thickening blanket, trapping the sun's heat and causing the planet to warm up.
2. Greenhouse gases keep heat close to the earth's surface making it livable for humans and animals. However, global warming is happening largely due to an over-emittance of these gases and fossil fuels (natural oil, gasoline, coal).
3. With the start of industry in the 1700's, humans began emitting more fossil fuels from coal, oil, and gas to run our cars, trucks, and factories. By driving a "smarter" car, you will not only save on gas, but help prevent global warming.
4. There is more carbon dioxide in the atmosphere today than at any point in the last 800,000 years.
5. Though Americans make up just 4 percent of the world's population, we produce 25 percent of the carbon dioxide pollution from fossil-fuel burning -- by far the largest share of any country.
6. The Environmental Protection Agency (EPA) has both the authority and responsibility to reduce pollution from electric power plants under the Clean Air Act, the nation's bedrock air pollution law adopted in 1970.
7. Since 1870, global sea levels have risen by about 8 inches.
8. Global climate change has already had observable effects on the environment. Glaciers have shrunk, ice on rivers and lakes is breaking up earlier, plant and animal ranges have shifted and trees are flowering sooner.
9. Heat waves caused by global warming present greater risk of heat-related illness and death, most frequently among people who have diabetes who are elderly or are very young.
10. According to the U.S. Global Change Research Program, the temperature in the U.S. has increased by 2 degrees in the last 50 years and precipitation has increased by 5%.
11. Global warming puts coral reefs in danger as the ocean warms, scientist fear that coral reefs will not be able to adapt quickly enough to the resulting changing conditions, and bleaching incidents and diseases will increase.

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- Over 97% of scientists agree that human activity has contributed to the steady warming of the Earth's climate.
  - Legislation that hopes to mitigate the potentially disastrous effects of climate change is dependent on the curbing of human activity that has a large carbon footprint.
  - Despite the consensus among scientists about the urgent need to curb emissions, there are more than 100 current members of Congress who have expressed skepticism about the role humans have played in climate change and the value of limiting our emissions.



Why do some deny Global Warming is happening?

**1. Science is wrong**

- climate change is part of the natural cycle
- climate models unreliable and too sensitive to carbon dioxide
- claim climate scientists are fixing data in some kind of global conspiracy

**2. Economic denial**

- too expensive to fix—can't stop using fossil fuels without ruining the global economy

**3. Humanitarian denial**

- Climate change is good for us
- Longer, warmer summers will make farming more productive
- Plants need carbon dioxide to grow
- More people die of cold than heat

**4. Political denial**

- We can't take action because other countries aren't taking action
- More important problems closer to home that need fixed

**5. Crisis denial**

- We shouldn't rush into rash decisions
- We'll have better data and more resources in the future

**IF WE WANT TO MINIMISE THE EFFECTS OF CLIMATE CHANGE, THE WORLD MUST BE CARBON ZERO BY 2050.**

**Countries contributing the most carbon dioxide to the atmosphere:**

