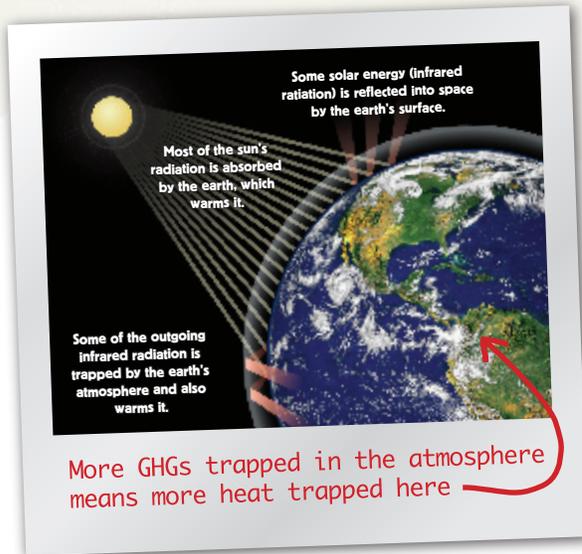


## WHAT IS GLOBAL WARMING?



### Short Answer (Hey, we've only got one page!)

Under natural circumstances, the atmosphere lets in rays of sunshine that warm the Earth's surface. The planet keeps cool by emitting heat back into space in the form of infrared radiation. Of course, not all of the heat is released back into space – otherwise we'd be living on a largely frozen planet during periods of darkness. Rather, the atmosphere acts much like a greenhouse, trapping some of the infrared radiation inside, keeping the Earth within a relatively small range of livable temperatures. This all happens quite naturally, without human intervention.

Unfortunately, human activity has led to a very unnatural situation. Global warming is largely the result of an increase in the amount of heat-trapping gases such as carbon dioxide (CO<sub>2</sub>) that humans have sent into the atmosphere by burning fossil fuels – in our cars, factories, and power plants, among other places. These gases amplify the atmosphere's "greenhouse effect" (that's why they're often called Greenhouse Gases, GHGs), trapping even more infrared radiation than usual, which causes the planet's temperature to rise above its normal range.

### What's wrong with a little warming?

By causing the planet to heat up at an unnatural rate, we are throwing the Earth out of balance. From melting ice caps to more destructive hurricanes, our world is changing dramatically—and these changes are happening much faster than scientists thought they would. We have witnessed the 12 hottest years on record in the past 16 years, and the planet is responding in ways we hardly understand.

As a truly global crisis, global warming will impact everyone. However, the impact will be felt greatest among the most vulnerable of the world's population. Unpredictably shifting weather patterns leading to both droughts and stronger and more frequent storms will dramatically affect the already scarce resources hundreds of millions rely on for the basics of life. And that's just the tip of the melting iceberg.

While global warming presents us with our most pressing challenge, it also presents our most inspiring opportunity. Stopping global warming will catalyze a new clean energy revolution: by averting environmental catastrophe, we will bring green jobs to millions of people and unite the world in a common global mission.

### What can we do about it?

The simple answer is: we must reduce the amount of CO<sub>2</sub> and other so-called Greenhouse Gases (GHG) emissions that enter our atmosphere. We can (and we will!) do that with a combination of

- 1. Individual action that results in our reducing our own personal impact on the environment, and by**
- 2. Convincing Congress to enact laws that will result in an 80% reduction in emissions by the year 2050.**

Because we have delayed action so long, the warming is now well underway. To avoid dangerously disrupting the climate, we must act now. Let's get started today by requiring science-based national policies that can stabilize our climate.