Global Climate Change

How 2 Degrees Can Change the Earth

What is global climate change?

Global climate change refers to the rise in global average temperatures near the Earth's surface.

These warming temperatures are causing climate patterns to change worldwide.

Global warming is caused by the greenhouse effect. Greenhouse gases from human activities trap warm air in our atmosphere, raising temperatures.

Deforestation; the burning of fossil fuels in cars, factories, and electricity production; methane release from landfills and agriculture; fertilizers, and gases used for industrial purposes all contribute to global warming.

How can a 2 degrees temperature change affect the Earth?

Scientists argue that if average global temperatures were to rise another 2 degrees, it would take the Earth's climate outside of the range measured over the last several hundred thousand years.

The Arctic will keep melting, losing 30% of its annual average sea ice.

The dry season in southwestern North American will see 20% less rainfall while the Alaskan region will see a corresponding increase in rainfall.

The corn crop in the U.S. and Africa will see a 30% drop in production.

There will be 20% less stream flow in some river basins, including the Rio Grande, resulting in drought.

The melting of polar ice will cause sea levels to rise, up to several meter's worth, flooding coastal cities and towns.

The western U.S. will see an 800% increase in area burned by wildfire.

As sea levels rise, the availability of freshwater will decline by 20%.

Hurricanes, monsoons, and tropical storms will be stronger and more frequent.

Between 20% and 30% of the Earth's animals and plant species will see an increasingly high risk of extinction.

What can we do about it?

The countries of the Intergovernmental Panel on Climate Change (IPCC) has agreed to limit global warming to a 2 degree increase and have agreed to take steps to make this happen. However, most countries agree that the limit needs to be much lower, closer to 1-1.5 degrees instead.

Reduce your dependency on fossil fuels. Walk, bike, take the bus, or carpool. If you drive, choose an energy efficient vehicle.

Encourage lawmakers to enact stricter laws that cap carbon emissions and pollution from companies.

Weatherize your home or apartment. Nearly half the energy used in homes comes from heating or cooling it.

Switch out your light bulbs for compact fluorescent bulbs. They last longer and keep a half-ton of carbon dioxide out of the air.

Reduce, reuse, and recycle. Reduce your consumption. Find ways to reuse items instead of throwing them away or buying more. If you must throw something out, see if any part of it can first be recycled.

Choose and support renewable energy resources whenever possible. Solar, wind, and geothermal are all clean alternatives to burning fossil fuels for energy.

For more information on global climate change and other great science topics, visit us at www.ricochetscience.com

Sources: www.nrdc.org,
www.climate.nasa.gov/
www.environment.nationalgeographic.com