

What Is Climate Change?

1. **Climate change** can be a natural process where temperature, rainfall, wind and other elements vary over decades or more. In millions of years, our world has been warmer and colder than it is now. But today we are experiencing rapid warming from human activities, primarily due to burning fossil fuels that generate greenhouse gas emissions.

2. **Increasing greenhouse gas emissions** from human activity act like a blanket wrapped around the earth, trapping the sun's heat and raising temperatures.

3. Examples of greenhouse gas emissions that are causing climate change include **carbon dioxide and methane**. These come from burning fossil fuels such as gasoline for driving a car or coal for heating a building. Clearing land and forests can also release carbon dioxide. Landfills for garbage are another source. Energy, industry, agriculture and waste disposal are among the major emitters.

4. Greenhouse gas concentrations are at their **highest levels in 2 million years** and continue to rise. As a result, the earth is about 1.1°C warmer than it was in the 1800s. The last decade was the warmest on record.

5. Many people think climate change mainly means warmer temperatures. But temperature rise is only the beginning of the story. Because the Earth is a system, where everything is connected, changes in one area can influence changes in all

8. The emissions that cause climate change come from every part of the world and affect everyone, but **some countries produce much more** than others. The 100 least-emitting countries generate 3 per cent of total emissions. The 10 largest emitters contribute 68 per cent. Everyone must take climate action, but people and countries

