



Climate Change

By- Kartik Sharma

Grade- 4A

What is climate change?

Climate change is the long-term alteration of temperature and typical weather patterns in a place. Climate change could refer to a particular location or the planet.



Causes

- **Generating power:** Generating electricity and heat by burning fossil fuels such as coal, oil and natural gas causes a large chunk of global emissions.
- **Manufacturing goods:** Manufacturing and industry produce emissions, mostly from burning fossil fuels to produce energy for making things like cement, iron, steel, electronics, plastics, clothes and other goods.
- **Cutting down forests:** Cutting down forests to create farms or pastures, or for other reasons, causes emissions, since trees, when they are cut, release the carbon they have been storing.
- **Using transportation:** Most cars, lorries, ships and planes run on fossil fuels. That makes transportation a major contributor of greenhouse gases, especially carbon-dioxide emissions.



Causes

- **Producing food:** Producing food requires energy to run farm equipment or fishing boats, usually with fossil fuels. Growing crops can also cause emissions, like when using fertilisers and manure. Cattle produce methane, a powerful greenhouse gas.
- **Powering buildings:** Globally, residential and commercial buildings consume over half of all electricity. As they continue to draw on coal, oil and natural gas for heating and cooling, they emit significant quantities of greenhouse gas emissions.
- **Consuming too much:** Your home and use of power, how you move around, what you eat and how much you throw away all contribute to greenhouse gas emissions. So does the consumption of goods such as clothing, electronics and plastics.



Effects of Climate Change



- Hotter temperatures
- More severe storms
- Increased drought
- A warming, rising ocean
- Loss of species
- Not enough food
- More health risks
- Poverty and displacement

Solutions for Climate Change

Save energy at home



Much of our electricity and heat is powered by coal, oil and gas. Use less energy by lowering your heating and cooling, switching to LED light bulbs and energy-efficient electric appliances, washing your laundry with cold water or hanging things to dry instead of using a dryer.

Eat more vegetables



Eating more vegetables, fruits, whole grains, legumes, nuts and seeds, and less meat and dairy, can significantly lower your environmental impact. Producing plant-based foods generally results in fewer greenhouse gas emissions and requires less energy, land and water.

Walk, cycle or take public transport



The world's roads are clogged with vehicles, most of them burning diesel or petrol. Walking or riding a bike instead of driving will reduce greenhouse gas emissions – and help your health and fitness. For longer distances, consider taking a train or bus. And carpool whenever possible.

Reduce, reuse, repair & recycle



Electronics, clothes and other items we buy cause carbon emissions at each point in production, from the extraction of raw materials to manufacturing and transporting goods to market. To protect our climate, buy fewer things, shop second-hand, repair what you can and recycle.

Solutions for Climate Change

Consider your travel



Aeroplanes burn large amounts of fossil fuels, producing significant greenhouse gas emissions. That makes taking fewer flights one of the fastest ways to reduce your environmental impact. When you can, meet virtually, take a train or skip that long-distance trip altogether.

Change your home's source of energy



Ask your utility company if your home energy comes from oil, coal or gas. If possible, see if you can switch to renewable sources such as wind or solar. Or install solar panels on your roof to generate energy for your home.

Throw away less food



When you throw food away, you're also wasting the resources and energy that were used to grow, produce, package and transport it. And when food rots in a landfill, it produces methane, a powerful greenhouse gas. So use what you buy and compost any leftovers.

Switch to an electric vehicle



If you plan to buy a car, consider going electric, with more and cheaper models coming on the market. Even if they still run on electricity produced from fossil fuels, electric cars help reduce air pollution and cause significantly fewer greenhouse gas emissions than petrol or diesel-powered vehicles.

Thank you!