## **Global Warming: Understanding the Basics**

- Rising Global Temperatures: Earth's average surface temperature has increased significantly.
- Greenhouse Gas Effect: Gases trap heat, leading to a warmer planet.
- Human Activities: Burning fossil fuels and deforestation are major contributors.
- Impact on Weather: Leads to more frequent and intense heatwaves, droughts, and floods.



## Observable Effects and Environmental Consequences



- Melting Ice and Rising Sea Levels:
  Polar ice caps and glaciers are melting at an alarming rate.
- Ocean Acidification: Increased CO2 absorption harms marine life.
- Ecosystem Disruption: Changing climates affect species distribution and survival.
- Extreme Weather Events: More hurricanes, wildfires, and severe storms are occurring.

## Mitigation and Solutions: Taking Action Now

- Reduce Greenhouse Gas Emissions: Transition to renewable energy sources (solar, wind).
- Energy Efficiency: Improve building insulation and transportation systems.
- Carbon Capture and Storage: Develop technologies to remove CO2 from the atmosphere.
- Sustainable Practices: Promote sustainable agriculture and responsible consumption.

