

Lesson Plans: Global Warming

Objective

The objective is to understand the enhanced greenhouse effect and the effects of global warming.

Important Points to Understand

If the emission of greenhouse gases continues at the present rate, it could have a serious impact for our weather, and for life on earth.

The earth's temperature over the last 100 years has increased by about 0.5 degrees Celsius and, if we continue to produce greenhouse gases at the present rate, global temperature could rise by about 2 degrees Celsius by the year 2100.

In general, the greenhouse effect keeps the earth comfortably warm by trapping heat in the atmosphere. The natural greenhouse gases act like a big blanket around the earth. Extra greenhouse gases mean that more heat gets trapped. This causes the temperature on Earth to rise and it could seriously affect the earth's weather in a number of ways, such as:

- Temperatures could rise as more heat is trapped by the greenhouse gases.
- Weather patterns around the world could change and become more erratic.
- As water is heated, it expands, and the sea level rises in response to global warming.
- Higher temperatures melt ice and snow which could make the sea level rise even more, if ice on land is melted.
- Summer rainfall might increase because of temperature rises, and coastal areas could flood because of sea level rises.
- As temperatures increase in the tropics, stronger cyclones could possibly occur.
- Higher temperatures could lead to an increase in the number and severity of brushfires.
- Animals and plants could be affected as the weather changes, and their habitats change.
- Food production: - could be affected as the pattern of rainfall and temperatures change.

Procedure

Write an essay (about 2 pages) on "Living in a Greenhouse Future" to show how life will be different if the enhanced greenhouse effect continues.

"Courtesy: U.S. Department of Energy's Atmospheric Radiation Measurement Program."