

Q. Comment, Green House Effect is a blessing. Also discuss Enhanced Green House Effect and its relation with global warming.

## Green House Effect

\* Green House Effect is a mechanism by which thermal radiation from the Earth's surface is reabsorbed by green house gases and re directed into all directions.

Green house gases include Carbon dioxide, Nitrous oxide, methane, water vapours, ozone and Fluorinated gases.

Green House Effect: Blessing for Survival

Green House Effect is a blessing for existence of living creatures. Following facts contribute to such blessing:

i) Maintaining the Planet's temperature.

By trapping sufficient heat back to the earth's surface, Green House Effect helps to maintain certain temperature level on the Earth's surface.

Thus, such normal temperature level makes the planet liveable.

ii) Blocking the harmful solar radiations.

Green House Effect is an essential tool to block the harmful solar radiations from entering into earth's surface.

Ozone plays key role in its purpose. It stops the harmful radiations - Ultraviolet rays - to enter into the earth's surface.

Hence, blocking such rays prevents human beings from diseases.



iii) Balancing ice-sheets on the Planet.

The Green House Effect keeps formation and presence of ice-sheets in control. It causes sufficient melting of ice-glaciers.

Thus, in the absence of Green House Effect, the Earth would be an icy wasteland.

## Enhanced Green House Effect

Description:

"It is retention of additional heat over the earth's surface due to release of increased amounts of Green House Gases by human activity."

### Factors responsible for Enhanced Green House Effect

i) Burning of fossil fuels:  
Fossil fuels like coal, gas, oil are sources of energy. However, their burning

produces Carbon dioxide and nitrous oxide.

ii) Use of fluorinated gases. Electronic appliances and equipments make use of fluorinated gases. These gases have strong warming effects.

iii) Deforestation. Cutting down trees result in more green house gases in the atmosphere. As trees are responsible for capturing Carbon dioxide. Thus, it would cause more heat over the Earth's surface.

Contribution to global warming  
The Enhanced Green House Effect contributes to global warming as follows:

- The solar radiations reach to the Earth surface
- There is presence of enhanced amount of green



house gases in the atmosphere.

• These gases absorb more heat. Thereby increasing amounts of re-emitted heat over the planet.

• In results, less heat is re-radiated into the space.

Hence, presence of more re-emitted heat increases the temperature of the Earth's surface leading to global warming.

