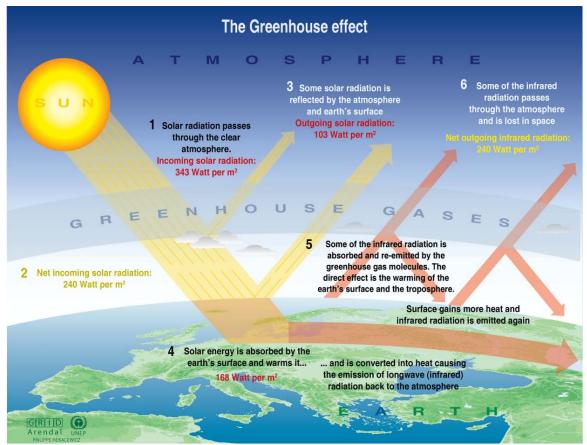
## THE GREENHOUSE EFFECT



Sources: Okanagan university college in Canada, Department of geography, University of Oxford, school of geography; United States Environmental Protection Agency (EPA), Washington; Climate change 1995, The science of climate change, contribution of working group 1 to the second assessment report of the intergovernmental panel on climate change, UNEP and WMO, Cambridge university press, 1996.

## How does the Greenhouse Effect work?

- 1. Heat from the sun hits the earth's atmosphere.
- 2. Some of this is reflected by the atmosphere into space.
- 3. The rest of the heat passes through the atmosphere and is absorbed by the earth and warms it.
- 4. Some of this heat is reflected by the earth back into space.
- 5. Not all of this heat escapes into space. Instead it is trapped by a layer of Greenhouse Gases in our atmosphere and it warms up the atmosphere.
- 6. The overall effect is that the surface of the earth gets hotter.

## In summary:

The Greenhouse Gases are like a blanket covering the earth, and they trap heat from the sun so that our planet gets steadily warmer.

## The Greenhouse Checklist

- Climate change is mainly caused by the emission of so-called 'Greenhouse Gases' which cause the earth to warm up. Carbon dioxide is the most important Greenhouse Gas or GHG
- 2. It is produced by burning carbon in the form of coal, oil, petroleum, diesel, jet fuel and others. It is also produced by the burning of forests.
- 3. Climate change became a serious problem when we put a lot more carbon dioxide into the atmosphere. This started over 200 years ago when we started burning coal to make power for factories and later to generate electricity.
- 4. Carbon dioxide is part of our atmosphere and is part of the carbon cycle. Animals use oxygen to breathe, and they produce carbon dioxide. Plants absorb carbon dioxide and produce oxygen. They also store carbon in this way.
- 5. Forests are very important because they absorb carbon dioxide. They are also important because when they are burnt down or degraded, they put carbon dioxide into the air.
- 6. Forests are important for other reasons: they provide many useful things including timber, food and medicines. They are home to millions of people and thousands of animal species.
- 7. Forests are now very valuable because of climate change. If forests are looked after and kept intact they can make a big difference in the fight to slow climate change down.