

# Global warming and Greenhouse effect



Alexandra Adamaki  
Eva Gerousi

# Global warming



# What is global warming?

- Global warming is the current increase in temperature of the Earth's surface (both land and water) as well as its atmosphere. Average temperatures around the world have risen by  $0.75^{\circ}\text{C}$  ( $1.4^{\circ}\text{F}$ ) over the last 100 years about two thirds of this increase has occurred since 1975. In the past, when the Earth experienced increases in temperature it was the result of natural causes but today it is being caused by the accumulation of greenhouse gases in the atmosphere produced by human activities.

# Causes

## Natural

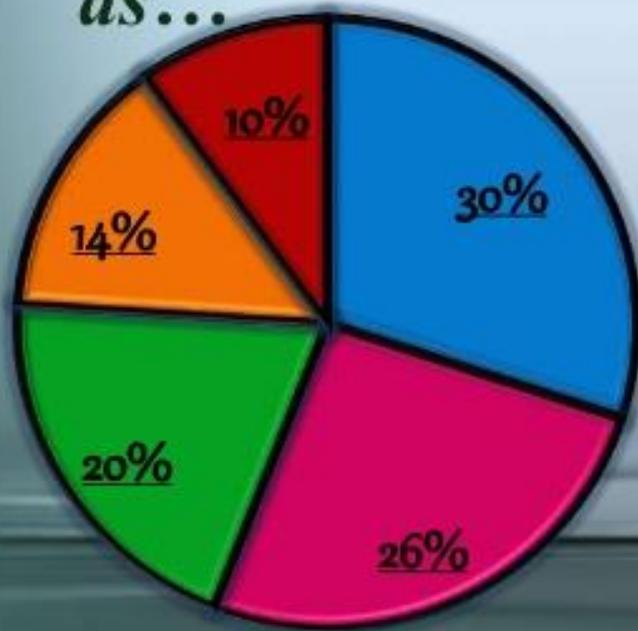
- ⦿ Greenhouse effect
- ⦿ Natural calamities
- ⦿ Slow tilting of Earth's axis

## Anthropogenic

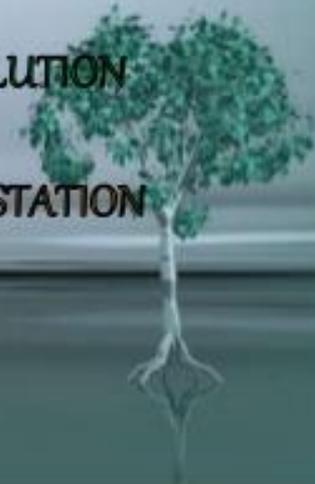
- ⦿ Means of transport
- ⦿ Factories
- ⦿ Mining activities
- ⦿ Rapid industrialization
- ⦿ Air pollution

# Causes

- *The main causes of this problem are as...*



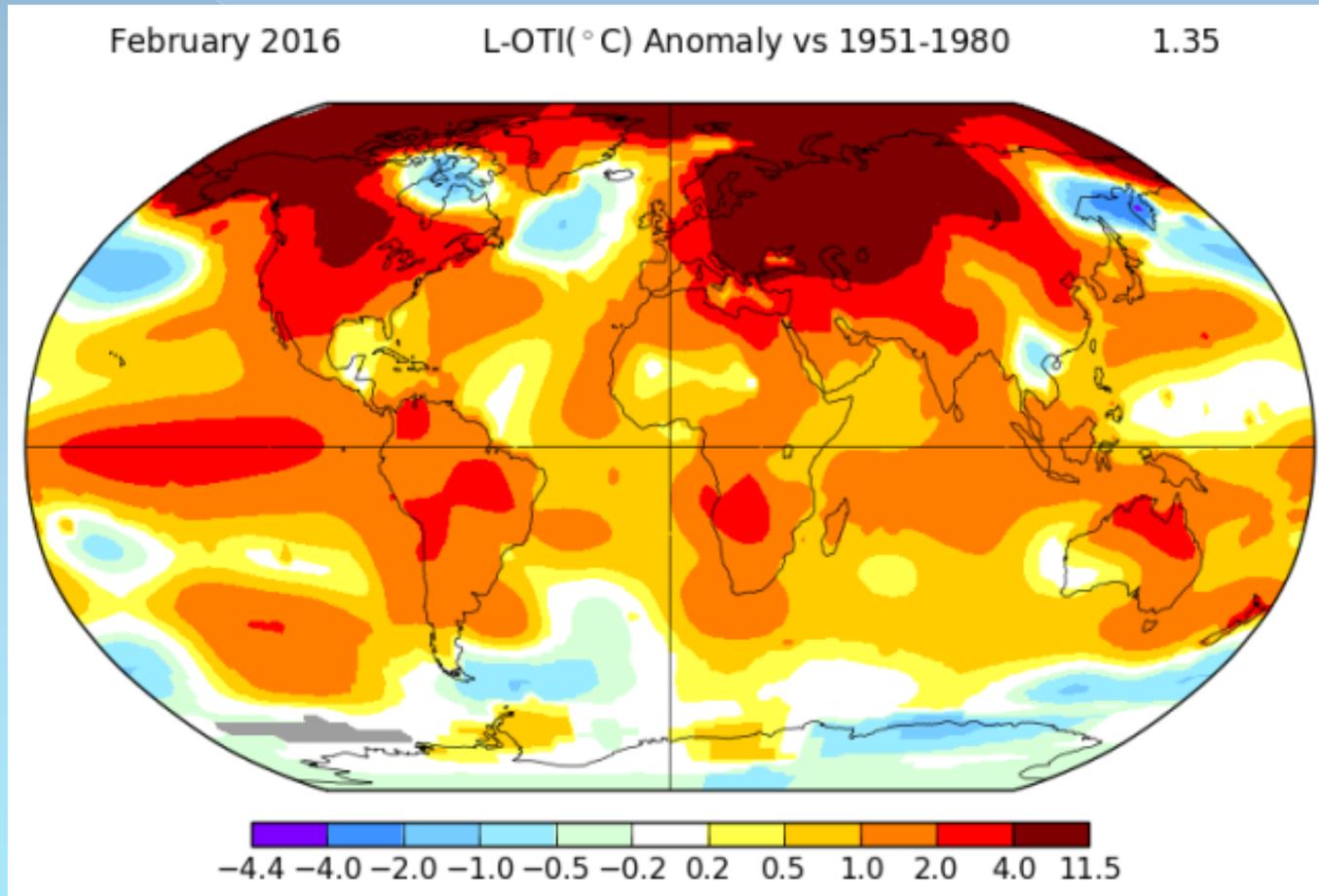
- GREEN HOUSE GASES
- BURNING OF FOSSIL FUELS
- AIR POLLUTION
- DEFORESTATION
- OTHER



# Results

- Climate change (higher temperatures)
- Ice melting
- Rising sea level
- More droughts and fires
- Warmer oceans

# Global temperature changes 2016



# Solutions

- Use public means of transport
- Turn off electronic devices
- Drive less
- Recycle more
- Plant trees



we are running out of time

# SIMPLE GLOBAL WARMING SOLUTIONS

Change a light

Recycle more

Use less hot water

Adjust your thermostat

Plant a tree

Drive less

Avoid products with lot of packaging

Turn off electronic devices

Spread the awareness

Buy energy efficient products

act now before it's too late



# Greenhouse effect



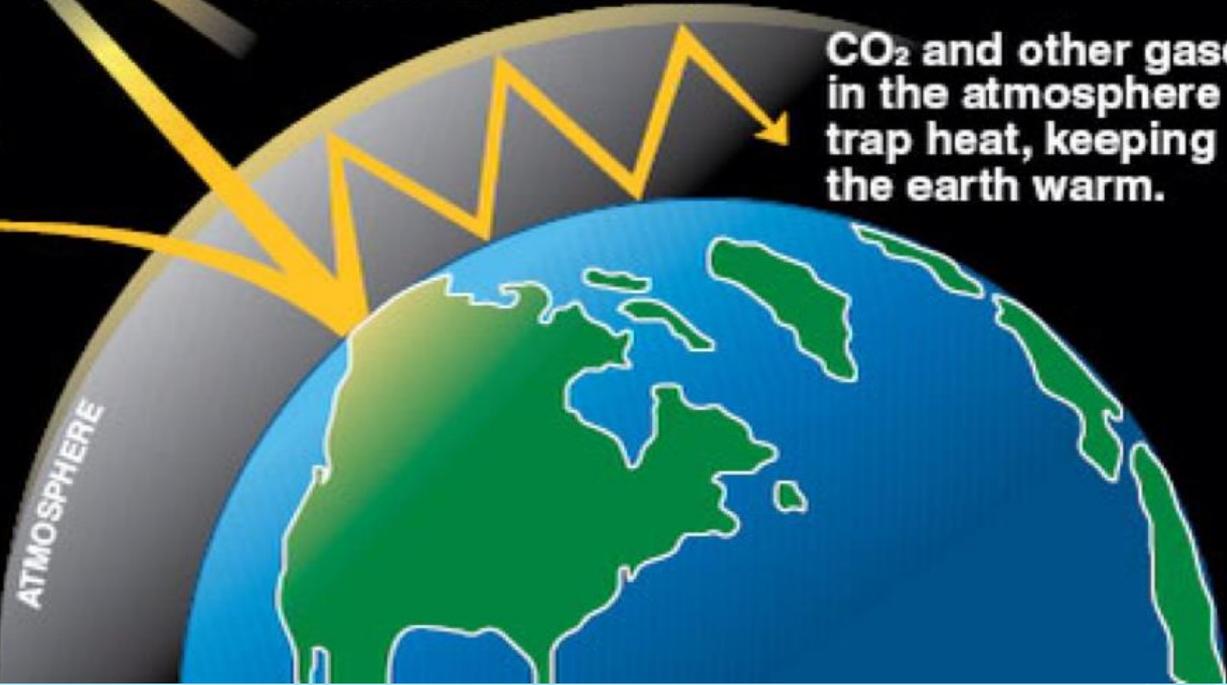
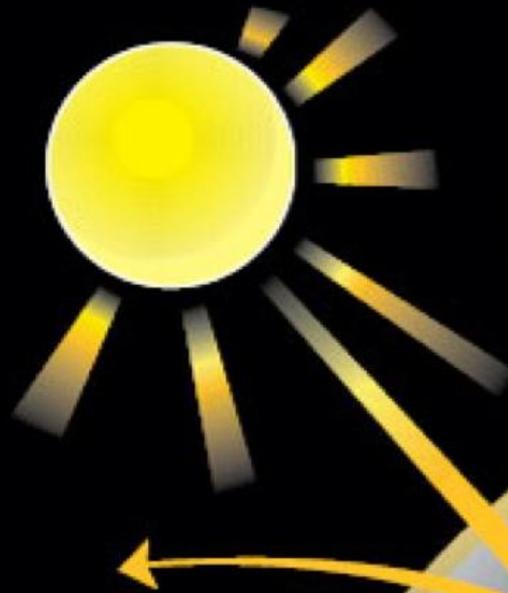
# What is the greenhouse effect?

The greenhouse effect increases the temperature of the Earth by trapping heat in our atmosphere. This keeps the temperature of the Earth higher than it would be if direct heating by the Sun was the only source of warming. When sunlight reaches the surface of the Earth, some of it is absorbed which warms the ground and some bounces back to space as heat. Greenhouse gases that are in the atmosphere absorb and then redirect some of this heat back towards the Earth.

## The Greenhouse Effect

Some sunlight that hits the earth is reflected. Some becomes heat.

CO<sub>2</sub> and other gases in the atmosphere trap heat, keeping the earth warm.

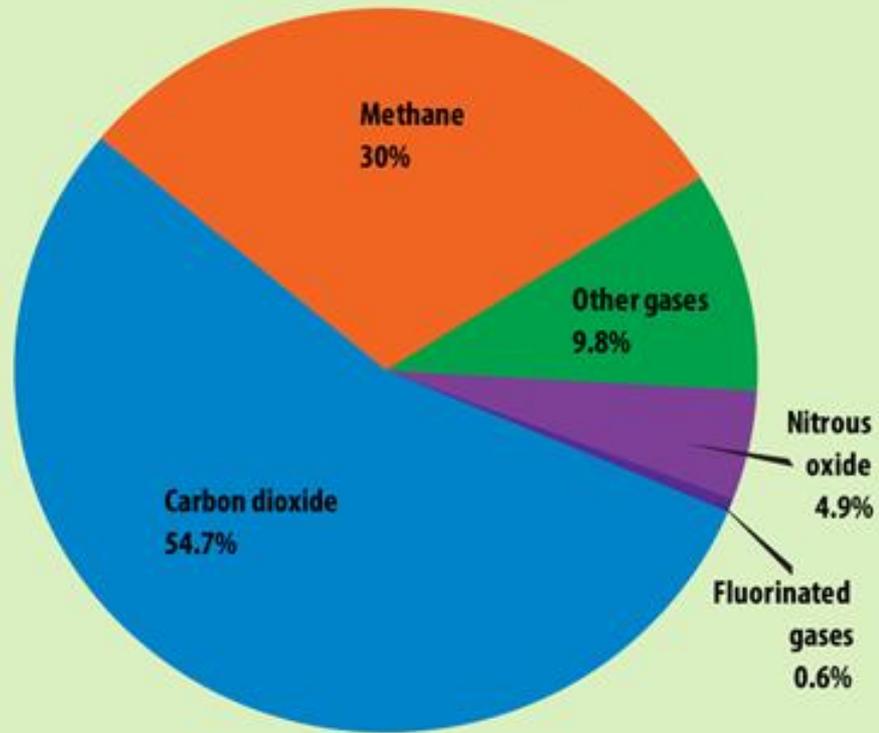


ATMOSPHERE

# Causes

- ⦿ Population growth
- ⦿ Deforestation
- ⦿ Use of chemicals in agriculture
- ⦿ Burning of fossil fuels, gasoline, oil, wood, coal

## Major Greenhouse Gases from People's Activities



# Results

- More droughts
- More floods
- Less ice and snow
- More extreme weather incidents
- Rising sea level



# Solutions

- Reduce the use of materials which produce greenhouse gases.
- Avoid the burning of fossil fuel and household residue.
- Upgrade infrastructures.
- Afforestation.
- Using alternative sources of energy.
- Using eco-friendly materials.
- Incineration plant should be established.
- Pollution should be controlled.....



# Sources

- <https://whatsyourimpact.org/global-warming>
- <http://www.bgs.ac.uk/discoveringGeology/climateChange/CCS/consequencesOfTemperatureIncrease.html>