

# The Threat of Climate Change



## EVIDENCE FOR GLOBAL WARMING

- Globally, average temperatures have risen by 1 °C since records were first kept in 1860
- The top ten hottest years have all occurred since 1980. The 1990's was the hottest decade and the first decade of the 21<sup>st</sup> Century has continued this trend
- Glaciers have started to melt on six continents and the polar ice margins have retreated significantly
- Sea levels have started to rise. In the 20<sup>th</sup> Century this was estimated at 1.5cm
- Extreme events, such as hurricanes, floods and droughts are occurring more frequently

## CAUSES OF GLOBAL WARMING

- Increasing concentrations of greenhouse gases, in particular carbon dioxide, methane and nitrous oxides
- CO<sub>2</sub> emissions released from power stations, factories and vehicles
- Methane released from intensive rice-cultivation, human waste and from large-scale cattle ranching
- Deforestation in the tropical rainforests releases carbon into the atmosphere from burning and also removes a vital 'carbon sink'

## THE MAIN CULPRITS

Rank	Country	% Global CO <sub>2</sub> emissions	% World Population
1	USA	24%	4%
2	EU	14%	6.3%
3	CHINA	13%	21%
4	RUSSIA	6%	2.5%
5	JAPAN	5%	2%
6	INDIA	4%	17%

