

# **GLOBAL WARMING FACT SHEET**

## **WHAT IS GLOBAL WARMING, ANYWAY?**

- Global warming is caused by the release of carbon dioxide and other heat-trapping gases into earth's atmosphere. The gases act like a thick blanket, trapping the sun's heat and causing the planet to warm up. Increase the gases and the warming increases, too. These gases are created when we burn fossil fuels in our cars and power plants as well as by loss of forests and agriculture.
- Scientists find clues to global warming by studying remnants of the past in ancient glacial ice, ocean sediments as well as tree and coral rings.
- Global warming is problematic to human civilization because it will cause increasingly severe storms and droughts, glaciers to melt, rising seas, changes in weather patterns, the spread of disease.
- Automobiles and coal-burning power plants are the two biggest sources of carbon dioxide in the U.S. Clearing of forests is also an important source worldwide.
- Scientists say that unless we curb global warming emissions, average temperatures could rise by 3 to 9 degrees by the end of the century.

## **SURPRISING SCIENTIFIC STATS ON GLOBAL WARMING**

- Recent data from Antarctic ice cores indicates that carbon dioxide concentrations are now higher than at any time during the past 650,000 years, which is as far back as measurements can now reach.
- 2005 was the warmest year on record since atmospheric temperatures have been measured. The ten warmest years on record have all been since 1990. In summer 2005, heat records were broken in hundreds of U.S. cities.
- Over the past 50 years, the average global temperature has increased at the fastest rate in recorded history.
- In 2003, heat waves caused over 30,000 deaths in Europe and 1500 deaths in India.
- Since 1978, arctic sea ice has been shrinking by about 9 percent per decade.
- Seagulls were spotted for the first time at the North Pole in 2000.
- The snows of Mt. Kilimanjaro, at their current rate of melt, may be gone by 2020.

## **PREDICTED EFFECTS AS TEMPERATURES RISE**

- Global warming is predicted to increase the intensity of hurricanes. In the past several decades, the number of Category 4 and 5 hurricanes globally has almost doubled. Because the ocean is getting warmer, tropical storms can pick up more energy and become far more powerful.
- Even as severe storms cause flooding in some areas, droughts and wildfires will increase in others.
- Low-lying islands will no longer be habitable due to rising sea level.
- Forests, farms and cities will face troublesome new pests and more mosquito-borne diseases.
- Disruption of habitats such as coral reefs and alpine meadows could drive many plant and animal species to extinction.

## **WHAT CAN BE DONE?**

- Energy efficiency, conservation, renewable sources of energy and new policies will all be part of the solution. Much of this technology already exists to reverse the effects of global warming. Immediate steps include building cleaner cars, manufacturing more efficient appliances and conserving energy on an international basis.
- Individuals can make an immediate difference by trying to reduce their personal greenhouse gas emissions.
- Major corporations are already finding ways to cut emissions while still saving money – but there is tremendous opportunity for more innovation.
- Developing and making available new clean energy technologies -- such as wind power, solar power, hybrid electric engines, and alternative fuels – will be key to controlling global warming.

## **TO FIND OUT MORE OR TO TAKE ACTION:**

- **Go to [www.climatecrisis.net](http://www.climatecrisis.net)**

