

## ENVIRONMENT

### Environmental issues and problems:

- **Climate change — Global warming**
  - **Energy** - Energy conservation • Renewable energy • Efficient energy use
  - **Pollution** — Air pollution • Light pollution • Noise pollution • Thermal pollution
  - **Water pollution** — Acid rain • Ocean dumping - Oil spills
  - **Toxins** — Chlorofluorocarbons • DDT • Dioxin • Heavy metals • Herbicides • Pesticides • Toxic waste
  - **Waste** — Waste disposal incidents
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### Global Warming

Global warming is already affecting the world we know, endangering polar bears, shortening ski seasons and creating more intense storms. We know how to fix this problem and prevent a global environmental disaster.

**Reason:** The Earth's atmosphere is overloaded with carbon dioxide, which threatens large-scale disruptions in climate.

**What causes global warming?** Carbon dioxide and other air pollution that is collecting in the atmosphere like a thickening blanket, trapping the sun's heat and causing the planet to warm up. **Coal-burning power plants** are the largest U.S. source of carbon dioxide pollution -- they produce 2.5 billion tons every year. **Automobiles**, the second largest source, create nearly 1.5 billion tons of CO<sub>2</sub> annually.

### Here are some examples of what's already happening due to air pollution and global warming:

Scientists say that as earth's thermostat continues to climb, human health problems will only become more frequent. The threats range from emerging tropical diseases to life-threatening temperatures to an increase in allergies and asthma. Bad air can bring on asthma attacks, even in healthy people; controlling pollution from cars, factories and power plants can help.

- In the summer of 2003, an intense heat wave was blamed for an estimated 35,000 deaths in Europe. A study says that global warming has doubled the likelihood of heat waves of this magnitude.

- Scientists found in 2008 that **poison ivy** vines have grown 10 times denser over the last 20 years. Increased carbon dioxide in the atmosphere causes poison ivy to grow larger and produce stronger irritants.

- Six young men and boys were killed by **fatal parasites** in 2007 at Lake Havasu, Ariz., after they swam in water infested with a heat-loving amoeba. The Centers for Disease Control and Prevention

expect more of these illnesses as global temperatures rise.

- Mosquitoes that carry **malaria** were found at never-before-seen elevations on Mount Kenya in 2006. As temperatures rise, higher elevations become more hospitable for mosquitoes -- and more dangerous for local inhabitants.

- Global warming makes hurricanes worse - Global warming doesn't create hurricanes, but it does make them stronger and more dangerous. Because the ocean is getting warmer, tropical storms can pick up more energy and become more powerful. So global warming could turn, say, a category 3 storm into a much more dangerous category 4 storm.

- Disruption of habitats such as coral reefs and alpine meadows could cause the extinction of many plant and animal species.

### Action Needed Now

We must use more efficient appliances and equipment in our homes and offices to reduce our electricity needs. We should also replace coal-burning power plants with cleaner plants. And we can increase our use of renewable energy sources such as wind and sun.

### What can I do to help fight air pollution?

There are many simple steps you can take right now to cut global warming pollution.

- Save energy and make it a part of your daily routine.
- Use a compact fluorescent light bulb: you'll lower your energy bill and keep nearly 700 pounds of carbon dioxide out of the air over the bulb's lifetime.
- Buy electrical appliances labeled with A -- indicating it uses less energy - cut our electricity use through energy efficiency (výkonnost).
- Eat local food. Does your food travel more than you do? Shipping in produce from all over the world creates air pollution and

greenhouse gas emissions, so why not use what's close to home?

- Make sure that batteries and electronic waste are disposed of correctly, and try to purchase less-toxic and reusable products to reduce the amount of potentially hazardous wastes needing disposal.

### **Water pollution**

Some organic water pollutants are:

- Insecticides and herbicides, Detergents, Various chemical compounds found in personal hygiene and cosmetic products

Some inorganic water pollutants include:

- Spill of oil over the seas is the biggest danger.
- Heavy metals including acid mine drainage
- Acidity caused by industrial discharges (especially sulfur dioxide from power plants)
- Pre-production industrial raw resin pellets, an industrial pollutant
- Chemical waste

### **Recycling**

Recycling is one of the most common of all environmentally beneficial activities. Recycling protects habitat and saves energy, water, and resources such as trees and metal ores. By recycling paper, cardboard, metals, plastics, and glass, we can help reduce the harmful impacts associated with the extraction of the raw materials used to make these resources, including greenhouse gas emissions, oil spills, deforestation, biodiversity loss, and water pollution.

Manufacturing products from recovered materials is less polluting than producing the same products from newly harvested or extracted virgin materials.

Making paper from recycled fibers, for example, uses less energy and water and produces less air and water pollution than making paper from trees.

## **1. Make a short speech about different types of pollution and their effect on the Earth. Use these phrases:**

The greatest source of emissions is..

Air pollution causes..

The health ... due to air pollution

Carbon dioxide (CO<sub>2</sub>), a greenhouse gas is emitted from ..

Chlorofluorocarbons (CFCs), harmful to the ozone layer, are emitted from ..

..., which may impair the health of plants and animals

.. is the contamination of water areas such as lakes, rivers, oceans, and groundwater.

.. is caused by human activities.

Most water pollutants are ..

..is killing trees and is the main reason of acidifying lakes.

.. can lead to the extinction of many species.

## **2. How can you personally help the environment?**