

Greenhouse Gas or Smokescreen?

Scenario:

A Senate fact-finding committee is studying environmental issues impacting the United States. Of particular concern is the country's non-participation in the Kyoto Agreement, the debate over global warming and its impact on future foreign and domestic policy. Your team, a group of scientists working for a university-related institute studying Earth's climate, is called to testify. The Committee Chairperson identifies possible topics to cover (listed below) and asks that you address those that, in your professional opinion, are most important for the country to understand. He welcomes any recommendations for action that you feel are appropriate based on scientific evidence. He reminds you that they have a full agenda and you have only ten minutes for your presentation.

Possible topics to cover (these are only suggestions and are not a requirement for a superior presentation):

1. What is Global Warming? How can we determine if this is really occurring?
2. What is the Greenhouse Effect and what causes it? How did it get its name?
3. How can changes in the atmosphere affect life on Earth? Has it ever happened before in Earth's history?
4. Have recent changes in the atmosphere already affected life on Earth?
5. Will melting ice caps and glaciers contribute to the Greenhouse Effect?
6. How can we be sure global warming is caused by human activity and not just a normal climate cycle?

Possible Sources

Library books, glaciologists, climatologists, videos, encyclopedias, science textbooks
ERS Portal sources: EBSCO, United Streaming, California Streaming, Brainpop, Associate Press
Extensive Photo Archive and Marco Polo Science NetLinks <http://www.erslibrary.org>
Internet websites:

Environmental Protection Agency:

<http://yosemite.epa.gov/oar/globalwarming.nsf/content/index.html>

National Oceanic and Atmospheric Administration:

<http://www.ncdc.noaa.gov/oa/climate/globalwarming.html>

The Earth Institute at Columbia University: <http://www.earth.columbia.edu/>

RealClimate: <http://www.realclimate.org/>

Wikipedia: http://en.wikipedia.org/wiki/Global_warming

Bibliography

Be sure to have a printed bibliography to hand to the judges before you begin your presentation. You are encouraged to cite all of your sources including graphics. A simple web tool to organize your bibliography can be found at <http://citationmachine.net>.