Why Is Our Project Important?

- Global warming affects everyone
- Awareness leads to solutions and everyone can do their part
- Many misconceptions about global warming exist
- Outreach offers a foundation for people to form opinions
Our Approach

- Subtopics research
- Community outreach
- Presentation preparation
Methods

- Researching new topics
- Creating a presentation featuring subtopics
- Contacting potential audiences
  - Schools
  - Professional Organizations
- Presenting material
Team Organization

Biofuels and Renewable Energy
- Shweta Gandhi
- Tanya Prabakar

Climate Engineering
- Adarsh Shukla
- Ryan McClure

CO₂, Fossil Fuels
- Daniel Kim
- Jaime Sahagun

Consequences
- Sean Murray
- Puneet Ralhan
Assigned Tasks

- Project Plan
- Website
- Brochure
- Presentation teams and organization of teams
- Assigned positions
  - Contact Teams
  - Transportation
  - Budget
  - Minutes
- IPRO Day
Previous Work

- Provided a good foundation for presentation slides
- Focused on the five main topics: carbon dioxide, fossil fuels and bio-fuels, polar regions, solar power, and wind energy
- Established contacts for Fall ‘09 semester
Benefits of Community Outreach

- Directly communicating with people
- Increasing audiences’ knowledge about global warming
- Answering questions and discussing the issues of global warming
- Motivating audiences to learn more about global warming
Obstacles & Challenges Encountered

- Finding reliable sources
- Finding contacts and scheduling meetings
- Increasing and diversifying our audiences
- Organizing and coordinating presentations
- Providing interesting and informative presentations
- Scheduling and supplying transportation
Results

Feedback

- Well organized (animations, stats, pictures, etc.)
- Length of presentation
- What we can do to prevent global warming?
- More solutions
- More interaction with audience
Accomplishments

- Created presentations
- Added new subtopic: Climate Engineering

Climate Engineering

Space-Based Solar Power

- Collect solar power in space
- Microwave begins to transmit energy
- 40+ years work in progress
Accomplishments

Updated brochure

What Is Global Warming
The average surface temperature of earth has increased more than 1 degree Fahrenheit since 1800, and the rate of warming has been nearly three times the century-long average since 1970. Experts agree that human activities, mainly the release of Greenhouse gases—such as carbon dioxide and methane—from smokestacks, tailpipes, and burning forests, are probably the dominant force driving the trend.

Effects of Global Warming
The consequences of global warming are the decrease in the Earth’s snow and ice cover, which would increase the global absorption of solar radiation. This will significantly melt the land ice and raise sea levels. Average temperature in the Arctic is rising twice as fast as elsewhere in the world. In Alaska, temperatures have increased an average 3.0 degree Celsius between 1970 and 2000. This increase in temperature poses a threat to the ecosystems in the polar regions. Species such as the polar bears are facing endangerment because the ice is melting their habitat. The Gulf Stream that bathes Britain and northern Europe in warm waters from the tropics has weakened dramatically in recent years. A consequence of global warming that could trigger more severe winters and cooler summers across the region, scientists warn today.

Fossil Fuels and CO₂
Fossil fuels (oil, gas, and coal) are the main source of energy used today. They are burned to provide significant amounts of energy, but as a byproduct of combustion CO₂, water, and other gases are released. These gases are known as Greenhouse gases and are a major contributor to Global Warming and a major factor in pollution. The Greenhouse gases trap radiation and prevent it from leaving the atmosphere—this is known as the Greenhouse Effect. The main greenhouse gases are water vapor, carbon dioxide, methane, nitrous oxide, and fluorocarbons.

Alternative Energy
There are many alternative fuels which can be used to obtain energy. Using crops high in cellulose, sugar or vegetable oil can form biofuels which create less CO₂ and get better gas mileage. Nuclear Fusion is a resource that can be utilized to obtain free energy. Nuclear fusion entails the act of splitting atoms to release large amounts of energy. While nuclear energy is a great resource, its main pitfall is the disposal of radioactive waste. Both wind and solar energy function without fuel. Wind energy is also emission-free and government subsidies are available its use. Solar energy converts radiant energy from the Sun (the main source of energy for our planet) into usable energy.

Climate Engineering
Climate engineering involves proposals to deliberately manipulate the Earth’s climate to counteract the effect of Global Warming from Greenhouse Gas emissions. Proposals of this sort include ideas such as carbon dioxide capture from the atmosphere, space-based solar power, and land use management. Climate engineering is the cutting edge of climate research and development and is still in very early stages. It will take many years for any of these proposals to get implemented but they will be the subject of massive research in coming years. While such approaches could be effective, it is very important to note that the potential of climate engineering should not divert efforts from reducing carbon emissions overall.

You Can Help!
Below is a short list of things you can do to help reduce energy use and reduce the emission of Greenhouse Gases:

- Turn down the thermostat.
- Purchase Energy Star labeled items when possible.
- Replace bulbs with Compact Fluorescent Bulbs.
- Turn off the lights in an empty room.
- Wash clothes in cold water.
- Improve the insulation in your home.

If you would like to learn more ways you could help out or are just interested in learning more about Global Warming, visit our website at: http://www.lit.edu/ipro231s09/
Accomplishments

New website: www.iit.edu/~ipro331s09

Who We Are

We are a team of undergraduate students from the Illinois Institute of Technology. We come from different backgrounds and majors, providing different views and ideas.

Our Purpose

We intend to spread the facts about global warming to raise awareness as this issue becomes increasingly more important.

Global Warming and Community Outreach

Topics | Links | Members | In the News | Contact Us

The Intergovernmental Panel on Climate Change (IPCC) releases an assessment on Global Warming every few years. The most recent assessment was released in 2007 and was the basis for their Nobel Peace Prize. If you would like to learn more about the IPCC please visit their website at:

http://www.ipcc.ch/

As part of a course (CHEM 410: The Science of Climate Change), students at IIT created voiced over presentations explaining the IPCC’s most recent assessment. You can view those presentations at the following website:

http://hsotec.net/arun.htm
Accomplishments

Increased outreach to over 1000 people through 14 presentations

Contacts:

- India Development Coalition of America
- Lakota East High School, OH
- Andrew High School
- Brookfield Rotarians
- De LaSalle High School
- Gage Park High School
- Arlington Heights Senior Center
- Lake Park High School
Get more contacts early on in the semester
Start making presentations as soon as possible
Learn more about and incorporate more on current events
Practice presentation skills
Questions?