# IPRO 331

### Who are we?

we are a team of undergraduate students from the Illinois Institute of Technology. We each come from different backgrounds and majors, providing different views and ideas. The Interprofessional Project Program is a way for students to learn as a team while brainstorming to solve a real world problem. Students are also able to learn project management skills and communication skills.

### Our Purpose

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

### How can you contact us?

If you would like to learn more about our presentation or schedule a presentation at your site please contact us at: globalwarming@iit.edu



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# Global Warming and Community Outreach

Educating people about the scientific facts concerning global warming



## Global Warming

### **Carbon** Dioxide

Greenhouse gases consist of gases in the atmosphere that trap the infrared emissions that the earth tries to reflect back into space. Carbon Dioxide is the biggest contributor to this effect. While carbon dioxide

is a naturally occurring gas, it's concentration in the atmosphere is increased due to the burning of fossil fuels



and the manufacturing of cement. The carbon dioxide produced from such productions not only adds to the atmospheric concentration but also becomes trapped in the oceans. Its effects have a vast spread from the inability of sea life to make shells to an increase in extreme weather conditions like hurricanes.

### Fossil Fuels and Bio-fuels

The global demand for oil is rapidly increasing in the midst of expansion of such developing countries such as India and China. Currently, fossil fuels account for 85% of global consumption of natural resources and it is well known that they are



the greatest contributors to global warming due to high carbon emissions. Continued use of fossil fuels will inevitably lead to environmental destruction, which in turn, could cause massive economic downfall, political instability, and global conflicts. An alternative is to actively pursue technological advancements in the production and use of bio-fuels. Bio-fuels, however, hold inherent flaws when considering their effects on the global economy and their potential inefficiencies. Thus, it is essential that we look at both sides of the bio-fuels debate. With efficient conversion of a new generation of biofuels, is it a viable alternative that can supply the global energy needs?

### **Polar Regions**

The polar regions often serve as a barometer for Global Warming. It has been observed that these regions have melted significantly due to rising

global temperatures. This has contributed to sea levels rising at a rapid rate. Rising sea levels could wipe out low lying lands, and destroy the habitats of the naturally occurring flora and fauna of those areas. The decline of glacial regions is also wiping out critical



sources for water supply in several regions around the world, most notably the Himalayan polar caps. Recent estimates suggest these sources could dry up within 25 years. Additionally, as glaciers melt, the natural habitats for animals such as polar bears, walruses, foxes, and many others will be wiped out, endangering those species.

### Solar Power



The Sun is the single greatest source of physical energy at the disposal of mankind. Solar power can be used to produce electricity and heat. This presentation outlines a few of the ways that solar energy is being captured, converted, and put to use in housing applications. Solar power plants may

soon begin replacing coal-powered electricity plants and solar technologies will become more widely available for everyday people. Our goal is for the audience to walk away with a basic understanding of how solar energy can be captured and used, the benefits of using solar technology, and the challenges of implementing solar technologies.

### Wind Energy

Wind energy, along with solar power, is the most abundant and free power source known to man. It is a renewable, environmentally

friendly power source that is available in every region of the globe. The technology to take advantage of this power is



already in place, and all it needs is more people to become aware of its potential. The cost to build is cheap compared to current energy methods and there are no greenhouse gas emissions. There is little to no impact on wildlife, terrain, or our wallets. Once the price of wind is known, there is no chance of fuel price inflation, as the price of wind is fixed. In the long run, wind has the power to be one of the key constituents that will meet our energy needs without forcing us to change our way of life.