

Global Warming and Community Outreach

Informing the general public of the issues concerning global warming



IPRO - 331

Who Are We?

Our IPRO team consists of undergraduate students from the Illinois Institute of Technology. The Interprofessional Project Program is a medium through which students come together to solve a problem in the community. We all come from different backgrounds and majors to undertake this very important issue concerning our environment.

What Is Our Focus?

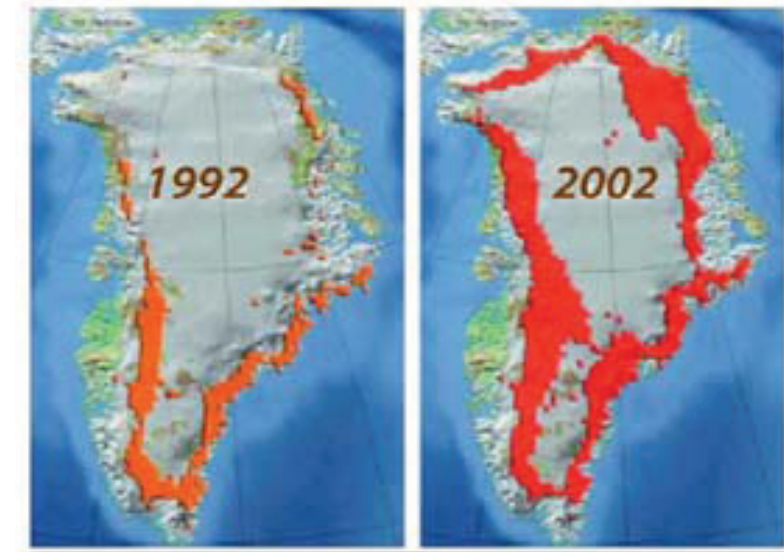
The Goal of this project is to inform the community of the problems associated with global warming. Subsequently we aim to educate people in the practical steps some have taken to improve the quality of our environment.

What is Global Warming? And what is the effect of it?

Over the last decades the surface temperature of earth and levels of CO2 concentration in the atmosphere have increased sharply. Experts agree that global warming is due to human activities such as burning fossil fuels produce greenhouse gases like carbon dioxide. As a result of global warming, global absorption of solar radiation is increasing. Due to this the land ice will melt, raising sea levels. Average temperature in the arctic is rising twice as fast as elsewhere in the world. Climate change is a threat to the ecosystems in the Polar Regions and the animals that live in those regions would be facing extinction. Another effect from global warming is more severe winters and cooler summers, according to scientists.

Greenland

Greenland is feeling the effects of global warming as its massive ice sheets are melting at increasingly high rates. Climate change in Greenland has led to rising sea levels and unstable weather patterns.



Greenland may be considered as a metric measure for the rest of the world if we don't become more environmentally conscious in the near future.

Satellites

Today, new technologies such as satellites are providing the information necessary to develop natural solutions to the climate change crisis. Geographical Information Systems (GIS) collect data regarding wind, solar, and residential patterns to determine which areas of the country are effective positions to place renewable energy structures. In addition, there is research developing space based solar power (SBSP) satellites hoping that in the near future, we can harvest unfiltered energy from the sun both day and night.



Waste Management

Waste management refers to the process of collecting, transporting, processing, recycling or disposal of waste materials. This is done in only three ways: burning it, burying it, or recycling it.



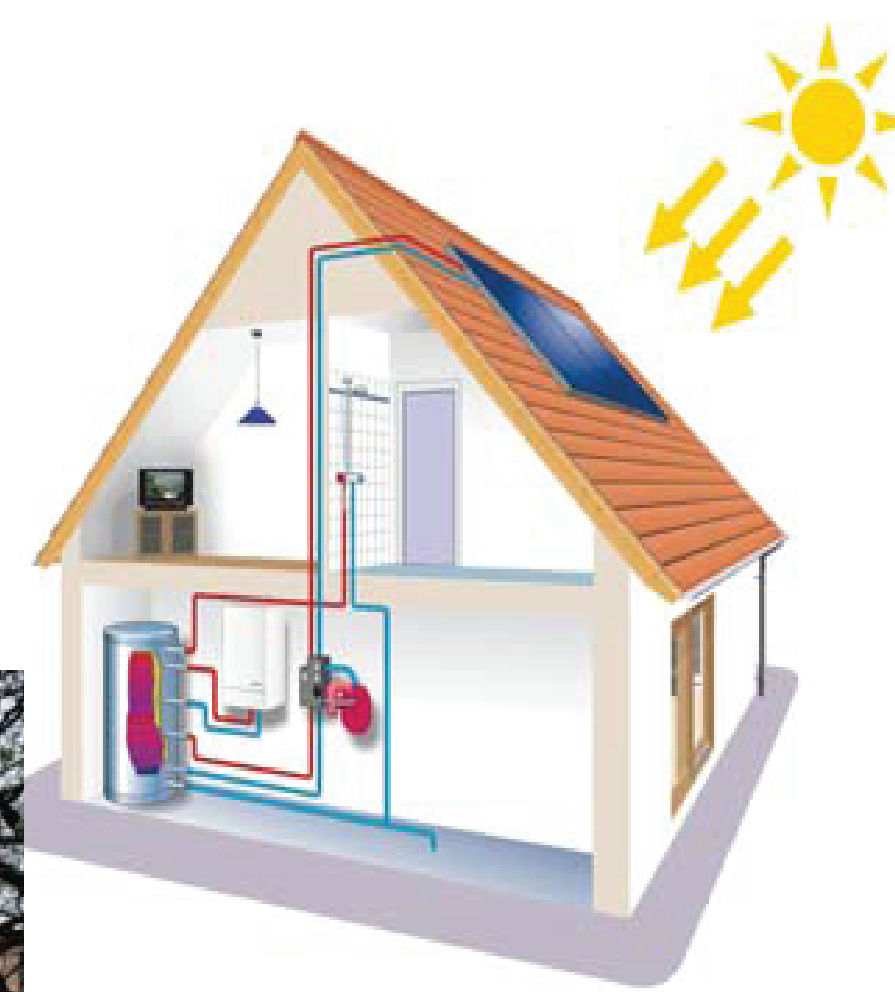
Proper waste management can save energy and prevent global warming, while unsuitable management can cause severe public health problems and intensify the greenhouse effect

Sustainable Architecture

Solar Panels can help save the environment by converting the sun's energy to usable power. Not only does this save energy, but also can make the owner money over time.

5 Eco-Principles of Design

- 1) Smart Design
- 2) Material Choice
- 3) Energy Efficiency
- 4) Water Conservation
- 5) Healthy Environment



The Smart House
Museum of Science and Industry, Chicago

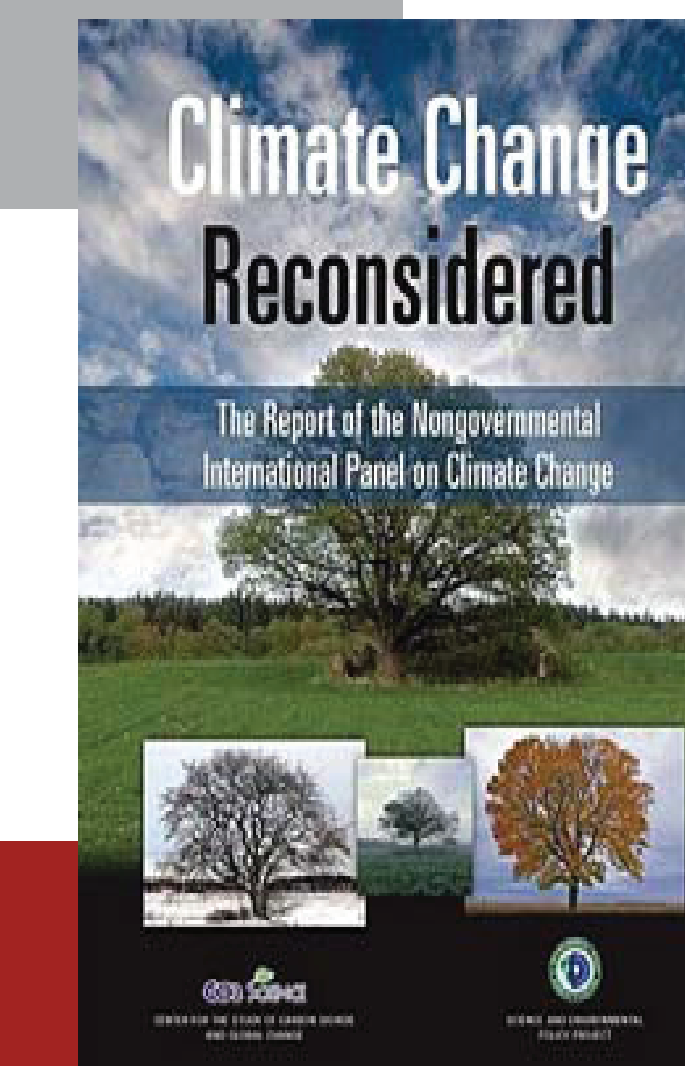
Potable Water

Potable or drinking water is vital to our current life style. As population increases, the supply of potable water decreases. Pollution and global warming are further limiting our access to freshwater reservoirs as glaciers are melting. In order to combat this decrease, we must find ways to develop water purification methods. Some new methods include flash distillation, reverse osmosis, geothermal desalination and nano-filtration. By bringing a practical approach in our daily lives to water conservation, we can further progress with a cleaner water supply for everyone.

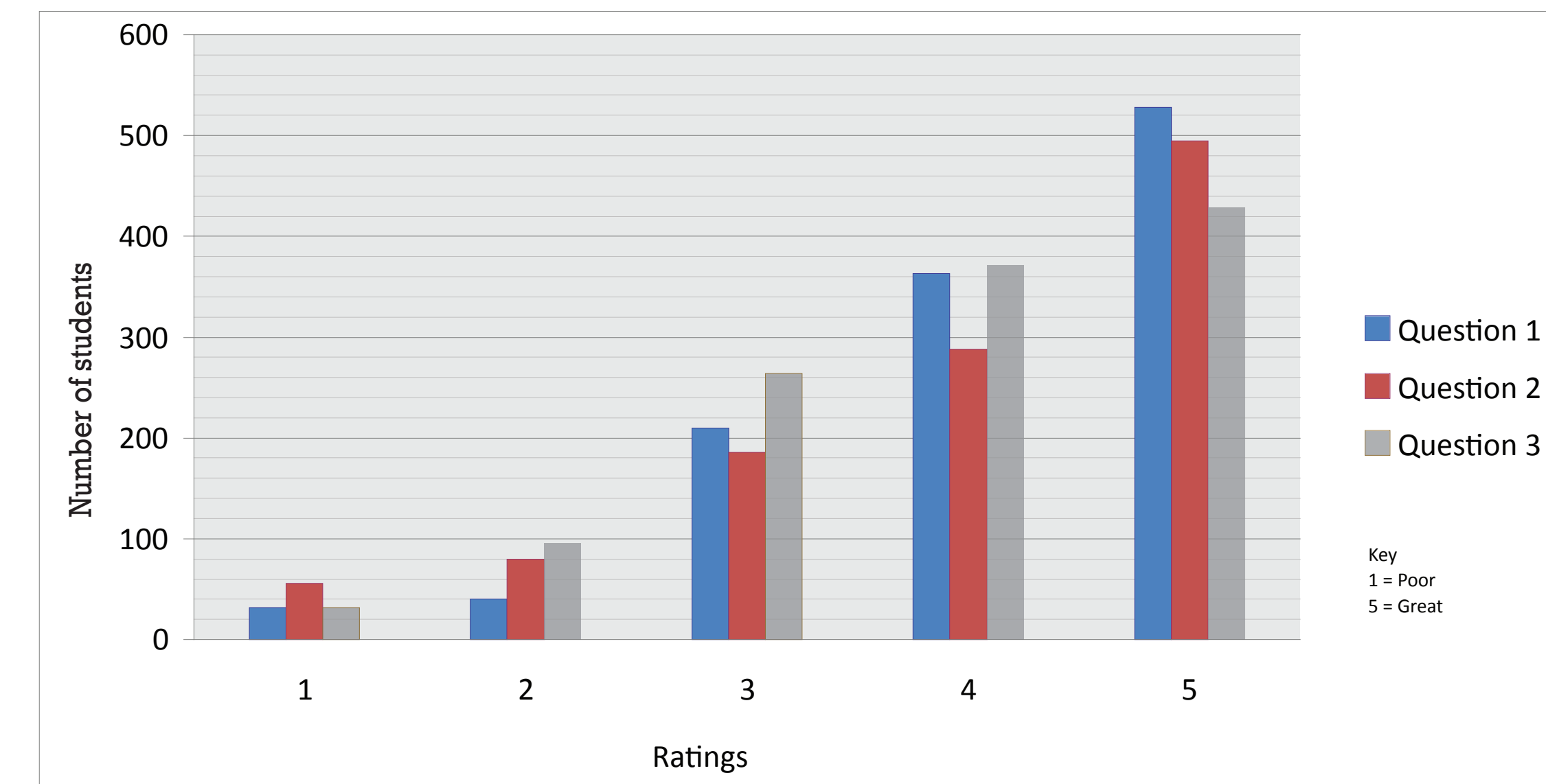


Skeptics

Many skeptics claim that global warming is not caused by humans, but naturally by the environment. They say that climate models are incorrect and we do not have reliable projections nor correct data.



Another area of skepticism deals with the effects of carbon dioxide in the atmosphere. As the primary resource of food for plants, carbon dioxide, if properly handled, may be considered as more beneficial than harmful.



Question 1: How informative was the presentation?

Question 2: How interesting was the presentation style?

Question 3: How much did the presentation increased your awareness of Global Warming?



Achievements:

New research topics

Create a Wiki Page

Reached out to people in Chicagoland

Incorporated Illinois state education goals in presentations as well as leave a legacy in schools

Presented to 1189 students, 11 schools

Average of 108 students per presentation

Faculty:
Dr. Peter Lykos

ILLINOIS INSTITUTE
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