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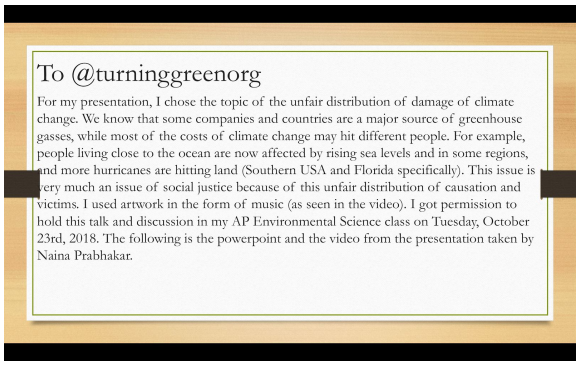
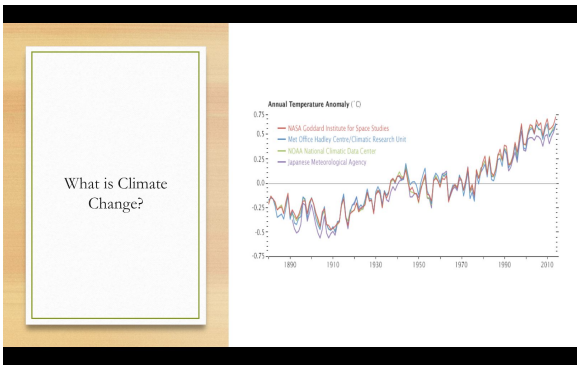
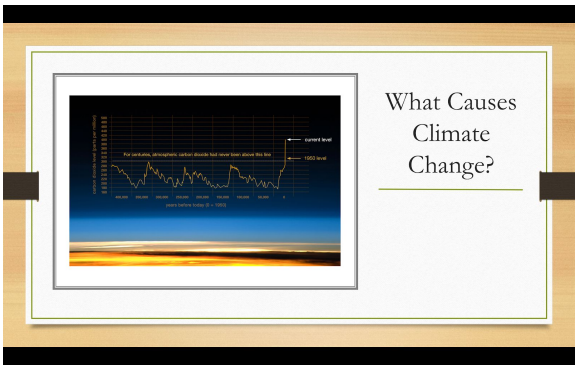
Greenest Day 9: Social Justice and the Environment

Link to my video: https://youtu.be/3kIm7qNJIvI

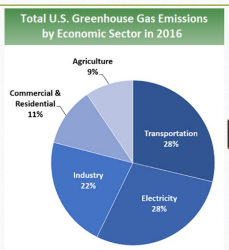
My Presentation Slides:



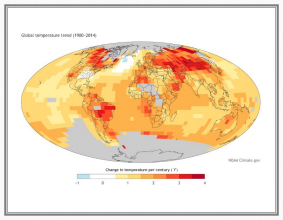




What Causes Fossil Fuels?

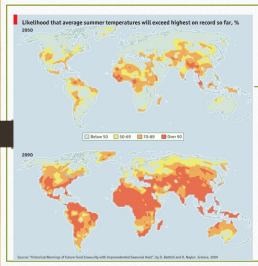


www.epa.gov



Measurable Impact of Climate Change

- NOAA Climate.gov
- Global climate change
- 1900 to 2014



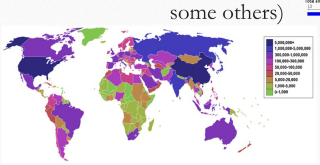
What is to Come?

- What is record and average summer temperature in Indiana?
- High: 116 F (and average 72 F)
- Image a shift by 2090:
- To 116 Fahrenheit AVERAGE
  - (and highs above 150 F??)

Costs

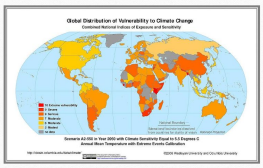
- There are different estimates for the annual costs for climate change. In 2017, the US Government Accountability Office stated that the U.S. government spent above $360 billion in the past decade in response to climate-change-related weather.
- However, the actual total damage is likely much more. The 2017 weather disasters (hurricanes and wildfires) costed $306 billion in the U.S. (NOAA.gov).
- World-wide, the United Nations (UNFCCC) attributes a loss of "$2,245 billion to climate-related disasters" in the past two decades.

Who are the Perpetrators? Hint: Look North (developed countries plus China and some others)



Wikipedia.org

Who are the Victims? Hint: Look South (mostly developing countries)



Big Idea: Who Should Pay(or Do Something)?

UN climate change panel says 'unprecedented' action needed to prevent rapid global warming.
CNBC, 2018

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CNBC, 2018

Big Idea: Who Should Pay(or Do Something)?

You will debate to figure this out

Rich Industrial Countries Mixed Opinions

United States, Japan, European Union, Israel, Australia…

A Global Effort is Needed!

Climate Change is not real

Kyoto Pact, Paris Agreement

If we develop technology, we can deal with it later

Island Nations with low elevation (Maldives etc)

- But also including Florida, where 1,000,000 homes are severely threatened in the 21st century (Miami Herald).

Developing Country Opinions

- (China, India, Mexico, Brasil, most African countries…)

"From the perspective of China's leaders in the 1990s, environmental degradation was a necessary price to pay in order to alleviate large-scale poverty."

Anthony Li, "Hopes of Limiting Global Warming? China and the Paris Agreement on Climate Change,"China Perspectives 2016. https://journals.openedition.org/chinaperspectives/6924#tk=1

Wikipedia.com

Representatives of fossil industry

We are part of the solution, not the problem.

Inhabit.com

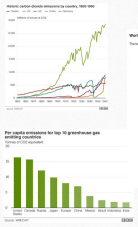
YOUR TASK

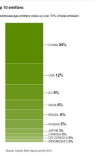
Find an agreement of strong actions that can bring about radical change.

If you fail, the planet may be doomed.

Possible Responses

- Developing Countries
- Developed Countries
- Industrial Countries
- Oceanic Countries





bbc.com

TOWARD A SOLUTION

- The key issue here is that an agreement HAS TO BE reached.
- It also seems to be reasonable to think about causation. Some countries have caused more negative climate change than others.
- Here is my first step towards a solution: all the stakeholders have to talk to each other like you did in this mock debate

Citations

The Economist
Socioeconomic Data and Applications Center | SEDAC - Columbia University
NASA
Environmental Protection Agency (Epa.gov)
NOAA.gov
United Nations (UNFCCC)
Jason Mark, "The Case for Climate Reparations," Sierra Magazine (May-June 2018) 34-45.
Wikipedia.org
CNBC.com
China Perspectives
Fwallpapers.com
Inhabit.com

Teaching Agenda:

Music Clip/Hook
Intro to Climate Change
Introduce Theme of Social Justice
Dive Deeper into the Issues Surrounding the Connection of the Two
Activity
Group Discussion
Possible Solutions
Conclusion and My Thoughts

Notes for the Presentation:

Play Music Clip (FIRST 20 SECONDS): Traditional Maldivian Music
https://www.youtube.com/watch?v=ETZlwktlA2A

Most people now agree that climate change is a real threat to our existence, but what we don't agree on is who is responsible for fixing it.

Discuss the music.

To preface the presentation, I would like to give a quick overview of what climate change is, or at least the definition that we will be focusing on today. If you don't believe that climate change is real, I would still like you to participate, learn, and voice your opinions in the activity after the talk. So, we will define climate change as a change in global or regional climate patterns, in particular a change apparent from the mid to late 20th century onwards attributed largely to the increased levels of atmospheric carbon dioxide produced by the use of fossil fuels.

According to an ongoing temperature analysis conducted by scientists from NASA, the average global temperature on Earth has increased by about 0.8° Celsius (1.4° Fahrenheit) since 1880. There will add another one degree increase in the next few decades with very strong effects on changing weather patterns

This is actually simple. FOSSIL FUELS. Yes, there is fluctuation, but it is clear that there has been a drastic increase in the past 70 years

I would like to point out that extreme weather events, including heat waves, hurricanes, wildfires, and droughts, are not *caused* by climate change. However, there is **no** question that their intensity and frequency in many cases has been made worse by the fact the entire planet is now 1.8 degrees F hotter

In the coming decade, economic losses from extreme weather combined with the health costs of air pollution spiral upward to at least $360 billion annually, potentially crippling U.S. economic growth

"The sad truth is that the poorest countries on the planet will be hit first and hardest by climate change. In the last decade it is poor countries like Honduras, Myanmar, Nicaragua and Bangladesh and Thailand that have been most battered by the climate storm." (ourworld.unu.edu)

Where will the money come from? The signs are not promising about our willingness to help.

The old industrialised world might respond that for much of the period since the 1850s nobody knew about man-made global warming. Does that take away its responsibility? And why should the current generation be punished for the crimes of its forebears? Is that really fair?

Then there's the question of who's polluting now - when we do know the damage it's doing (see graphs). China belts out more CO2 than the United States, and the gap between the two is expected to grow as China continues to develop. So perhaps it is China, not the United States, which should bear the greatest burden? However, when looking at a per capita arrangement, China now emits more than the US because its population is four times the size, but on average, each Chinese citizen is much poorer than each American, and has a much smaller environmental footprint. So is the United States to blame?

These are the kinds of questions which have avoided at global climate change summits. And you can see why: there is no clear answer to any of them.

One innovative way to deal with global warming emissions is carbon trading.

"Countries (or states, or companies), are given an allowance to emit a certain amount of the gases that cause climate change - CO2 for example. If a country wants to go beyond its allowance, it can buy the right to emit from other countries, which will compensate by cutting their emissions.

If this market-based system works as it's supposed to, it's an efficient and cost-effective way of cutting overall emissions. Emissions can be trimmed in countries where it's cheap to do so, rather than in countries where it's expensive and difficult." (bbc.com)

But even if the carbon trading market is effective, is it fair? Some researchers and sceptics have compared carbon trading to the Roman Catholic medieval practice of allowing people to pay money to reduce punishment for a sin that they committed.

As seen through all of these examples, there are SO many opposing ideas and arguments that can be made, which makes it INCREDIBLY difficult to come to a feasible solution to the problem.

Sources:

https://www.bbc.com/news/magazine-36900260
The Economist
Socioeconomic Data and Applications Center | SEDAC - Columbia University
NASA
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United Nations (UNFCCC)
Jason Mark, "The Case for Climate Reparations," Sierra Magazine (May-June 2018) 34-45.
CNBC.com
China Perspectives

Summary

For this talk, 50 students signed up and came to listen to my presentation. It was really nice to have such a large, diverse audience, especially in the discussion, as we could see many different perspectives on one issue. The presentation seemed to resonate well with the students who came to the talk. For the activity, their task was to model a UN meeting discussing the issue of who should pay or do something about climate change and its effects. About half of the groups reached something like a conclusion, but after discussing, no group truly had a solution that every type of country would agree on. This activity was demonstrating how hard it is to get changes made when there are so many factors involved.