

Individual Solutions

2 factors ON campuses contributing MOST to CO2 emissions:



Transportation

- Encourage productive on campus transportation
- Reduce personal vehicles
- Bike or walk to class
- Order less items to reduce shipping



Energy

- Encourage greener energy from your campus (ex: solar panels)
- Turn off lights when you leave
- Use fans instead of AC

Corporate Solutions

- Switch to renewable energy
- Improve energy efficiency
- Reduce resource consumption in production
- Eliminate single use plastic
- Stop supporting deforestation & harvesting of natural resources

Without Solutions...

- Potential for lots of feedback loops
- Hotter temperatures cause ice to melt, warming the oceans, causing more ice to melt. (Positive feedback)
- More carbon affects everything from ocean currents to overpopulation, which then have their own effects.

Carbon Emission Control

Decreasing global CO2 emissions from humans will help lessen the rate of global temperature increase.

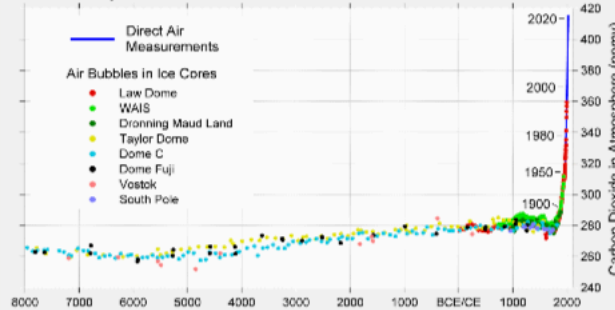
Why Should We Care?

Experts now know that humans are the main climate forcing of the last 150 years, so it is up to us to fight global warming.

Potential Climate Impacts as the Planet Warms:

- Flooding and loss of coastal communities as sea level rises
- Climate zones are shifting, causing human and species migration
- Biodiversity and species loss in all regions, especially Arctic, as species struggle to adapt to changing climates
- Coral reef ecosystem loss due to ocean acidification
- Increased climate extremes like wildfires, flooding, drought, etc.
- Human health decline from air pollution, disease, and extreme weather

10,000 Years of Carbon Dioxide



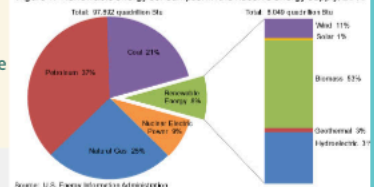
CO2 levels in the atmosphere over the last 10,000 years, shows sharp increase since 1850s



It's Not Just About Environmentalism

- Low demand for green energy = low supply
- Lower social classes don't have access to expensive green energy options, even if they want to go green.
- Green energy is more expensive and there is little individual incentive to switch *see graphs below

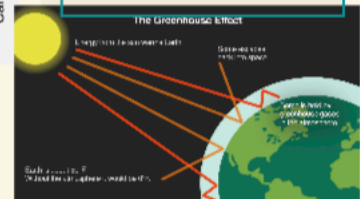
Figure 1. Renewable energy consumption in the nation's energy supply, 2010



Source: U.S. Energy Information Administration

How Carbon Warms the Planet

- Humans burn fossil fuels as our main source of energy*
- Fossil fuels release CO2 and other "Greenhouse Gases" into the atmosphere*
- Increased GHG concentrations block Earth from emitting solar radiation back into space
- Radiation is trapped in our atmosphere and warms the planet *see graphs below



Want to Know More?

<https://news.climate.columbia.edu/2018/12/27/35-ways-reduce-carbon-footprint/>

<https://www.epa.gov/climateleadership/ghg-reduction-programs-strategies>