

A photograph of Earth from space, showing the curvature of the planet and a bright sun on the horizon. The sun is positioned in the center of the horizon, creating a lens flare effect. The sky above the horizon is a deep blue, and the surface of the Earth below is dark with some clouds visible.

T H E R E I S N O P L A N E T B

T H E T I M E T O A C T I S N O W



Source: NASA

My Background

- ❑ **Grew up in upstate New York. Graduated from SUNY Buffalo.**
- ❑ **Moved to San Jose in 1984.**
- ❑ **15-year career as a test engineer in high-volume disk drive manufacturing.**
- ❑ **Career change to**





EARTH DAY **LIVE**

STRIKE
APR 22

DIVEST
APR 23

VOTE
APR 24

earthdaylive2020.org

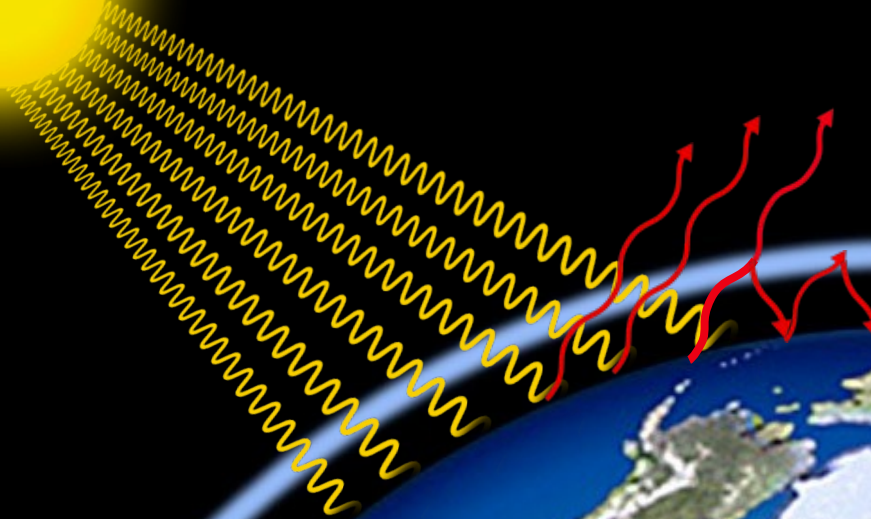
Climate Change Science and the Climate Crisis

Burning fossil fuels is a combustion reaction

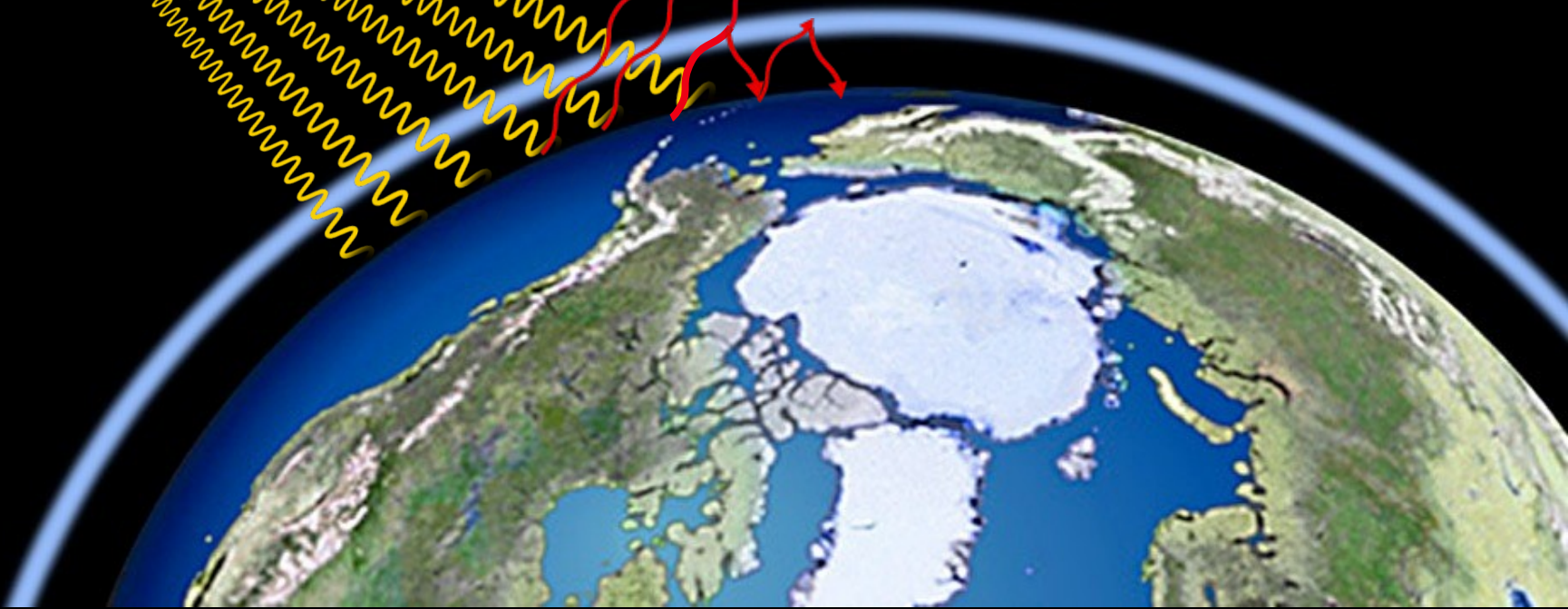
Organic

Molecules + O₂ → CO₂ + H₂O + Heat

with (C,H and O)

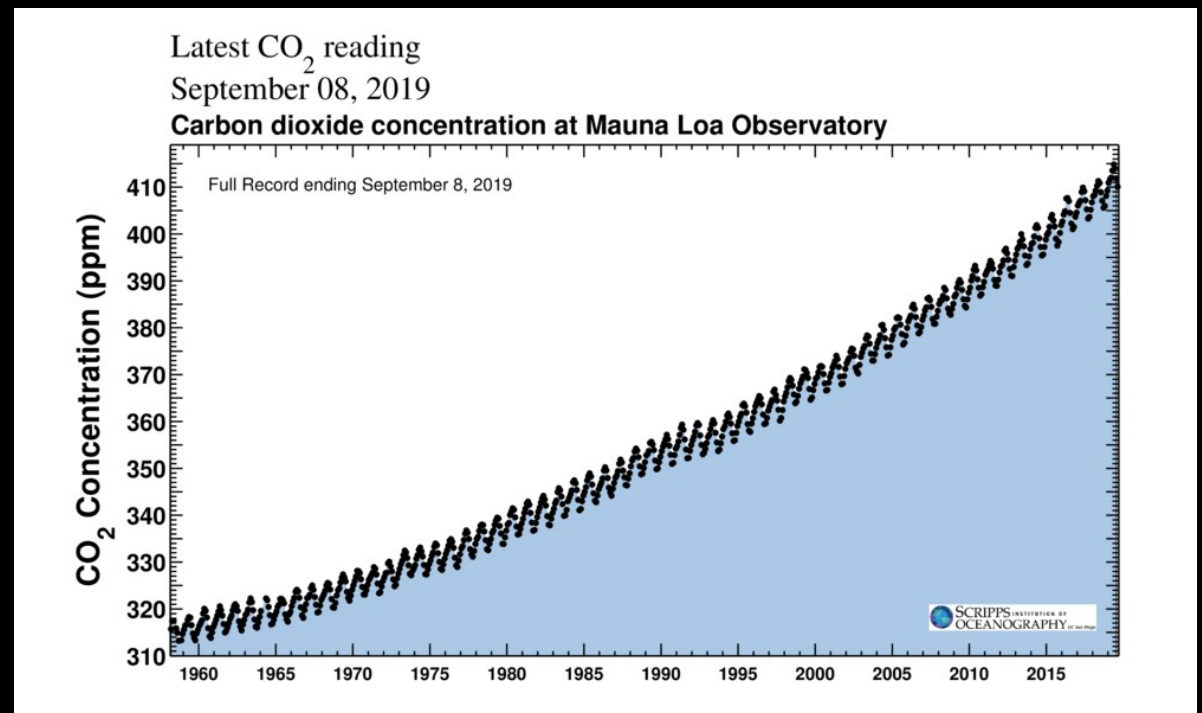
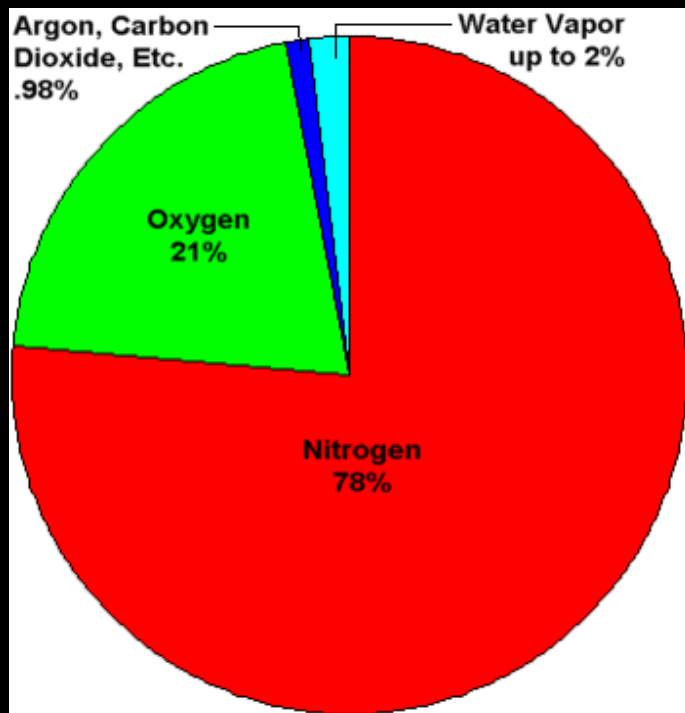


As the CO₂ concentration increases, more of the outgoing infrared radiation is trapped.



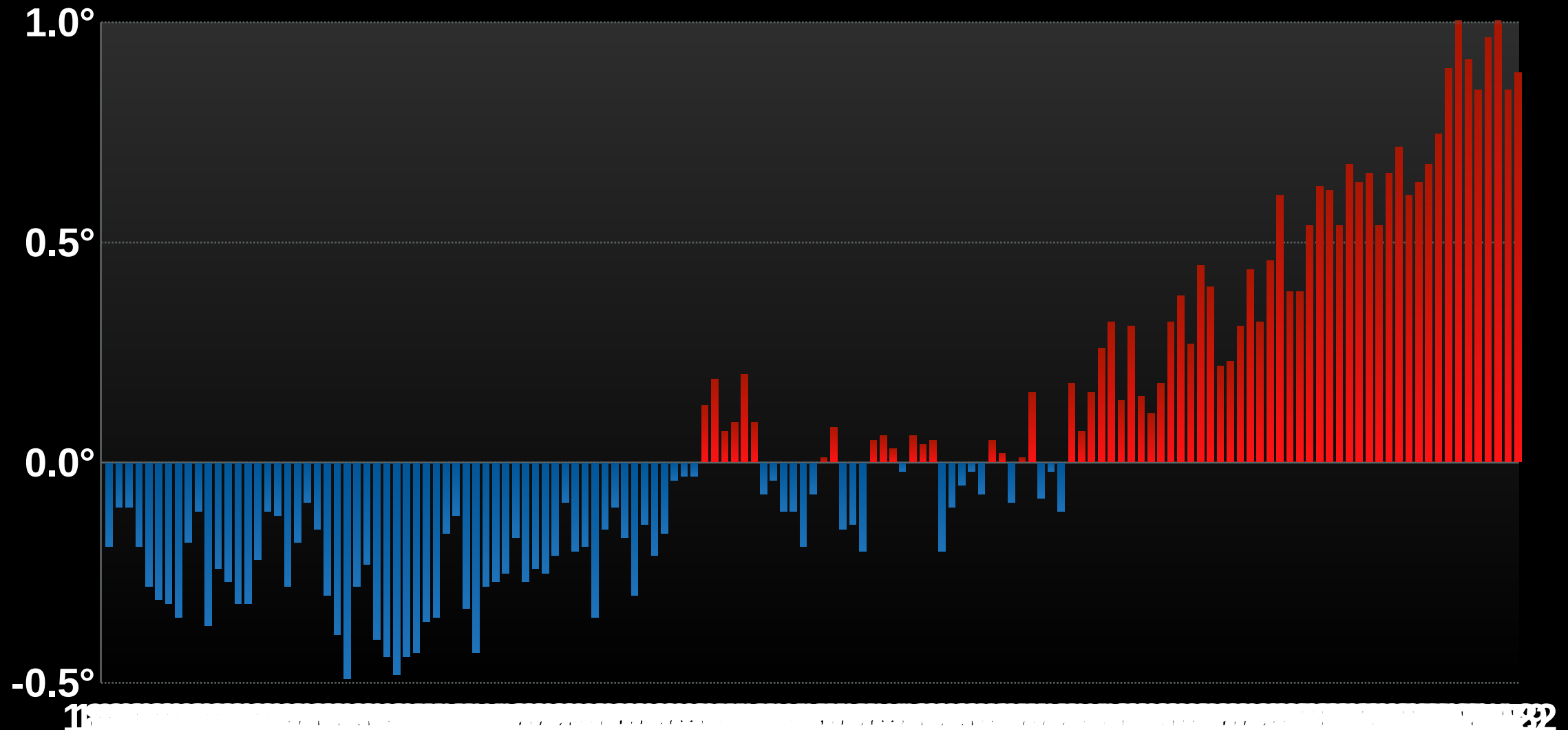
Small changes in atmospheric CO₂ have big effects

- CO₂ Makes Up Just 0.04% of Earth's Atmosphere.
- CO₂ concentration is currently 420 PPM. Scientists believe that 350 PPM is healthy target.



Global Surface Temperature – Departure from Average

1880 – 2022



The Climate Crisis

- Nature captures solar energy and stores carbon in the geosphere. By burning fossil fuels we are undoing nature's work and turning Planet Earth into a hot house.
- Climate tipping points will likely be crossed by 1.5°C to 2.0°C of warming.
- Nature requires biodiversity for ecosystems to fully function and sustain all forms of life. We are in the midst of a 6th mass extinction, an extinction we are causing by burning fossil fuels.
- Oceans are where life began. Marine phytoplankton produce half of the atmospheric oxygen and are threatened by ocean warming and acidification.

The Climate Crisis is Accelerating

- **Europe is warming up faster than any other continent, and the heat is deadly**, REBECCA HERSHER, NPR, April 22, 2024.
- **Ocean heat is driving a global coral bleaching event, and it could be the worst on record**, REBECCA WRIGHT, CNN, April 15, 2024.
- **Planet inched closer to 'scorched Earth' - 2023 global temps were the highest on record**, RAYMOND ZHONG AND KEITH COLLINS, New York Times, Jan. 10, 2024.
- **The Thwaites Glacier is expected to slide into the ocean in 5 years.**
- **Coral reefs will go extinct with 1.5-2.0 degrees Celsius of warming.**

Climate Solutions and Activism

What can a concerned citizen do about the climate issue?



Citizens' Climate Lobby

www.citizensclimatelobby.org

Personal Actions for a Healthy Planet

- Decide on a timeline to remove natural gas appliances from your home. (Gas stove, hot water heater, gas furnace.)
- Turn down the thermostat in the winter. (Average of 58 degrees Fahrenheit is livable.)
- Weatherize your home to save energy.
- Purchase an EV. Take public transit whenever possible.
- Put up solar panels.

Use Your Influence for a Healthy Planet

- Vote for the climate.
- Talk to your family, friends, and coworkers about the climate.
- Contact your local, state, and federal representatives about your climate concerns.
- Join a climate organization – Citizens Climate Lobby, The Climate Reality Project, Third Act, Climate Action California.
- Lobby for climate legislation.

California Is In the Room Where It Happens

- California is the 5th largest economy in the world and is leading the way on many climate policy issues.
- California has a super-majority of politicians that can get things done for the climate. But there are crosswinds that are slowing down progress.
- 40-million Californians can apply political pressure for urgent climate action.
- Our children are our future. We need to lead on the climate issue and not follow.

Thank you for attending!

Lisa Oliver

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Citizens' Climate Lobby – Silicon Valley East

Climate Reality Project – Silicon Valley



Citizens' Climate Lobby

www.citizensclimatelobby.org

References

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- Climate One Interview with Congressman Ro Khanna:
<https://www.climateone.org/audio/rep-ro-khanna-ai-misinformation-and-holding-big-oil-accountable>
- Climate One Interview with Stefan Rahmstorf:
<https://www.climateone.org/audio/stefan-rahmstorf-2022-schneider-award-winner>

References

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 - <https://www.ourplanet.com/en/video/how-to-save-our-planet>
 - [Our Planet | How to rewild our planet](#)
- Earth in the Balance, Ecology and the Human Spirit by Senator Al Gore.
- The Sixth Extinction: An Unnatural History by Elizabeth Kolbert.
- The Three Ages of Water. Prehistoric Past. Imperiled