



FOUNDATION FOR  
**CLIMATE**  
RESTORATION

# CLIMATE RESTORATION

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The Leading Edge of Climate Action

# How do you rate the climate crisis?



1-3

Not a problem  
Not concerned

4-7

Most likely a problem  
Somewhat concerned

8-10

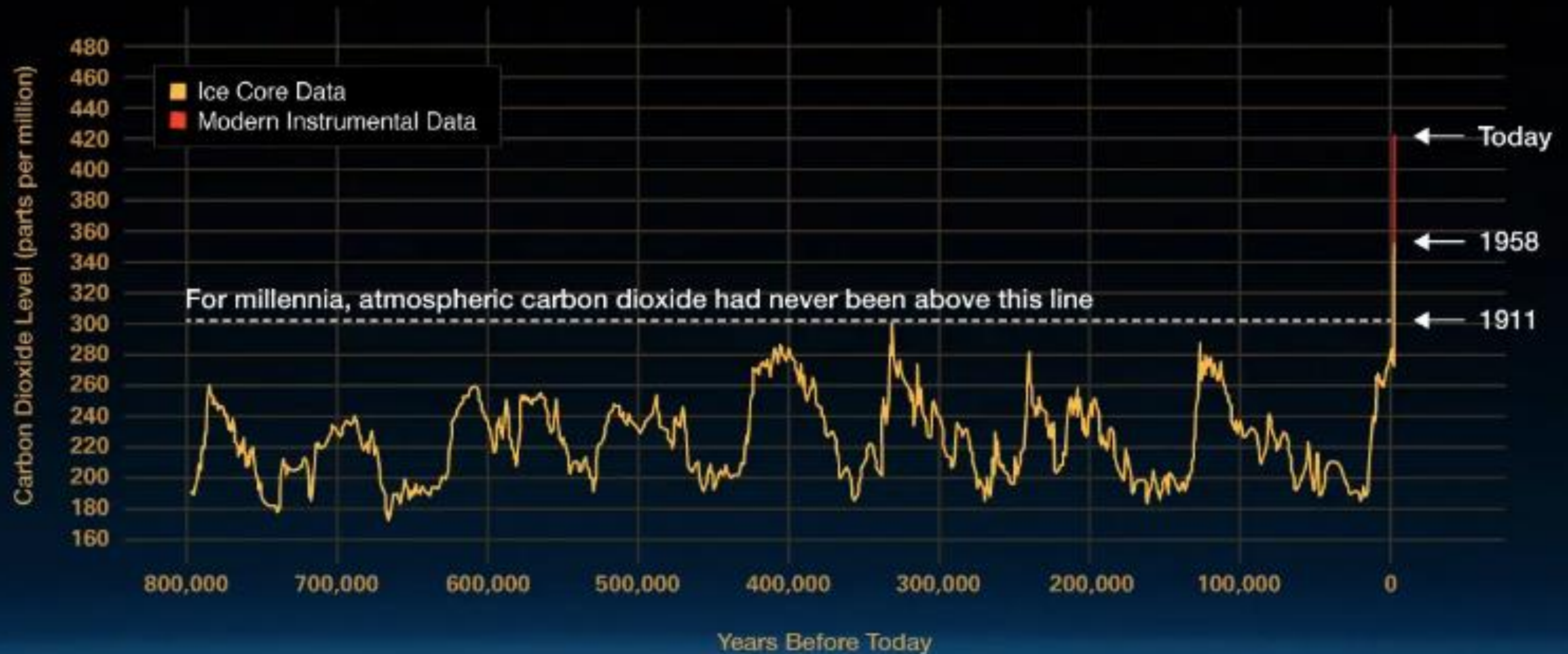
Huge problem  
Very concerned



# What is causing today's climate disruption?

- Most comes from everyday human activities: burning coal, gas, oil; destroying forests and other ecosystems.
- Burning fuel and forests releases "greenhouse gases" especially carbon dioxide (CO<sub>2</sub>) and methane
- They act like a blanket over the Earth, holding in more heat from the sun. Temperatures rise.
- Extreme events become more frequent and more intense: droughts, floods, hurricanes and wildfires, etc.

# DEEP TIME TRAVEL: 800,000 YEARS OF CO<sub>2</sub> LEVELS





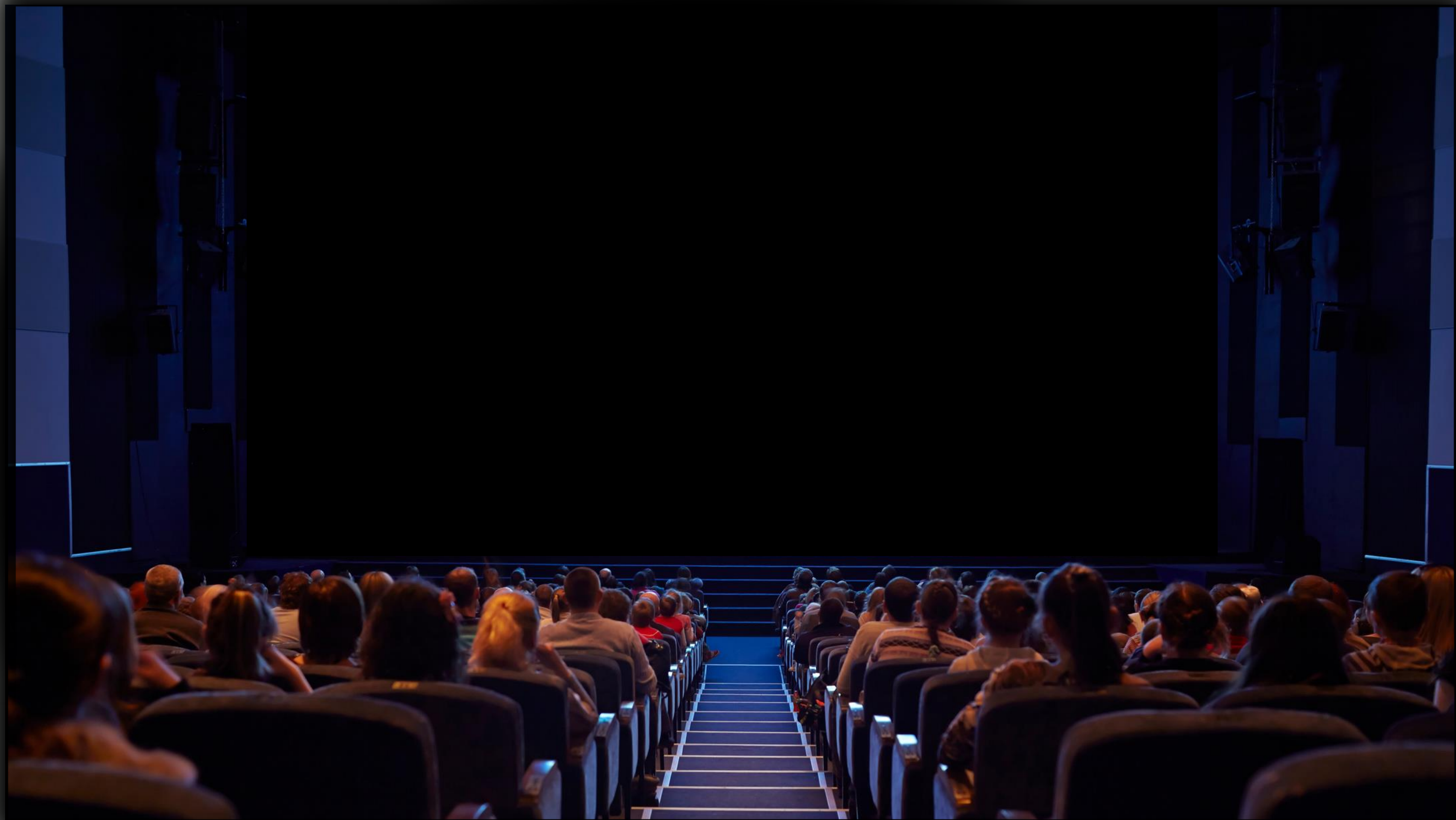
# Climate action today: Aiming for “Net zero”

- Net-zero = not adding any MORE CO<sub>2</sub> pollution. Mostly by using more clean energy and less fossil fuel
- Net zero “balances out” new CO<sub>2</sub> emissions by doing things that remove CO<sub>2</sub> from the air. E.g. planting trees, “CDR” - carbon dioxide removal-technology, more plants in the ocean....
- Net zero is important. BUT if we achieve only net-zero by 2050—CO<sub>2</sub> will be 50 percent higher than humans have ever survived long term
- Net zero does not address the legacy load of CO<sub>2</sub> already in the air, built up over the last 200 years



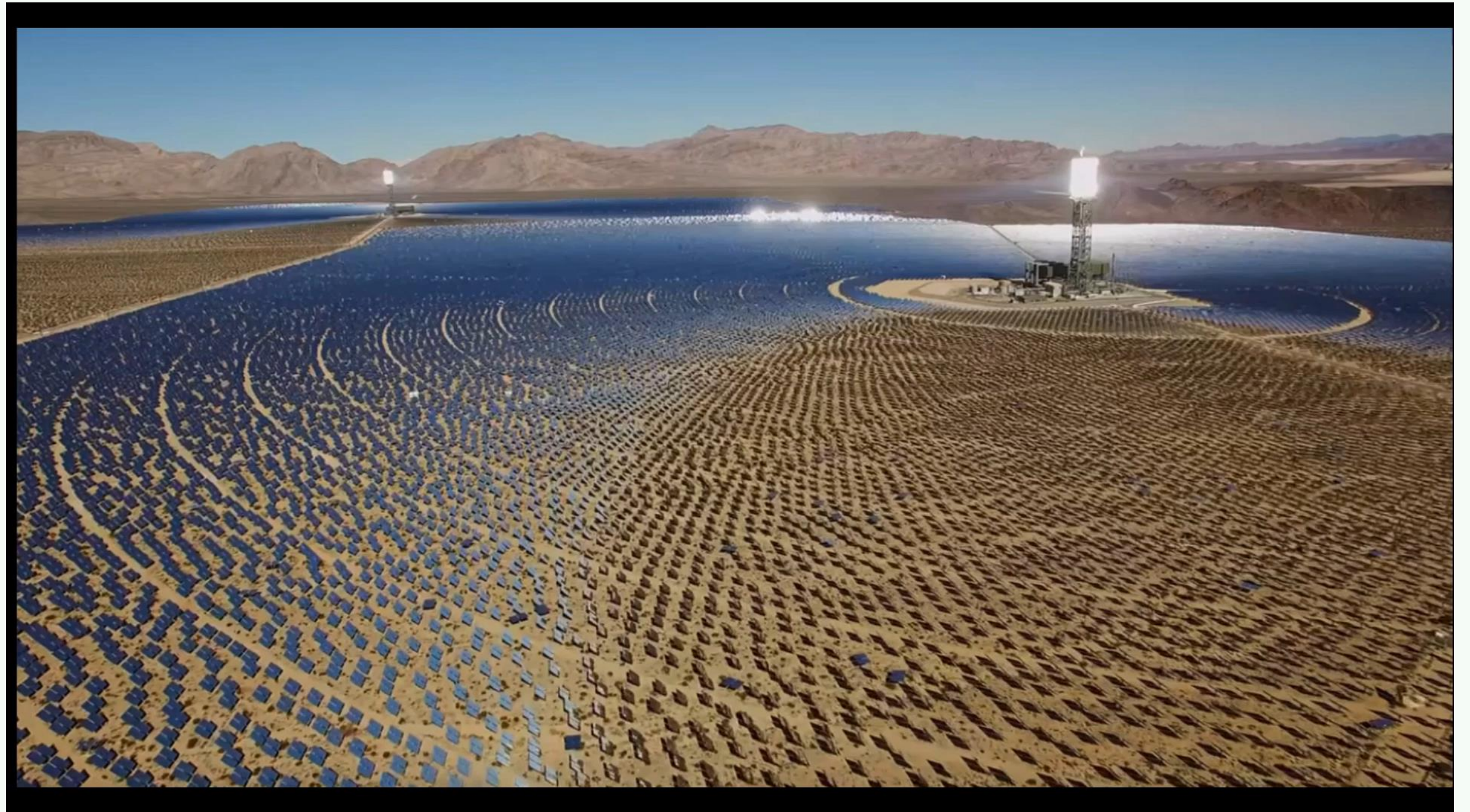
# Climate restoration vs. net-zero alone

- Net zero was an appropriate goal decades ago. But it's too late for that to work now.
- 1 trillion tons: the amount of CO<sub>2</sub> already in the air.
- This “legacy load” of CO<sub>2</sub> causes more than 95 percent of climate chaos
- The legacy load is what climate restoration addresses—to restore a safe climate by 2050



# What is climate restoration?

- Restoring a safe climate—one that humans have survived over the long term.
- The proven, safe climate for humanity has a CO<sub>2</sub> level below 300 ppm.





# What is the Foundation for Climate Restoration?

## **Our Vision:**

By 2030: The world will adopt restoration to a safe climate - less than 300 ppm by 2050 - as the goal of climate action.

By 2050: A safe climate will be restored. CO2 levels will be less than 300 ppm—a level proven safe for humanity.

## **Our Mission:**

Generate the social license and political will to restore the climate by 2050.

This will allow for the discovery and funding of scalable solutions that can remove the legacy CO2 from the atmosphere.

## **Our Approach:**

Education for citizens and policy makers. Letters to the editor and other media campaigns. Building a youth leadership initiative for climate restoration.



# What makes a climate-restoration solution?

- **Permanence** - CO<sub>2</sub> stored for at least 100 years
- **Scalability** - capable of removing and storing 20 - 60 billion tons a year
- **Financeability** - can be financed with little to no government funding (since that is uncertain)



# We think best-bet climate restoration solutions today follow nature's lead

## **Ocean Iron Fertilization:**

- Promoting photosynthesis in the ocean
- Biomimicry: Nature does this before ice ages. We can replicate; safe if done right, and restores fish and other marine life
- Inexpensive: National Academy of sciences says 1-2 cents a ton CO<sub>2</sub>
- Scalable: Appears able to scale up to 60 billion tons a year
- Needs less than 1 percent of the ocean
- Bad rap from previous expeditions and disinformation: needs new pilot projects to secure social license



# We think best-bet climate restoration solutions today follow nature's lead

## **Synthetic limestone**

- Nature stores most carbon on earth in limestone—from shells, bones of ocean life
- Limestone is nearly half CO<sub>2</sub> by weight
- Biomimicry—synthetic limestone made like oysters, corals make their shells
- Makes uniform, high-quality building, paving materials
- We can pave and build with CO<sub>2</sub>! Already in use in San Francisco International Airport
- Scaleable—needs financing for more manufacturing plants



# We think best-bet climate restoration solutions today follow nature's lead

## **Methane oxidation**

- Inexpensive: Also biomimicry. Nature oxidizes methane in simple chemical process in sunlight over ocean. We can replicate, to double the rate.
- Scalable: Big impact in a small area, mid-ocean
- Immediate Impact: powerful and swift because methane molecules trap about 100 times more heat than CO<sub>2</sub>.
- In demonstration phase.



# Other climate solutions

## **Regenerative Agriculture**

- Better farming practices put more carbon into plants and in the soil
- Relatively inexpensive
- Safe and benefits soil, food security, ecosystems, livelihoods, and health
- Theoretically scalable but requires behavior change from billions of people.



# Other climate solutions

## Industrial CO2 removal (CDR)

- E.g. Direct Air Capture (DAC), Heirloom, several types of ocean CDR, numerous tech startups funded by the IRA and other government programs
- Expensive: Received billions in government and venture-capital funding over a decade; lots of attention but little CO2 removed
- Not scalable: \$600 - \$1000 / ton CO2 captured X 1 trillion! = the world economy.
  - If 90% cheaper — \$100 / ton—still thousands of times more expensive than biomimicry processes
- A burgeoning industry: producing jobs and profits, but little effect on the legacy CO2 load

# Want to help restore a safe climate?

- Contact the Foundation for Climate Restoration!
  - **Reach out to us at [info@F4CR.org](mailto:info@F4CR.org)**
- Request a presentation for your university or organization
- [Join the community](#) and get training in climate-restoration outreach— including letters to the editor, educating policy makers, giving presentations
- Share climate optimism: We *can* restore our climate for future generations.

# Want to learn more?

- Go to [F4CR.org](https://F4CR.org) Sign up for events and updates
- [PeterFiekowsky.com](https://PeterFiekowsky.com) for the latest research
- [ClimateRestoration.substack.com](https://ClimateRestoration.substack.com) for updates
- Read the book: Climate Restoration—The Only Future That Will Sustain the Human Race



# **As a messenger of Climate Restoration, we are in action:**

- Developing your personal climate story to share
- Being trained to lead presentations and leading them
- Interacting with media and social media platforms
- Writing letters to the editor
- Interacting with blogs, newsletters, and more
- Tabling at local events to get the word out
- Attending town halls or other events

Contact [Melanie@f4cr.org](mailto:Melanie@f4cr.org) or [Joan@f4cr.org](mailto:Joan@f4cr.org) for a conversation and to find out more

# Join the Movement!

Be a Part of Spreading the word. We are committed to sharing this positive message - We Can Restore our Climate!

## **We are glad to schedule presentations & speakers for:**

- Organizations & Groups
- Universities & Classrooms
- Businesses
- Clubs

## **Become a Messenger for Restoring Our Climate:**

- Attend weekly Climate Restoration Community calls, to learn, share & be in action with others to spread the word
- Attend monthly Founders Series sessions on a variety of topics
- Share resources with family, friends and other groups
- Share our youth curriculum with your children
- Join or start a local chapter to be in action together locally

Contact [Melanie@f4cr.org](mailto:Melanie@f4cr.org) or [Joan@f4cr.org](mailto:Joan@f4cr.org) for a conversation and to find out more



## JOIN US IN MAKING A DIFFERENCE

Thank you for your attention and interest in our mission towards climate restoration. **If you're inspired by what you've heard today and wish to contribute to the cause, please scan the QR code to donate.** Every contribution helps us move closer to a sustainable and healthy planet.

Together, we can restore our climate.





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