

# The Science of Carbon Dioxide Removal

## What Is It and Is It Needed?

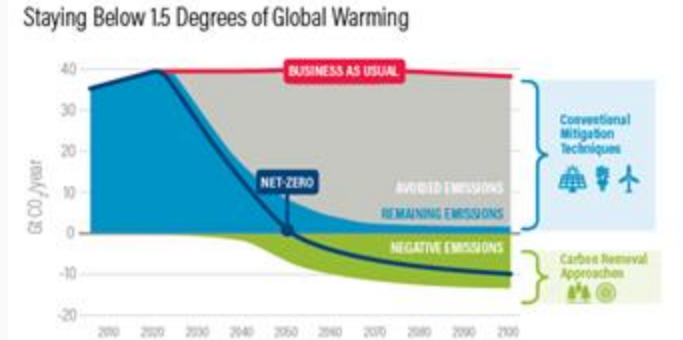
Part 1 of a 6-part webinar series on Carbon Dioxide Removal

Friday, September 20th, 10:00-11:30 am PT



# Why Carbon Dioxide Removal (CDR)?

- IPCC 1.5C: cut emissions in half by 2030 *AND* drawdown 100-1,000 GtCO<sub>2</sub>; CDR “inevitable”
- CA’s AB 1279 (Muratsuchi, 2022) set state goal of carbon neutrality by 2045, with at least 85% emission reductions; leaving up to 15% CDR
- California’s 2022 Scoping Plan sets a goal of 7 MMT of CDR/yr by 2030 and 75 MMT/yr by 2045



<https://blog.cloudflare.com/historical-emissions-offsets-and-scope-3-sneak-preview/>

# Why CDR? *(continued)*

- 4 CA-based projects rec'd grants from DOE's DAC Hubs program
- With many CDR projects in process, some in the permitting process, communities must have a critical role re: if/how these projects get developed
- Many CDR pathways provide necessary co-benefits for adaptation, such as biodiversity, food and water security, clean air and water and more



# Our shared CDR principles

- 1) Removing past climate pollution from the atmosphere is essential to stabilizing our climate
- 2) We must accelerate cutting GHG emissions and phasing-out fossil fuels
- 3) CDR is not a substitute for direct emission reductions
- 4) CDR projects should be community-centered and designed with input from communities
- 5) CDR projects must not exacerbate existing pollution and other environmental problems
- 6) Nature-based CDR is critical with its many co-benefits



# Who's in the room?

**Quick Poll**



**Poll: Choose one statement that best describes where you are on Carbon Dioxide Removal (CDR) as a climate solution:**

- a) I am unfamiliar with and generally curious about CDR**
- b) I have a general understanding but wish to know more about CDR to help me make informed choices in my work/community**
- c) I have a deep understanding of CDR and wish to dig into the nuances to help me make informed choices in my work/community**
- d) I am concerned about CDR impacts and have questions**

# CDR Webinar Series- next up

Webinar #2: October 18  
10-11:30am PT

CDR Approaches:  
Air, Land, Rock, Ocean



# Speakers



Dr. Marcius Extavour  
*Ode*



Dr. Kimberley Mayfield  
*Lawrence Livermore Natl. Lab*



Katie Lebling  
*World Resources Institute*

