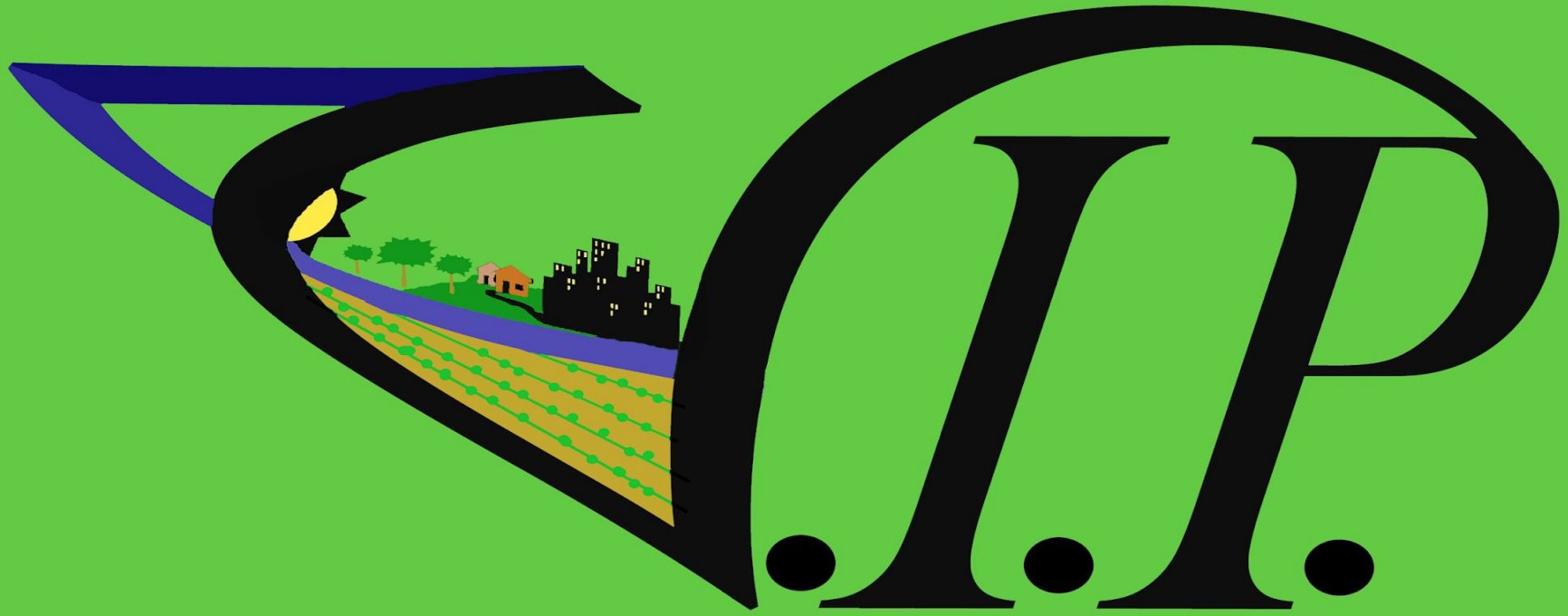
California Environmental Justice Coalition

CEJC

For Solidarity!

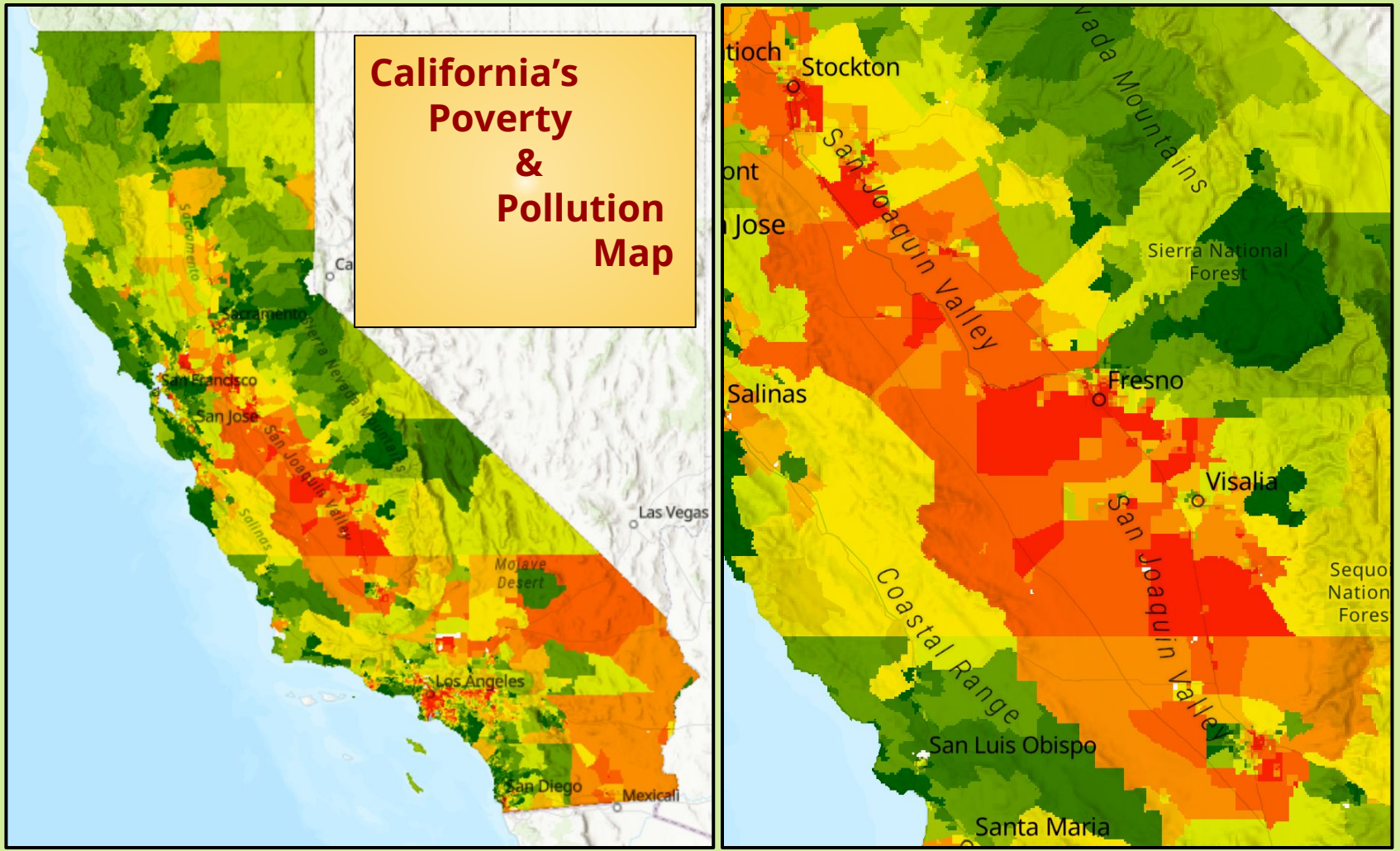
¡Por Solidaridad!



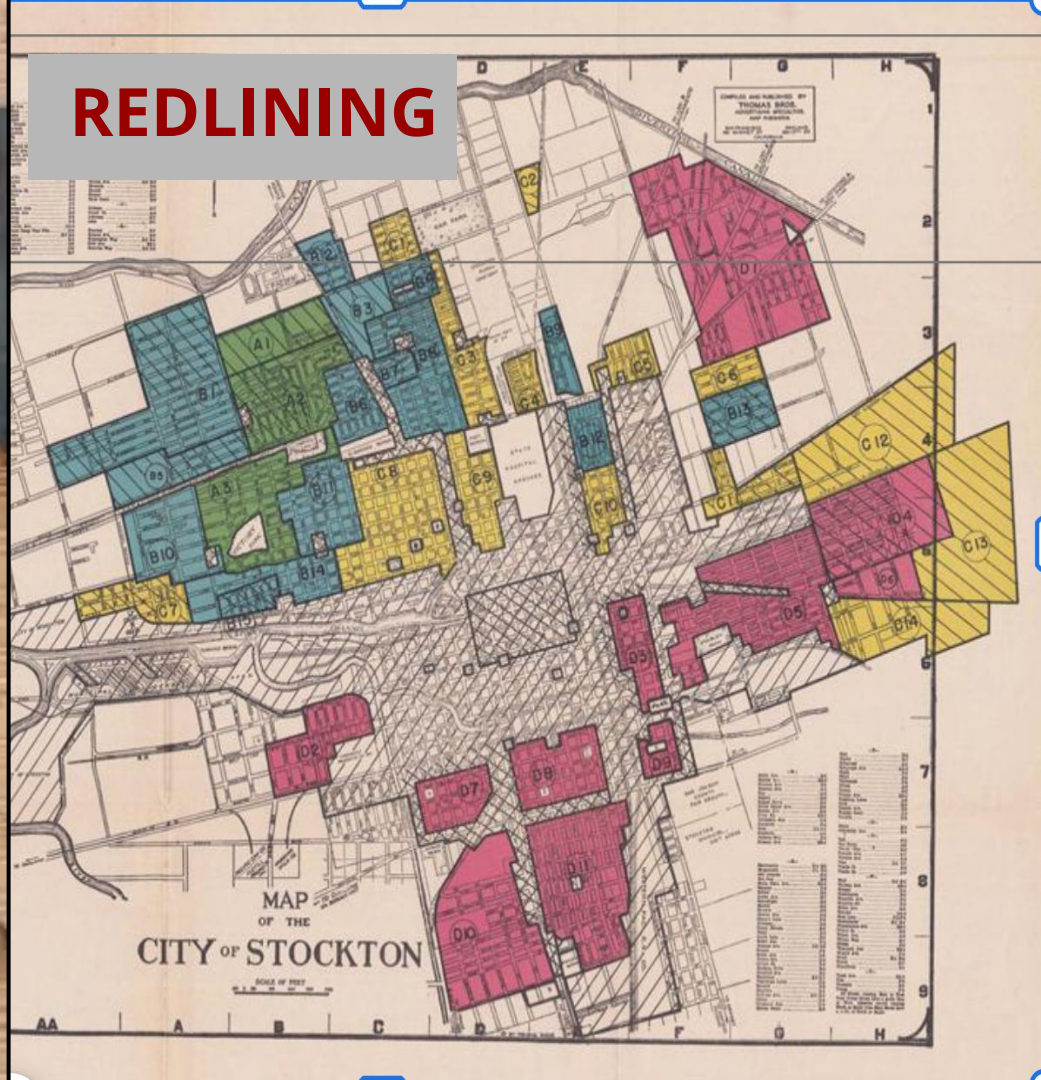
VALLEY IMPROVEMENT PROJECTS

FOR SOCIAL & ENVIRONMENTAL JUSTICE

California's Poverty & Pollution Map



HOMESTEAD ACT



Urban Forestry in Richmond California
A World of Beauty and Benefits
Constrained by Carbon Calculations

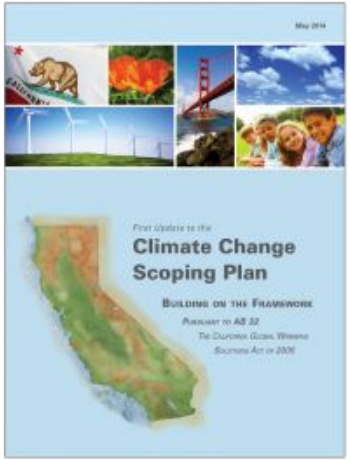

A society grows great when old men plant trees whose shade they know they shall never sit in.
~ Greek Proverb

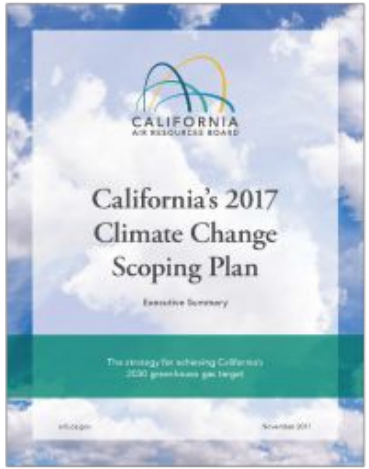
AB32

Global Warming Solutions Act, 2006

Required the State to Set Carbon Goals…apparently to the exclusion of common sense they focused on new unproven ideas for the 1st 2 decades.

Required the State to Establish an Environmental Justice Advisory Committee [EJAC]





?!

2008 2013 2017 2022 2027

20 years! of Cap & Trade Setting Carbon Targets For Cars and Factories Neglecting Natural & working Lands That's 90% of CA!

2022 Scoping Plan (**16yrs IN!**) 1st Scoping Plan to Include Preliminary CO2 Calculations for Natural & Working Lands & Acknowledge Short Lived Climate Pollutants

EJAC established as a permanent advisory body by CARB only to be summarily dismissed by the CARB Executive Office during this current C&T reauthorization campaign.

AB1757

Natural & Working Lands *Carbon Targets*

Acknowledged that CARB had neglected Nature Based Solutions

Established Expert Advisory Committee within CNRA to set Carbon Targets for NWL

Committee Finds Nature Based Solutions are More Efficient w/ CO_2 than any other sector.

Recommends Immediate Geographic Sequencing of NBS Strategies to maximize Results

CALIFORNIA'S NATURAL AND WORKING LANDS

Forest

Shrubland/
Chaparral

Grasslands

Wetlands

Croplands

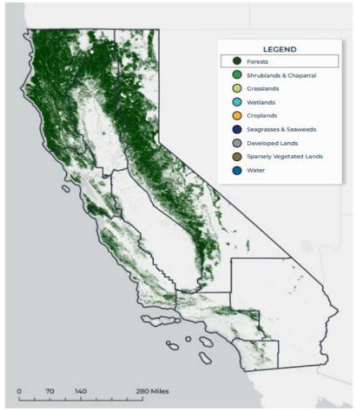
Sparsely Vegetated Lands

Seagrasses & Seaweeds

Developed Lands

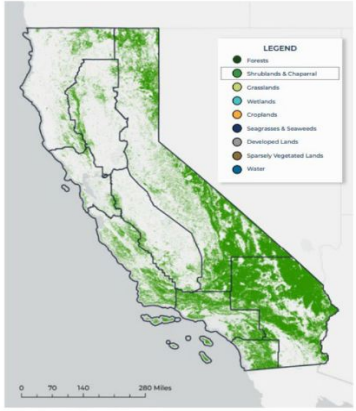
STATEWIDE LAND COVER MAP

FORESTS



STATEWIDE LAND COVER MAP

SHRUBLANDS AND CHAPARRAL



STATEWIDE LAND COVER MAP

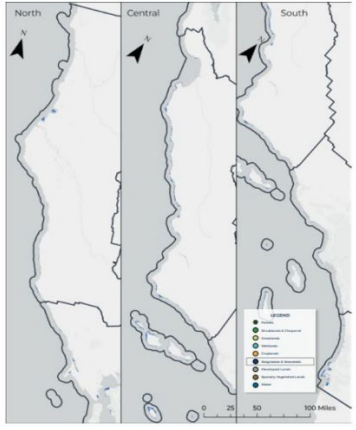
CROPLANDS

STATEWIDE LAND COVER MAP

WETLANDS

STATEWIDE LAND COVER MAP

SEAGRASSES AND SEAWEEDS



STATEWIDE LAND COVER MAP

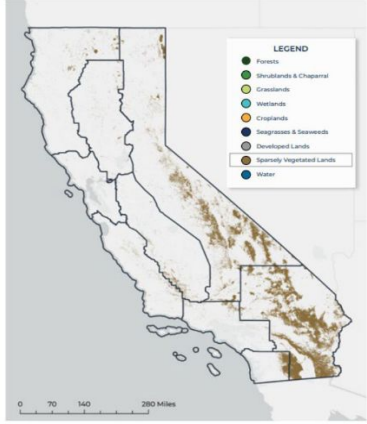
DEVELOPED LANDS

STATEWIDE LAND COVER MAP

GRASSLANDS

STATEWIDE LAND COVER MAP

SPARSELY VEGETATED LANDS



Good Scientists Identified Critical Priorities

- **Social & Cultural Equity:** Prioritizing "Just Transitions" that include tribal engagement, workforce development in underserved communities, and increased technical assistance.

- **Ecosystem Function:** Focus on reducing land conversion to development, minimizing soil disturbance, and using climate-resilient native species for restoration.

- **Climate Co-benefits:** Actions are designed to simultaneously reduce risks from catastrophic wildfires, floods, and biodiversity loss while enhancing water security.

Risk Management Benefits

Investments in NWL will:

- substantially lower CO2 emissions
- significantly address climate risks such as catastrophic fire, floods, and biodiversity losses.

Vulnerable Communuities

Investments in NWL will:

- better serve the state than investments elsewhere by improving the resilience of California's most vulnerable communities, both urban and rural.

- Covid Should have taught us that inequality is dangerous.

Water

Investments in NWL will:

- stabilize water security across the state.
  - Water instability is its own catastrophic climate risk factor

Key: Scale and the Urgency

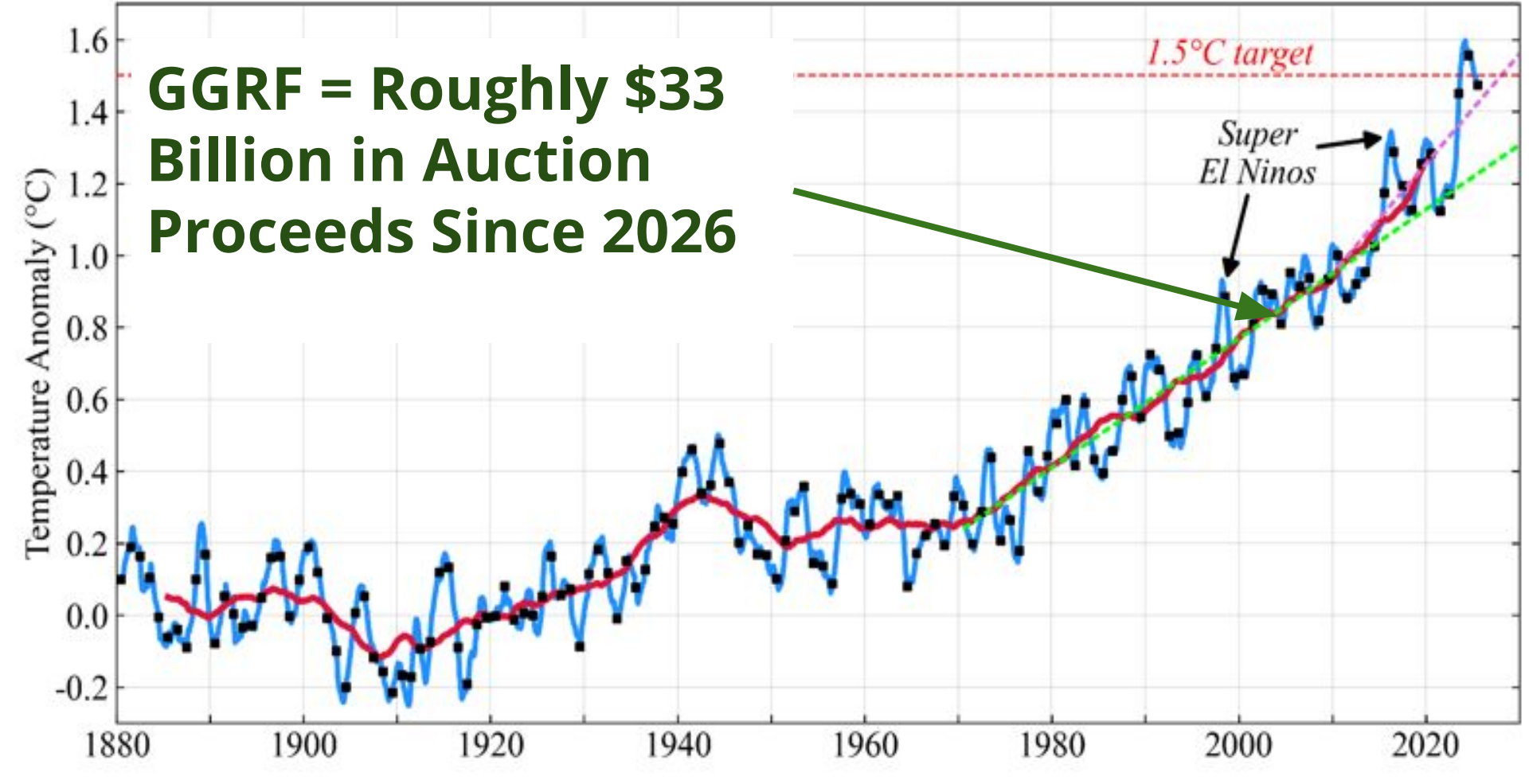
Investment in the NWL sector should:

- Match CO2 reduction potential,
- increasing to at least $10 billion over the next 5 years.
- I'll add:
  - Not Have required a bond (Prop 4)
  - Already have 20years underway

The best time to plant a tree was 20 years ago. The second best time is now.

~Chinese Proverb

Fig. 1. Global surface temperature (relative to 1880-1920 base period).[1]

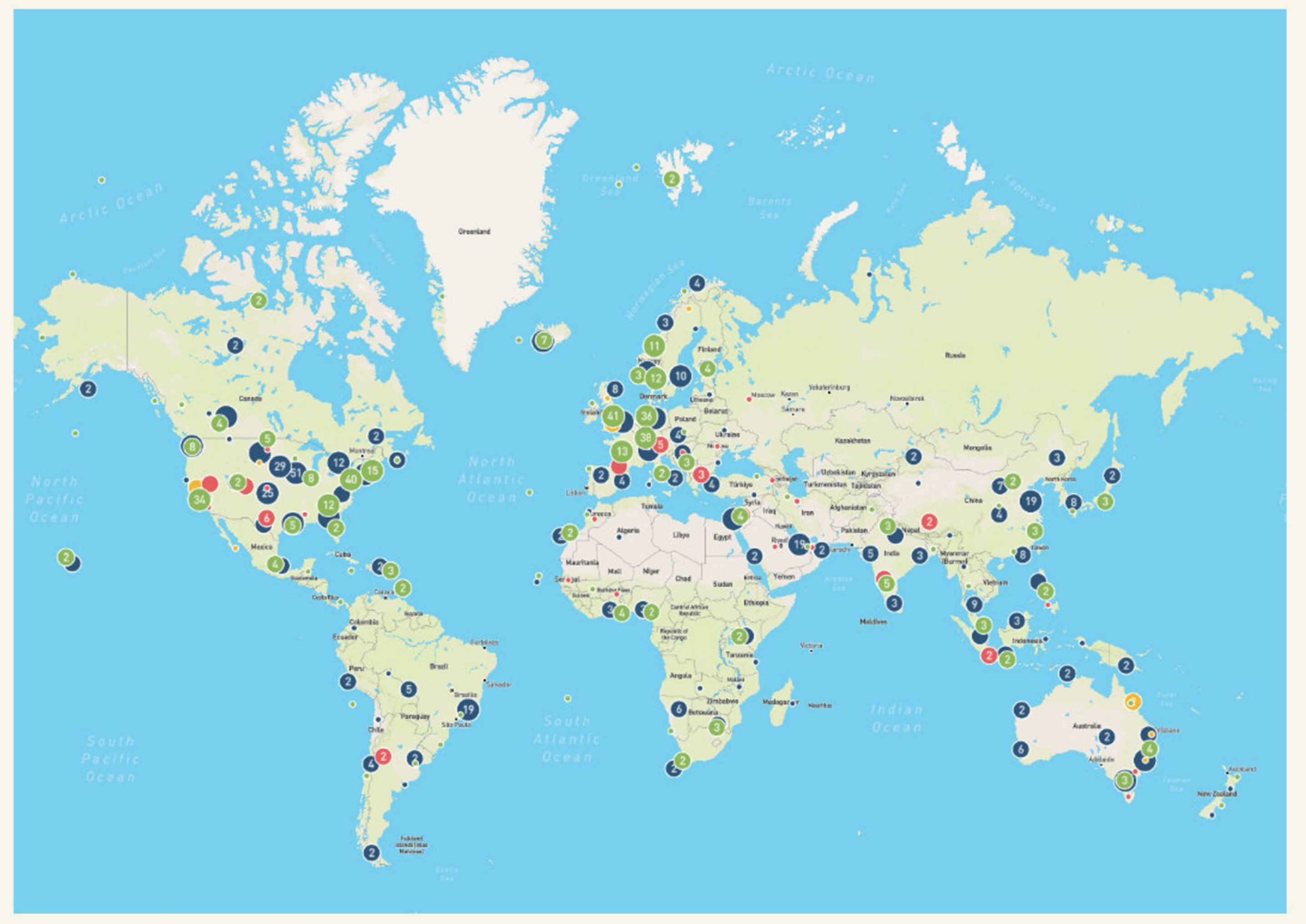


Time Tested Solutions Continue to Be Sidelined

In Favor of False Solutions

Here's some sillier one's you may not have heard about!

And they sound like Nature!


Arctic Ocean
Arctic Ocean
Greenland
Russia
Canada
North Pacific Ocean
North Atlantic Ocean
South Pacific Ocean
South Atlantic Ocean
Indian Ocean
Mexico
Brazil
Algeria
Libya
Egypt
Chad
Niger
Mali
Mauritania
Sudan
Ethiopia
Angola
Kazakhstan
Mongolia
China
India
Iran
Australia
New Zealand

ATMOSPHERE

STRATOSPHERIC AEROSOL INJECTION (SAI)

Read more: geoengineeringmonitor.org/technologies/marine-cloud-brightening

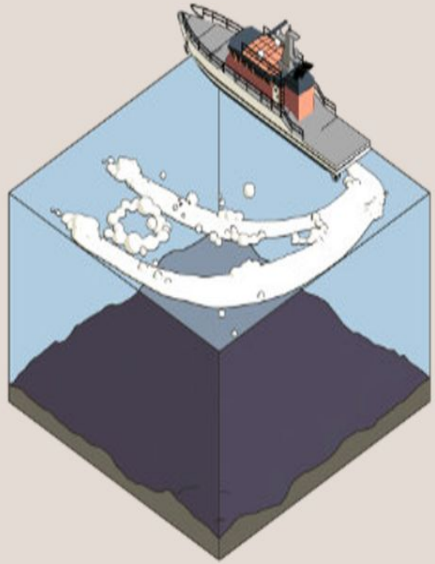
SAI involves praying sulfur dioxide and other aerosols into the stratosphere to partially block the sun. Proposals range from spraying reflective particles, such as sulfur dioxides or finely powdered salt or calcium carbonate from specialised aircraft, shooting particles from artillery guns, or using large hoses to reach high altitudes. Inherently unpredictable, SAI could result in an unevenly altered climate system, disrupting the monsoon and causing droughts. So-called moderate scenarios envisage deployment over hundreds of years; should the technology ever be paused or stopped, temperatures would suddenly spiral in what's known as termination shock.

OCEANS

MICROBUBBLES AND SEA FOAM (ALSO A FORM OF SAM)

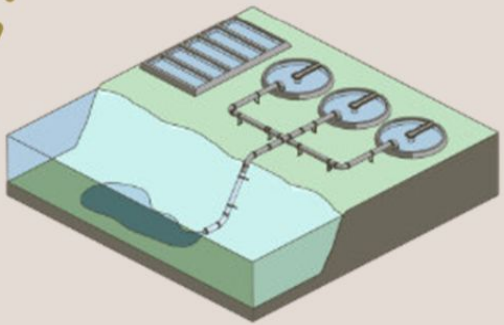
Read more: geoengineeringmonitor.org/technologies/surface-albedo-modification

Injecting tiny air bubbles or spraying seafoam to reflect light away from the oceans. Proposals to produce long-lasting bubbles combine two different approaches: ships are equipped with technology to produce large quantities of microbubbles, then stabilized by the addition of chemicals. These chemicals could impact marine food chains and planetary water systems.



OCEAN ALKALINITY ENHANCEMENT (OAE)

Read more: geoengineeringmonitor.org/technologies/ocean-alkalinity-enhancement

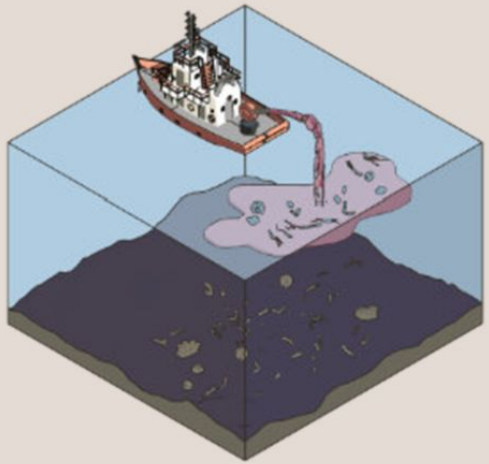


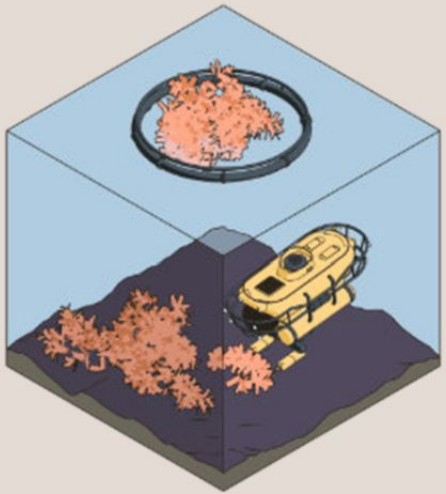
OAE seeks to make seawater more alkaline so that it can absorb more C02 from the atmosphere. OAE involves depositing several gigatonnes of ground-up alkaline minerals into the ocean or onto beaches. These minerals include limestone, olivine, magnesite, brucite or chemicals such as sodium hydroxide (hydroxide is a toxic, corrosive substance, commonly known as lye/caustic soda) and potassium hydroxide (a known hazardous substance). Other approaches are electrochemical processes that extract seawater from the ocean and return it in a more alkaline state, or remove CO_2 from seawater to increase the ocean's ability to absorb atmospheric CO_2. Increased pH from OAE would have harmful short-term impacts on marine life in surface waters, but particles sinking to deeper waters could alter microbial communities and affect the food supply for deep-sea life. This technique would take hundreds of years to monitor, and hence the permanence of this approach is unprovable.

OCEAN FERTILIZATION (OF)

Read More: geoengineeringmonitor.org/technologies/ocean-fertilisation

OF aims to stimulate marine plant growth to try to draw down CO_2 from the atmosphere. It involves dumping powdered iron sulphate or other nutrients like urea into areas of the ocean with low biological productivity in order to stimulate phytoplankton growth. The phytoplankton grows and falls to the ocean floor with stored sequestered carbon, which can have negative impacts on the marine food web, artisanal fishers, algae cultivators and the livelihoods of coastal communities generally.





SEAWEED FARMING & BIOMASS SINKING

Read more: geoengineeringmonitor.org/technologies/seaweed-farming-and-biomass-sinking

This involves growing seaweed and other types of biomass at an industrial scale to capture carbon and sinking it in the deep ocean, using it for products, or burying it on land. It is claimed that, when the seaweed sinks in the deep ocean, the captured carbon will remain locked on the seafloor for hundreds of years. Others say biomass can be used to create products like biofuels, fertilisers and animal feed. This technique has the potential to create low-oxygen ocean conditions and mass die-off of seafloor organisms.

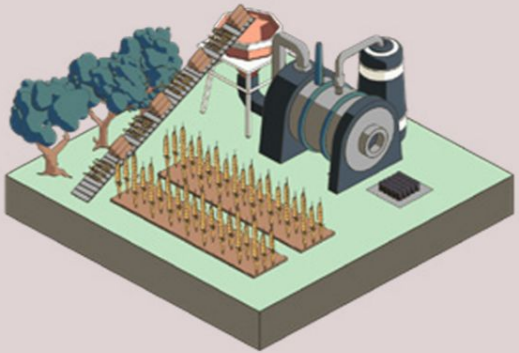
SURFACE ALBEDO MODIFICATION (SAM) & ARCTIC ICE MANAGEMENT

Read more: geoengineeringmonitor.org/technologies/surface-albedo-modification

Modifying the surface of the oceans and managing arctic ice and glaciers in order to reflect more sunlight back into space. Proposals include scattering megatons of Silica microsphere particles across glacial areas, pumping megatonnes of seawater onto glacier surfaces, injecting tiny air microbubbles or spraying seafoam to reflect light away from the oceans. This implies significant risks for biodiversity and people's livelihoods.

BIOCHAR AND BIO-OIL SEQUESTRATION

Read more at https://www.geoengineeringmonitor.org/technologies/biochar



Biochar is essentially a new name for charcoal, and is made by pyrolyzing biomass at high temperatures in low-oxygen conditions, producing a carbon-rich solid that can be mixed into soil or used elsewhere, where proponents claim that it will remain stored for many years. However, there is little conclusive evidence to support this and, similarly, some studies show that rather than benefiting soil health, adding biochar can introduce toxic and harmful substances. On top of this, carbon dioxide emissions from pyrolysis are ignored due to flawed carbon accounting methodologies which assume that biomass is renewable — as is the case with BECCS. Utilising or sequestering bio-oil, a by-product of the process, is also being commercialised as carbon removal.

Screenshot from A technofix for the climate? Land-based geoengineering (BECCS) from Youtube

BIOMASS BURIAL AND GEOLOGICAL STORAGE

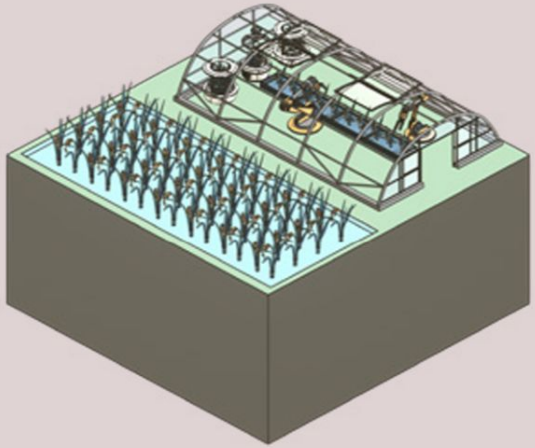
Learn more from https://www.wri.org/insights/biomass-carbon-removal-storage-companies-fight-climate-change

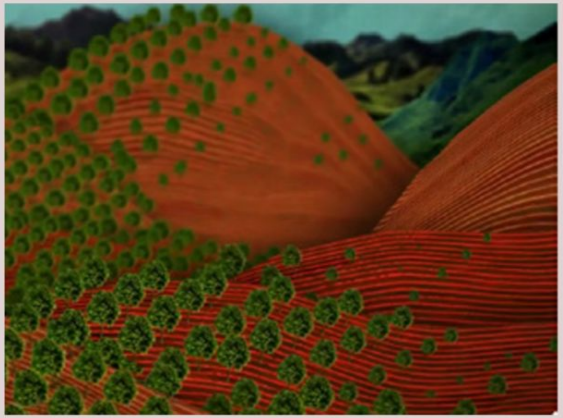
Biomass burial, or “wood vaults”, involves storing organic matter like wood, agricultural waste, or seaweed in low-oxygen environments to slow decomposition. Variants include burial in mounds, quarries, mines, underwater, or frozen conditions. Biomass geological storage injects bioslurries—e.g., sewage or paper sludge—deeper underground, often using high-pressure techniques like fracking, as practiced by companies such as Vaulted Deep.

GENETICALLY ENGINEERED (GE) TREES AND PLANTS

Read more about genetically engineered (GE) trees and a campaign to stop them at https://globaljusticeecology.org/stop-ge-trees/

Some proposals aim to engineer trees and crops for faster growth, herbicide tolerance, or delayed decomposition to absorb more CO_2. Companies like Living Carbon market GE eucalyptus and poplar as carbon removal tools. However, these approaches carry risks of ecological disruption, contamination, long-term unknown effects, and corporate control; potentially harming forests, soils, water systems, biodiversity, and Indigenous Peoples.

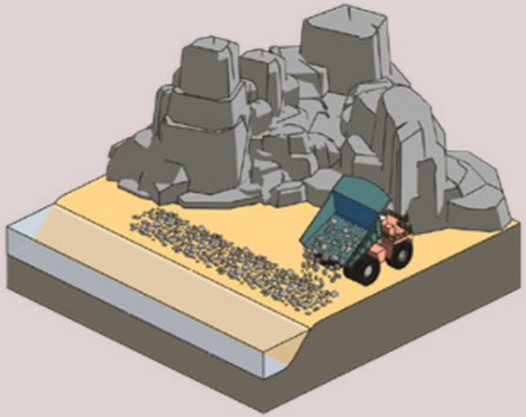




Screenshot from A technofix for the climate? Land-based geoengineering (BECCS) from Youtube

INDUSTRIAL AFFORESTATION AND MONOCULTURE PLANTATIONS

While not strictly geoengineering, industrial plantations dominate current carbon removal efforts. Afforestation/reforestation with plantations[2] would also be required to supply sufficient feedstock for BECCS, biochar, and biomass burial at scale, with the added incentive of selling carbon credits based on the plantations themselves. This practice often rebrands industrial plantations as “carbon sinks”, misleadingly framing them as climate solutions. Large-scale monocultures of non-native species (e.g., eucalyptus or pine) replace biodiverse ecosystems, deplete water resources, increase fire risk, and perpetuate social inequities.



ENHANCED WEATHERING (EW)

Read more about genetically engineered (GE) trees and a campaign to stop them at https://globaljusticeecology.org/stop-ge-trees/

Enhanced Weathering (EW) techniques aim to remove carbon dioxide by spreading large quantities of finely ground rock minerals across extensive land areas, beaches, or the sea surface, mimicking and accelerating the natural weathering processes of silicate and carbonate rocks which chemically react with and absorb carbon dioxide from the atmosphere.

1. LAND GRABS AND DISPLACEMENT

Land and coastal areas in the Global South and Arctic are already under intense pressure. Carbon dioxide removal (CDR), particularly land-based methods like afforestation, reforestation, and Bioenergy with Carbon Capture and Storage (BECCS), at the scale needed to impact climate change would worsen land grabs and human rights abuses[3], with the most marginalized communities and under-represented groups such as women and youth bearing the greatest burden. Geoengineering proposals, particularly land-based CDR, would amplify these threats to people and biodiversity.

2. DRIVE BIODIVERSITY LOSS

Land-based geoengineering risks severe biodiversity loss[4] by driving habitat destruction, water scarcity, and ecosystem degradation. Large-scale BECCS alone could require land twice the size of current croplands, replacing diverse ecosystems with monoculture plantations. The use of fast-growing species like genetically engineered eucalyptus further harms biodiversity, relying heavily on water and herbicides and creating uniform landscapes.

3. ENABLE AND REINFORCE CORPORATE CONTROL AND CARBON MARKETS

Carbon markets fuel the expansion of land-based geoengineering[5], allowing companies to profit from speculative carbon offsets. These schemes act as a "permit to pollute", misleadingly suggesting that market mechanisms can solve the climate crisis. Fossil fuel and other polluting industries can exploit geoengineering, including land-based geoengineering, to monetize offsets while avoiding real emissions reductions.

Read this letter of concern[6] by Demand Climate Justice members

4. DISTRACT FROM FOSSIL FUEL PHASE-OUT

The belief that geoengineering can "fix" climate change gives governments and industries an excuse to delay urgent action[7]. Focusing resources on experimental technologies risks diverting funding, research, and attention from genuine, rights-based mitigation and adaptation measures that tackle the root causes of the crisis.

HOME ALLIANCE

CONNECT WITH US

coordinator@handsoffmotherearth.org

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Hands off Mother Earth (HOME) Alliance

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VISIT OUR WEBSITE

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SCAN TO LEARN MORE

Let's Get Back to Basics

END

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