



2023 Carbon Capture, Use and Storage (CCUS) Platform - Summary

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Engineered carbon capture, use, and storage (CCUS) is being used to delay meaningful climate action and increases our investments in fossil fuel and other hydrocarbon infrastructure at a time when we should be investing in zero emission energy and phasing out fuels that continue to drive the climate crisis and poison frontline communities. We are part of a growing chorus of advocates and communities around the United States and across the globe condemning CCUS as an obstacle, not a vehicle, to a climate-safe planet, one that perpetuates fossil fuel dominance and exacerbates harms to frontline communities. While we urge policy makers to change course away from CCUS altogether and to pursue bolder, more justice-oriented direct emissions reductions, we feel simultaneously compelled to limit the harms and risks of CCUS to the communities we represent as long as CCUS remains on the table.

The 2022 legislative session realized several of our platform's policy protections, but also initiated reforms to speed investment in CCUS. Given the clear and substantial evidence that CCUS has a track record of failure as a GHG reduction strategy and presents significant risk to the health and safety of Californians, especially already pollution-burdened communities, we urge any state agency overseeing the deployment of CCUS in California to use its discretion to reject project applications outright. Where state agencies are compelled to consider project applications, we urge that this list of common-sense policy protections necessary for CCUS be first met. For the full platform document or any questions, contact Jasmin Martinez at jasmin@calcleanair.org.

Overall:

- CCUS projects cannot proceed if they threaten groundwater and drinking water supplies or threaten to increase water pollution, soil pollution, truck or barge traffic, light pollution, noise pollution, or other nuisances to the community, defined as within a community designated radius from the project location.
- CCUS infrastructure (e.g., capture infrastructure, pipelines, storage) should not be sited in or near overburdened EJ communities. We recommend a minimum buffer distance of 10 miles from all capture, storage, and pipelines, unless a further distance is shown by scientific modeling to be necessary to conform with the prohibition on pollution articulated in the previous point.
- CCUS projects must be powered by excess clean, renewable energy.
- The state must require notification for any residents or schools within the set buffer distance near a planned site for any CCUS at least 6 months before a permit application.

- Once notification occurs, there must be at least 3 workshops or community meetings with the opportunity for residents to raise concerns with the project moving forward and require community benefits as a condition of the project proceeding.
- A full Environmental Impact Report (EIR) must be required for all proposed capture, transport, and storage projects.
- The state must require research on potential adverse impacts, informed by impacted communities and community-based organizations, including worst-case scenario modeling, at local and statewide scales.
- Financial assurances should only be satisfied by measures that do not count on a company maintaining strong fiscal health for over a century, such as bonds and strong third-party insurance.
- Financial assurances should be responsive to continuous reevaluation of costs of closure, remediation, and leaks or other harms.
- Within the California Air Resources Board (CARB), the Office of Community Air Protection (OCAP) or the Air Quality Planning and Science Division (AQPSD) should oversee carbon management work.
- CCUS financing must not result in increased rates for utility customers.
- CARB must amend the CCUS Protocol in the Low Carbon Fuel Standard (LCFS) to include all protections and must place a moratorium on LCFS applications for CCUS projects until in place.
- CARB must include a multi-criteria lifecycle assessment in the LCFS CCS Protocol, and that multi-criteria lifecycle assessment must include construction, transport, and power generation.
- No offsets can be generated by planning, constructing, or operating CCUS projects.
- CARB should take steps to ensure additionality with CCUS projects.

Capture: CARB should seriously consider omitting CCUS from its climate plans because it is a boondoggle with dubious climate impacts and grave local harms in even the best of circumstances. Insofar as CARB decides to allow and rely on CCUS, CARB must confine deployment to truly hard-to-decarbonize sectors in order to limit harm to climate and communities. Sectors that should never be candidates for CCUS, and thus for which CCUS should be prohibited in order to reach our climate and air quality goals, include refineries, natural gas power plants, bioenergy with carbon capture and storage (BECCS), waste incinerators and chemical recycling facilities, and ethanol production facilities

Storage:

- The California Geological Survey must complete a study on maximum sequestration potential in the state before storage projects can be allowed to proceed.
- Storage project operators must assess and prove stable geology where projects are to be sited and ensure no risk of leakage, and they must prove that projects will not increase geological risks.
- CARB must ensure that any carbon stored underground will be permanently stored for at least 1,000 years.
- CARB must also ensure proper site characterization.
- Relatedly, CARB must require and verify monitoring of carbon storage to ensure that the carbon is behaving as expected underground.
- For a sequestration project to proceed, the State Geologist must certify that the project is unlikely to harm groundwater supplies.

Transportation: Before pipelines can be deployed, the regulations must be improved, but in order for the regulations to be improved, more research must be conducted to fill knowledge gaps that in many cases underlie regulatory gaps. At a minimum, the state must do the following:

- Keep the carbon pipeline moratorium in place until at a minimum updated federal regulations are in place.
- There must be a defined safe distance or plume dispersion model for developing a potential impact area.
- An odorant must be added to CO₂ for effective leak detection.
- Community burdens and resources should be considered during pipeline site exploration.
- Pipeline operators must assess and prove stable geology where projects are to be sited and ensure no risk of rupture due to seismicity.
- A regulatory definition of “carbon dioxide” needs to assure all phases of CO₂ apply.
- Converting existing transmission pipelines to CO₂ service presents serious risks that have not been fully investigated and must be prohibited.
- Regulations must require pure carbon dioxide streams.
- Other modes of transportation such as trucks, trains, and barges are not safe or cost effective and should not be utilized to transport CO₂.