



theclimatecenter.org

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June 18, 2024

The Honorable Isaac Bryan
Chair, Assembly Committee on Natural Resources
1020 N Street, Room 164
Sacramento, CA 95814

Re: SB 308 (Becker): Net Zero Greenhouse Gas Emissions Goal: Carbon Dioxide Removal: Regulations - SUPPORT IF AMENDED

Dear Chair Bryan, Vice Chair Flora, and Committee Members:

On behalf of The Climate Center, I am writing to express our support of SB 308 by Senator Becker, if it is amended. While we agree that there is a critical need for carbon removal at scale, we believe that as written, the bill does not adequately protect communities nor create the pathways needed for all viable carbon removal strategies to be included in the resulting regulations. We appreciate the committee's and author's engagement on this issue, and offer amendments below to ensure that the bill achieves its intentions in a just and effective manner.

The Climate Center is a climate and energy policy nonprofit working to rapidly reduce climate pollution at scale. We are a think tank, a do tank working collaboratively for accelerated, equitable climate policy in California. We know that as goes California, so goes the world. With the climate crisis rapidly worsening, we engage in cross-sector coalitions to enact bold, science-based policy that sparks innovation and channels market forces for speed and scale greenhouse gas reductions to benefit everyone.

A growing consensus, cemented by the [2018 IPCC report](#), acknowledges that in order to meet our Paris Agreement goals of limiting warming to 1.5 or 2 degrees Celsius, we must scale up carbon dioxide removal globally, while continuing to rapidly and drastically cut greenhouse gas emissions. Furthermore, AB 1279 (Muratsuchi, 2022) set the state goal of achieving net neutrality by 2045 and achieving and maintaining net negative emission thereafter. Since there are a myriad of existing and new strategies to draw carbon out of the atmosphere, it is critical to establish transparent regulatory pathways and proper guardrails for this emerging industry.

To that end, we offer the following amendments to the June 5, 2024 version of the bill:

- 1. Ensure SB 905 (2022, Caballero) regulations are fully in place before any carbon capture, utilization, and storage (CCUS) or carbon dioxide removal projects that seek to utilize geologic storage reservoirs are counted or credited by CARB.** SB 308 as proposed relies heavily on protections outlined in SB 905 from 2022, but CARB has yet to complete a rulemaking to implement that legislation. To ensure SB 308 is implemented true to its intent, a rulemaking to implement SB 905 must be complete

before projects are allowed to proceed. Specific language would add a new subsection (g) to Section 38562.2 of the Health and Safety Code to read:

38562.2 (g) No state or local agency, including but not limited to air quality management districts, shall issue any permit for any carbon dioxide capture, removal, or sequestration projects until rules are in effect to effectuate 39741.1(a)(3).

Further language would add a new subsection (g) to Health and Safety Code Section 39741.1, which is not currently included in the bill, to read:

39741.1 (g) No state or local agency, including but not limited to air quality management districts, shall issue any permit for any carbon dioxide capture, removal, or sequestration projects until rules are in effect to effectuate 39741.1(a)(3).

2. **Ensure efforts to increase carbon dioxide removal do not include CCUS.** Carbon capture that occurs at an industrial source of emissions serves as an avoidance or reduction of emissions and does not remove carbon dioxide from the atmosphere. Per the IPCC, carbon dioxide removal is a process that involves human activities removing carbon dioxide (CO₂) from the atmosphere and storing it in a durable way. As such, it is important that SB 308 be clear and specific that the projects made eligible to be counted towards carbon removal targets do not include Carbon Capture, Utilization and Storage projects. We recommend adding a new section to the legislative intent to read:

(a) (14) Carbon Capture, Utilization, and Storage (CCUS) technologies represent an avoidance or reduction of emissions and not the removal of carbon dioxide from the atmosphere, and therefore CCUS shall only be counted towards the state's emissions reduction targets and not towards the state's carbon dioxide removal targets.

Specific language would also add a new subsection (3) under subsection (a) in the proposed Section 38562.3, and amend subsection (c) to read:

38562.3 (a) (3) The state board shall not include Carbon Capture, Utilization, and Storage projects and technologies as defined in Health and Safety Code Section 39741(b) for the purposes of this section.

38562.3 (c) (1) ~~The carbon dioxide removal process results in removals of carbon dioxide from the atmosphere, directly or indirectly, and not only the avoidance of or reduction of greenhouse gas emissions.~~ The carbon dioxide removal process results in removals of carbon dioxide from the atmosphere. For purposes of this statute, the carbon dioxide removal process can remove carbon dioxide from the atmosphere equivalent of up to 15% of the state's emissions to reach the

state's 100% greenhouse gas emissions reduction target and then exclusively counted towards targets for carbon dioxide removal from the atmosphere thereafter to achieve and maintain net negative emissions per Health and Safety Code 38562.2.

- 3. Ensure nature-based solutions are included.** Nature-based sequestration is a critical carbon removal strategy that provides essential co-benefits to communities beyond carbon removal, including groundwater replenishment, biodiversity enhancement and food security, but is not expressly detailed in the current bill. Specific language would add a new subsection (4) under subsection (a) in the proposed Section 38562.3 to read:

38562.3 (a) (4) For the purposes of this section, the state board shall include nature-based strategies pursuant to Section 38561.5 of the Health and Safety Code that can be coupled with longer term storage strategies or ensure at least 100 years of durability.

- 4. Ensure CARB addresses additionality concerns within the Low Carbon Fuel Standard (LCFS).** The broad goal of SB 308 is to ensure that CARB is creating and attaining meaningful targets on carbon removal. As such, measures must be taken to ensure that CARB does not double-count emissions reductions or avoidance as carbon removal. Specific language would add a new subsection (3) to Section 38562.3 (b) to read:

38562.3 (b) (3) The state board shall ensure that all removals are real, durable, quantifiable, verifiable, and enforceable by the state board. The board shall also ensure all removals are in addition to any greenhouse gas emission reduction otherwise required by law or regulation, or any other greenhouse gas emission reduction that otherwise would occur.

- 5. Prohibit carbon removal projects that include polluting feedstocks.** To be aligned with the bill's intention, projects that are in any way connected to sources of air pollution or greenhouse gas emissions need to be expressly prohibited. Specific language would amend subsection (c)(3) of the proposed Section 38562.3 to read:

38562.3 (c) (3) ~~If the carbon dioxide removal process requires biomass as a feedstock, it only uses biomass that is produced as a residue or waste product, including, but not limited to, agricultural residues and byproducts of sustainable forest management.~~ The carbon dioxide removal process does not involve any dairy biomethane, or biomass feedstocks not produced as a residue or waste product.

- 6. Close out of state loopholes for LCFS crediting.** While CARB has no oversight authority on projects outside of California, CARB does have the authority to determine which out-of-state projects are accepted for credits within the LCFS. Unfortunately, CARB has to date not prohibited enhanced oil recovery in their carbon capture

pathways within LCFS, despite explicit language in SB 905 that captured carbon could not be used for enhanced oil recovery. Specific language would amend subsection (d) of the proposed section 38562.3 to read:

38562.3 (d) ~~To the extent feasible, the requirements of this section and section 39741.1(a)(3) shall apply equivalently to all carbon dioxide removal processes outside of the state that receive credits from certified by the state board that are used by covered entities within the state for compliance with state regulations. whether located inside or outside of the state.~~

- 7. Ensure carbon removal projects have sufficient state-level oversight.** As currently drafted, SB 308 requires CARB to establish targets and certify processes for carbon removal, but does not direct CARB to implement any project-level oversight or enforcement mechanism. Given the variety of locations and pathways potentially available, such oversight is absolutely critical for the successful implementation of this legislation. Specific language would add a new subsection (e) in the proposed Section 38562.3 to read:

38562.3 (e) ~~The state board shall establish a process to review specific carbon removal projects for compliance with this section. This review will also ensure at least the following:~~

- ~~(1) That the project does not result in a net increase of air pollution, particularly in an air basin currently in nonattainment for federal or state ambient air quality standards.~~
- ~~(2) That the project does not result in adverse health outcomes in impacted communities, particularly low-income and disadvantaged communities.~~
- ~~(3) That the project does not sell the captured carbon for use in enhanced oil recovery in any jurisdiction.~~
- ~~(4) That the project must mitigate any adverse environmental impacts in areas where it operates.~~
- ~~(5) Conduct at least 3 community meetings before a project is developed. These meetings shall disclose the scope and potential impacts of the proposed project.~~
- ~~(6) Enter into a legally enforceable community benefits agreement after the community meetings are completed, and before any project is developed. The community benefits agreement must include meaningful benefits to residents of the surrounding community.~~

- 8. Ensure CARB conducts a meaningful implementation process that includes early and robust community input.** Given the broad direction provided to CARB by this bill, and the significant implications this legislation may have on environmental justice communities, we propose a new subsection (f) in the proposed Section 38562.3 to read:

38562.3 (f) For the purposes of this section, the state board shall conduct a robust community engagement process before a formal rulemaking commences. This outreach should target residents of communities most likely to be near potential carbon removal projects, and be conducted in partnership with the environmental justice advisory committee established pursuant to section 38591.

9. **Ensure robust legislative oversight.** The Legislature should receive annual reports from CARB on the implementation of this legislation. This report should be timely to allow for Legislative input and guidance. Specific language would add a new subsection (g) in the proposed Section 38562.3 to read:

38562.3 (g) The state board shall, by July 1, 2025 and annually thereafter, appear before the Joint Legislative Committee on Climate Change Policies established pursuant to Section 9471.10 (a) of the Government Code to report on implementation of this section. The environmental justice advisory committee established pursuant to section 38591 shall also appear to provide a report on implementation of this section, and to provide recommendations to the Legislature for future consideration on this topic.

We believe that these amendments will strengthen the bill to ensure communities are well protected from new projects and loopholes that exist in current programs, and that CARB has the ability to fully consider all of the viable carbon removal pathways.

Thank you for your consideration of these proposals, and please do not hesitate to reach out to Baani Behniwal (baani@theclimatecenter.org) if you have any concerns or questions.

Sincerely,

Ellie M. Cohen

Ellie Cohen
Chief Executive Officer
The Climate Center

cc:

Assemblymember Heath Flora (Vice Chair)
Assemblymember Rebecca Bauer-Kahan
Assemblymember Laura Friedman
Assemblymember Josh Hoover
Assemblymember Ash Kalra
Assemblymember Devon Mathis
Assemblymember Al Muratsuchi
Assemblymember Gail Pellerin
Assemblymember Buffy Wicks

Assemblymember Jim Wood
Senator Josh Becker (Author)