

Date of Hearing: August 20, 2025

ASSEMBLY COMMITTEE ON APPROPRIATIONS

Buffy Wicks, Chair

SB 643 (Caballero) – As Amended June 26, 2025

Policy Committee:	Natural Resources	Vote:	12 - 0
	Utilities and Energy		18 - 0

Urgency: No State Mandated Local Program: No Reimbursable: No

SUMMARY:

This bill, subject to appropriation, requires the Air Resources Board (ARB) to fund carbon dioxide removal (CDR) projects in an amount totaling \$50 million.

Specifically, this bill, among other things and subject to appropriation:

- 1) Requires ARB to establish and administer the Carbon Dioxide Removal Purchase Program, a competitive grant process for eligible CDR projects, to advance the development of CDR technologies to achieve the state's climate goals, while supporting the development of eligible CDR projects that provide economic, community, and environmental benefits within the state.
- 2) Specifies numerous requirements for ARB as part of program implementation, including, but not limited to, conducting and publishing on its website a survey of CDR projects existing or in development within the state; conducting public workshops; and publishing on its website a report describing program activities completed and CDR projects to date.
- 3) Requires ARB, on or after July 1, 2026, but on or before December 31, 2035, to fund CDR projects in an amount totaling \$50 million and allows ARB to use up to 10% of this amount to supplement necessary administrative costs in establishing the program.
- 4) Except as specified, requires CDR projects that receive grants to include CDR projects operating in at least two of the following categories: direct air capture, biomass carbon removal and storage, enhanced mineralization or enhanced weathering, and marine CDR.
- 5) Requires ARB to fund only CDR projects that meet specified requirements, including that an eligible CDR project demonstrates the ability to secure carbon removal purchases from third parties in an amount at least equal to the amount of funds provided to that project by ARB.
- 6) Except as specified, prohibits CDR grants from exceeding either of the following: (a) \$25 million of grants toward qualified CDR removals in any one of the eligible project categories described above, and (b) \$12.5 million of grants toward any one individual CDR project sponsor.
- 7) Specifies numerous criteria ARB is to prioritize in selecting eligible CDR projects, including, but not limited to, the anticipated impacts of the community benefit mechanisms associated with an eligible CDR project.

- 8) Requires ARB, by January 1, 2028, to adopt guidelines for the program that include numerous specified requirements, including, but not limited to, the definition of an “eligible CDR project” and a prohibition against the use of CDR processes for purposes of enhanced oil recovery.

FISCAL EFFECT:

- 1) One-time cost of \$50 million (General Fund, Greenhouse Gas Reduction Fund (GGRF), or other fund source) for ARB to fund CDR projects. The fiscal year 2025-26 budget does not include funding for this purpose.
- 2) ARB will incur significant costs to implement the various requirements of this bill. ARB estimates ongoing costs of about \$2.8 million annually (GGRF) to hire 13 staff. Examples of anticipated tasks include, among other things, establishing and updating program guidelines pursuant to the Administrative Procedure Act, including definitions, eligible project and feedstock types, selection criteria, community benefit requirements, and verification criteria; coordinating with various state entities and stakeholders; conducting public workshops; developing and executing contracts for the purchase of CDR credits; monitoring and auditing projects; and conducting annual reporting. The bill allows ARB to use up to 10% of the \$50 million allocation to “supplement necessary administrative costs in establishing the program.”

COMMENTS:

- 1) **Purpose.** According to the author:

Over the last several years, a small number of companies have voluntarily purchased CDR removals as part of their own carbon neutrality goals, but none of the CDR removals have occurred in California. To meet the urgent need to reach carbon neutrality by 2045, this bill directs ARB to fund and track CDR projects. By accelerating CDR development and deployment, the bill is an integral step to remove carbon dioxide from the atmosphere and meet the state’s climate goals.

- 2) **Background.** CDR is an umbrella term used to describe a range of strategies used to remove carbon dioxide (CO₂) from the atmosphere, without a relationship to where or when the CO₂ was emitted. To store the CO₂ for long periods, it is generally injected underground into geological formations, such as former oil and gas reservoirs, deep saline formations, and coal beds.

California has a statutory goal to achieve net-zero greenhouse gas emissions by 2045, with a reduction in emissions of at least 85% from 1990 levels. This leaves 15% of emissions that need to be removed, estimated to be about 65 million metric tons (MMT). To balance out those remaining 15% of emissions, ARB’s 2022 Scoping Plan projected that the state will need about 75 MMT of CDR by 2045.

This bill is sponsored by Project 2030, which argues that CDR deployment is critical to meet the state's carbon neutrality goals. The organization also argues California has "many of the pieces of a nascent CDR eco-system that could support California's CDR leadership."

Project 2030 writes:

Several CDR companies have started here, and their headquarters and science teams are here. Additionally, California has CDR targets, a skilled labor force, abundant CO₂ storage capacity, and two of our California-based national labs (Lawrence Livermore National Labs and Lawrence Berkeley National Labs) are leaders in CDR R&D. However, many California CDR companies are not developing projects in California but in other states, due to better incentives.

Writing in opposition, a coalition of environmental groups argues the state has not defined what "legitimate, verified, effective forms of CDR are – yet this this bill mandates spending \$50 million for CDR. This is a terrible idea, especially during the State's budget crisis." The coalition further contends biomass energy with carbon capture and storage (BECCS) and marine CDR – which this bill allows – are both "highly problematic technologies," BECCS because "it adds climate and air pollution to the atmosphere and harms communities and forests," and marine geoengineering because of its "significant probability of causing far-reaching ecological and social harms and its unproven effectiveness." Finally, the coalition argues the bill "lacks guardrails to protect communities and the environment."

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