

Senate Bill No. 643

Passed the Senate September 12, 2025

Secretary of the Senate

Passed the Assembly September 11, 2025

Chief Clerk of the Assembly

This bill was received by the Governor this _____ day
of _____, 2025, at _____ o'clock ____M.

Private Secretary of the Governor

CHAPTER _____

An act to add Chapter 8.5 (commencing with Section 39945) to Part 2 of Division 26 of the Health and Safety Code, relating to climate change.

LEGISLATIVE COUNSEL'S DIGEST

SB 643, Caballero. Carbon Dioxide Removal Purchase Program.

Existing law establishes the State Air Resources Board as the state agency responsible for monitoring and regulating sources emitting greenhouse gases. Existing law requires the state board to establish a Carbon Capture, Removal, Utilization, and Storage Program, as provided, to evaluate the efficacy, safety, and viability of carbon capture, utilization, or storage technologies and carbon dioxide removal technologies and facilitate the capture and sequestration of carbon dioxide from those technologies, where appropriate. Existing law requires the Secretary of the Natural Resources Agency, in consultation with the state board, to publish a framework for governing agreements regarding 2 or more tracts of land overlying the same geologic storage reservoir or reservoirs for purposes of managing, developing, and operating a carbon dioxide capture, removal, or sequestration project, as provided.

This bill would require the state board to establish and administer the Carbon Dioxide Removal Purchase Program as a competitive grant process for eligible carbon dioxide removal projects, as specified. The bill would require the state board, on or before January 1, 2028, and annually thereafter, to conduct and publish on its internet website a survey of carbon dioxide removal projects existing or in development within the state, and, on or before December 31, 2027, and annually thereafter, until December 31, 2035, to publish on its internet website a report describing Carbon Dioxide Removal Purchase Program activities completed and carbon dioxide removal projects to date, as specified. The bill would require the state board, on or after July 1, 2026, but on or before December 31, 2035, to fund carbon dioxide removal projects in an amount totaling \$50,000,000. The bill would authorize up to 10% of that amount to be used to supplement necessary administrative costs in establishing the program. The bill would

prohibit carbon dioxide removal projects from exceeding \$25,000,000 of grants toward qualified carbon dioxide removals in any one of specified project categories or \$12,500,000 of grants towards any one individual carbon dioxide removal project sponsor, except as specified. The bill would require that eligible carbon dioxide removal projects permanently retire the contracted tons of removed carbon dioxide from any future carbon dioxide removals credit issuance. The bill would require the state board, on or before January 1, 2028, to adopt guidelines, including the definition of an eligible carbon dioxide removal project, for the program, which the bill would require to be consistent with certain provisions governing carbon dioxide capture, removal, or sequestration projects, as specified. The bill would make implementation of these provisions contingent upon an appropriation by the Legislature for purposes of the program. The bill would require all funds to be available for encumbrance or expenditure until June 30, 2035, and to be available for liquidation until June 30, 2035.

The people of the State of California do enact as follows:

SECTION 1. The Legislature finds and declares all of the following:

(a) Climate change poses a severe threat to California’s people, places, resources, and institutions that is already manifesting in the form of wildfires, extreme heat, drought, storm events, sea-level rise, species loss, and other disruptions to the state’s communities, environment, and economy.

(b) Mitigating this threat requires aggressive action to reduce emissions of carbon dioxide and other greenhouse gases and to remove already-emitted greenhouse gases from the atmosphere.

(c) In 2022, the state enacted Assembly Bill 1279 of the 2021–22 Regular Session (Chapter 337 of the Statutes of 2022), which established a state target of achieving net zero greenhouse gas emissions no later than 2045, and Senate Bill 905 of the 2021–22 Regular Session (Chapter 359 of the Statutes of 2022), which directed the State Air Resources Board to establish a carbon capture, removal, utilization, and storage program to evaluate and set standards for carbon dioxide removal and sequestration projects.

(d) The State Air Resources Board’s 2022 Scoping Plan for Achieving Carbon Neutrality states, “there is no path to carbon neutrality without carbon removal and sequestration,” and establishes state targets for carbon dioxide removal of 7,000,000 metric tons of carbon dioxide equivalent by 2030 and 75,000,000 metric tons by 2045.

(e) While carbon dioxide removal strategies, such as direct air capture and enhanced mineralization are emerging, significant acceleration in technological and market development will be necessary to achieve these targets.

(f) It is in the interest of the state to advance carbon dioxide removal technologies by supporting carbon dioxide removal project deployment within California that meets high standards regarding greenhouse gas mitigation, community benefits, safety, air quality, and environmental protection.

SEC. 2. Chapter 8.5 (commencing with Section 39945) is added to Part 2 of Division 26 of the Health and Safety Code, to read:

CHAPTER 8.5. CARBON DIOXIDE REMOVAL PURCHASE PROGRAM

39945. This chapter shall be known, and may be cited, as the Carbon Dioxide Removal Purchase Program.

39945.1. For purposes of this chapter, the following definitions apply:

(a) “Additional” means a carbon dioxide removal that would not otherwise have occurred.

(b) “Agricultural biomass resources” means crop, orchard, vineyard, or other agricultural residue, and excludes crops grown for the purpose of producing energy and edible produce.

(c) “Biomass carbon removal and storage” means long-term storage of carbon removal products, including, but not limited to, biochar and bio-oil that are generated from agricultural or forest biomass resources.

(d) “Carbon dioxide removal” means a process or approach that results in removal and storage of carbon dioxide already emitted to the atmosphere, by direct or indirect means. Storage of removed carbon dioxide may occur in geological, biobased, or ocean reservoirs or in value-added products, such as low-carbon concrete. Carbon dioxide removal is exclusive of processes that prevent, reduce, or avoid carbon dioxide emissions.

(e) “Carbon dioxide removal credit” means a credit associated with a specified quantity of carbon dioxide removal, issued by a carbon dioxide removal project sponsor, and sold or traded for value to achieve a greenhouse gas emissions removal commitment.

(f) “Carbon dioxide removal project” has the same meaning as the term is defined in Section 3132 of the Public Resources Code.

(g) “Carbon dioxide removal project sponsor” means a person or entity responsible for the financing, planning, developing, operating, owning, or otherwise managing a carbon dioxide removal project.

(h) “Community benefits mechanism” means an arrangement or agreement between a carbon dioxide removal project sponsor and one or more geographic host communities or organizations to ensure community members accrue benefits through, and have meaningful opportunities to participate in, the project’s implementation, including but not limited to, community benefits agreements, project labor agreements, local hiring requirements, project oversight, project ownership, and profit or revenue sharing.

(i) “Eligible carbon dioxide removal project” means a carbon dioxide removal project that meets the guidelines, including the standards, established pursuant to Section 39945.4.

(j) “Energy Commission” means the State Energy Resources Conservation and Development Commission.

(k) “Forest biomass resources” means material removed for wildfire mitigation, forest restoration projects, or the protection of public safety and infrastructure.

(l) “Program” means the Carbon Dioxide Removal Purchase Program established pursuant to this chapter.

39945.2. (a) The state board shall establish and administer the Carbon Dioxide Removal Purchase Program, a competitive grant process for eligible carbon dioxide removal projects.

(b) The goal of the program shall be to advance the development of carbon dioxide removal technologies in order to achieve the state’s climate goals, while supporting the development of eligible carbon dioxide removal projects that provide economic, community, and environmental benefits within the state.

(c) In implementing the program, the state board shall do all of the following:

(1) Administer the competitive grant program described in Section 39945.3.

(2) On or before January 1, 2028, and annually thereafter, conduct and publish on its internet website a survey of carbon dioxide removal projects existing or in development within the state. The survey shall include, but not be limited to, information on carbon dioxide removal projects operating in each of the categories described in subdivision (c) of Section 39945.3 and on carbon dioxide removal projects' carbon removal potential, economic opportunities, and environmental impacts. The survey shall also include information on carbon dioxide removal projects existing or in development within the state that are designed to facilitate removal from the atmosphere of greenhouse gases, other than carbon dioxide, or to facilitate removal of carbon dioxide from media other than the atmosphere.

(3) On or before January 1, 2028, identify and document for use in the competitive grantmaking process both of the following:

(A) A transactional or bidding process including a means of payment in advance of up to half the total payment and at least half of the total payment to be paid on initial verification of carbon dioxide removal. "Initial verification," for the purposes of this section, means verification, by an independent third-party verifier using an appropriate, industry-standard protocol, that a specified quantity of carbon dioxide removal has been completed and has adequate mechanisms and practices in place to meet the minimum duration requirement of Section 39945.4. A bid shall include the total amount to be paid and the total number of tons to be removed during the contract term, consistent with subdivision (g) of Section 39945.3.

(B) A minimum contract lifespan for eligible carbon dioxide removal projects.

(4) Before initiating the funding described in Section 39945.3, conduct at least two public workshops to receive comments from the public. The state board shall design the workshops to allow the public to participate from any location via the internet or a call-in telephone number.

(5) On or before December 31, 2027, and annually thereafter, until December 31, 2035, publish on its internet website a report describing program activities completed pursuant to this chapter and carbon dioxide removal projects to date, including, but not limited to, the cost per ton of carbon dioxide removed by each

eligible carbon dioxide removal project funded pursuant to this section.

(d) In implementing the program, the state board may do both of the following:

(1) Adopt guidelines or other standards, including, but not limited to, the guidelines described in Section 39945.4.

(2) Consult with the Energy Commission, the State Water Resources Control Board, the Department of Fish and Wildlife, the State Lands Commission, the Geologic Energy Management Division, local air quality management districts, local air pollution control districts, regional water quality control boards, and other relevant local, state, or federal agencies, to ensure program moneys support achieving the state's climate and environmental targets.

(e) Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code does not apply to the guidelines, standards, and requirements developed pursuant to this section.

39945.3. (a) On or after July 1, 2026, but on or before December 31, 2035, the state board shall fund carbon dioxide removal projects in an amount totaling fifty million dollars (\$50,000,000). Up to 10 percent of this amount may be used to supplement necessary administrative costs in establishing the program.

(b) The state board shall only fund eligible carbon dioxide removal projects that meet both of the following requirements:

(1) The eligible carbon dioxide removal 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 the state board pursuant to this section.

(2) The eligible carbon dioxide removal is additional, as defined in Section 39945.1.

(c) Except as specified in subdivision (e), the carbon dioxide removal projects that receive grants shall include eligible carbon dioxide removal projects operating in at least two of the following categories:

- (1) Direct air capture.
- (2) Biomass carbon removal and storage.
- (3) Enhanced mineralization or enhanced weathering.
- (4) Marine carbon dioxide removal.

(d) (1) Except as specified in subdivision (e), the carbon dioxide removal grants shall not exceed either of the following:

(A) Twenty-five million dollars (\$25,000,000) of grants toward qualified carbon dioxide removals in any one of the project categories described in subdivision (c).

(B) Twelve million five hundred thousand dollars (\$12,500,000) of grants toward any one individual carbon dioxide removal project sponsor.

(2) The grants described in this section may consist of multiple transactions completed during the period described in subdivision (a).

(e) Subdivisions (c) and (d) do not apply to the purchase of carbon dioxide removal project grantmaking if the state board issues a determination, following completion of the survey described in paragraph (2) of subdivision (c) of Section 39945.2 that it would not be feasible to meet those requirements through eligible carbon removal projects operating within the state before the deadline stated in subdivision (a).

(1) For the purposes of this subdivision, “feasible” means likely to achieve the requirements of subdivision (b) by the deadline stated in subdivision (a) or within five years after the deadline stated in subdivision (a). The state board may delay the purchase of carbon dioxide removal by up to five years in order to support the development of the technology.

(2) If the state board determines that it would not be feasible to meet the requirements described in subdivisions (c) and (d) for any of the categories in subdivision (c), the state board shall make its best efforts to equitably carry out the purchases as deemed feasible.

(f) The state board shall prioritize the following criteria in selecting eligible carbon dioxide removal projects through the program:

(1) The potential of an eligible carbon dioxide removal project to accelerate development of carbon dioxide removal strategies to the scale needed to achieve the state target for total carbon dioxide removal by the year 2045 described in the state board’s 2022 Scoping Plan for Achieving Carbon Neutrality.

(2) The potential of an eligible carbon dioxide removal project to be completed on or before December 31, 2035.

(3) The anticipated impacts of the community benefit mechanisms associated with an eligible carbon dioxide removal project.

(4) Compliance with and exceedance of the guidelines adopted pursuant to Section 39945.4.

(5) Distribution of program funds across multiple geographic areas and multiple eligible carbon dioxide removal project categories, as described in subdivision (c).

(g) The eligible carbon dioxide removal project shall permanently retire the contracted tons of removed carbon dioxide from any future carbon dioxide removals credit issuance.

(h) Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Codes does not apply to the criteria and requirements developed pursuant to this section.

39945.4. (a) On or before January 1, 2028, the state board shall adopt guidelines for the program that include all of the following:

(1) The definition of an “eligible carbon dioxide removal project.”

(2) A requirement that an eligible carbon dioxide removal project be physically located within the state.

(3) A requirement that an eligible carbon dioxide removal project incorporate or fund community benefit mechanisms commensurate with the eligible carbon dioxide removal project.

(4) A requirement that an eligible carbon dioxide removal project results in carbon dioxide removals that are verified in the claimed quantity by an independent third-party verifier using appropriate, industry-standard protocols.

(5) A minimum duration of sequestration, elimination, or other storage of removed gases without leakage to the atmosphere that is sufficiently long enough to ensure that the risk of leakage poses no material threat to public health, safety, the environment, or the achievement of net zero greenhouse gas emissions in California, and shall not be less than 100 years.

(6) A prohibition against the use of carbon dioxide removal processes for purposes of enhanced oil recovery.

(7) A prohibition against the use of a biomass feedstock for carbon dioxide removal, unless it is for biomass carbon removal and storage, as defined in this chapter.

(b) The guidelines shall be consistent with Part 8 (commencing with Section 71460) of Division 34 of the Public Resources Code.

(c) Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Codes does not apply to the guidelines and requirements developed pursuant to this section.

39945.5. (a) Implementation of this chapter shall be subject to an appropriation by the Legislature for purposes of this chapter.

(b) All funds shall be available for encumbrance or expenditure until June 30, 2035, and shall be available for liquidation until June 30, 2035.

Approved _____, 2025

Governor