SENATE THIRD READING
SB 88 (Caballero)
As Amended September 02, 2025
Majority vote

## SUMMARY

Requires the California Air Resources Board (ARB) to publish an assessment of the life-cycle emissions from alternative uses of forest and agricultural biomass residues and develop a strategy to support beneficial carbon removal products; directs the Department of Forestry and Fire Protection (CAL FIRE) to require state-funded forest health projects to include a forest biomass resource disposal component, as specified; and, directs the California Energy Commission (CEC) to include the value proposition of using agricultural biomass resources and forest biomass resources for low- and negative-carbon liquid and gaseous fuels in certain reports.

**Major Provisions**

1) Requires ARB to:

    a) On or before January 1, 2028, publish on its website an assessment of the life-cycle emissions from alternative uses of forest and agricultural biomass residues that take into account wildfire management actions.

    b) On or before January 1, 2029, publish on its website a comprehensive strategy to support beneficial carbon removal products, including, but not limited to, biochar, that are generated from agricultural or forest biomass resources.

2) Requires CAL FIRE to require, to the extent feasible, all state-funded forest health projects to include an appropriate forest biomass resource disposal component that includes a scientifically based, verifiable method to determine the amount of biomass to be physically removed and the amount to be burned by prescribed burn.

3) Requires the CEC to include the value proposition of using agricultural biomass resources and forest biomass resources for low- and negative-carbon liquid and gaseous fuels, including hydrogen, from noncombustion conversion technology methods and other emerging and innovative approaches in relevant reports and other agency-sponsored documentation.

## COMMENTS

California covers about 100 million acres and approximately 40% of the state is forest. Forest operations such as logging, thinning, fuels reduction programs, vegetation management, and ecosystem restoration create a huge amount of woody biomass. Some of this is brought out of the forest for use, but as much as half of the biomass is left in the forest. When residues from mastication and slash from timber harvests are left scattered throughout the forest, they act as additional dry surface fuel and serve to increase intensity and severity if a wildfire burns through the area. According to the CEC, there are currently approximately 47 million bone dry tons (BDT) of biomass resource potential in California. According to the Board of Forestry, state requirements to remove forest fuels on a combined one million acres per year will lead to 10 to 15 million BDT of forest waste biomass annually.

Biochar is produced using controlled fire, converting forest slash, timber harvest residues, damaged trees, and excess brush, into stable carbon rich charcoal that can be retained in forest soils. It may be a promising product in the food, soil, and agricultural sectors because of its composition and properties of retaining moisture and nutrients, and improving soil quality. Biochar produced from residual biomass and sequestered in soil also results in carbon dioxide removal.

CAL FIRE requires grantees performing forest health and vegetation management projects to confirm that they plan to treat the forest products created by their project, which may include pile burning, chipping, leaving in place, or hauling to a biomass facility. CAL FIRE places no requirement on what method is used by the grantee. The bill would require a "scientifically based, verifiable method" to determine the amount of biomass that should be physically removed and the amount to be burned by prescribed fire, but there is currently no industry standard for such a method. Current statewide efforts to track forest product piles have been difficult because piles can result from both permitted and unpermitted activities, and there is no existing process in place to account for their location, size, or material amounts.

**According to the Author**
SB 88 takes critical steps to identify and reduce the harmful air pollution caused by wildfires and open air burning of forest and agricultural waste in California. By requiring ARB, CAL FIRE, and the CEC track and quantify harmful pollution emissions, and promote the beneficial use of clean biomass conversion, the bill will mitigate wildfire risks, reduce air pollution and greenhouse gas emissions, and encourage sustainable alternatives to open air burning. This measure will help California meet its climate goals, clean the air pollution, reduce healthcare costs related to dirty air, and accelerate the transition to carbon-negative solutions, ensuring a healthier and more sustainable future.

**Arguments in Support**
The California Chamber of Commerce writes, "California continues to face a growing surplus of forest and agricultural biomass, in part due to the closure of legacy biomass energy facilities across the state. These closures have left many communities, particularly in rural and fire-prone regions, without viable options for responsible biomass disposal. At the same time, the need to actively manage vegetation to reduce wildfire risk has never been greater. SB 88 presents a constructive, market-oriented solution to this challenge by supporting the development of low-emission uses for excess biomass, such as biochar and other durable carbon-removal products."

**Arguments in Opposition**
Center for Biological Diversity and a group of 16 additional organizations write, "A primary problem is the bill's incorrect presumption of the benefit of woody biomass products. Converting trees and agricultural materials into biomass products like hydrogen, electricity, fuels, and char comes with significant harms to the climate, public health, environmental justice, and forest ecosystems. Yet the bill incorrectly presumes these biomass products benefit the climate and public health, and would enshrine that presumption into statute, ignoring scientific evidence rebutting that presumption."

## FISCAL COMMENTS

According to the Assembly Appropriations Committee:

1) Ongoing costs of an unknown amount, likely under $1 million annually, for ARB to implement this bill (Cost of Implementation Account).

2) CEC estimates ongoing annual costs of up to $201,000 (Energy Resources Program Account) for one position to conduct biomass analysis and modeling. CEC describes the scope of the analysis required this the bill as unclear and notes potential redundancies with work already underway to implement SB 1075 (Skinner), Chapter 363, Statutes of 2022.

3) Administrative costs of an unknown amount, likely minor and absorbable, for CAL FIRE to implement this bill. However, requiring all state-funded forest health projects to include a forest biomass resource disposal component, even to the extent feasible, could increase project costs, which could reduce the overall number of projects funded with existing grant funding.

## VOTES

**SENATE FLOOR: 37-0-3**
**YES:** Allen, Alvarado-Gil, Archuleta, Arreguín, Ashby, Becker, Blakespear, Cabaldon, Caballero, Cervantes, Choi, Cortese, Dahle, Durazo, Gonzalez, Grayson, Grove, Jones, Laird, Limón, McGuire, McNerney, Menjivar, Niello, Ochoa Bogh, Padilla, Pérez, Richardson, Rubio, Seyarto, Smallwood-Cuevas, Stern, Strickland, Umberg, Valladares, Weber Pierson, Wiener
**ABS, ABST OR NV:** Hurtado, Reyes, Wahab

**ASM NATURAL RESOURCES: 13-0-1**
**YES:** Bryan, Alanis, Connolly, Ellis, Flora, Garcia, Haney, Hoover, Kalra, Muratsuchi, Pellerin, Schultz, Wicks
**ABS, ABST OR NV:** Zbur

**ASM APPROPRIATIONS: 11-0-4**
**YES:** Wicks, Arambula, Calderon, Caloza, Elhawary, Fong, Mark González, Ahrens, Pacheco, Pellerin, Solache
**ABS, ABST OR NV:** Sanchez, Dixon, Ta, Tangipa

## UPDATED

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