
SENATE COMMITTEE ON APPROPRIATIONS

Senator Anna Caballero, Chair
2025 - 2026 Regular Session

AB 70 (Aguiar-Curry) - Solid waste: organic waste: diversion: biomethane

Version: May 23, 2025

Urgency: No

Hearing Date: July 14, 2025

Policy Vote: E.Q. 8 - 0

Mandate: No

Consultant: Ashley Ames

Bill Summary: This bill would require the Department of Resources Recycling and Recovery (CalRecycle) to make pipeline biomethane converted exclusively from organic waste eligible for procurement credit under SB 1383 (Lara, Chapter 395, Statutes of 2016), among other things.

Fiscal Impact:

- CalRecycle estimates ongoing costs of approximately \$306,000 annually beginning in fiscal year 2025-26 (Greenhouse Gas Reduction Fund [GGRF]) and two new positions to facilitate rulemaking, support regulation development, prepare the appropriate conversion factors, and update technical assistance tools and resources.

Background: In 2016, California passed SB 1383 (Lara, Chapter 395, Statutes of 2016) to reduce emissions of short-lived climate pollutants (SLCPs) and specifically to reduce methane emissions by 40% relative to 2014 levels by 2030. SB 1383 targets SLCP emissions from organic material decomposing in landfills

When food and other organic material are discarded in a landfill, bacteria break down the material anaerobically (without oxygen), a process that releases methane and other climate pollutants. While modern landfills have systems in place to capture this methane, significant amounts of SLCPs continue to escape from landfills into the atmosphere. According to CalRecycle, landfills are the third largest source of methane in California, and organic waste in landfills emits 20% of the state's methane. Approximately 8.5 million tons of carbon dioxide equivalent were released by landfills in 2020.

Compost facilities, in contrast to landfills, have significantly fewer emissions from organic waste, as composting primarily breaks material down aerobically (with oxygen), which does not produce methane.

To reduce emissions from landfills, SB 1383 set a target of reducing the landfill disposal of organic waste 50% by 2020 and 75% by 2025 relative to the 2014 disposal level. Under SB 1383, the organic waste diverted from landfills must go to organics recovery facilities to make products like compost, fertilizer, fuel, or energy. In addition to these goals, at least 20% of the edible food in the organic waste stream must be recovered to feed people by 2025.

Broadly, SB 1383, as developed in regulations by CalRecycle in consultation with CARB, operates by requiring every jurisdiction to provide organic waste collection

services to all residents and businesses and by creating a destination for that stream of organics by setting annual recovered organic waste procurement targets for jurisdictions. The procurement targets are based on the average amount of organic waste generated by Californians annually multiplied by the population of a jurisdiction. Jurisdictions must meet their procurement target by procuring, giving away, or creating direct service contracts with entities to use the compost, mulch, biomass electricity, or renewable gas that is generated from the collected organic waste.

Progress towards SB 1383 goals. The ambitious waste diversion goals established in SB 1383 have necessitated significant changes to California's organic waste management infrastructure. Though California has made significant progress towards achieving the goals laid out in SB 1383, there is still some way to go; according to a report by the Little Hoover Commission in 2023, the state failed to reach its 2020 targets and is not on track to reach its 2025 goals. However, since its January 2022 implementation, 75% of California communities (464 out of 616 jurisdictions) report that they have residential organic waste collection in place. According to CalRecycle, California now has 206 organic waste processing facilities and is building 20 more. CalRecycle reports having invested over \$220 million in grants and loans for SB 1383 infrastructure.

Pyrolysis. Pyrolysis is generally defined as the chemical decomposition of organic materials (i.e., containing carbon) by heat in the absence of oxygen. In practice, the complete absence of oxygen is nearly impossible to achieve, and the systems that conduct pyrolysis are operated with some unavoidable oxygen. Pyrolysis is usually conducted at temperatures above 500 degrees Celsius. Due to the lack of oxygen, the material does not combust. Instead, it thermally decomposes into combustible gases and bio-char. The gases can be converted into bio-oil. Pyrolysis is widely used in the chemical industry to produce chemicals, such as ethylene from oil and coke from coal, and in the conversion of natural gas and methane into hydrogen. Pyrolysis is one of the technologies that has gained attention in recent years as a form of "advanced recycling" (previously known as conversion technologies), which is a term widely used by the plastic and oil industries to describe technologies that convert plastic back into chemicals, fuel, or oil. According to a recent study by the National Renewable Energy Lab, pyrolysis and gasification require large amounts of energy and generate GHG emissions and pollutants. These technologies can have significant environmental impacts, particularly in generating hazardous waste,

In California, these technologies do not count as recycling for purposes of achieving the state's solid waste recycling targets. However, when used to convert organic waste, they may count as organics recycling if they meet certain standards. A technology may qualify as organic waste diversion for purposes of meeting the state's SLCP targets if the permanent life-cycle GHG emissions reductions are equal to or greater than the emissions reductions from composting organic waste.

Proposed Law: This bill would:

1. Define "pyrolysis" as the thermal decomposition of material at elevated temperatures in the absence or near absence of oxygen.

2. Require CalRecycle, no later than January 1, 2027, to amend its regulations to include pipeline biomethane converted exclusively from organic waste that is diverted from landfills as a product eligible for procurement credit by local jurisdictions under SB 1383.

Related Legislation:

SB 279 (McNerny, 2025) would reduce the regulatory requirements for certain composting operations, including for agricultural operations, and specifically lowers the regulatory tier for compost facilities accepting up to 10% food waste for five years.

AB 2514 (Aguiar-Curry, 2024) was substantively the same as AB 70, and it would have defined pyrolysisrequired CalRecycle to include pipeline biomethane converted from organic waste as eligible for procurement credit by local jurisdictions, and made biosolids handling projects by the Town of Windsor and the Windsor Water District eligible for an existing CalRecycle grant program to promote organic waste diversion.

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