

Date of Hearing: April 22, 2026

ASSEMBLY COMMITTEE ON UTILITIES AND ENERGY

Cottie Petrie-Norris, Chair

AB 1849 (Papan) – As Amended April 15, 2026

**SUBJECT:** Decarbonized gaseous fuels

**SUMMARY:** Requires the California Air Resources Board (CARB) to assess the amount of “decarbonized gaseous fuels” that will be needed to decarbonize hard-to-electrify sectors and maintain reliability in the electricity sector.

**EXISTING LAW:**

- 1) Requires, pursuant to the California Global Warming Solutions Act,<sup>1</sup> CARB to adopt a statewide greenhouse gas (GHG) emissions limit and to adopt rules and regulations to achieve maximum technologically feasible and cost-effective GHG emission reductions. (Health and Safety Code §§ 38500 *et seq.*)
- 2) Declares the policy of the state to achieve net zero GHG emissions as soon as possible, but no later than 2045, and to achieve and maintain net negative GHG emissions thereafter. (Health and Safety Code § 38562.2)
- 3) Requires ARB to prepare and approve a scoping plan at least once every five years for achieving the maximum technologically feasible and cost-effective reductions in GHG emissions from sources or categories of sources of GHGs. (Health and Safety Code § 38561)
- 4) Requires ARB to evaluate, consider, and report on various issues related the potential role of hydrogen in meeting state “decarbonization” goals by June 1, 2024. (Health and Safety Code § 38561.8)
- 5) Establishes a policy requiring renewable energy resources and zero-carbon electric generating facilities to supply 100% of electricity procured to serve California customers by 2045, and directs the Public Utilities Commission, California Energy Commission, and ARB to incorporate this policy into all relevant planning and programs. (Public Utilities Code § 454.53)

**FISCAL EFFECT:** Unknown. This bill is keyed fiscal and will be referred to the Assembly Committee on Appropriations for its review.

**BACKGROUND:**

*CARB’s 2022 Scoping Plan* – CARB adopted its 2022 Climate Change Scoping Plan, the state’s primary roadmap for achieving carbon neutrality by 2045, in December 2022.<sup>2</sup> The plan concludes that while electrification will play an important role in almost all sectors, electrification is not possible in all situations, and that it will take time to fully grow the

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<sup>1</sup> AB 32 (Núñez), Chapter 488, Statutes of 2006

<sup>2</sup> <https://ww2.arb.ca.gov/sites/default/files/2023-04/2022-sp.pdf>

electricity grid to serve as the backbone of a decarbonized economy. For those sectors where electrification is not feasible, the plan proposes scaling green hydrogen and biomethane where needed.<sup>3</sup> The plan specifically acknowledges that certain industrial processes – such as steel forging, glass manufacture, and lime and cement manufacture – present few commercially available or economically viable electrification options due to their high-heat requirements, and identifies carbon capture and sequestration as a vital component of decarbonization for such processes.<sup>4</sup> The final plan projects a 48% reduction in greenhouse gas emissions below 1990 levels by 2030, surpassing the statutory minimum of 40%. Taken together, the Scoping Plan’s treatment of decarbonized fuels reflects a conditional role — necessary for hard-to-electrify end uses and grid reliability, but secondary to electrification as the primary decarbonization strategy.

#### COMMENTS:

- 1) *Author’s Statement.* According to the author, “AB 1849 directs CARB to conduct an assessment of the need for decarbonized gaseous fuels and provide recommendations to help the state meet its climate targets for hard-to-electrify sectors and electricity reliability. Hard-to-electrify industries, such as cement, glass, and steel manufacturing, along with the use of peaker plants for grid reliability, account for more than one-third of California’s greenhouse gas emissions. Consistent with the 2022 Climate Change Scoping Plan, which recognized the need for decarbonized fuels in a carbon-free future, this bill advances that goal by determining how much decarbonized fuel each hard-to-electrify sector will require and by evaluating the policies and incentives needed to speed up deployment.”
- 2) *Purpose of Bill.* AB 1849 seeks to assess and plan for the role that decarbonized gaseous fuels (undefined) could play in reducing greenhouse gas emissions from sectors of the California economy that are difficult to electrify, as well as from continued fossil fuel use in the electricity sector itself. Fossil gas currently accounts for roughly 34% of California’s electricity generation,<sup>5</sup> and industrial activity accounts for approximately 22% of the state’s GHG emissions.<sup>6</sup> Together these sources represent more than one-third of statewide emissions. This bill is framed as a tool to help California meet its statutory climate obligations by identifying pathways to deploy decarbonized fuels derived from agricultural residues, forest waste, and organic materials – sources that CARB has identified as significant contributors to methane emissions and as potential feedstocks for new fuel markets.
- 3) *What is Decarbonized Gaseous Fuel?* The bill does not include a definition of “decarbonized gaseous fuels” despite it being the subject of the bill’s assessment. This gives CARB broad discretion to determine which fuels qualify, a determination that could encompass fuels with contested carbon profiles. This is a central concern of the bill’s opponents who take issue with the potential for fuels made from woody biomass, fossil fuel (with or without carbon capture), or large dairy feedstocks to be considered

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<sup>3</sup> Pg. 1 of Executive Summary, *Ibid.*

<sup>4</sup> Pg. 207, *Ibid.*

<sup>5</sup> CEC’s 2024 Total System Electric Generation; <https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2024-total-system-electric-generation>

<sup>6</sup> CARB’s 2000-2023 GHG Inventory; 2023 GHG emissions broken out by economic sector; <https://ww2.arb.ca.gov/ghg-inventory-data>

and included. A lack of a definition also makes it difficult to ensure consistency within existing regulatory frameworks, such as the low carbon fuel standard, the scoping plan, and CARB's recent hydrogen assessment. However, leaving the fuel choice undefined gives CARB the flexibility to apply its technical expertise and adapt to new information in this rapidly evolving technological space. Because the bill's primary output is an assessment, rather than a regulatory mandate, it seems reasonable to give CARB more discretion to determine what should be included and not foreclose on fuels and pathways that could prove viable in the future.

- 4) *A Narrow Perspective.* This bill asks CARB to assess the need for these decarbonized gaseous fuels to decarbonize hard-to-electrify sectors and to maintain electricity reliability and resilience. While considering alternatives to the electricity grid's natural gas peaker plants and the local reliability value they provide is laudable, having CARB assess this without any input or feedback from the state's electricity organizations – namely the California Public Utilities Commission, the California Energy Commission, and the California Independent System Operator – may produce incomplete results.

Moreover, the assessment asks CARB to quantify future demand for gaseous fuels, which could be used by gas utilities and fossil fuel interests to justify continued infrastructure investment. The “policies to ensure decarbonized gases displace fossil fuels” provision is important but may need stronger direction. In fact, the bill seems to assume that only decarbonized gases can displace fossil fuels in circumstances where electrification is not viable. Indeed, the bill requires CARB to consider “how to incentivize the *increased* production and use of decarbonized gas in California,” drawing a conclusion that growth in the decarbonized gas sector is necessary to reach our climate goals.

However, other technologies like energy efficiency, waste heat recovery and thermal energy networks may also serve a role in displacing fossil gas, even in difficult industrial applications. These are technologies advanced by both CARB<sup>7</sup> and this bill's author.<sup>8</sup> Since the amount of decarbonized gaseous fuels needed to decarbonize hard-to-electrify end uses and maintain grid reliability is dependent upon the availability and efficacy of these alternative technologies, limiting the bill's assessment to only decarbonized fuels may inflate their anticipated contribution. Given this, the author may wish to consider broadening the scope of the assessment to enable CARB to form a more complete picture of future needs.

- 5) *Related Legislation.*

AB 2088 (Papan, 2026) authorizes gas corporations and other utilities regulated by the CPUC to own and operate thermal energy service as a regulated utility service through thermal energy networks (TENs), directs the CEC to develop technical standards for TENs, and requires the CPUC to initiate a proceeding to establish a regulatory framework for TENs deployment. Status: *set for hearing* in this committee on April 22, 2026.

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<sup>7</sup> On pg 207 of CARB's 2022 Scoping Plan, CARB noted: “Decarbonizing industrial facilities depends upon displacing fossil fuel use with a mix of electrification, solar thermal heat, biomethane, low- or zero-carbon hydrogen, and other low-carbon fuels to provide energy for heat and reduce combustion emissions. Emissions also can be reduced by implementing energy efficiency measures and using substitute raw materials.”

<sup>8</sup> AB 2088 (Papan, 2026)

AB 2313 (Berman, 2026) requires the CPUC to establish a program to require gas corporations to offer eligible gas customers a monetary incentive to replace gas appliances with electric alternatives and cease gas service as an alternative to a planned gas distribution service line replacement. Status: *set for hearing* in this committee on April 22, 2026.

SB 1359 (Stern, 2026) establishes the Gas Transition Responsibility and Electrification Act, directing the CPUC to prioritize electrification and nonpipelined alternatives to capital investment for natural gas distribution infrastructure. The bill requires the CPUC to develop a framework for the orderly and equitable transition of the natural gas distribution system, including minimizing ratepayer impacts. Status: *set for hearing* on April 21, 2026, in the Senate Committee on Energy, Utilities and Communications.

6) *Prior Legislation.*

SB 1221 (Min, 2024) requires the CPUC to establish a voluntary zonal decarbonization program and designate priority neighborhood decarbonization zones. Also directed the CPUC to evaluate the costs and benefits of TENs and to identify potential implementation barriers. Status: Chapter 602, Statutes of 2024.

AB 1279 (Muratsuchi) establishes a goal of net zero GHG emissions by 2045 and ensures that by 2045, statewide anthropogenic GHGs are reduced to at least 85% below 1990 levels. Status: Chapter 337, Statutes of 2022.

SB 1383 (Lara) requires CARB to approve and implement the comprehensive short-lived climate pollutant strategy to achieve, from 2013 levels, a 40% reduction in methane, a 40% reduction in hydrofluorocarbon gases, and a 50% reduction in anthropogenic black carbon, by 2030. Status: Chapter 395, Statutes of 2016.

SB 32 (Pavley) requires CARB to ensure that statewide GHG emissions are reduced to at least 40% below the 1990 level by 2030. Status: Chapter 249, Statutes of 2016.

7) *Double Referral.* This bill is double referred. It was first heard in the Assembly Committee on Natural Resources on April 13, 2026, where it passed on a 10-0-4 vote.

**REGISTERED SUPPORT / OPPOSITION:**

**Support**

Bioenergy Association of California (Co-Sponsor)  
 California Hydrogen Business Council (Co-Sponsor)  
 Anaergia  
 Bio-tronic Energy-ca, LLC  
 Calgren  
 California Association of Sanitation Agencies  
 California Hydrogen Coalition  
 Clean Water Social  
 Cr&r, INC.  
 Darling H2o Consulting  
 Earth Foundries, INC.

Golden State Natural Gas Systems  
Hcycle  
Los Angeles County Sanitation Districts  
Mainspring Energy  
Monterey One Water  
Mote, INC.  
Northeast-western Energy Systems  
Resource Recovery Coalition of California  
Sierra Energy  
Socalgas  
Supply Chains for Good Enrolled Member, Standing Rock  
Tss Consultants  
USA Water and Power  
Vespene Energy  
Western Propane Gas Association  
Yosemite Clean Energy

**Oppose**

1000 Grandmothers for Future Generations  
350 Bay Area Action  
California Environmental Justice Coalition  
California Nurses for Environmental Health & Justice  
Center for Biological Diversity  
Center for Community Action and Environmental Justice (CCA EJ)  
Center on Race, Poverty & the Environment  
Center on Race, Poverty and the Environment  
Climate Action California  
Climate Communications Coalition  
Earthjustice  
Food & Water Watch  
Forests Forever  
Fossil Free California  
Leadership Council for Justice and Accountability  
Los Padres Forestwatch  
Mount Shasta Bioregional Ecology Center  
San Diego 350  
San Francisco Bay Physicians for Social Responsibility  
Sandiego350  
Santa Cruz Climate Action Network  
Sequoia Forestkeeper  
Sierra Club California  
Sonoma County Climate Activist Network (SOCOCAN!)  
Sunflower Alliance  
Valley Improvement Projects (VIP)

**Oppose Unless Amended**

Californians Against Waste

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