

A ROADMAP FOR ZONAL DECARBONIZATION IN CALIFORNIA

ADDRESSING THE LEGAL AND PRACTICAL
HURDLES OF SB 1221



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Introduction

California’s gas distribution network is becoming increasingly expensive to maintain. At the same time, the state has explicitly signaled its desire to move away from natural gas in favor of electrification.¹ Yet gas utilities in California have planned a combined \$43 billion in replacement expenses for their increasingly redundant pipeline network in the next 20 years.² Under the status quo, ratepayers risk being on the hook for billions of dollars spent on what may soon be stranded assets. A rapid course correction is necessary to avoid burdening utility customers with unnecessary and costly infrastructure investments. Electrification can come with significant up-front costs, such as the need to replace gas-powered appliances with electric ones. To further public policy goals and achieve an equitable energy transition, mechanisms to redirect funding from gas infrastructure repairs to electrification investments should be explored.

California’s Public Utility Commission (CPUC) has already taken steps to reduce investments in new gas infrastructure. In 2024, it ceased authorizing ratepayer-funded incentives for gas line extensions to new construction projects with no existing gas line, or for new construction projects with an existing gas line if gas usage will materially increase.

1 See, e.g., SB 1477 (Stern, 2018).

2 Sean Smillie et al., *Avoiding Gas Distribution Pipeline Replacement Through Targeted Electrification in California* 1, E3, (Jun. 2024).

However, gas utilities can continue to recover costs involved in repairing or replacing existing gas service lines from ratepayers. This reduces utilities’ incentive to support electrification policies. The CPUC is also currently exploring potential non-pipeline alternative (NPA) approaches as part of its long-term gas planning proceeding.³

The latest effort to transition away from gas is zonal decarbonization, to be piloted pursuant to SB 1221 (Min, 2024). SB 1221 was passed in the 2024 legislative session, and is currently in the early stages of implementation by the CPUC. Although promising, some questions—both legal and practical—remain. This brief summarizes the scope and intent of SB 1221, and identifies advantages and disadvantages of the zonal decarbonization approach. It concludes by offering some recommendations on how the CPUC could most effectively leverage SB 1221 to achieve its decarbonization goals.

SB 1221

In 2024, the California Legislature passed Senate Bill 1221. The bill required the CPUC to establish a voluntary zonal decarbonization pilot program and designate priority neighborhood decarbonization zones.

Within these zones, the Commission may authorize projects that facilitate the transition of customers’ natural gas service to zero-emission alternatives.



SB 1221 requires that the CPUC define these neighborhood priority decarbonization zones by January 1, 2026, and annually thereafter.⁴ A progress report on the pilots must be prepared by the Commission and submitted to the Legislature annually by March 1 from 2026 to 2030, at which point the pilot program will sunset.⁵

3 See Cal. Pub. Util. Comm’n, *Long-Term Gas Planning, Rulemaking R.24-09-012*.

4 Cal. P.U.C. § 662.

5 Cal. P.U.C. § 664(b).

The law represents a useful tool to explore transitioning away from gas infrastructure: Once the CPUC establishes voluntary pilot programs for the decarbonization zones, utilities may implement up to thirty transition pilots, affecting up to 1 percent of each gas corporation’s customers.⁶ In absolute numbers, that could mean a big impact: There are about 11 million residential gas customers in California,⁷ the overwhelming majority of which receive service from the three large investor-owned utilities.⁸ Electrifying one percent of that number—110,000 customers—could lead to a sizeable reduction in state carbon emissions.

To qualify under the bill, projects must replace planned, higher-cost gas pipeline replacement projects with a more cost-effective decarbonized solution. Utilities would be relieved of the “obligation to serve” an area—the requirement that they provide service to all customers—if at least 67% of gas customers in the project area agree to the decarbonization project.⁹



SB 1221 presents an affirmative electrification strategy. If a community agrees to participate, the gas utility will cease to service that community and instead offer NPAs to local residents. This could include supplying them with electrified appliances, installing energy-efficiency upgrades, upgrading panels, supplying hesitant households with propane, and so on.

6 Cal P.U.C. § 663(a).

7 U.S. Energy Information Admin., *Natural Gas – California*, https://www.eia.gov/dnav/ng/ng_cons_num_dcu_SCA_a.htm (last accessed Oct. 31, 2025).

8 Cal. Pub. Util. Comm’n., *Natural Gas and California*, <https://www.cpuc.ca.gov/industries-and-topics/natural-gas/natural-gas-and-california> (last accessed Oct. 31, 2025) (“SoCalGas and PG&E provide service to about 5.9 million and 4.3 million customers, respectively, while SDG&E provides service to over 800, 000 customers.”).

9 See Cal. P.U.C. § 663(b)(4). If 100% of customers agree to the project, that project does not count towards the 30-project limit, see Cal. P.U.C. § 663(a).

Participating communities won't be announced until after program guidelines are released in the summer of 2026.¹⁰ However, community interest has been brewing behind the scenes,¹¹ and utilities and the CPUC may have made as-yet unannounced progress on selecting pilot sites. In November 2025, the CPUC announced its proposed decision designating priority neighborhood decarbonization zones, selected at the census tract level. 142 census tracts were selected across California, with Alameda and San Diego counties relatively overrepresented in the selected tracts.¹² Next, utilities will be asked to engage with local stakeholders within these tracts, and file a report with the CPUC by April 1, 2026 detailing which community partners and local governments have expressed interest in participating in SB 1221's pilot program.¹³

Advantages, Disadvantages, and Remaining Questions

The pilot program established in SB 1221 has a few distinct advantages. First, it is relatively proactive. The program asks the CPUC and the utilities to work together on affirmatively identifying geographic areas where a transition away from natural gas would be economically feasible. The program would also tackle electrification for entire neighborhoods at a time, which could make electrification investments more affordable through economies of scale. Larger projects can attract firms with union laborers, making SB 1221 a politically viable strategy as well.



10 See Cal. Pub. Util. Comm'n, *Second Amended Assigned Commissioner's Scoping Memo and Ruling Requesting Comments on Pilot Program*, in Rulemaking R.24-09-012 (Oct. 16, 2025).

11 See, e.g., *Local Organizations Push for Electrification Options in Palisades Rebuilding*, Palisades News, (Jun. 3, 2025); CalCCA, *BlocPower and East Bay Community Energy to Spur Community Health and Climate Justice through Transformative Home Electrification Program*, (n.d.); Twilight Greenaway, *In California, plans to move low-income neighborhoods off of gas advance*, Inside Climate News, (Jun. 26, 2025).

12 Cal. Pub. Util. Comm'n., *Proposed Decision Designating Initial Priority Neighborhood Decarbonization Zones*, in Rulemaking R.24-09-012 (Nov. 13, 2025).

13 Id.; see also Elias van Emmerick, *The CPUC Makes Good on Neighborhood Electrification*, Legal Planet, (Nov. 18, 2025).



A larger-scale approach lessens the transaction costs associated with securing a commitment from each household individually, and adapting to each household’s preferred timeline. We can expect significant efficiencies to arise from electrifying at scale relative to uncoordinated electrification.

Another benefit of SB 1221 is that it legally absolves the gas utility of its obligation to serve. Under Cal. P.U.C. § 451, public utilities must “furnish and maintain such adequate, efficient, just, and reasonable service, instrumentalities, equipment, and facilities, [...] as are necessary to promote the safety, health, comfort, and convenience of its patrons, employees, and the public.” Ordinarily, utilities cannot terminate service without providing “adequate” substitute service.¹⁴ The CPUC has interpreted § 451 as requiring utilities to, among other things, repair gas lines serving existing customers and expand lines to customers within their service areas, if those customers so demand.¹⁵ As such, voluntary electrification of a given household may not necessarily be permanent. A new resident could move in and request that gas service be restored under a voluntary electrification scenario. SB 1221 offers regulatory clarity and gives the utility a clear legal basis to deny gas service in a pilot program area.

14 See Nicholas Wallace et al., *Removing Legal Barriers to Building Electrification 2*, Stanford Woods Inst. for the Env’t. (2020).

15 *Id.* at 9-10.

But the approach proposed by SB 1221 is not without its shortcomings. Utilities are likely to face coordination and holdout problems in the project areas they are set to designate. It is not easy to get a supermajority of residents on board, many of whom may simply be uninterested in the potential hassles involved with electrifying their homes. Prior experiments with NPAs have highlighted the difficulty of reaching people and convincing them to take part in a utility’s program, even if the financial incentives rationally make sense.¹⁶

Legal questions around the implementation of SB 1221 remain. For example, residents of a decarbonization project zone will likely be provided electric appliances to help them transition away from gas. But it is unclear exactly how these appliances will be provided, and whether costs incurred will be distributed among ratepayers. Treatment of costs has been a stumbling block for electrification projects in the past. PG&E recently cancelled its plans to electrify California State University’s Monterey Bay campus, partially because of uncertainties about the reimbursement of costs and availability of a rate of return on expenditures for the utility.¹⁷ SB 1221 prohibits utilities from recovering behind-the-meter costs associated with the pilot projects as capital costs, which would be the most straightforward way of earning a rate of return for participating utilities.¹⁸ That said, other ways of earning a rate of return on these capital investments exist under the bill—SB 1221 asks the CPUC to determine the “appropriate rate of return and recovery period that a gas corporation is eligible to receive for its costs to implement a zero-emission alternative.”¹⁹ For example, behind-the-meter costs could be recovered as regulatory assets, which would provide an incentive similar to a rate of return on equity.

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16 See PG&E, *Utility Perspectives on Procedures for Facilitating Non-Pipeline Alternatives* (Sep. 22, 2025) (noting that, “on average, ~25% of customers engaged by [the Alternative Energy Program (AEP)] and [Zonal Equity Electrification Program (ZEEP)] have agreed to retire their gas service”).

17 PG&E had proposed capitalizing the cost of the project, which would allow its shareholders to earn a rate of return on the appliances purchased by PG&E and given to CSU Monterey Bay. Stakeholders had pushed back on this, arguing that PG&E should pay for the project through its operating expense budget, which would allow the utility to recover costs without any additional profit for shareholders. This lack of a rate of return may have influenced PG&E’s decision to pull back on its commitment to electrification at the site. See Laura Klivans, [PG&E Wants to Pull the Plug on Electrification Project at CSU Monterey Bay](#), KQED, (Feb. 3, 2025); Cal. Pub. Util. Comm’n., [Decision Dismissing Pacific Gas and Electric Company’s Application for Zonal Electrification Project at California State University Monterey Bay](#), A. 22-08-003 (Sep. 30, 2025).

18 Cal. P.U.C. § 663(b)(8).

19 Cal. P.U.C. § 663(b)(9).

There is also the question of scale. As a pilot program, the scope of SB 1221 is limited, and the lessons learned from this program may not translate neatly into larger-scale future programs. The program will require a significant amount of administrative work to implement, and it is uncertain how many customers it will ultimately cause to relinquish gas service.²⁰

For the program’s benefits to exceed its costs, the lessons drawn from implementing decarbonization projects should be useful for managing future gas transition efforts. The real value of SB 1221, in other words, may be the fact that it is a learning opportunity. To maximize this value, the Commission should continue to concurrently encourage other non-pipeline alternative offerings, especially in the service line context. These NPAs will generate additional opportunities for electrification and gas main retirements, to which the lessons learned from SB 1221 could apply.

Recommendations

SB 1221 is an ambitious first step in California’s transition away from gas, but its success will hinge on the program’s implementation strategy. Proactive outreach and community-centered messaging are essential to securing participation in voluntary electrification programs. Existing programs have struggled to secure sufficient customer buy-in. PG&E’s Alternative Energy Program and Zonal Equity Electrification Program only saw about 25% of customers engaged by the utility agree to retire their gas service.²¹ Participation rates need to increase significantly for programs like SB 1221 to achieve their intended purpose. Trusted messengers with established links to target communities should be employed to discuss the benefits of electrification, and to relay community feedback to the utility. Local governments can play a role in this, too. Notifying residents that electrification offers are legitimate and not “too good to be true” could go a long way towards generating community buy-in.



20 See Cal. P.U.C. § 661(a) (requiring gas corporations to submit a map including the location of all potential gas distribution line replacement projects to the CPUC); § 662(a) (requiring the Commission to designate priority neighborhood decarbonization zones based on recommendations from each gas utility); § 664(a) (requiring the CPUC to review the efficacy of projects and submit a report to the legislature).

21 PG&E, *Utility Perspectives on Procedures for Facilitating Non-Pipeline Alternatives* (Sep. 22, 2025).



Benefit-cost analysis should follow a defined method that does not overestimate costs of NPAs or underestimate costs of gas projects. SB 1221 requires that zero-emission alternatives be cost-effective, i.e. save ratepayers relative to the cost of pipeline repair or replacement. Methods of accounting can substantially impact whether a project is deemed cost-effective.²² The CPUC should require utilities to adopt an expansive interpretation of the benefits of NPAs. Although SB 1221 requires that nonenergy benefits not be included in the cost-effectiveness calculus, the CPUC could propose a broad definition of “energy benefits,” including avoided pollution costs, increased reliability, or energy efficiency gains.

Finally, the CPUC should critically examine the incentives faced by gas and combined gas-electric utilities. Widespread electrification will require the participation of large utilities. Without adequate incentives, it is likely that participation will be halfhearted at best. The CPUC should consider whether offering a rate of return on electrification efforts that is at least equivalent, if not in excess to, that of pipeline repairs would be in the best interests of ratepayers. The Commission should balance the advantages of granting a profit incentive for utilities to electrify with the need to maintain low costs for ratepayers. For single-fuel gas utilities, the Commission may want to consider creative strategies to motivate them to participate in electrification.

22 See generally Aryeh Gold-Parker et al., *Benefit-Cost Analysis of Targeted Electrification and Gas Decommissioning in California*, E3, (Dec. 2023).

About This Brief

This is the first brief in a series titled “Legal Insights for the Gas Transition” published by the Emmett Clean Energy Law & Leadership Project (E-CELL).

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