Equitable Building Decarbonization Options in a Changing Legal Landscape

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ABSTRACT

Housing is a key social determinant of health, and the economic burdens and health consequences associated with indoor air pollution from fossil fuel-fired appliances fall disproportionately on lower income households and households of color.

With the recent Ninth Circuit case *California Restaurant Association v. Berkeley* finding the city's all-electric new construction ordinance is preempted under the Energy Policy and Conservation Act (EPCA), there is heightened concern about the impact court rulings could have on state and local building electrification efforts.

This paper provides an overview for non-lawyers of EPCA statutory preemption and the existing caselaw interpreting EPCA preemption of building codes. It discusses available legal options for local jurisdictions to electrify building codes. Then it assesses the legal questions involving building decarbonization options beyond building codes, such as building performance standards, regulating air emissions, and directly limiting or reducing gas infrastructure.

The legal landscape is changing rapidly with the potential for significant future legal challenges as governments pursue additional building decarbonization efforts. As jurisdictions consider their equitable building decarbonization options, they should be prepared for likely legal challenges from those opposed to transitioning away from health-harming gas appliances. This paper presents several policy options to drive building decarbonization that are likely safe from EPCA preemption.

Introduction

Eliminating the use of fossil fuels in buildings is an important element of any climate-mitigation strategy[1] and is particularly important for reducing the inequitable exposure of communities of color and low-income communities to air pollution. Federal building decarbonization policy, outside of rebates through the Inflation Reduction Act, leaves state and local governments to fill the gap. However, litigation under the Energy Policy and Conservation Act has led to a federal appeals court striking down one municipal ordinance aimed at complete building decarbonization, raising concerns about federal preemption of state and local climate action (*California Restaurant Association v. City of Berkeley* 2024).

This paper aims to clarify the state of subnational authority to promote building electrification and efficiency measures. We begin with an explanation of the *California Restaurant Association v. City of Berkeley* case, including both its impacts and limitations. We

[1] A Pacific Northwest National Lab analysis based on energy modeling found that building energy codes that only require efficiency would not be sufficient to require net zero energy homes or buildings (Pacific Northwest National Lab 2020). While PNNL's study did not explicitly analyze what steps are required to achieve ambitious energy code efficiency goals like Washington State's goal that its 2031 code permit 70% less energy use than its 2006 code (Washington State Department of Commerce 2020), it is unlikely that such energy code progress can be achieved without also including steps like the ones outlined in this paper to encourage renewables and remove the existing bias toward gas from energy codes.

then dedicate the bulk of the paper to highlighting and discussing options that state and local governments have for moving forward on building decarbonization: building performance standards, emissions standards, regulation of gas distribution, zoning, and subsidies and incentives. This list is by no means exhaustive, but it reflects some of the most prominent policies in the current discussion.

Federal Preemption of State and Local Building-Decarbonization Regulations

The Energy Policy and Conservation Act and California Restaurant Association v. Berkeley

The federal Energy Policy and Conservation Act (EPCA) creates energy-efficiency standards for certain appliances (EPCA §§ 6291-6317). It also preempts—that is, makes ineffective—state and local regulations "concerning the energy efficiency, energy use, or water use of [an EPCA-]covered product" (EPCA § 6297).[2] Until recently, this had been understood to preempt state and local energy-efficiency standards. For example, one appeals-court case said that EPCA "preempts state standards requiring greater efficiency than the federal standards" (*Building Industries Association of Washington v. Washington State Building Code Council* 2012).

However, the judges in a more recent federal case, *California Restaurant Association v. Berkeley* (*Berkeley*), interpreted the preemption provisions in EPCA much more broadly. *Berkeley* was an industry challenge to a municipal ordinance adopted in 2019, which prohibited the inclusion of gas infrastructure in new buildings. The industry plaintiff argued that, since some EPCA-covered appliances use gas, and eliminating gas from a building would prevent those appliances from being used there, the ordinance "concern[ed] the…energy use" of EPCA-covered appliances. The defendants and supporters argued, among other points, that such a broad interpretation of EPCA would eliminate the traditional state and local role in the regulation of utility distribution.

The judges' reasoning can be understood as proceeding in three steps. First, they agreed with the industry group that EPCA would preempt a regulation that entirely prohibited the use of an EPCA-covered appliance, because such a prohibition would reduce the "energy use" of the appliance to zero, therefore "concerning" the appliance's "energy use." Second, the judges argued that some regulations that have the effect of eliminating the use of EPCA-covered appliances, but do not explicitly prohibit those appliances, may also be preempted. Third, they determined that the *Berkeley* case ordinance was a "building code" within the scope of preemption.[3]

The judges also rejected the argument that their interpretation infringes on local control of utility distribution. They defined gas distribution as ending at the meter. Thus, since the ordinance only affected infrastructure on the building side of the meter, the judges decided that gas distribution would not be affected. They specifically noted that they were not addressing

[2] Importantly, EPCA exempts many regulations from this preemption, including regulations included in certain types of "building codes for new construction."

[3] The judges did not make clear why they considered the ordinance to be a "building code for new construction," since it was not actually incorporated into state building codes and did not amend the state codes. Presumably, the fact that the ordinance applied only to new construction and addressed a building system made it similar enough to a building code that the judges did not care to draw the distinction.

state or local authority to regulate gas distribution on the utility side of the meter; that is to say, the bulk of gas-distribution infrastructure.

Finally, *Berkeley*'s most recent developments point to a high level of disagreement with the case interpretation, even among other judges of the same appeals court. The case was heard by a three-judge panel. The city asked the court to convene a larger panel to review the original panel's decision. This request was denied. However, eleven judges supported a dissent to that denial,[4] laying out a more traditional and limited understanding of EPCA preemption and "urg[ing] any future court that interprets [EPCA] not to repeat the panel opinion's mistakes" (*Berkeley*, 89 F.4th at 1119). While no court is required to follow the dissent's reasoning, its force and the number of judges involved may persuade judges in future cases.

Implications of the *Berkeley* Case for State and Local Building Decarbonization Authority

Although EPCA is a federal law, the *Berkeley* case applies only in the states and territories in the jurisdiction of the Ninth Circuit Court of Appeals, namely: Alaska, Arizona, California, Guam, Hawai'i, Idaho, Montana, Nevada, the Northern Marianas, Oregon, and Washington (collectively, the "Ninth Circuit"). This means that, unless other courts adopt the *Berkeley* reasoning, state and local governments outside of the Ninth Circuit can pass and implement legislation identical to the ordinance struck down in *Berkeley*.

Currently, there are at least two lawsuits pending that are attempting to copy the *Berkeley* litigation in New York (*Mulhern Gas Co. v. Rodriguez* 2023; *Association of Contracting Plumbers v. City of New York* 2023). A third lawsuit in Colorado employs logic similar to that used in the *Berkeley* case, but challenges a different type of legislation: building performance standards, which are discussed in more detail below (*Colorado Apartment Association v. Ryan* 2024). If any of these cases are appealed, it is possible that the Second Circuit (responsible for federal appeals from New York) or the Tenth Circuit (responsible for federal appeals from Colorado) would reach a different conclusion than the Ninth Circuit, creating what is called a "circuit split." This would greatly increase the chances of the U.S. Supreme Court taking on the case and issuing an opinion that would apply nationwide. Until then, however, the viability of the type of regulation at issue in the *Berkeley* case depends largely on whether the city or state is in the Ninth Circuit.

There is also some ambiguity about the extent to which the *Berkeley* opinion will affect other kinds of regulation. The ordinance in *Berkeley* effectively prevented any use of gas appliances in non-exempt buildings, resembled a "building code for new construction," and affected infrastructure on the building side of the meter. The judges in *Berkeley* emphasized that each of these factors was important in their decision, and that their opinion was not meant to address any other kind of regulation. Therefore, we expect other courts in the Ninth Circuit, or outside the Ninth Circuit that decide to follow the *Berkeley* decision, to consider those three factors in determining whether regulations are preempted; this informs the following analysis.

[4] Specifically, eight active-status judges joined the dissent, and three senior-status judges wrote separately to support the dissent. This is likely because only active-status judges vote on whether to engage in this type of review, and therefore senior-status judges generally do not file or join dissents to such decisions.

Legal Pathways for Building Decarbonization

The remainder of this paper discusses the legal viability of specific types of building-decarbonization regulation. Throughout, we consider the three key elements of the *Berkeley* decision: complete prohibition on gas use, similarity to new construction building codes, and applicability to the building side of the meter. It is important to bear in mind that the *Berkeley* decision does not currently apply outside of the Ninth Circuit states and territories. Governments outside of the Ninth Circuit are still able to implement regulations identical to the ordinance struck down in *Berkeley*.

Building Performance Standards

As of March 2024, four states and nine localities have adopted building performance standards (BPS). Those 13 jurisdictions and more than thirty others have joined President Biden's National Building Performance Standard Coalition to commit to adopting equitable BPS and sharing best practices in a community of practice, as depicted in Figure 1, below.

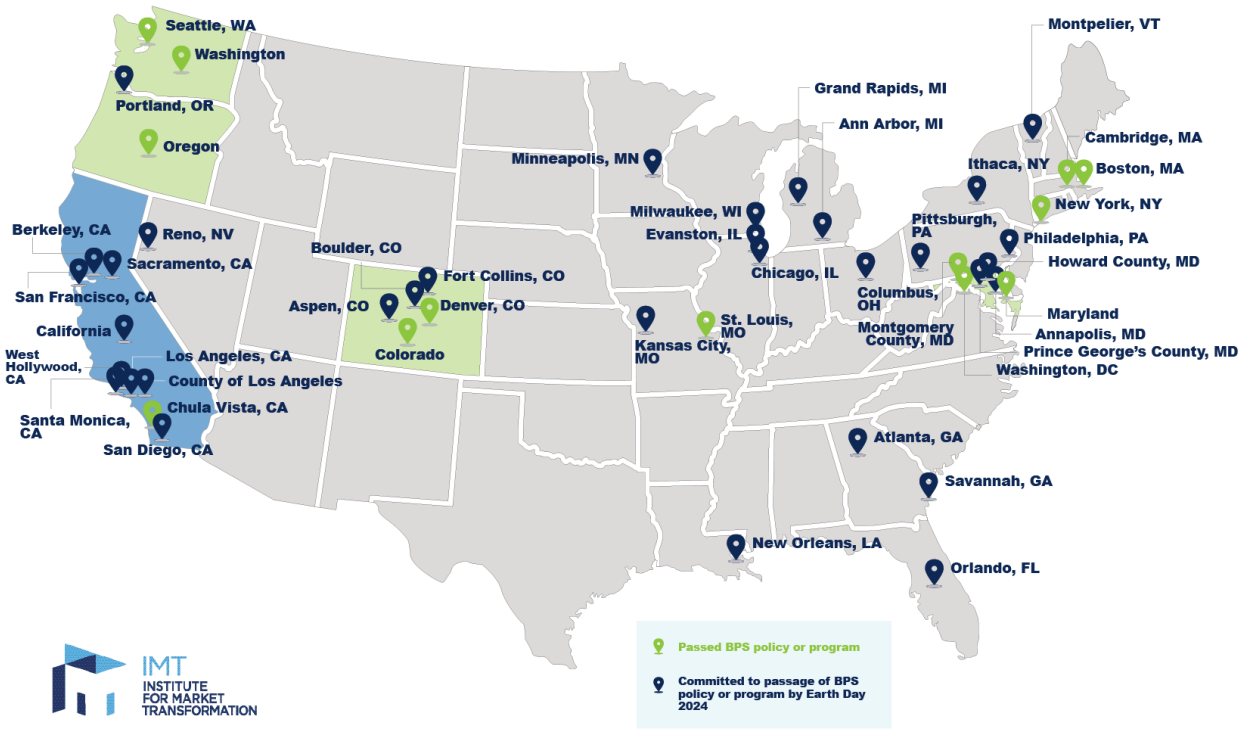

Figure 1. States, counties, and cities in the National Building Performance Standard Coalition. *Source*: National Building Performance Standard Coalition, 2024.

A building performance standard is a policy that sets specific deadlines for existing public and private buildings to achieve quantified standards of performance. BPS apply to buildings at or above a size threshold; the 13 adopted BPS have minimum thresholds of 10,000-50,000 square feet of gross floor area.

BPS can regulate many performance metrics, including water use or ventilation. To date, all 13 adopted BPS regulate only energy intensity and/or emissions intensity. BPS become more

ambitious over time at a cadence set in law, driving continuous, long-term improvement in the building stock. BPS requirements apply at a set schedule and require no trigger. In this way BPS are different from, and complementary to, building energy codes, which are triggered by a construction or renovation permit application (Institute for Market Transformation 2024).

BPS typically apply to almost all large buildings and not just to the 1-2% of the building stock typically constructed each year. So, BPS can quickly drive change to the built environment. In fact, BPS can be one of the most powerful policy tools for driving such change, especially when paired with technical, practical, and financial help to building owners, operators, and occupants. Because of the great potential of BPS, such assistance, tenant protections, and other safeguards must be employed to assure that the process of designing and implementing BPS is equitable and inclusive.

To date, building decarbonization is a central goal of every BPS adoption. The most common BPS performance metric is site energy use intensity (site EUI). Building owners can lower site EUI in many ways. The least expensive options are operational changes including retuning, shutting down lights and systems serving unoccupied spaces, optimizing HVAC routines, and improved maintenance. These changes improve efficiency and reduce GHG emissions, but rarely eliminate onsite emissions. Another way to lower site EUI is through capital improvements, including replacing lighting, building envelope, water heaters, and HVAC equipment. Replacing combustion equipment with heat pumps is typically the single measure that most lowers site EUI. So, BPS that require very low EUIs will induce most building owners to replace all frequently-used combustion appliances with heat pumps.

Maryland's proposed BPS rules go a step farther. They have two performance metrics. They use site EUI and the trajectory approach – setting different trajectories by building type – to ensure energy efficiency and deter installation of inefficient electric resistance heaters. To further support decarbonization, Maryland's BPS requires that onsite and district thermal GHG emissions be lowered in five-year intervals by 2030, 2035, ending at zero in 2040. Instead of achieving GHG targets, owners can make alternative compliance payments set at the social cost of carbon instead of achieving GHG targets (Maryland Department of Environment 2024).

The Institute for Market Transformation (IMT) model BPS law, first published in 2021, serves as the starting point for most new BPS bills. It includes five performance metrics: site EUI, onsite and district thermal greenhouse gas emissions, coincident peak demand, water usage intensity, and indoor air quality. It also introduced the trajectory approach, a method to set each building's BPS targets to equitably distribute the level of effort across building owners while providing long-term certainty. Like many adopted BPS, it features flexibility mechanisms, including giving owners the option to propose alternative compliance plans or to pay a fee in lieu of achieving performance targets (Institute for Market Transformation 2021).

Building performance standards and EPCA. Since building performance standards are not building codes, they may also be insulated from the effects of the *Berkeley* decision. However, there are at least two potential areas of concern here. First, some BPS that are based on emissions will eventually reduce the permissible amount of greenhouse-gas emissions in covered buildings to zero. In the absence of flexibility mechanisms, this could be interpreted as effectively prohibiting the use of on-site fossil-fuel appliances. The Ninth Circuit's core claim in *Berkeley*—that state and local governments cannot prohibit the use of products subject to EPCA energy-efficiency standards—could imply that any regulation that effectively prohibits the use of gas appliances in a building is preempted by EPCA. It is not certain that a reviewing court would extend *Berkeley*'s logic in this way. Particularly given the opinion's insistence that its

"holding…is limited" and applies only to "building codes that regulate the gas usage of covered appliances on premises where gas is otherwise available" (*Berkeley*, 89 F.4th at 1103). Flexibility mechanisms, such as the ability to pay a fee in lieu of reducing emissions, or the ability to use off-site renewable energy, may also protect such regulations from preemption.

For instance, Boston enacted a policy requiring buildings over 20,000 square feet to meet emissions targets starting in 2025 with the final target of carbon neutrality by 2050. Alternative compliance options include the off-site purchase of renewable energy or paying an alternative compliance payment per metric ton of carbon dioxide equivalent in excess of the building's target. These alternative compliance pathways reduce the legal risks posed by *Berkeley* because they do not prevent consumers from using covered products under EPCA. Rather, building owners retain a range of options for achieving compliance with the city's BPS.

BPS that only regulate buildings' energy use (e.g. site EUI) rather than emissions are unlikely to force a building to stop using fossil-fuel appliances. They are fuel-neutral and do not require buildings to completely eliminate energy use, the way that emission-based BPS may require the complete elimination of emissions. Thus, energy-based BPS and those with flexibility mechanisms are likely to be protected from the effects of *Berkeley*.

Building Energy Codes for New Construction

Building codes for new construction are a key policy lever for building decarbonization. Electrification and efficiency measures are usually much less expensive and easier to perform at the time of construction than during building retrofits. Building codes are typically passed by state governments and are generally based on "parent codes" created by nonprofit institutions. For energy codes—building codes that specifically address building energy use—the primary parent codes are the International Energy Conservation Code, published by the International Code Council, and ASHRAE's Standard 90.1. Most states adopt these codes with amendments that reflect their particular needs or policy preferences. Some states allow local governments to adopt additional amendments. Others have no statewide code and delegate responsibility for building codes to local governments.

In the Ninth Circuit, energy-code provisions that apply to new construction and prevent builders from using gas are at risk for preemption under *Berkeley*. However, there are many options for energy codes that stop short of outright fuel bans. In fact, EPCA includes an exception for certain types of flexible codes. Thus, codes that meet the following requirements (EPCA § 6297(f)) are immune from EPCA preemption, even in the Ninth Circuit:

1. The code must set an ends-oriented standard that allows the builder to select measures to meet a specified energy goal.
2. The code cannot set mandatory standards for a specific EPCA-covered appliance that is more stringent than EPCA standards require.
3. The code can award builders credit for using appliances that are more efficient than EPCA standards require, which can be used to reduce the energy standards in other areas of the code, but those credits must provide for reductions on a one-for-one basis, based either on cost or energy savings.
4. If the code uses baseline designs, against which other designs would be compared, the baseline design cannot include appliances that are more efficient than EPCA standards require.

5. If the code is designed as a selection from different bundles of energy requirements, at least one of those bundles must be designed so that EPCA-covered appliances do not need to beat the EPCA standards. In addition, if there are any bundles that require EPCA-covered appliances to be more than 5% more efficient than EPCA standards require, there must be an equal number that are within 5% of the EPCA standards.
6. The goal that the energy code sets for energy efficiency must be described in terms of energy consumption or cost.
7. Finally, the code must use the same energy-efficiency testing procedures as EPCA regulations use.

Taken together, these requirements allow for a variety of flexible energy efficiency codes. Under such codes builders can use highly efficient appliances, such as heat pumps, or achieve equivalent efficiency through other means, such as by tightening the building insulation. Energy codes can also include provisions that promote electrification without prohibiting the use of gas appliances. "Electric-ready" provisions require homes to include the infrastructure necessary for electric appliances, even if they use gas appliances. This is the approach taken by Washington's most recent commercial code (2021 Washington State Energy Code—Commercial, 2024).

Two federal cases have interpreted this flexibility requirement. In *Air Conditioning, Heating and Refrigeration Inst. v. City of Albuquerque* (*Albuquerque*) (2008; 2012), a trial-level court evaluated various code approaches for consistency with the EPCA exception. In a preliminary ruling, the court found that a code that allowed for flexibility on paper, but whose alternative options were practically impossible, would not qualify for the exception (2008). That code also gave builders a choice between using appliances that are more efficient than EPCA requires and taking other, more expensive, measures to increase efficiency in other aspects of the building. The judge in *Albuquerque* suggested this could be considered a penalty for using EPCA-compliant appliances that would disqualify the code from the EPCA exception (2008). However, this initial ruling was never finalized; the court instead struck down the code on other grounds (2012).

The second case, *Building Industry Association of Washington v. Washington State Buildings Code Council* (*Washington*) (2012), was ultimately decided at the Ninth Circuit Court of Appeals. That opinion determined that the EPCA exception allowed for a code to require builders to use more efficient appliances than required by the EPCA, or take on other, more costly efficiency measures. This opinion also determined that, although the EPCA exception requires efficiency credits to be provided on a one-to-one basis, "some approximation" was permissible in assigning credits (683 F.3d at 1146). Because the *Washington* opinion came from an appeals court and the *Albuquerque* opinion came from a trial-level court, and because the relevant portions of *Albuquerque* came from an initial ruling, the *Washington* approach to the EPCA exception must be followed within the Ninth Circuit and is more likely to be followed outside of it. Therefore, a flexible code that allows some options for builders to avoid using appliances that are more efficient than EPCA requires, even if those options are more expensive, can still qualify for the EPCA exception.

Emission Standards

State or local governments have also considered applying restrictions on the amount of pollutants that an appliance, building, or fuel can emit. This type of regulation is conceptually

different from appliance efficiency regulations. Air pollution is regulated at the federal level by the Clean Air Act, not EPCA, and is motivated by public-health concerns, not by a need to conserve energy. State, local, and tribal air agencies must adopt measures to control pollution and stay within attainment of National Ambient Air Quality Standards (NAAQS) established by the Environmental Protection Agency (EPA) as required by the Clean Air Act.[5]

Within the Ninth Circuit, emission standards that eliminate certain types of fuel—for example, because it is technologically impossible to combust that fuel without emitting more than the permitted amount of pollutant—have an uncertain status. Such standards are not necessarily "building codes for new construction," but when they apply only to new buildings, they may be treated as such. Further, they could be thought of as applying to the building side of the meter, since they generally address the point of fuel combustion. However, they could also be thought of as applying to the point where the fuel achieves its final chemical composition, or to a point outside the energy system altogether. Finally, as addressed below, they may be fully incorporated into the Clean Air Act's regulatory structure, implying that they should not be subject to EPCA preemption at all.

Fuel emission standards. Some cities have prohibited the combustion of any fuel that emits more than a specified level of pollutant. For example, New York City has prohibited "the combustion of any substance that emits 25 kilograms or more of carbon dioxide per million British thermal units of energy" in new buildings, with some exceptions (N.Y.C. Admin. Code § 24-177.1). Chicago's Clean and Affordable Buildings Ordinance, introduced in early 2024, has essentially the same provision (Clean and Affordable Buildings Ordinance 2024). These would have the effect of preventing the use of commercially available fossil-fuel appliances, since no fossil fuel currently meets that standard for carbon-dioxide emissions per unit of energy (Energy Information Administration 2023).[6]

As noted above, how the *Berkeley* opinion logic applies here is unclear. These prohibitions are not explicitly building codes, but they do apply to new construction, They are stylized as emission regulations, but they have a similar effect to fuel prohibitions. It may also be relevant that air quality regulation is an area of law separate from energy codes. So courts may think of these regulations as more removed from EPCA's ordinary scope than the *Berkeley* ordinance. New York City's ordinance was challenged under the same theory as the *Berkeley* opinion, and so we are likely to get an answer from one lower court soon (*Association of Contracting Plumbers v. City of New York* 2023).

Appliance standards. Many state and local regulations set limits on the amount of pollutants an appliance can emit. These are typically in service to clean-air standards set by state governments or under the federal Clean Air Act. Although they may have the effect of requiring EPCA-

[5] https://www.epa.gov/criteria-air-pollutants

[6] It is not yet clear how these laws would treat fossil fuels mixed with hydrogen or renewable gas. Both the enacted New York City ordinance and the proposed Chicago ordinance specify that qualification for their emissions standards is based on the U.S. Energy Information Administration's (EIA's) statistics (N.Y.C. Admin. Code § 24-177.1(b); Clean and Affordable Buildings Ordinance 2024 § 2). To the authors' knowledge, the EIA has not released an accounting of the carbon-dioxide emissions per unit energy of any blended fuels used in appliances. Notably, the EIA's carbon coefficient for motor gasoline blended with fuel ethanol does assume that the ethanol component of the gasoline does not emit any carbon dioxide (Energy Information Administration 2023). This suggests that the EIA could consider the portion of renewable gas produced by renewable sources to have no carbon emissions, as well.

covered appliances to run more efficiently, to the authors' knowledge they have never been subject to an EPCA preemption challenge.

Among these appliance standards, there is a growing movement to adopt "zero emission" standards, which would require appliances that do not emit certain pollutants of concern, primarily nitrogen oxides (NO_x). For example, the Bay Area Air Quality Management District (BAAQMD), a regional air-quality regulator in California, recently enacted rules that will eventually require certain heating appliances to have zero NO_x emissions (BAAQMD 2023). These zero-NO_x standards are particularly important in California, where smog levels (formed in part by NO_x) have persistently exceeded federal standards (e.g., EPA 2023).

Under currently available technology, these zero-emission standards would appear to prevent appliances subject to them from using gas.[7] Because BAAQMD is in the Ninth Circuit, the *Berkeley* opinion has immediately raised questions about its future, and that of other planned rules in California. However, the rules could be incorporated into the regulatory structure of the federal Clean Air Act, which would likely protect them from preemption under EPCA. The Clean Air Act functions, in part, by requiring states to come up with their own paths to comply with federal air-pollution standards, which they bundle into "state implementation plans" (SIPs) (Clean Air Act §§ 7407, 7410). These SIPs can include state or local laws, regulations, or policies. The SIPs are then subject to review and approval by the U.S. Environmental Protection Agency (EPA) (Clean Air Act § 7410).

Importantly, once a SIP is approved, federal appellate courts agree that its provisions gain "the force and effect of federal law" (e.g., *Safe Air for Everyone v. EPA* 2007; *Sierra Club v. EPA* 2007; *Union Electric Company v. EPA* 1975). If the regulations are federal in nature, they are likely not to be subject to preemption, since preemption applies only to state and local laws. Instead, a court that believed that a SIP provision conflicted with EPCA's preemption provision would likely be obligated to "harmonize" the two, a process that would provide much more protection to the SIP provisions than is afforded to state and local regulations. This is still somewhat theoretical, although one Ninth Circuit opinion agrees with this understanding in the context of federal railway preemption: "[T]o the extent that state and local agencies promulgate EPA-approved statewide plans under federal environmental laws…, [federal railway law] generally does not preempt those regulations because it is possible to harmonize [federal railway law] with those federally recognized regulations" (*Ass'n of Am. Rrs. v. S. Coast Air Qual. Mgmt. Dist.* 2010, 622 F.3d at 1098).

Limitations on Gas Distribution

As noted above, state and local governments have traditionally been the primary regulators of gas distribution. This regulatory role includes deciding where gas-distribution networks can be placed initially. Historically, these decisions have been based on the need for gas in an area and the cost of building and maintaining the necessary infrastructure. Recently, however, states and localities have been examining the possibility of using this role to encourage or mandate the removal of gas from use in an area altogether.

[7] Depending on the regulations' ultimate form, this could go beyond gas appliances. BAAQMD's regulations apply only to gas-fired furnaces, boilers, and water heaters (BAAQMD 2023). Similar regulations proposed by the South Coast Air Quality Management District would also apply to gas-fired appliances (SCAQMD 2024a; 2024b, 36-38; 2023). The standard proposed by the California Air Resource's Board (CARB), on the other hand, refers generally to "space and water heaters" and therefore may include appliances that use other fuels, potentially even including non-fossil fuels that release air pollutants when combusted (CARB 2022, 101).

This policy pathway may be particularly attractive in the Ninth Circuit. The *Berkeley* opinion strongly implies that the regulation of gas-distribution networks is not preempted by EPCA, even if it leads to gas becoming unavailable to a building. Such regulations are also clearly not "building codes for new construction," and can be designed to avoid regulating gas infrastructure on the building side of the meter.

State and local restrictions on gas distribution. State and local governments typically exercise differing levels of authority over gas distribution. States typically assign gas utilities "service areas," which are the regions in which the gas utility can and, to an extent, is required to provide service (Wallace et al. 2020, 10, 24-25). States also exercise a high level of regulatory authority over the business decisions of gas utilities, especially privately owned ones.[8] In particular, states generally determine when a utility can raise prices to recover the cost of expanding or maintaining its infrastructure. In this way, they can exert a high level of control over a utility's business decisions.

Local authority, on the other hand, is typically rooted in the control the local government has over public land and rights-of-way. Gas utilities almost always need to install physical infrastructure, such as mains and service lines, on public land. To do so, they typically enter into a "franchise" or "license" agreement with the governmental entity that controls that land, buying the right to use the land. These agreements could limit the areas where a gas utility is allowed to use the land for their infrastructure, effectively preventing areas from receiving gas service. Even outside the franchise structure, local governments could refuse access to gas infrastructure for certain areas. Some local governments also have their own, public gas utilities that can be more directly controlled.

Neighborhood-scale electrification. A related strategy is to fully transition all the buildings in an area to electricity, then remove the gas infrastructure. If the area is strategically selected based on gas infrastructure maintenance needs and the ease of infrastructure removal from the distribution network, this approach can result in substantial cost savings to the gas utility. This "neighborhood-scale electrification" or "tactical decommissioning" strategy both protects residents from the harms of gas combustion and reduces costs for people who continue using gas (e.g., Gridworks n.d.). This approach could be pursued alongside other strategies to reduce the service or franchise area of a gas utility, to lock in decarbonization while also achieving cost savings.

Reducing the costs of current gas infrastructure is particularly important to avoid a gas "death spiral." The "death spiral" is a scenario in which a large number of customers stop using gas, but the fixed costs of gas infrastructure remain the same, leaving the remaining customers paying a high per-unit rate for gas. The higher costs would then push more customers to drop gas, raising prices even more for those remaining in the system (e.g., Gridworks 2019, at 4-5). The result is to leave people who have no option to electrify—likely because they rent their homes or cannot afford new appliances—with extremely high gas prices.

[8] For one example of a state regulatory body exerting that control, see the recent "Future of Gas" decision from the Massachusetts Department of Public Utilities (2023).

Subsidies and Incentives

State and local governments may encourage building electrification and efficiency through subsidies and incentives. Because they work on a voluntary basis, subsidies and incentives are free of many of the restrictions that inhibit other policy pathways. The *Berkeley* opinion almost certainly does not restrict a government from securing voluntary decarbonization through subsidies and incentives because they do not prohibit appliance use, they are not a building codes, and don't directly affect any part of the fuel-distribution infrastructure.

The possible subsidies are too many and varied to list here. Some governments provide direct installation of electric appliances to replace gas appliances (e.g., California Energy Commission n.d.). Where local governments run publicly owned utilities, they may provide rebates through the utility for the installation of efficient electric appliances (e.g., Sacramento Municipal Utility District n.d.). Governments may also charge fees as part of a building-decarbonization program and direct those fees to subsidize decarbonization measures for low-income households (e.g., City of Boston Code of Ordinances 2022 § 7-2-2(g)).

Though less commonly discussed, zoning codes are another regulatory method for local governments to encourage or even require electrification. Many local governments have broad authority to pass zoning codes. One common way in which local governments use that authority is to relax zoning and design requirements for buildings if they meet other policy goals of the local government. One example of this approach is the town of Brookline, Massachusetts, which created a special zoning district in which only buildings that met certain green-building certifications were eligible for certain variances (Town of Brookline By-Laws 2018, § Z-5.06(4)(j)(3)(d)). One concern with this approach is that the specially zoned areas will receive a disproportionate amount of the co-benefits of green buildings. If the special zoning districts are placed in areas that are already wealthy, high-income, and/or white, this could exacerbate existing economic and racial inequities in health and energy burden (e.g. Tozer 2019).

Conclusion

As with other industries like the tobacco industry (Public Health Law Center 2024), the gas industry is actively litigating against local and state governments in an attempt to block equitable building decarbonization efforts. The goal appears to be to stop implementation where they can, but also to chill future efforts by other local and state governments that may think twice about spending the resources needed to defend against the deep pockets of industry. Fortunately, local and state governments have many options available to avoid a negative outcome in litigation. Also, organizations like the Public Health Law Center stand ready to provide legal technical assistance to organizations and state and local governments in developing building decarbonization laws to minimize litigation risk. This will likely be a rapidly evolving legal landscape in the coming years with the potential for conflicting opinions from various courts, so it will be important to seek both local counsel and advice from those closely tracking the EPCA preemption landscape when developing policy options.

Summary Table

Policy	Summary	EPCA Preemption?	Active Litigation?
Building Performance Standards	Set deadlines for existing buildings to meet a performance standard	Unlikely	Yes
Building Codes	Require higher efficiency or electric codes for new building	Maybe (depends on approach)	Yes
Fuel Emissions Standards	Use local/state authority to regulate greenhouse gases from buildings	Unlikely	Yes
Clean Air Act appliance standards	Use Clean Air Act authority to regulate emissions from appliances	Unlikely	No
Limit Gas Distribution	Use state or local authority to restrict gas infrastructure	Highly unlikely	No
Subsidies and Incentives	Encourage building electrification and efficiency	Highly unlikely	No

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