

# Can Local Governments Exercise Police Power to Combat Climate Change Impacts by Banning Natural Gas in New Buildings?

YICHAO GU\*

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## I. INTRODUCTION

Natural gas (CH<sub>4</sub>) and carbon dioxide (CO<sub>2</sub>) are both greenhouse gases (GHGs) that trap heat in the atmosphere. CH<sub>4</sub> is a more potent GHG than CO<sub>2</sub>—eighty-four times stronger than CO<sub>2</sub> over twenty-nine years, and twenty-eight times stronger over 100 years.<sup>1</sup> Natural gas use in California accounted for seven percent of the total natural gas use within the United States in 2020.<sup>2</sup> California’s residential and commercial building sector is its third highest natural gas consumer (28%), after power plants (42%) and the industrial sector (30%).<sup>3</sup> More than 90% of California households use at least one natural gas-fueled appliance for water heating, space heating, cooking, laundry drying, or fireplace lighting.<sup>4</sup>

While California has comprehensive statewide regulations to reduce GHG emissions from power plants and the industrial sector, such as the Renewables Portfolio Standard (RPS) and the Cap-and-Trade Program, none of the regulations control the emissions from natural gas directly consumed by residential and commercial customers.<sup>5</sup> This difference in regulations is reflected in the California statewide GHG emissions inventory

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1. GUNNAR MYHRE ET AL., ANTHROPOGENIC AND NATURAL RADIATIVE FORCING 731 (Daniel Jacob et al. eds., 2013), [https://www.ipcc.ch/site/assets/uploads/2018/02/WG1AR5\\_Chapter08\\_FINAL.pdf](https://www.ipcc.ch/site/assets/uploads/2018/02/WG1AR5_Chapter08_FINAL.pdf) [<https://perma.cc/2859-3L2G>] (Methane’s 20-year global warming potential is 84 and 100-year global warming potential is 28); THE CITY OF OAKLAND, OAKLAND 2030 EQUITABLE CLIMATE ACTION PLAN 50 (2020), <https://cao-94612.s3.amazonaws.com/documents/Oakland-ECAP-07-24.pdf> [<https://perma.cc/Z93D-8KBP>].

2. U.S. ENERGY INFO. ADMIN., NATURAL GAS CONSUMPTION BY END USE (Oct. 31, 2022), [https://www.eia.gov/dnav/ng/ng\\_cons\\_sum\\_dc\\_u\\_nus\\_a.htm](https://www.eia.gov/dnav/ng/ng_cons_sum_dc_u_nus_a.htm) [<https://perma.cc/4UZZ-HAQC>] (total 2020 consumption in California is 2,074,302 million cubic feet and total 2020 consumption in the U.S. was 30,472,212 million cubic feet).

3. *Id.* (2020 consumption in California is 615,090 million cubic feet from electric power, 690,283 million cubic feet from industrial, 458,498 million cubic feet from residential, and 232,642 million cubic feet from commercial).

4. YIFANG ZHU ET AL., EFFECTS OF RESIDENTIAL GAS APPLIANCES ON INDOOR AND OUTDOOR AIR QUALITY AND PUBLIC HEALTH IN CALIFORNIA 8 (2020), <https://ucla.app.box.com/s/xyzt8jc1ixnetiv0269qe704wu0ihif7> [<https://perma.cc/V5EH-HHGG>].

5. CAL. AIR RES. BD., CALIFORNIA’S 2017 CLIMATE CHANGE SCOPING PLAN 25 (2017), [https://ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/scoping\\_plan\\_2017.pdf?utm\\_medium=email&utm\\_source=govdelivery](https://ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/scoping_plan_2017.pdf?utm_medium=email&utm_source=govdelivery) [<https://perma.cc/8YTG-66WD>].

trend: emissions from the electric power sector decreased by 41% from 2000 to 2019, largely due to RPS and Cap-and-Trade incentivize the dispatch of renewables over fossil fuel generation, while emissions from commercial and residential buildings remained relatively constant throughout the same time frame.<sup>6</sup>

In response, many local jurisdictions in California with aggressive GHG reduction targets in their Climate Action Plans (CAPs) aim to eliminate residential and commercial building natural gas use by adopting building ordinances requiring all-electric appliances in new constructions.<sup>7</sup> The City of Berkeley, citing local climate, wildfire, and air quality concerns,<sup>8</sup> used a new approach in 2020 by exercising its police power to prohibit natural gas infrastructure in newly constructed buildings under the Municipal Health and Safety Code (the Gas Ban Ordinance).<sup>9</sup>

This article analyzes whether the Berkeley Gas Ban Ordinance would survive federal or state preemption challenges and examines whether Berkeley properly exercised its police power in adopting the Gas Ban Ordinance. Section II of this article provides background on the air quality and climate change impact from natural gas combustion. Section III discusses Berkeley's police power authority to adopt the Gas Ban Ordinance. Sections IV through VI present potential express and implied preemption challenges and analyze arguments on both sides. Section VII concludes that the Gas Ban Ordinance is likely to survive federal and state express preemption, but it may be implicitly preempted because it may interfere with the purpose, objective, and implementation of a state code.

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6. CAL. AIR RES. BD., CALIFORNIA GREENHOUSE GAS EMISSIONS FOR 2000 TO 2019: TRENDS OF EMISSIONS AND OTHER INDICATORS 13 (2021), [https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000\\_2019/ghg\\_inventory\\_trends\\_00-19.pdf](https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2019/ghg_inventory_trends_00-19.pdf) [<https://perma.cc/Q3TZ-NPTW>] (emissions from total electric power dropped from about 105 million tons CO<sub>2</sub>e to below 60 million tons CO<sub>2</sub>e).

7. Kristiana Faddoul, *California's Cities Lead the Way on Pollution Free Homes and Buildings* SIERRA CLUB (July 22, 2021), <https://www.sierraclub.org/articles/2021/07/californias-cities-lead-way-pollution-free-homes-and-buildings> [<https://perma.cc/KRV8-7UFV>].

8. Berkeley, Cal., Mun. Code § 12.80.010(B) (2020), <https://berkeley.municipal.codes/BMC/12.8> [<https://perma.cc/2GPH-GK75>].

9. *Id.* at § 12.80.040.

## II. BACKGROUND ON GHG AND AIR QUALITY IMPACTS FROM NATURAL GAS COMBUSTION

Scientific evidence on the human contribution to climate change and more frequent climate-related disasters is clear.<sup>10</sup> Natural gas combustion is one of the key contributors to climate change.<sup>11</sup> In California cities, 20% to 30% of citywide GHG emissions are from residential and commercial building natural gas use.<sup>12</sup> Eliminating natural gas use in buildings is an important step towards reducing GHG emissions and mitigating climate change impacts.<sup>13</sup> CAPs in recent years have adopted building decarbonization strategies to eliminate emissions from natural gas by: (1) converting mixed-fuel (electricity and natural gas) buildings to all-electric buildings through new construction requirements and existing building retrofits; and (2) supplying renewable and GHG-free electricity to the all-electric buildings.<sup>14</sup>

In addition to GHG emissions reduction, eliminating natural gas use in buildings also improves indoor and outdoor air quality, and public health.<sup>15</sup> Natural gas combustion forms pollutants, such as particulate matter (PM), nitrogen dioxide (NO<sub>2</sub>), and carbon monoxide (CO) from incomplete combustion, which are linked to acute respiratory illness, stroke, increased blood pressure, and chronic health effects.<sup>16</sup> Natural gas kitchen appliances have significant indoor air quality impacts linked to respiratory illness, because pollutants are emitted directly within the home without proper ventilation.<sup>17</sup> Pollutant (CO and NO<sub>2</sub>) concentrations during cooking exceed national- and California-based ambient air quality standards and may

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10. See RICHARD P. ALLAN, ET AL., INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, SUMMARY FOR POLICY MAKERS at 4, 18 (2021).

11. U.S. ENV'T PROT. AGENCY, GLOBAL GREENHOUSE GAS EMISSIONS DATA (2022), [https://www.epa.gov/ghgemissions/global-greenhouse-gas-emissions-data#:~:text=Electricity%20and%20Heat%20Production%20\(25,of%20global%20greenhouse%20gas%20emissions](https://www.epa.gov/ghgemissions/global-greenhouse-gas-emissions-data#:~:text=Electricity%20and%20Heat%20Production%20(25,of%20global%20greenhouse%20gas%20emissions) [<https://perma.cc/5TU4-9GWY>].

12. See CITY OF BERKELEY, CLIMATE ACTION PLAN UPDATE (July 21, 2020), [https://www.cityofberkeley.info/Clerk/City\\_Council/2020/07\\_Jul/Documents/2020-07-21\\_Presentations\\_Item\\_5\\_\(6pm\)\\_Pres\\_CMO\\_pdf.aspx](https://www.cityofberkeley.info/Clerk/City_Council/2020/07_Jul/Documents/2020-07-21_Presentations_Item_5_(6pm)_Pres_CMO_pdf.aspx) [<https://perma.cc/AXL8-KTN5>] (showing 31% of 2018 community-wide GHG emissions were from commercial and residential natural gas); see also CITY OF SAN DIEGO, CLIMATE ACTION PLAN 2020 ANNUAL REPORT APPENDIX 2 tbl. 1 (2020), <https://www.sandiego.gov/sites/default/files/cap-2020-annual-report-appendix.pdf> [<https://perma.cc/YS6Y-P5M7>] (showing 20% of 2019 greenhouse gas emissions were from natural gas emission category).

13. OAKLAND, *supra* note 1, at 51 (Measure B-1 eliminating natural gas in new buildings and Measure B-2 plan for all existing buildings to be efficient and all-electric by 2040 are combined with the goal to achieve 100% clean electric grid in 2030 and 2050).

14. *Id.* at 50, 55–56.

15. Zhu, *supra* note 4, at 41.

16. *Id.* at 9, 26.

17. *Id.* at 12.

harm public health.<sup>18</sup> Therefore, replacing residential gas appliances reduces both indoor and outdoor pollutants and decreases health risk associated with high pollutant concentrations.<sup>19</sup>

### III. LOCAL GOVERNMENT’S POLICE POWER AUTHORITY UNDER CALIFORNIA CONSTITUTION

The California Constitution has historically granted police power, such as land use and zoning authority, to local county and city governments, so long as the police power does not conflict with “general laws.”<sup>20</sup> Berkeley used its municipal police power to adopt the Gas Ban Ordinance, which may operate on the same subject matter as State law regarding energy.<sup>21</sup> While this may seem like grounds for state law preemption, the preemption doctrine does not preclude a city from exercising its police power on a subject simply because the state legislature has also enacted a law on the same subject.<sup>22</sup> The level of judicial review for a local jurisdiction’s proper exercise of police power is less stringent than the strict scrutiny standard, where regulation must be narrowly tailored to promote a compelling government interest.<sup>23</sup>

#### *A. Local Health and Safety Concerns Support Using Police Power to Ban Natural Gas*

In California, local governments maintain the maximum degree of control over local zoning by exercising their police power, not under the delegation of authority by the state.<sup>24</sup> An ordinance passed under the government’s police power is not subject to the stringent standard, unlike an ordinance with content-based restrictions on aerial banner advertisements

18. *Id.* at 26.

19. *Id.* at 32.

20. *Miller v. Bd. of Pub. Works*, 195 Cal. 477, 483 (1925); Cal. Const. art. XI § 7.

21. Matt Jachman, *Gas Infrastructure Ban Takes Hold in Berkeley*, ACHR NEWS (Sept. 1, 2022), <https://www.achrnews.com/articles/146993-gas-infrastructure-ban-takes-hold-in-berkeley#:~:text=Berkeley%20was%20the%20first%20community,building%20additions%20and%20remodeling%20projects> [https://perma.cc/N3YK-9ZXZ].

22. *Harrahill v. City of Monrovia*, 104 Cal. App. 4th 761, 767 (2002).

23. *Strict Scrutiny*, LEGAL INFO. INST., <https://www.law.cornell.edu/wex/strictscrutiny#:~:text=Overview,sues%20the%20government%20for%20discrimination> [https://perma.cc/8E9R-LY8N] (last visited Oct. 4, 2022).

24. *Big Creek Lumber Co. v. Cnty. of Santa Cruz*, 38 Cal. 4th 1139, 1151 (2006).

over heavily populated areas.<sup>25</sup> If an ordinance under the exercise of a government’s police power is reasonably related to a legitimate policy purpose, such as to protect public peace, safety, morals, or health and welfare, and the ordinance is not arbitrarily invoked and applied, then it is within constitutional limits.<sup>26</sup>

Even if the level of judicial review is less stringent than the strict scrutiny standard, the local legislation cannot completely lack a rational basis.<sup>27</sup> However, existence of an emergency is not a prerequisite to pass the local legislation.<sup>28</sup> Using the rational basis test, a Berkeley rent control charter amendment was held as a proper exercise of the police power.<sup>29</sup> Findings of ameliorative conditions on housing shortage problems—such as availability of housing in adjacent cities and increased rental housing supplies—may suggest the Berkeley City Council should not enact rent control, but were not enough to dispel the sufficient rational basis of the amendment.<sup>30</sup>

Similarly, another Berkeley ordinance that asks wireless providers to disclose potential radiation frequency (RF) exposure risk to customers is a legitimate government interest to protect public health and safety, which passes the rational basis test.<sup>31</sup> Even if there is scientific uncertainty in the degree of danger of RF exposure, a reasonable scientific basis exists between RF exposure at some level and health risk. Therefore, this requires certain RF limits for safety purposes.<sup>32</sup>

The Gas Ban Ordinance is also tailored to local conditions<sup>33</sup> and its purpose is to protect “health, welfare and resiliency of Berkeley and its residents.”<sup>34</sup> First, Berkeley, a coastal city located in the San Francisco Bay, is vulnerable to the intensifying impacts of climate change: sea level rises, extreme tides, wildfires, and drought, all of which are exacerbated

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25. *Ctr. for Bio-Ethical Reform, Inc. v. City & Cnty. of Honolulu*, 455 F.3d 910, 919 (9th Cir. 2006).

26. *Birkenfeld v. Berkeley*, 17 Cal. 3d 129, 159 (1976); *Miller*, 195 Cal. 477, 488–90.

27. *Birkenfeld*, 17 Cal. 3d 129, 161.

28. *Id.* at 161, 163.

29. *Id.* at 129, 153, 162.

30. *Id.* at 162–63.

31. *CTIA - The Wireless Ass’n v. City of Berkeley*, 139 F. Supp. 3d 1048, 1070 (N.D. Cal. 2015).

32. *Id.*; *CTIA - The Wireless Ass’n v. City of Berkeley*, 928 F.3d 832, 845–46 (9th Cir. 2019).

33. BERKELEY, CAL., MUN. CODE § 12.80.010(B) (2020), <https://berkeley.municipal.codes/BMC/12.8> [<https://perma.cc/2GPH-GK75>] (citing the local climate conditions Berkeley is facing).

34. BERKELEY, CAL., MUN. CODE § 12.80.010(F) (2020), <https://berkeley.municipal.codes/BMC/12.8> [<https://perma.cc/2GPH-GK75>].

by anthropogenic GHG emissions.<sup>35</sup> All of these extreme events threaten the health, safety, and welfare of Berkeley residents.

Second, Berkeley City Council has direct safety concerns over transporting and burning natural gas in the City, in addition to the effects of natural gas combustion on climate change.<sup>36</sup> By prohibiting new gas lines, the Gas Ban Ordinance would reduce the number of deadly home fires that start from an open flame, which are fueled by gas lines.<sup>37</sup> In 2011, gas lines (owned by the same natural gas provider that serves Berkeley) exploded in San Bruno and San Francisco, killing eight people and destroying thirty-eight homes.<sup>38</sup> This further illustrates the danger and difficulty that arises while controlling high pressure gas lines in residential neighborhoods during times of crisis.<sup>39</sup> Furthermore, Berkeley is located along the Hayward Fault.<sup>40</sup> A study of a magnitude seven earthquake scenario shows gas lines as a key fire risk factor during and after an earthquake, accounting for 25% of the total number of fires following earthquake ignitions.<sup>41</sup> After an earthquake, natural gas utility takes longer than electricity utility to restore, which undermines the resiliency of the community during disaster recovery.<sup>42</sup>

Like the RF Risk Disclosure ordinance, the Gas Ban Ordinance points to several scientific studies as reasonable scientific bases justifying its

35. BERKELEY, CAL., MUN. CODE § 12.80.010(B) (2020), <https://berkeley.municipal.codes/BMC/12.8> [<https://perma.cc/2GPH-GK75>].

36. *E.g.*, Susie Cagle, *Berkeley became the first US city to ban natural gas. Here's what that may mean for the future*, THE GUARDIAN (July 23, 2019), <https://www.theguardian.com/environment/2019/jul/23/berkeley-natural-gas-ban-environment> [<https://perma.cc/S53S-CDS9>].

37. CITY OF BERKELEY, REVISED AGENDA MATERIAL FOR SUPPLEMENTAL PACKET 2, at 13 (July 16, 2019), <https://records.cityofberkeley.info/PublicAccess/api/Document/ASgQgDSskSHk2zQziOlk55VGB0EHKHAnOCSXRÉaJLhIÉqKUPmZZLizRvVXBUbard57hUI50jx1Á5ksFJK8rXcf4%3D/> [<https://perma.cc/7LUU-PJQM>].

38. Rebecca Bowe & Lisa Pickoff-White, *Five Years After Deadly San Bruno Explosion: Are We Safer?*, KQED (Sept. 8, 2015), <https://www.kqed.org/news/10667274/five-years-after-deadly-san-bruno-explosion-are-we-safer> [<https://perma.cc/2EYY-9CFY>].

39. *E.g.*, *id.*

40. *The Hayward Fault*, BERKELEY SEISMOLOGY LAB, <http://earthquakes.berkeley.edu/hayward/index.html> [<https://perma.cc/G5A5-VG7M>] (last visited Oct. 3, 2022).

41. U.S. GEOLOGICAL SURVEY, THE HAYWIRED EARTHQUAKE SCENARIO—ENGINEERING IMPLICATIONS 281 (2017), [https://pubs.usgs.gov/sir/2017/5013/sir20175013\\_iq.pdf](https://pubs.usgs.gov/sir/2017/5013/sir20175013_iq.pdf) [<https://perma.cc/N7QH-FLLG>].

42. *Id.* at 281.

purpose.<sup>43</sup> The Gas Ban Ordinance’s Findings and Purpose section specifically indicates the relationship between climate change and emissions from natural gas combustion, and lists the local concerns of sea level rise and wildfires which have been exacerbated by climate change.<sup>44</sup> Even if the existence of an emergency was not a prerequisite, the Berkeley City Council, citing numerous climate studies and climate disasters in Berkeley and statewide, declared an existential climate emergency in Berkeley and endorsed a citywide emergency mobilization effort to end GHG emissions as quickly as possible.<sup>45</sup> The declaration further emphasizes the rational purpose of the Gas Ban Ordinance as a follow-up implementation effort of the climate emergency declaration to end citywide GHG emissions.<sup>46</sup>

Therefore, considering all the negative health, welfare, and resiliency impacts of burning and transporting natural gas in Berkeley, it is well within the scope of the City’s legitimate government purpose to ban new gas infrastructure.

### *B. Evolving Climate Sciences Further Support Berkeley’s Police Power*

Police power has developed to meet changing conditions.<sup>47</sup> An improper exercise of police power at one time may be a legitimate exercise of that power at another time because of the growth of knowledge and the changing conditions of modern life.<sup>48</sup> Scientific evidence of the human contribution to climate change and worsening climate disasters has become clear, which further supports Berkeley’s adoption of the Gas Ban Ordinance using police power.<sup>49</sup>

Challengers of the Gas Ban Ordinance may indicate that the coverage of the Ordinance, a Berkeley citywide ban, is broader than past ordinances

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43. E.g., Robert W. Howarth et al., *Methane and the Greenhouse-Gas Footprint of Natural Gas from Shale Formations*, 106 CLIMATIC CHANGE 679, 688 (2011), <https://link.springer.com/content/pdf/10.1007/s10584-011-0061-5.pdf> [<https://perma.cc/2SA8-RSM9>].

44. BERKELEY, CAL., MUN. CODE § 12.80.010(B) (2020), <https://berkeley.municipal.codes/BMC/12.8> [<https://perma.cc/2GPH-GK75>].

45. City Council Res. 68,486-N.S., 2018 (Berkeley, Cal., 2018), <https://records.cityofberkeley.info/PublicAccess/api/Document/AVzmFWwUsdP4KuV8L0cgNOuRbCFODIWKHwRqx5ICfUNLJYeYWp0TUoVwM9WR1hGvisLOQnRXWnihpxcCFYVUjdM%3D/> [<https://perma.cc/6WCL-YSZB>] (declaring a climate emergency).

46. *Id.*

47. *Miller v. Bd. of Pub. Works*, 195 Cal. 477, 484 (1925).

48. *Id.* at 484–85.

49. See Richard P. Allan et al., *IPCC, 2021: Summary for Policymakers*, Intergovernmental Panel on Climate Change (2021) [hereinafter IPCC Report], [https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC\\_AR6\\_WGI\\_SPM.pdf](https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_SPM.pdf) [<https://perma.cc/BW3Q-BXCW>] (summarizing CLIMATE CHANGE 2021: THE PHYSICAL SCIENCE BASIS, Intergovernmental Panel on Climate Change (2021)).



that have been held as valid exercises of the police power. Such valid ordinances have been geographically-limited to abate nuisances in specific communities or time-limited to curtail certain behavior.<sup>50</sup> The Ordinance also has uncertainties and secondary impacts.<sup>51</sup> First, electric utilities may increase power shutoffs to mitigate wildfire risks, raising electricity reliability issues that may make gas infrastructure seem more reliable during emergency services.<sup>52</sup> Second, the Ordinance indicates that an all-electric design is cost competitive due to cost savings from avoiding new gas infrastructure.<sup>53</sup> However, only building developers would benefit from these savings by avoiding the cost of building new gas infrastructure. These savings would not be realized by consumers if their electricity bill is not as competitive as their natural gas bill.

These arguments were considered by the Berkeley City Council when they adopted the Gas Ban Ordinance.<sup>54</sup> The City Council determined that these negative impacts can be mitigated and they did not weigh heavily in its consideration.<sup>55</sup> First, gas infrastructure is more difficult to repair following disasters than electric infrastructure.<sup>56</sup> The fossil fuel supply chain is also more likely to be disrupted, making electric appliances, combined with distributed renewable generation and storage, a more resilient local option.<sup>57</sup> This is true even during an emergency power shutoff. Second, even on the consumer side, the total utility bill would not necessarily be higher when associated with thoughtful building design

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50. Korean Am. Legal Advoc. Found. v. City of L.A., 23 Cal. App. 4th 376, 389 (1994) (holding that an ordinance that imposes conditions in order to reduce nuisance activities around retail establishments selling alcoholic beverages is a valid exercise of the city's police power); Harrahill v. City of Monrovia, 104 Cal. App. 4th 761, 766 (2002) (holding that a city ordinance that excludes unsupervised minors from public places during normal school hours in order to reduce risk is a classic exercise of the city's police power).

51. BERKELEY, CAL., MUN. CODE §12.80.010(B) (2020) (noting that Berkeley is vulnerable to sea level rise, wildfires, and earthquake damage from the Hayward fault).

52. Complaint For Declaratory and Injunctive Relief; Petition for Writ of Mandate, S. Cal. Gas Co. v. Cal. State Energy Res. Conservation and Dev. Comm'n., Docket No., 30-2020-01152336-CU-WM-CXC (Sup. Ct. Cal. July 31, 2021).

53. Berkeley, Cal., Mun. Code §12.80.010(F) (2020).

54. Memorandum from Councilmembers Harrison, Davila, Bartlett and Hah to the Honorable Mayor and Members of the Berkeley City Council 27 (Tues., July 16, 2019, 6:00 PM).

55. *Id.*

56. *Id.*

57. *Id.*

under the scenario that the price per unit for electricity is higher than natural gas, because electric appliances are more efficient.<sup>58</sup>

The coverage of the citywide natural gas ban may be too broad to be a proper exercise of historical police power. However, our knowledge of human contribution to climate change has evolved. The potential of severe climate disasters affecting the entire City in the future without any mitigation actions has become more obvious.<sup>59</sup> Due to the evolving climate condition and new scientific knowledge, the natural gas ban is likely a proper exercise of Berkeley's police power.

Considering the standard of review for the police power, there is a strong rational basis for the Ordinance due to the local climate, health, and public safety concerns and the City's urgency to reduce GHG emissions.<sup>60</sup> The City Council weighed the uncertainty and the negative impacts of the Ordinance in its decision.<sup>61</sup> Similar to the findings of the ameliorative conditions in the Berkeley rent control ordinance, uncertainties and secondary impacts may not dispel the sufficient rational basis of the Ordinance, especially under the current and more severe climate conditions.

#### IV. EXPRESS PREEMPTION AT THE FEDERAL LEVEL

Both federal and state law may preempt local ordinances.<sup>62</sup> Preemption can either be express by the statute's language or implied based on the statute's structure and purpose.<sup>63</sup>

##### *A. Express Preemption Is Interpreted Narrowly*

Congress may preempt state and local rulemaking authority in express terms within constitutional limits.<sup>64</sup> Determining federal preemption issues starts with Congress's intent. First, from the text of the provision, and then from the structure and purpose of the statute.<sup>65</sup> For example, the Toxic Substances Control Act (TOSCA), a national legislative and regulatory act regulating toxic substances, has an explicit preemption provision prohibiting a "State or political subdivision of a State" establishing requirements

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58. *Id.*

59. *See id.* at 8.

60. *Id.* at 1–2, 5, 8, 12.

61. *See id.* at 16–19.

62. *Pac. Gas & Elec. Co. v. State Energy Res. Conservation & Dev. Comm'n*, 461 U.S. 190, 203–04 (1983) (citations omitted).

63. *Gade v. Nat'l Solid Wastes Mgmt. Ass'n*, 505 U.S. 88, 98 (1992) (citations omitted).

64. *Pac. Gas & Elec. Co.*, 461 U.S. at 203–04 (citations omitted).

65. *Air Conditioning & Refrigeration Inst. v. Energy Res. Conservation & Dev. Comm'n*, 410 F.3d 492, 495 (9th Cir. 2005).

applicable to the substances covered by TOSCA.<sup>66</sup> Congress, by inserting this preemption provision, intended to prevent state and local ordinances from undermining the effectiveness of this national scheme.<sup>67</sup>

Express preemption statutory provisions should be interpreted narrowly because of the presumption that Congress does not intend to supplant state law in an area where there is no history of significant federal presence.<sup>68</sup>

*B. EPCA Likely Does Not Expressly Preempt the Gas Ban Ordinance*

The Energy Policy and Conservation Act (EPCA) establishes nationwide energy conservation standards for (1) consumer products (including water heaters, furnaces and boilers, clothes dryers, kitchen ranges and ovens)<sup>69</sup> and (2) commercial and industrial equipment (including commercial air conditioning and heating equipment, furnaces, and water heaters).<sup>70</sup> “Energy” in EPCA means electricity or fossil fuel.<sup>71</sup> The EPCA contains explicit preemption language indicating standards prescribed or established under the EPCA shall “supersede any State or local regulation *concerning* the energy efficiency or energy use” of the products (emphasis added).<sup>72</sup>

Based on the statute’s language, the preemption issue is limited to an interpretation of whether an ordinance is “concerning” the energy efficiency or energy use of EPCA-covered products.<sup>73</sup> First, if a local ordinance sets its own energy efficiency or conservation standards that exceed EPCA minimum requirements, the ordinance is an example of a regulation “concerning” the energy efficiency or energy use of covered products.<sup>74</sup> To increase energy efficiency in the building industry and reduce GHG

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66. *Rollins Env’t Servs. (FS), Inc. v. Par. of St. James*, 775 F.2d 627, 633 (5th Cir. 1985) (quoting 15 U.S.C. § 2617(a)(2)(B)); 15 U.S.C. § 2617(a).

67. *Rollins Env’t Servs.*, 775 F.2d at 632.

68. *Air Conditioning & Refrigeration Inst.*, 410 F.3d at 496.

69. 42 U.S.C. § 6292.

70. *Id.* §§ 6311, 6313.

71. *Id.* § 6291.

72. *Id.* § 6316(b)(2)(A) (emphasis added).

73. *See id.*

74. *Air Conditioning, Heating & Refrigeration Inst. v. City of Albuquerque*, 835 F. Supp. 2d 1133, 1135–37 (D.N.M. 2010) (holding even if the local law presents regulated parties with viable, non-preempted options, with two other performance compliance approaches, the prescriptive approach is still preempted by the federal law because its standards are more stringent than the federal standards).

emissions, Albuquerque passed an Energy Conservation Code in 2008.<sup>75</sup> One pathway to meet the Albuquerque Code is through a prescriptive method.<sup>76</sup> The Code prescribes energy efficiency standards for individual components of a building, including water heating and air conditioning products.<sup>77</sup> Because Albuquerque’s prescriptive energy efficiency standards of EPCA covered products were more stringent than the federal standards, they were deemed regulations “concerning” energy efficiency and struck down due to preemption.<sup>78</sup>

The Berkeley Gas Ban Ordinance, unlike the Albuquerque Ordinance, has not prescribed more stringent standards for EPCA covered appliances.<sup>79</sup> The requirement of the Ordinance is solely to prohibit new natural gas infrastructure—fuel gas piping in, or in connection with, a building—in newly constructed buildings.<sup>80</sup> The Ordinance does not set any mandates or standards on the electricity or fossil fuel use of covered appliances.<sup>81</sup> Instead, it prohibits the infrastructure for natural gas, a type of fossil fuel, from being used at all in new buildings.<sup>82</sup> Therefore, the Gas Ban Ordinance is not preempted under the *Albuquerque* interpretation of regulation “concerning” energy efficiency or energy use, because the Ordinance does not set standards for covered appliances.<sup>83</sup>

However, challengers of the Gas Ban Ordinance may indicate that under a plain interpretation of the statute’s language, “concerning,” is not limited to the interpretation in *Albuquerque*. Prohibiting natural gas infrastructure from going into new buildings so that no appliances can use natural gas may also be a regulation “concerning” energy use. To evaluate whether the broader interpretation is appropriate, the second step in the express preemption analysis is to compare the purpose of the EPCA and that of the Gas Ban Ordinance.<sup>84</sup>

The purpose of the EPCA is to reduce reliance on foreign energy resources by conserving energy use domestically.<sup>85</sup> Congress enacted the EPCA in 1975 in the aftermath of the OPEC oil embargo imposed against the United

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75. *Air Conditioning, Heating & Refrigeration Inst. v. City of Albuquerque*, No. 08-633 MV/RLP, 2008 U.S. Dist. LEXIS 106706, at \*4–5 (D.N.M. Oct. 3, 2008).

76. *Id.* at \*7.

77. *Id.*

78. *Air Conditioning, Heating & Refrigeration Inst.*, 835 F. Supp. 2d at 1137.

79. See BERKELEY, CAL., MUN. CODE §§ 12.80.010-080 (2020).

80. BERKELEY, CAL., MUN. CODE §§ 12.80.030-040 (2020).

81. BERKELEY, CAL., MUN. CODE §§ 12.80.010-080 (2020).

82. BERKELEY, CAL., MUN. CODE § 12.80.030 (2020).

83. See BERKELEY, CAL., MUN. CODE §§ 12.80.010-080 (2020).

84. *Albuquerque*, 2008 U.S. Dist. LEXIS 106706, at 7.

85. 42 U.S.C. § 6201.

States.<sup>86</sup> The EPCA’s purpose is to preempt state energy efficiency standards and create a nationwide conservation program for covered appliances to reduce domestic energy use and foreign energy resource reliance.<sup>87</sup>

On the other hand, the purpose of the Gas Ban Ordinance is different from the purpose of the EPCA.<sup>88</sup> The purpose of the Gas Ban Ordinance is to reduce GHG emissions, and the environmental and health hazards associated with burning and transporting natural gas in Berkeley.<sup>89</sup> Unlike the EPCA, the purpose of the Gas Ban Ordinance is not to reduce energy use or reliance on foreign energy resources.<sup>90</sup>

The Gas Ban Ordinance does not prescribe more stringent energy standards for the EPCA-covered appliance. Additionally, the purpose of the Gas Ban Ordinance is different from the EPCA. With the presumption that express preemption should be interpreted narrowly, the EPCA will unlikely expressly preempt the Gas Ban Ordinance.

## V. EXPRESS PREEMPTION AT THE STATE LEVEL

### *A. California Does Not Have Legislation Expressly Preempting the Local Gas Ban Ordinance*

If California were to pass legislation expressly preempting local governments from prohibiting natural gas infrastructure in newly constructed buildings, the state law would expressly preempt the Gas Ban Ordinance.

California currently does not have this type of legislation, but other states have enacted laws prohibiting local natural gas bans.<sup>91</sup> Arizona was the first state to prohibit cities from banning natural gas in February 2020, indicating “a municipality may not impose a fine, penalty or other requirement that has the effect of restricting a utility provider’s authority to operate or

86. *Air Conditioning & Refrigeration Inst. v. Energy Res. Conservation & Dev. Comm’n*, 410 F.3d 492, 498 (9th Cir. 2005).

87. *Id.*; *but see* *Bldg. Indus. Ass’n v. Wash. State Bldg. Code Council*, 683 F.3d 1144, 1145 (9th Cir. 2012) (indicating state energy efficiency standards satisfy the conditions in 42 U.S.C. § 6297(f)(3) can be exempted).

88. *BERKELEY, CAL., MUN. CODE* § 12.80.010 (2020); 42 U.S.C. § 6201.

89. *BERKELEY, CAL., MUN. CODE* § 12.80.010(H) (2020).

90. *BERKELEY, CAL., MUN. CODE* § 12.80.010 (2020).

91. Ella Nilsen, *Cities tried to cut natural gas from new homes. The GOP and gas lobby preemptively quashed their effort*, CNN (Feb. 7, 2022), <https://www.cnn.com/2022/02/17/politics/natural-gas-ban-preemptive-laws-gop-climate/index.html> [<https://perma.cc/JN8Z-U8SX>].

serve customers.”<sup>92</sup> Even though the bill did not specifically mention natural gas, its intent was clear. The bill, sponsored by Arizona’s largest gas utilities, was inspired by Berkeley’s ban.<sup>93</sup> The Arizona bill already had an impact on local government’s ability to reduce GHG emissions. The City of Flagstaff, Arizona, has a CAP strategy to increase electrification and decrease natural gas use in building sector. In fear of being preempted by the state law, Flagstaff dropped its consideration to ban natural gas as a strategy to meet its CAP’s building electrification goals.<sup>94</sup>

Twenty other states have passed similar legislation preempting natural gas bans by local governments.<sup>95</sup> If California were to pass similar legislation, the Gas Ban Ordinance would be explicitly preempted due to a state prohibition on local natural gas bans.<sup>96</sup>

### *B. The California Energy Code Likely Does Not Expressly Preempt the Gas Ban Ordinance*

Similar to the express preemption analysis at the federal level, if the purpose and the effect of a local ordinance are not the same as those of the state law, the state law does not expressly preempt the local regulation.<sup>97</sup> For example, California’s Alcoholic Beverage Control Act (ABCA) regulating transportation and sales of alcohol did not expressly preempt a Los Angeles ordinance (LA Ordinance) requiring improvements in businesses’ off-site alcohol sales conditional use permit application.<sup>98</sup> The LA Ordinance may have some indirect impact on alcohol sales at the establishment, but the purpose of the LA Ordinance was to control nuisances surrounding liquor stores through zoning and land-use regulations, not to regulate alcohol sales directly.<sup>99</sup> Similarly, California’s Forest Practice Act (FPA) regulating timber harvesting operations did not expressly preempt a Santa Cruz County zoning

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92. H.R. 2686, 2020 Leg., 54th Sess. (Ariz. 2020).

93. Emily Coleman, *One State Becomes First in the Nation to Preempt City Natural Gas Bans*, ROUTE FIFTY (Feb. 25, 2020), <https://www.route-fifty.com/management/2020/02/arizona-preemption-natural-gas/163322/> [<https://perma.cc/E52R-FY9J>].

94. Jeff Brady and Dan Charles, *As Cities Grapple With Climate Change, Gas Utilities Fight To Stay In Business*, NPR (Feb. 22, 2021), <https://www.capradio.org/news/npr/story?storyid=967439914> [<https://perma.cc/X4EZ-TFD4>].

95. Lisa Prevost, *New Hampshire Gas Law Handcuffs Local Government on Climate-friendly Construction*, ENERGY NEWS NETWORK (Sept. 27, 2021), <https://energynews.us/2021/09/27/new-hampshire-gas-law-handcuffs-local-government-on-climate-friendly-construction/> [<https://perma.cc/Z4EK-ALT7>].

96. H.R. 2686, 2020 Leg., 54th Sess. (Ariz. 2020).

97. *Korean Am. Legal Advocacy Found. v. City of L.A.*, 23 Cal. App. 4th 376, 388–89 (1994).

98. *Id.* at 389.

99. *Id.*

ordinance (Santa Cruz Ordinance) limiting timber operation locations within Santa Cruz County.<sup>100</sup>

A state law that may potentially expressly preempt the Gas Ban Ordinance is the Building Energy Efficiency Standards (Energy Code), developed by the California Energy Commission (CEC).<sup>101</sup> The Energy Code includes energy efficiency building, construction, and energy conservation design standards for new residential and nonresidential buildings, to reduce wasteful consumption of energy and manage energy load to help maintain electrical grid reliability.<sup>102</sup> The Energy Code is part of state building standards, which cover rules and regulations requiring or forbidding the type of material used on building construction, architectural, and design functions.<sup>103</sup>

The statutory language interpretation analysis is similar to the analysis in the Federal Preemption Section (Section IV).<sup>104</sup> From the statute's language, the Energy Code is related to the "energy efficiency," "energy conservation," or "consumption of energy," of a building design, similar to the ABCA regulating a product (alcohol) and the FPA regulating an operation (timber harvesting operation) at the state level.<sup>105</sup> The plain language of the Gas Ban Ordinance prohibits natural gas infrastructure that goes into the building,<sup>106</sup> but it does not mention the interior or the characteristics of the building, such as the architectural and design function of the building. Therefore, the Gas Ban Ordinance does not directly regulate energy efficiency, energy conservation, nor consumption of energy of the building. Like the Santa Cruz Ordinance, which limits the *locations* of timber operation in the County but does not regulate timber *operation*, the Gas Ban Ordinance limits the *type of fuel* that goes into the building, substituting natural gas with electricity, but does not regulate the *energy efficiency* of the building.

The purposes of the Energy Code and the Gas Ban Ordinance also differ. The purpose of the Energy Code is to reduce wasteful energy consumption while maintaining grid reliability, while the purpose of the Gas Ban Ordinance is to eliminate GHG emissions and environmental and

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100. Big Creek Lumber Co. v. Cnty. of Santa Cruz, 38 Cal. 4th 1139, 1157 (2006).

101. CAL. PUB. RES. CODE § 25402(a)(1) (West 2021).

102. CAL. PUB. RES. CODE §§ 25402(a)(1), (b)(1) (West 2021).

103. CAL. HEALTH & SAFETY CODE § 18909 (West 2018).

104. See Air Conditioning, Heating & Refrigeration Inst. v. City of Albuquerque, 835 F. Supp. 2d 1133, 1135–36 (D.N.M. 2010).

105. See CAL. PUB. RES. CODE §§ 25402(a)(1), (b)(1) (West 2021).

106. BERKELEY, CAL. MUN. CODE § 12.80.010(B) (2020).

health hazards produced by the burning and transportation of natural gas.<sup>107</sup> Even though the pathways used to achieve these purposes are similar—substitution of natural gas with electricity in buildings—the purposes themselves are different. Therefore, the Gas Ban Ordinance is unlikely to be expressly preempted by the Energy Code because they each have different requirements and purposes.

In addition, the enforcement mechanisms of the Energy Code and the Gas Ban Ordinance are different. The Energy Code is enforced by each local jurisdiction’s building department through the Building Permit application process.<sup>108</sup> In contrast, the Gas Ban Ordinance requirements apply to Use Permit or Zoning Certificate applications,<sup>109</sup> the same permitting mechanism as used in the LA and Santa Cruz Ordinances through land use and zoning. The building permit regulation is separate from the zoning permit regulation.<sup>110</sup> A zoning permit is generally the first step in the development process and is sometimes required prior to the application of a building permit.<sup>111</sup>

Challengers to the Gas Ban Ordinance, such as gas utilities or building users relying heavily on natural gas, may argue that the underlying purposes of both the Energy Code and the Gas Ban Ordinance are the same, and therefore the Ordinance is preempted. A city-wide ban on natural gas pipelines connect to buildings is essentially the same as regulating building natural gas use (consumption of energy) in the entire city. The architectural and design elements of new buildings, regulated by the Energy Code<sup>112</sup> and other parts of California’s Building Standards would have to be reconfigured in order to meet the Gas Ban Ordinance’s requirement.<sup>113</sup> Unlike the geographic limitations in the LA Ordinance (limitation of alcohol sales in certain locations) and the Santa Cruz Ordinance (restriction of timber operations to specific areas), the Gas Ban Ordinance does not have any geographic limitations.<sup>114</sup> By adopting the Gas Ban Ordinance, an opponent would argue that Berkeley is essentially adopting its own building

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107. *Id.* at § 12.80.010(H).

108. CAL. PUB. RES. CODE § 25402.1(g).

109. BERKELEY, CAL. MUN. CODE § 12.80.020 (2020).

110. *What’s the Difference between a Zoning Permit and a Building Permit?*, CITY OF BERKELEY, [https://www.cityofberkeley.info/Planning\\_and\\_Development/Land\\_Use\\_Division/Difference\\_between\\_a\\_Zoning\\_Permit\\_and\\_a\\_Building\\_Permit.aspx](https://www.cityofberkeley.info/Planning_and_Development/Land_Use_Division/Difference_between_a_Zoning_Permit_and_a_Building_Permit.aspx) [<https://perma.cc/9DHW-VR2C>] (last visited Nov. 13, 2022).

111. *Id.*

112. *See generally* CALIFORNIA ENERGY COMMISSION, 2019 BUILDING ENERGY EFFICIENCY STANDARDS FOR RESIDENTIAL AND NONRESIDENTIAL BUILDINGS 28 (2018), [https://www.energy.ca.gov/sites/default/files/2021-06/CEC-400-2018-020-CMF\\_0.pdf](https://www.energy.ca.gov/sites/default/files/2021-06/CEC-400-2018-020-CMF_0.pdf) [<https://perma.cc/DFQ4-6GPE>].

113. *See generally* CAL. CODE REGS. tit. 24 (2019).

114. BERKELEY, CAL. MUN. CODE § 12.80.020(A) (2020).



energy efficiency standard for the entire city, rather than limited areas of the city, which would be preempted by the Energy Code.

However, even if the Gas Ban Ordinance has an indirect effect on the “consumption of energy” or the building design (for example, if the building design needed to be altered to accommodate all-electric appliances), the plain requirements and the enforcement mechanism of the Gas Ban Ordinance are not the same as those of the Energy Code, which indicates the Ordinance has a different purpose.<sup>115</sup> However, the purposes of the Energy Code and the Gas Ban Ordinance are closer than those of the EPCA and the Gas Ban Ordinance under the federal preemption section.<sup>116</sup> Here, the Energy Code is still unlikely to expressly preempt the Gas Ban Ordinance, but the argument is stronger here than the argument under federal preemption.

## VI. IMPLIED PREEMPTION AT THE STATE LEVEL

In addition to express preemption by a statute’s language, preemption can be implied based on a statute’s structure and purpose.<sup>117</sup> Implied preemption can be classified as either: (1) field preemption, where the legislative field is fully occupied by the higher law; or (2) conflict preemption, where the lower law conflicts with the higher law.<sup>118</sup>

### *A. Local Ordinances Cannot Be in an Area Fully Occupied by State’s General Laws*

Local ordinances entering a field fully occupied by the state are preempted.<sup>119</sup> If there is no room for supplementary or complementary local legislation, the subject matter or field of the legislation has been fully occupied by the state.<sup>120</sup>

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115. BERKELEY, CAL., MUN. CODE § 12.80 (2020); CAL. PUB. RES. CODE § 25402 (2021).

116. 42 U.S.C. § 6297; BERKELEY, CAL., MUN. CODE § 12.80 (2020); CAL. PUB. RES. CODE § 25402 (2021).

117. *Gade v. Nat’l Solid Wastes Mgmt. Ass’n*, 505 U.S. 88, 98 (1992).

118. *Id.*; *Air Conditioning & Refrigeration Inst. v. Energy Res. Conservation & Dev. Comm’n*, 410 F.3d 492, 495 (9th Cir. 2005).

119. *Air Conditioning*, 410 F.3d at 495.

120. *Korean Am. Legal Advoc. Found. v. City of L.A.*, 23 Cal. App. 4th 376, 389 (1994).

The field or the subject matter here, energy use or energy efficiency in buildings, is not fully occupied by the state because the Energy Code leaves room for supplementary local legislation.<sup>121</sup> One Energy Code provision specifically allows local governments to adopt their own energy standards (Reach Codes) if the standards are cost-effective and require buildings to be designed to consume less energy than the Energy Code's requirements.<sup>122</sup> By leaving room for Reach Codes, the legislature did not intend to full occupy the field. Therefore, the Gas Ban Ordinance did not enter an area fully occupied by state law.

*B. Local Ordinances Cannot be in Conflict with General Laws*

*1. The Gas Ban Ordinance Does Not Duplicate the California Energy Code*

A local ordinance duplicates a state law if it is coextensive with the state law, whereby it would be preempted under conflict preemption.<sup>123</sup> But if a violation of the ordinance is not a violation of the state law, or if the penalties of the ordinance and the state law are different, the local ordinance is not a duplicate and, therefore, not in conflict.<sup>124</sup> For example, a local ordinance prohibiting children from being in a public place other than school while school is in session does not duplicate the state's truancy law, because a violation of the local ordinance is not the same as a violation of the truancy law.<sup>125</sup> Similarly, under the LA Ordinance, a storeowner may lose her permit for not meeting the LA Ordinance's conditional permitting requirement even though she may still maintain an alcoholic beverage license under the ABCA.<sup>126</sup> Therefore, the LA Ordinance does not duplicate the ABCA.

Similar to these two examples, the Gas Ban Ordinance is not coextensive with the Energy Code because a violation of the Ordinance is not a violation of the Energy Code.<sup>127</sup> For example, building a new mixed-fuel home (using both electricity and natural gas as energy sources) in Berkeley would violate the Ordinance because the home would require a gas line connecting

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121. CAL PUB. RES. CODE § 25402.1(h)(2) (1985).

122. *Id.*

123. *Harrhill v. City of Monrovia*, 104 Cal. App. 4th 761, 768 (2002).

124. *Id.* at 768–70.

125. *Id.* at 768 (stating a student skipping school by staying at home when school is in session violates the state education law but not the Ordinance, therefore, the Ordinance is not duplicative of the state law).

126. *Los Angeles.*, 23 Cal. App. 4th 376, 391 (1994).

127. *See generally* Berkeley, Cal. Mun. Code § 12.80 (2020); *see generally* CAL. PUB. RES. CODE.

to the home.<sup>128</sup> But if the new mixed-fuel home meets all the energy efficiency and design requirements in the Energy Code, it would not violate the Energy Code.<sup>129</sup> Therefore, a violation of the Ordinance is not necessarily a violation of the Energy Code.

Similarly, a violation of the Energy Code is not the same as a violation of the Gas Ban Ordinance. A new all-electric home in Berkeley without gas line connections would violate the Energy Code if the potential electricity use at the home exceeds the maximum energy use allowed under the Energy Code.<sup>130</sup> But, it would not violate the Gas Ban Ordinance simply because the home would not have natural gas infrastructure connecting to it.<sup>131</sup>

Because a violation of the Gas Ban Ordinance is not a violation of the state law, or vice versa, the Ordinance is not coextensive with the Energy Code and, therefore, does not duplicate the Energy Code.<sup>132</sup>

## *2. The Gas Ban Ordinance May Stand as an Obstacle to the Energy Code Implementation*

At the federal level, in determining whether a state law “stands as an obstacle” to the full implementation of a federal law, a state law is preempted if it interferes with the methods by which the federal statute was designed to reach that goal.<sup>133</sup> It is not enough to say the ultimate goal of both federal and state law is the same.<sup>134</sup> For example, an ordinance banning a specific hazardous waste facility in the city is preempted by TOSCA because if every locality were able to dodge responsibility for and participation in this program through artfully designed ordinances, then TOSCA’s national goal of safe toxic waste disposal would be frustrated.<sup>135</sup>

The Gas Ban Ordinance differs from an ordinance blocking a specific hazardous waste facility because the Gas Ban Ordinance is not targeting a particular facility or project, but instead is targeting citywide community

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128. Berkeley, Cal. Mun. Code § 12.80.040 (2020).

129. *See generally* CAL. PUB. RES. CODE.

130. *See generally* Berkeley, Cal. Mun. Code § 12.80 (2020); CAL. PUB. RES. CODE § 140.1.

131. BERKELEY, CAL. MUN. CODE § 12.80.040(A) (2020).

132. *Harrahill*, 104 Cal. App. 4th at 768–70.

133. *See Gade v. Nat’l Solid Wastes Mgmt. Ass’n*, 505 U.S. 88, 103 (1992).

134. *Id.*

135. *See Rollins Env’t Serv. (FS), Inc. v. Par. of St. James*, 775 F.2d 627, 629–30, 637 (1985).

safety concerns.<sup>136</sup> However, if the Gas Ban Ordinance interferes with the design and implementation of the Energy Code when applying the federal or state preemption analysis at the state or local level, the Gas Ban Ordinance would be preempted.

The Energy Code is carefully designed to reduce wasteful consumption of energy while maintaining electrical grid reliability and cost-effectiveness.<sup>137</sup> The Energy Code is updated on a three-year cycle.<sup>138</sup> The CEC has been gradually moving towards requiring all-electric new construction through the last three iterations of the Code, rather than promulgating a sudden mandate.<sup>139</sup> A significant update from the 2016 to the 2019 Code is that the 2019 Code requires solar electric systems for new homes.<sup>140</sup> This change encourages all-electric designs and on-site renewable electricity use, while maintaining electrical grid reliability and reducing electricity bills.<sup>141</sup> The 2022 Code, even if it continues to not require all-electric constructions, has significant changes to the 2019 Code.<sup>142</sup> First, the 2022 Code establishes an energy budget, and the maximum energy consumption allowed is based on using an efficient space and water electric heat pump.<sup>143</sup> Even if gas-fueled heating units are allowed under the 2022 Code, the energy budget encourages electric heating units by establishing them as a baseline starting point for new constructions.<sup>144</sup> Second, all new construction must be electric-ready, with wiring and spaces ready for eventual electric appliances replacement, regardless of whether the fuel used is electricity or natural gas.<sup>145</sup>

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136. BERKELEY, CAL., MUN. CODE § 12.80.010(B) (2020), <https://berkeley.municipal.codes/BMC/12.8> [<https://perma.cc/2GPH-GK75>].

137. CAL. PUB. RES. CODE §§ 25402(a)(1), (b)(1), (b)(3) (2022).

138. *Building Energy Codes Program, California*, OFF. OF ENERGY EFFICIENCY & RENEWABLE ENERGY, <https://www.energycodes.gov/status/states/california> [<https://perma.cc/EWK8-BP2G>] (last visited Oct. 15, 2022).

139. See Kavya Balaraman, *California greenlights first-of-its-kind energy code to encourage electrified buildings*, UTILITY DIVE (Aug. 21, 2021), <https://www.utilitydive.com/news/california-greenlights-first-of-its-kind-energy-code-to-encourage-electrifi/604863/> [<https://perma.cc/B6RA-HX8U>].

140. See Press Release, California Energy Commission, Energy Commission Adopts Standards Requiring Solar Systems for New Homes, First in Nation (May 9, 2019), <https://www.energy.ca.gov/news/2018-05/energy-commission-adopts-standards-requiring-solar-systems-new-homes-first> [<https://perma.cc/U2H2-823W>].

141. *Id.*

142. See *Fact Sheet: What's Changed in 2022*, ACE RESOURCES (2022), [https://energycodeace.com/resources/?item\\_category\\_trait\\_file\\_type=17688](https://energycodeace.com/resources/?item_category_trait_file_type=17688) [<https://perma.cc/YG5T-7H5L>] (search for “act Sheet: What’s Changed in 2022 – Nonresidential Buildings”).

143. CAL. ENERGY COMM’N, BUILDING ENERGY EFFICIENCY STANDARDS SUMMARY 8 (2021), [https://www.energy.ca.gov/sites/default/files/2021-08/CEC\\_2022\\_EnergyCodeUpdate\\_Summary\\_ADA.pdf](https://www.energy.ca.gov/sites/default/files/2021-08/CEC_2022_EnergyCodeUpdate_Summary_ADA.pdf) [<https://perma.cc/X5ZL-WBTV>].

144. *Id.*

145. See *id.*

Even though the Gas Ban Ordinance's ultimate goal of moving new construction to all-electric is similar to that of the Energy Code, the Gas Ban Ordinance is a sudden mandate. The Ordinance therefore interferes with the design and preventative measures of the Energy Code updates. The Gas Ban Ordinance claims that electric heating and cooling infrastructure would be cost competitive, but a cost-effectiveness study to support this contention is not a requirement for passing the Ordinance (unlike the cost-effectiveness requirement of the Energy Code).<sup>146</sup> The main concern with the Ordinance is its potential high cost of electricity bills.<sup>147</sup>

One mechanism in the Energy Code that deals with the cost concern is that the Reach Code must show cost-effectiveness.<sup>148</sup> In determining cost-effectiveness, the relevant factors include, but are not limited to: the life-cycle cost to the consumers, the impact on housing costs, and the economic impacts on California businesses.<sup>149</sup> Through a cost-effectiveness analysis, the Energy Code allows Reach Code flexibility based on local conditions, but ensures that the Reach Code would not be a burden to building users and businesses in the long run.

If all local jurisdictions circumvent the Energy Code and Reach Code processes and ignore the purpose of Energy Code by adopting a natural gas ban, they would likely interfere with the Energy Code's purpose of reducing energy use while maintaining electrical grid reliability and cost-effectiveness. The Gas Ban Ordinance likely interferes with the goal, design, and the implementation method of the Energy Code and Reach Code and, therefore, would likely be preempted by these state codes.

### *3. The Gas Ban Ordinance Does Not Contradict the California Energy Code*

When compliance with both federal and state regulations is a physical impossibility, state law is preempted by federal law.<sup>150</sup> Similarly, at the

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146. Berkeley, Cal., Mun. Code § 12.80.010(B) (2020), <https://berkeley.municipal.codes/BMC/12.8> [<https://perma.cc/2GPH-GK75>].

147. See Dave Quast, *California Cities Pass Natural Gas Bans, Ignoring Sky-High Electricity Prices and Consumer Choice*, ENERGY IN DEPTH (Aug. 5, 2019), <https://www.energyindepth.org/california-cities-pass-natural-gas-bans-high-electricity-prices-consumer-choice/> [<https://perma.cc/P62S-PD6Y>].

148. CAL. PUB. RES. CODE § 25402(b)(3) (2021).

149. CAL. PUB. RES. CODE § 25402 (2021).

150. *Id.* at 98.

local level, if a local ordinance mandates what a state law expressly forbids, or if it forbids what a state law expressly mandates, then one cannot comply with both and the local ordinance will be preempted.<sup>151</sup> The Santa Cruz Ordinance limiting timber production location does not contradict the state forestry law, because timber operators can comply with both.<sup>152</sup> The forestry law encourages maximum production, but it does not require every harvestable tree to be cut down, so the local ordinance limiting harvesting locations does not contradict with the state law.<sup>153</sup>

Under the 2019 Energy Code, electricity, natural gas, and propane are potential fuel types in the energy budget calculation.<sup>154</sup> While the Code sets requirements for the energy budget and indicates that certain fuel types may be more preferable, it does not mandate nor forbid any type of fuel.<sup>155</sup> Therefore, the Gas Ban Ordinance does not contradict the Energy Code by prohibiting the use of natural gas, so complying with both state and local law is possible.

As electric and natural gas rates constantly change and potential new supplies of renewable natural gas become available, a no-gas infrastructure may not be the most cost-effective building design, as it may increase the building occupants' utility bills.<sup>156</sup> However, as long as a new home with no-gas infrastructure meets energy budget requirements in the Energy Code, the new home is in compliance with both the state Energy Code and the local Gas Ban Ordinance.<sup>157</sup>

## VII. CONCLUSION

For express preemption, the Berkeley Gas Ban Ordinance will likely survive federal and state preemption challenges. While the Ordinance may indirectly impact the subject matter of the EPCA or the California Energy Code, its stated purpose does not expressly regulate energy use or energy efficiency of appliances as covered by the EPCA, nor building design as covered by the Energy Code.

As a citywide ban, the Gas Ban Ordinance may read broad in its scope, but the dynamic local police power weighs in its favor. Even if the existence of an emergency is not a prerequisite, the Berkeley City Council declared a climate emergency that the burning and transporting of natural gas or natural gas's contribution to climate change threatened the health and safety of

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151. *Big Creek Lumber Co. v. Cnty. of Santa Cruz*, 38 Cal. 4th 1139, 1151 (2006).

152. *Id.* at 1161.

153. *Id.*

154. CAL. ENERGY COMM'N, *supra* note 143, at 91.

155. *Id.*

156. Quast, *supra* note 147.

157. CAL. ENERGY COMM'N, *supra* note 143, at 6.

the local community. This citywide threat outweighs the potential electricity liability or cost issue during emergency power shutoff or other negative impacts of additional electric load due to the Ordinance. Even if not required, Berkeley City Council's emergency declaration further supports the use of dynamic police power for a citywide ban.

For implicit preemption, the best approach for challengers of the Gas Ban Ordinance is to show that the Ordinance interferes with the purpose, objective, and implementation mechanism of the California Energy Code to reduce wasteful consumption of energy while maintaining electrical grid reliability and cost-effectiveness. If all local jurisdictions circumvented the Energy Code and Reach Code process by adopting natural gas bans, state law would be frustrated, which would implicitly preempt the local bans. However, the Gas Ban Ordinance does not encroach on an area fully occupied by the Energy Code, because the Code specifically allows local governments to adopt their own energy standards. Further, the Gas Ban Ordinance does not duplicate nor contradict the current (2019) and the upcoming (2022) Energy Codes.

