

NO. 21-16278

**IN THE UNITED STATES COURT OF APPEALS
FOR THE NINTH CIRCUIT**

CALIFORNIA RESTAURANT ASSOCIATION,
Plaintiff-Appellant,

v.

CITY OF BERKELEY,
Defendant-Appellee.

On Appeal from the United States District Court
for the Northern District of California
No. 4:19-cv-07668-YGR
Hon. Yvonne Gonzalez Rogers, District Judge

**BRIEF OF AMICI CURIAE CHEF CHRISTOPHER GALARZA AND
CHEF GERARD KENNY II IN SUPPORT OF THE CITY OF BERKELEY**

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**AMICI CURIAE’S STATEMENT OF IDENTITY, INTEREST, AND
SOURCE OF AUTHORITY TO FILE**

Pursuant to Federal Rule of Appellate Procedure 29(a)(4)(D)¹, Amici Curiae Christopher Galarza and Gerard Kenny II (together, the “Chefs” or “Amici”) state as follows²:

Mr. Galarza is the founder and culinary sustainability consultant for Forward Dining Solutions LLC, which designs all-electric kitchens, consults on kitchen electrification projects, and trains kitchen staff on all-electric equipment. Mr. Kenny is the Director of Strategic Operations for Forward Dining Solutions LLC. Mr. Galarza and Mr. Kenny work with manufacturers, brands, designers, and chefs to create sustainable electric/induction kitchens and prepare kitchen operators to successfully, efficiently, and safely run their operations.

¹ This brief is filed with the consent of the California Restaurant Association and City of Berkeley.

² Pursuant to Federal Rule of Appellate Procedure 29(a)(4)(E) and the corresponding Local Rule of this Circuit, the Chefs state that: (i) No counsel for the parties authored this amicus curiae brief in whole or in part; (ii) No parties or counsel for the parties contributed money intended to fund the preparation or submission of this brief; and (iii) No person other than the amici curiae, their members, or their counsel, contributed money intended to fund the preparation or submission of this brief.

INTRODUCTION AND SUMMARY OF THE ARGUMENT

The City of Berkeley's ("Berkeley") Ordinance No. 7,672-N.S. (the "Ordinance") prohibits natural gas hookups in new buildings, subject to certain exceptions. *See* Ordinance No. 7,672-N.S., codified as Chapter 12.80 of the Berkeley Municipal Code. The Ordinance recognizes that natural gas presents short-term health and safety risks and long-term environmental and health risks and seeks to reduce those risks for Berkeley residents. The California Restaurant Association ("CRA") argues that the Ordinance is preempted by the Energy Policy and Conservation Act (the "EPCA"), 42 U.S.C. § 6201 *et seq.*, which sets efficiency standards for appliances. That argument is misguided, for the reasons set forth in Berkeley's brief, the briefs of the other supporting *amici*, and this brief. CRA largely relies on a "long history" of preemption litigation involving phrases such as "relating to" to give the word "concerning" within EPCA's preemption provisions a broad preemptive scope. However, for the Court to accept CRA's novel interpretative stance, it would have to ignore the definitions of specific terms within the preemption provision that ultimately narrow its reach.

CRA and the *amici curiae* supporting its petition – the Air Conditioning, Heating, and Refrigeration Institute; California Building Industry Association; Hearth, Patio, & Barbecue Association; National Association of Home Builders; and National Association of Manufacturers – also question the health and safety justifications behind the Ordinance and the ability of professional chefs to run their kitchens without natural gas. Kitchen staff and cooks are at the front line of kitchen hazards and vulnerable to occupational health risks due to the nature of their work. Natural gas appliances have many downsides: they create excessive radiant and ambient heat, and they produce pollutants as they burn off gas, to name just two. Furthermore, as explained *infra*, induction cooking is outperforming gas-powered appliances due to its ability to control heat more efficiently and reduce heat and emissions exposures to front line cooks. The Chefs have years of professional culinary experience, and as consultants advising on all-electric kitchen operations, they know that the fears associated with induction cooking capabilities are overblown. Using electric technologies like induction makes kitchens more comfortable, healthier places to work, and does not compromise culinary

techniques. Chefs can run any kind of kitchen on all-electric appliances, and ordinances like Berkeley's are nothing to fear.

ARGUMENT

The express preemption analysis here raises the following question: Is the challenged ordinance a regulation “concerning” the “energy use” of a covered product under 42 U.S.C. § 6297(c)?

I. The preemptive scope of the EPCA depends on its purpose

“[T]he purpose of Congress is the ultimate touchstone in every pre-emption case.” *Hughes v. Talen Energy Mktg., LLC*, 578 U.S. 150, 163 (2016) (quoting *Altria Grp., Inc. v. Good*, 555 U.S. 70, 76 (2008)). When discerning Congress’s purpose, courts must focus on “the plain wording” of the preemption provision at issue because plain text “necessarily contains the best evidence of Congress’ pre-emptive intent.” *Puerto Rico v. Franklin Cal. Tax-Free Trust*, 579 U.S. 115, 125 (2016) (quoting *Chamber of Com. v. Whiting*, 563 U.S. 582, 594 (2011)). See also *Atay v. Cty. of Maui*, 842 F.3d 688, 699 (9th Cir. 2016).

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A. EPCA’s preemption provision applies to efficiency standards for appliances, not to every local regulation incidentally affecting appliances

The Ordinance does not prescribe energy efficiency standards for appliances; it regulates whether new buildings can have natural gas piping. To recast the Ordinance as a regulation of energy use, CRA argues that by “banning the building’s piping needed to supply natural gas,” the Ordinance is thus one “concerning” the “energy use” of gas appliances because it requires that consumer appliances operate using “zero” natural gas. CRA Br. 23, 26.

To get there, CRA cites the “rich body” of preemption litigation interpreting the phrase “relating to” as a synonym of “concerning,” which “expresses a broad pre-emptive purpose.” CRA Br. 23, 28-29 (citing *Coventry Health Care of Mo., Inc. v. Nevils*, 137 S. Ct. 1190, 1197 (2017)). However, CRA’s arguments that the Ordinance “concerns” the “energy use” of a covered product ignores the limiting definition of “energy use,” thus stretching EPCA’s preemption provision beyond its reasonable limits.

Only “regulation concerning the energy efficiency, energy use, or water use of [a] covered product” is preempted under the EPCA. 42 U.S.C. § 6297(c). The EPCA defines the term “energy use” as “the quantity of

energy directly consumed by a consumer product *at point of use*, determined in accordance with test procedures under section 6293 of this title.” 42 U.S.C. § 6291(4) (emphasis added).

In other statutory contexts, the Supreme Court has cautioned that “the breadth of the words ‘related to’ does not mean the sky is the limit,” *Dan’s City Used Cars, Inc. v. Pelkey*, 569 U.S. 251, 260 (2013), and has sought to give such provisions “the broad scope Congress intended while avoiding the clause’s susceptibility to limitless application,” *Gobeille v. Liberty Mut. Ins. Co.*, 577 U.S. 312, 320 (2016). Accordingly, such provisions generally do not extend to “state laws affecting” the protected activities “in only a ‘tenuous, remote, or peripheral . . . manner.’” *Dan’s City Used Cars*, 569 U.S. at 261 (quoting *Rowe v. N.H. Motor Transp. Ass’n*, 552 U.S. 364, 371 (2008) (alteration in original)). As the Supreme Court held with respect to the similar phrase “in connection with,” “connections, like relations, ‘stop nowhere,’” and such isolated phrases “provide[] little guidance without a limiting principle consistent with the structure of the statute and its other provisions.” *Maracich v. Spears*, 570 U.S. 48, 59-60 (2013) (quoting *N.Y. State Conf. of Blue Cross & Blue Shield Plans v. Travelers Ins. Co.*, 514 U.S. 645, 655 (1995)).

Here, the EPCA’s preemption provision alone provides those limiting principles.

First, the preemption provision only applies to “established energy conservation standards.” 42 U.S.C. § 6297(c) (“[E]ffective on the effective date of an energy conservation standard ... no State regulation...”). As defined, an “energy conservation standard” prescribes either a performance standard or a design requirement for all covered products. 42 U.S.C. § 6291(6)(A)-(B). Performance standards establish either “a minimum level of energy efficiency or a maximum quantity of energy use” for each covered appliance. *Id.* § 6291(6)(A). Energy efficiency is defined as “the ratio of the useful output of services from a [covered] product to the energy use of such product.” *Id.* § 6291(5).³ Here, the Ordinance does not discriminate based on energy efficiency, says nothing about particular appliances, and sets no standards for any appliance performance or design – at all.

³ See Berkeley Br. 26-27 (Since the denominator in an energy efficiency ratio under EPCA is “energy use,” then “energy use” can never be zero within the context of EPCA.).

Second, “energy use” is defined as a “quantity of energy” measured at a “point of use.” 42 U.S.C. § 6291(4). The Ordinance is clear: it prohibits the existence of natural gas piping in new buildings, which eliminates the construction of points of use for natural gas. CRA relies heavily on *Rowe*, where the Court recognized that “tell[ing] shippers what to choose rather than carriers what to do” was a distinction without a difference because it ultimately affected the services offered by carriers. *Rowe*, 552 U.S. at 368, 372 (involving Congress’s intent to preempt laws “relating to” “carriers” to fulfill Congress’ overarching goal of helping assure that transportation rates, routes, and services that reflect “maximum reliance on competitive market forces”). But here, the lack of gas piping in buildings does not compel appliance manufacturers to alter the design or performance of any gas appliance. The CRA would have the Court participate in “uncritical literalism” that would mean preemption would “never run its course,” *Dan’s City Used Cars, Inc.*, 569 U.S. at 260 (quoting *N.Y. State Conf. of Blue Cross & Blue Shield Plans*, 514 U.S. at 655-56), by arguing that the EPCA somehow jumps from regulating product performance and design to regulating the upstream distribution of energy infrastructure. CRA Br. 32-33. Despite CRA’s unsupported insistence, CRA Br. 35, that its arguments

would not compel cities to provide natural gas infrastructure, that is effectively what accepting their reading of the statute requires. Here Congress' intent is to regulate how a product performs once connected to a point of use, *see* Berkeley Br. 27-28, not making a point of use available to all.

Where Congress defines preemption as particular aspects of an activity or object, as it did in this case, the Supreme Court has taken a narrower approach to the phrase "related to." In *Dan's City Used Cars*, the Court held that where Congress preempts regulations "related to a price, route, or service of any motor carrier . . . *with respect to the transportation of property*," 49 U.S.C. § 14501(c)(1) (emphasis added), that additional qualification "massively limits the scope of preemption." *Dan's City Used Cars*, 569 U.S. at 261 (citation omitted). The fact that EPCA preempts state regulations related to energy efficiency/energy use does not mean that states cannot regulate what type of energy infrastructure is used in buildings in the first instance. *See also Association des Éleveurs de Canards et d'Oies du Quebec v. Becerra*, 870 F.3d 1140, 1150 (9th Cir. 2017) ("The fact that Congress established 'ingredient requirements' for poultry products that *are* produced does not preclude a state from banning products—here,

for example, on the basis of animal cruelty – well before the birds are slaughtered.”); *Cavel Int’l, Inc. v. Madigan*, 500 F.3d 551, 554 (7th Cir. 2007) (federal regulation of slaughterhouse operations for horse meat “was not a decision that states must allow horses to be slaughtered for human consumption”); *Empacadora de Carnes de Fresnillo, S.A. de C.V., v. Curry*, 476 F.3d 326, 333 (5th Cir. 2007) (“This preemption clause expressly limits states in their ability to govern meat inspection and labeling requirements. It in no way limits states in their ability to regulate what types of meat may be sold for human consumption in the first place.”).

Construing section 6297(c)’s scope so broadly as to effectively require cities to provide points of use for all appliances with federal conservation standards ignores obvious textual limitations. The Ordinance simply does not reach local regulations that do not prescribe energy efficiency standards for products or determine how much energy an appliance must consume.

II. Indoor combustion of natural gas presents health and safety risks to kitchen workers

Berkeley adopted the Ordinance in part because “asthma and other health conditions” that are exacerbated by combustion of natural gas.

Berkeley, CA, Mun. Code § 12.80.010(C). Restricting gas infrastructure in new buildings thus serves to “reduc[e] the environmental and health hazards produced by the consumption and transportation of natural gas.” *Id.* § 12.80.010(H).

Kitchen staff work long hours on their feet in confined workspaces exposed directly to radiant heat and emissions from cooking equipment. The *Amici* have several years of experience in professional kitchens and are familiar with the health and safety risks from cooking with natural gas: excessive heat and air pollution. As outlined below, the Ordinance reduces those risks.

A. Cooking with natural gas contributes to excessive heat in kitchens

The cooking line, where meals are prepared, produces the largest heat gains in a kitchen and exposes chefs and other kitchen staff to high temperatures. Due to the high level of metabolic activity while cooking, exposure to high air temperatures, and radiation from hot surfaces, kitchen staff may experience varying thermal environments and, potentially, heat stress. Kitchen work is high intensity, and when it is carried out next to

open flames or appliances radiating heat, it is not uncommon for kitchen employees to experience heat stress.⁴

“One of the main causes for extreme thermal conditions in kitchens is the warm cooking equipment imparting radiant heat directly to the cooks and surrounding surfaces.”⁵ The problem of ambient heat is exacerbated because restaurants often leave “gas burning equipment to idle throughout the day, waiting to be used for a given order. The result is a tremendous amount of heat released into the surrounding environment via open flame and radiant heat from the warm surfaces of the equipment.”⁶ Even when in use, gas appliances lose up to 60 percent of their energy to “vented combustion gases and to the surrounding environment, which leads

⁴ ASHRAE RP-1469 – Thermal Comfort in Commercial Kitchens 3, 9, 14-15 (2012).

⁵ Steve Gross, *Environmental Inequality in Commercial Kitchens*, Interface Engineering (May 27, 2021), <https://interfaceengineering.com/news-and-awards/2021/environmental-inequality-in-commercial-kitchens>; *see also* Rebecca Leber, *A Tik Tok food star on why gas stoves are overrated*, Vox (Dec. 9, 2021), <https://www.vox.com/22744866/tiktok-food-star-gas-stoves-induction> (“The heat [in commercial kitchens that use gas stoves] is uncomfortable. It’s almost like disregard for the comfort of workers the way that kitchen life here is just accepted. You’re supposed to suffer for your art and for your craft here, and the open flame cooking is just one of the components of that.”).

⁶ Gross, *supra* note 5.

directly to space overheating and poor indoor air quality.”⁷ “Studies on kitchen labour have [also] often shown a high ambient temperature in the kitchen working environment.”⁸

Evidence shows kitchen staff are exposed to higher temperatures when using gas-powered kitchen appliances than when using electric and induction appliances. For instance, in one study, in the large-scale kitchens, air temperatures and radiant heat indexes in front of gas cookers were higher than those of electric cookers.⁹ The radiant and ambient temperatures around gas kitchen workers were significantly higher than those of electric kitchen workers leading to fluid loss and impacts to heart

⁷ *Id.*

⁸ Hiroe Matsuzuki et al., *Effects of Heating Appliances with Different Energy Efficiencies on Associations among Work Environments, Physiological Responses, and Subjective Evaluation of Workload*, 46 *Industrial Health* 360, 360 (2008), <https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.638.6455&rep=rep1&type=pdf> [hereinafter “*Effects of Heating Appliances*”].

⁹ *Id.* at 363.

rates.¹⁰ Overall, the high temperatures in kitchens have a negative impact on the productivity and general well-being of employees.¹¹

Electrifying kitchens can reduce thermal stress and improve employee wellbeing, however. Induction equipment, which runs solely from electricity and requires no natural gas connection, heats pots and pans directly through magnetic induction rather than thermal conduction. Induction is about 85 percent efficient in transferring energy, while gas ranges are about a third as efficient as induction with a heat efficiency of about 30 percent.¹² There is therefore little exhaust heat with the induction stove, the rise in kitchen temperature is slight, and induction cooking

¹⁰ Hiroe Matsuzuki et al., *The Effects of Work Environments on Thermal Strain on Workers in Commercial Kitchens*, 49 *Industrial Health* 605, 607-09 (2011), https://www.jstage.jst.go.jp/article/indhealth/49/5/49_MS1219/_pdf/-char/en [hereinafter "*The Effects of Work Environments*"].

¹¹ *The Effects of Heating Appliances*, *supra* note 8 at 363 ("In the groups who felt that the workload was "considerably hard", there were significant differences in ambient dry-bulb temperature except for 150 cm, globe temperature and body temperature (abdomen, antebrachial skin and external acoustic meatus temperature) between the IH and gas stoves.").

¹² Energy Star, *2021-2022 Residential Induction Cooking Tops*, https://www.energystar.gov/about/2021_residential_induction_cooking_tops. See also Frontier Energy, *Residential Cooktop Performance and Energy Comparison Study*, at 10-19, (July 2019), <https://cao-94612.s3.amazonaws.com/documents/Induction-Range-Final-Report-July-2019.pdf>

eliminates the heat associated with idling.¹³ The result is less surface and ambient heat, and a more comfortable working environment for anyone who must spend time standing near a cooktop.¹⁴ Even though induction cooking can impact the cooking environment, heat stress indicators, such as oxygen uptake, skin temperature and subjective awareness of heat after heat exposure did not increase significantly as compared to gas appliances.¹⁵ The benefits of induction/electric equipment combine to dramatically improve the thermal environment in commercial kitchens, as well as reduce kitchen energy consumption by as much as 70 percent.¹⁶

Furthermore, kitchen owners and operators generally want their kitchens to be more comfortable while complying with stringent indoor air

¹³ Jeff McMahon, *Commercial Kitchens Not Ready To Forsake Gas, But Can Profitably Cut Carbon* (July 4, 2021), <https://www.forbes.com/sites/jeffmcmahon/2021/07/04/commercial-kitchens-will-be-cooking-with-gas-for-a-while-yet-expert-says/?sh=7a5563ab1ca0>; Frontier Energy, *supra* note 12 at 25-26.

¹⁴ *The Effects of Heating Appliances*, *supra* note 8, at 366-67 (describing induction heating's ability to maintain a good thermal environment in the kitchen).

¹⁵ *The Effects of Heating Appliances*, *supra* note 8, at 363-67.

¹⁶ Gross, *supra* note 5.

quality standards. CRA and worker safety alliances¹⁷ have expressed concern regarding how to manage temperatures and heat stress in comments¹⁸ recently submitted to the California Division of Occupational Safety and Health in response to new Heat Illness Prevention in Indoor Places of Employment standards proposed to be added to Chapter 4, subsection 7, (General Industry Safety Orders).¹⁹ CRA raised concerns that increased heat illness standards that limit the radiant heat from gas appliances would “conflict” with their members’ ability to meet food safety

¹⁷ Restaurant Opportunities Center United, *Comments Re: Heat Illness Prevention in Indoor Places of Employment* (February 27, 2018), <https://www.dir.ca.gov/dosh/doshreg/Heat-Illness-Prevention-Indoors/Comments-3/ROC.pdf> (“Workers are at risk for heat illness in much lower heat indices and temperatures. The standard should require the control measures at significantly lower heat levels.”). *See also* Food Chain Workers Alliance, *Comments Re: Heat Illness Prevention in Indoor Places of Employment* (February 27, 2018), <https://www.dir.ca.gov/dosh/doshreg/Heat-Illness-Prevention-Indoors/Comments-3/FCWA.pdf> (same).

¹⁸ CRA, *Comments Re: Heat Illness Prevention in Indoor Places of Employment Comments on Discussion Draft – January 29, 2019* (February 22, 2019), <https://www.dir.ca.gov/dosh/doshreg/Heat-Illness-Prevention-Indoors/Comments-6/California-Restaurant-Association.pdf>.

¹⁹ California Department of Industrial Relations, *Heat Illness Prevention in Indoor Places of Employment, Advisory Meeting*, <https://www.dir.ca.gov/dosh/doshreg/Heat-illness-prevention-indoors/> (last visited February 8, 2022).

regulations requiring that food be cooked to certain temperatures.²⁰

Electric/induction cooking does not present such tradeoffs in two important ways. First, induction cooking does not create the same extreme ambient heat issues (i.e. continuous open flame) associated with gas cooking. Second, kitchen ventilation systems moderate kitchen temperatures by exhausting ambient heat from sources like smoke and steam. However, ventilations systems cannot capture radiant heat produced by gas appliances, and thus remains a kitchen health issue contributing to heat stress.²¹

²⁰ *CRA Comments, supra* note 18 (“Employee safety is a top priority for the statewide restaurant community. Restaurants use commercial cooking equipment like gas ranges, broilers, ovens and fryers to prepare menu items for our customers. The California Retail Food Code requires restaurants to heat eggs, meat, poultry and fish to specific temperatures to ensure food safety. We are concerned that the proposed indoor heat illness regulations may conflict with regulations which affect our ability to heat and hold food to the necessary temperatures to protect the public’s health and safety from food borne illnesses and comply with the Retail Food Code.”)

²¹ As previously explained, gas appliances are usually continuously left on to maintain heat, which creates excessive radiant heat (coming off the cooktop and appliances) and ambient heat (collecting in the environment from the open flame). *Gross, supra* note 5. Electric and induction cooking do not present the same radiant heat issues.

Mr. Galarza has reflected that in his own experience using induction equipment he was initially “reluctant” to use anything new but then found he “really enjoyed using it and couldn’t believe how comfortable the kitchen environment had become.” He also noticed “a significant improvement” in “employees’ moods and overall comfort at work.”²²

Mr. Galarza’s experience at Chatham University Eden Hall’s project features an all-electric kitchen using induction ranges, griddles, and warming stations. All of the appliances in Mr. Galarza’s kitchen, including an induction stove, used solar-powered electricity for a carbon-neutral footprint, and he was able to boil water within two minutes using 50 percent of the energy a conventional cooktop would use.²³ Findings verified consistently mild temperatures in the campus kitchen during all meals. During a summer week in September 2019, outdoor temperatures reached into the high 80s, yet the kitchen temperature was typically between 69 and 73 degrees throughout the meal services.²⁴

²² Gross, *supra* note 5.

²³ Deborah Weisburg, *Chatham's new sustainable campus boasted as 'first in the world'*, (April 26, 2016), <https://archive.triblive.com/lifestyles/food-drink/chathams-new-sustainable-campus-boasted-as-first-in-the-world/>

²⁴ Gross, *supra* note 5.

B. Natural gas use in kitchens also contributes to harmful indoor and outdoor air pollution

Poor indoor air quality is another hazard in both residential and commercial kitchens. Cooking with natural gas emits nitrogen dioxide, carbon monoxide, formaldehyde, particulate matter, and volatile organic compounds – “each of which can exacerbate various respiratory and other health ailments.”²⁵ Gas burners are estimated to add 25 to 33 percent to the weekly average indoor nitrogen dioxide concentrations during summer and 35 to 39 percent in winter.²⁶

Over one-third of households in the United States, and over 60 percent of households in California, cook with gas. People who interact more directly with a stove or oven increase their potential exposure to natural gas pollutants. And unlike a furnace or water heater, cooktops are unique because the byproducts of combustion are emitted directly into home air; venting can reduce the concentration of this pollution, but vented

²⁵ Wendee Nicole, *Cooking Up Indoor Air Pollution: Emissions from Natural Gas Stoves*, 122 *Envtl. Health Perspectives* A27 (2014), available at <https://ehp.niehs.nih.gov/doi/10.1289/ehp.122-A27>

²⁶ Logue, J.M., et al, *Pollutant Exposures from Natural Gas Cooking Burners: A Simulation-Based Assessment for Southern California*, *Environ. Health Perspect* (2014), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3888569/>.

hoods are, in practice, used only 25 to 40 percent of the time.²⁷ These pollutants have been proven to exacerbate asthma.²⁸ Furthermore, restaurant workers, as essential workers, are among those who face the greatest exposure risk, and studies have shown a correlation between NO₂ exposure and negative COVID outcomes.²⁹

The byproducts of natural gas cooking are not just respiratory irritants; they are also greenhouse gases that contribute to climate change. Overall, researchers estimate that natural gas stoves emit up to 1.3 percent of the gas they use as unburned methane – far more than previously assumed.³⁰ And more than three-quarters of methane emissions occur while stoves are off, suggesting that gas fittings and connections to the

²⁷ Eric Lebel et al., *Methane and NO_x Emissions from Natural Gas Stoves, Cooktops, and Ovens in Residential Homes*, *Envtl. Sci. & Tech.* A-B (2021), available at <https://pubs.acs.org/doi/pdf/10.1021/acs.est.1c04707>.

²⁸ Brady Seals, Andee Krasner, Rocky Mountain Institute, *Health Effects from Gas Stove Pollution*, at 12 (2020), <https://rmi.org/insight/gas-stoves-pollution-health/#:~:text=Health%20Effects%20from%20Gas%20Stove%20Pollution&text=What's%20more%2C%20a%20robust%20body,air%20p>ollution%20remains%20largely%20unregulated.

²⁹ Brady Seals, Rocky Mountain Institute, *Tackling NO₂ from All Sources to Help Fight COVID-19* (September 23, 2020) <https://rmi.org/tackling-no2-from-all-sources-to-help-fight-covid-19/> (summarizing studies on the relationship between air pollution exposure and COVID-19 death outcomes in the United States).

³⁰ Eric Lebel et al., *supra* note 27, at H.

stove and in-home gas lines are responsible for most emissions, regardless of how much the stove is used.³¹

III. Electrifying does not compromise the efficiency of the kitchen or the quality of its work

Finally, CRA's unfounded allegation that electrification will compromise kitchen quality reflects outdated habits and biases that Mr. Galarza's experience has shown to be false. *See* CRA Br. 13 (alleging that the Berkeley ordinance will harm chefs who "rely on gas for cooking particular types of food, whether it be flame-seared meats, charred vegetables, or the use of intense heat from a flame under a wok," and that these chefs will not be able to prepare many of their specialties, and lose speed and flavor control during food preparation). These statements underestimate the capabilities of electric kitchens. In fact, converting to all-electric or induction appliances can improve a kitchen's speed and performance.³²

The fact that induction transfers energy more efficiently than gas means that induction works faster. Consumer Reports found that "[n]o

³¹ *Id.* at A, F.

³² *See* Frontier Energy, *supra* note 12.

other cooking technology that we've tested is faster than the fastest induction elements – we're talking 2 to 4 minutes speedier than the competition to bring 6 quarts of water to a near-boil."³³ While the efficiency of all-electric cooking is a small but noticeable convenience for home cooks, it can make a serious difference to commercial kitchens, because small margins scale to large gains.³⁴

Finally, an all-electric kitchen can produce superior culinary performance. Several renowned restaurants,³⁵ including Michelin Star

³³ Paul Hope, *Pros and Cons of Induction Cooktops and Ranges*, Consumer Reports (Aug. 21, 2021), <https://www.consumerreports.org/electric-induction-ranges/pros-and-cons-of-induction-cooktops-and-ranges-a5854942923/>.

³⁴ See Chris Galarza, *Viewpoint: Should cooking go electric?*, Food Management (June 9, 2021) (Tara Fitzpatrick ed.), <https://www.food-management.com/colleges-universities/viewpoint-should-cooking-go-electric> (edited by Tara Fitzpatrick).

³⁵ See, e.g., Chloe Scott-Moncrief, *Vice.com, Why London's Top Chefs Are All Cooking on £99 Induction Hobs* (May 29, 2017), <https://www.vice.com/en/article/78mvqa/why-londons-top-chefs-are-all-cooking-on-99-induction-hobs>; Patsy Testerman, *Professional Chefs Love Induction Cooking and You Should Too*, EuroKera, <https://eurokera.com/blog/professional-chefs-love-induction-cooking-and-you-should-too/>

kitchens,³⁶ have fully electric/induction kitchens. Perhaps the most persistent myth about electrification is that it is difficult to cook on electric appliances because they do not provide the same visual cues as a gas range.³⁷ Electric induction ranges offer several benefits that can improve culinary performance, however, including:

- Precise temperature control. Induction hobs allow cooks to set precise temperatures without the need to rely on visual cues like the size or color of a gas flame or ambiguous high/low settings, and can maintain a consistent temperature without having to adjust heat settings up and down.
- Responsive temperature settings. An induction hob is more responsive because the temperature adjusts immediately without waiting for an external element to heat.

³⁶ See e.g., Jennifer Tanaka, *Five Days on the Line* (June 8, 2007) <https://www.chicagomag.com/chicago-magazine/november-2006/five-days-on-the-line/> (discussing Alinea); Justin Phillips, *Inside the French Laundry's new \$10 million kitchen* (February 17, 2017), <https://www.sfgate.com/restaurants/article/Inside-the-French-Laundry-s-new-10-million-10941359.php> (discussing the French Laundry)

³⁷ See Katie Moritz, *Induction Cooking is Eco-Friendly, but Can We Afford It?*, PBS.org (Jan. 30, 2019), <https://www.pbs.org/wnet/peril-and-promise/2019/01/induction-cooking-affordable/>.

- Greater work surface area. Because the top of an induction range does not get hot, it is safe to put cutting boards or cookbooks on it and use it as an additional work surface.³⁸
- Easy to clean. Because it does not get hot, an induction hob is less likely to have burned-on food stuck to it. The surface wipes clean, which saves kitchen staff time and requires fewer cleaning supplies containing harsh chemicals.
- Accommodates many cooking techniques. Wok cooking, for example, requires greater surface area contact with a heating element to ensure that the entire wok heats up. The solution when using induction appliances is a “design that nestles the wok in a concave induction cavity [and] delivers all of the heat – if none of the flame – using a fraction of the energy.”³⁹

³⁸ See Energy Star, *supra* note 12 (“Furthermore, because the source of heat is the cookware itself, the cooking top surface remains cool to the touch and less heat is lost to the surrounding air, providing an additional energy efficiency benefit by reducing the workload for the HVAC equipment. A cooler cooking top surface also makes induction cooking tops safer to work with than other types of cooking tops.”).

³⁹ Adam Aston, *The challenges of building electrification – or, the parable of flameless wok hei*, Greenbiz (June 7, 2021),

Amici have consulted on electrification projects in high-output kitchens at schools and corporate cafeterias, all of which operate efficiently and harmoniously without using gas appliances.⁴⁰ Restaurants of all kinds are increasingly moving to all-electric kitchens as well, from Michelin-starred restaurants to neighborhood standbys. Culinary schools in the United States have trained students on both gas and induction cooktops for years because chefs can expect to use both during their careers.⁴¹ *Amici* acknowledge that chefs certainly have their preferences as to which type of appliance they work with, *see* CRA Br. 14, but those preferences are driven more by training and familiarity than any inherent limitations in cooking equipment. Kitchens of all types – homes, restaurants, cafeterias, food trucks – can run without fossil fuels and produce delicious food.

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https://www.greenbiz.com/article/challenges-building-electrification-or-parable-flameless-wok-wei?utm_source=linkedin&utm_medium=integral+group&utm_term=fa7e092e-3f2f-41a4-95d7-8a6f78803970&utm_content=&utm_campaign=default_2021.

⁴⁰ Forward Dining Solutions, *Projects*,

<https://forwarddynamicsolutions.com/projects>.

⁴¹ *See* Elizabeth Weise, *Banning natural gas to save the planet*, Visalia Times-Delta A4 (Nov. 12, 2019), 2019 WLNR 34051632.

CONCLUSION

Berkeley's Ordinance is good for kitchen workers, good for home cooks, good for fans of all types of cuisine, and good for the planet. *Amici* respectfully request that the Court affirm the judgment of the district court.

Dated: February 8, 2022

Respectfully submitted,

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I hereby certify that on February 8, 2022, I electronically filed the foregoing BRIEF OF AMICI CURIAE CHEF CHRISTOPHER GALARZA AND CHEF GERARD KENNY II IN SUPPORT OF THE CITY OF BERKELEY with the Clerk of the Court for the United States Court of Appeals for the Ninth Circuit by using the appellate CM/ECF system, which will send notice of such filing to all counsel who are CM/ECF registered users.

Dated: February 8, 2022

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