

Exhibit 7

Public Comments

Dear Clerk of the Board,

I support taking climate action and making new buildings sustainable and carbon-free! New all-electric buildings will improve people's health by reducing toxic air pollution; combat climate change by reducing greenhouse gas emissions; and improve housing affordability by saving construction costs and lowering utility bills.

A study for the LA Dept of Water and Power finds that "all-electric new construction results in savings of \$130-\$540 per year relative to a gas-fueled home over the life of the equipment." All-electric buildings are less expensive to build and less expensive and healthier to live in.

Thank you for maintaining Ventura County's environmental leadership.

Sincerely,

Bruce Vincent
1664 San Gabriel St
Ojai, CA 93023
backwoodsbruce1@yahoo.com
(805) 646-1676

Dear Clerk of the Board,

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Sincerely,

Stephan Foley
402 S Carrillo Rd
ojai, CA 93023
salexfoley@gmail.com
(805) 473-9888

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Sincerely,

Tami Mcc
6278 cynthia st
Simi valley, CA 93063
stevenmccready@roadrunner.com
(805) 791-9064

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Sincerely,

Mikhail Vizel
13790 Hightop St
Moorpark, CA 93021
ddbvizel@hotmail.com
(805) 222-5946

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Sincerely,

Allen Chinn
46 Debussy Lane
Ventura, CA 93003
mvm4la@gmail.com
(818) 645-4266

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Sincerely,

Jennifer Kopczynski
2374 Moreno Drive
Camarillo, CA 93010
adivachanna@aol.com
(805) 370-8366

Good to know. Thank you Ruben!

Debra Walters

805.766.0684

Hello Ms. Walters. Your point is well taken.

I am not sure if you would be affected by this ordinance, as I believe the Clearpoint area is in the City of Ventura jurisdiction. This ordinance will only affect construction projects in the unincorporated areas of Ventura County.

Thank you for your input and feedback. We appreciate your comments.

ruben

From: Debra Walters <debralynnwalters@gmail.com>

Sent: Tuesday, September 27, 2022 9:15 AM

To: BuildingCodeChanges2022 <BuildingCodeChanges2022@ventura.org>

Subject: Fwd: Electric Utility Blindside

Then why does LEED still support use of natural gas for efficiency and efficacy? The footprint for electricity production is hardly green.

Anyhow the point is that in stepping in the right direction, we have to remember who burned down our homes in 2018. In rebuilding my family house in Clearpoint, which has been a vacant lot for five years... We are plumbed for natural gas and want a gas stove, heating/cooling system, and clothes dryer as these are far more efficient to operate and less costly. How will that be accommodated? This County should be able to understand why its community not completely trusting and supportive of the electric utility industry.

Thank you,

Debra Walters

805.766.0684

----- Forwarded message -----

From: **BuildingCodeChanges2022** <BuildingCodeChanges2022@ventura.org>

Date: Tue, Sep 20, 2022 at 12:08 PM

Subject: RE: Electric Utility Blindside
To: Debra Walters <debralynnwalters@gmail.com>

Thank you for your comments and suggestions.

The ban on natural gas comes from the County's General Plan which was adopted by the Board of Supervisors in the last year or so.

The ban is intended to reduce the production of greenhouse gases, which would otherwise be created by new appliances and equipment installed in newly constructed buildings.

As you may know, the overwhelming majority of scientists agree that greenhouse gases are changing the climate in a dramatic and potentially dangerous fashion that will affect us all. Ventura County is no exception. Our community is affected by climate change in several ways...severe droughts, heat and dry weather conditions that exacerbate the threat of wildfires, and potentially serious sea level rise in the near and long term future.

The proposed measures are intended to help avert this problem in a reasonable, but meaningful way.

In regards to pre-2008 buildings...the proposed measures will only affect homes that are near wildland areas, or Hazardous Fire Zones, as determined by the VC Fire Dept. The proposed provisions will require that if you make a significant addition or remodel to your home in the future, then an additional 10% of your project cost be spent toward retrofitting your home to meet the current requirements that protect it against ignition by flying embers from nearby wildfires. But that is only if your home is not already in compliance with those standards. Many homes constructed prior to 2008 already meet those standards as they are constructed with tile, stucco, and small opening vents, etc, which make it a resilient home. These standards are intended to make those homes which were not originally constructed in this fashion, to be made more resilient to large wild land fires.

For example, these are the types of work that would have to be done as a retrofit if your home had these vulnerabilities:

1. Wood shake roofs...replaced with tile or asphalt roof shingles
2. Wood siding on the exterior walls...replaced with stucco or other non-combustible finish material
3. Large vent openings in underfloor and attic vents...replace vent openings having larger than 1/8 inch openings, with screens or grates having smaller than 1/8 inch openings (This will be a minimum retrofit required)
4. Exposed roof eaves having combustible materials...box-in the eaves with stucco or other non-combustible material

But these retrofits will only be required to the extent that you spend no more than an additional 10% of the cost of your main project (the addition or remodel).

If approved, we will enforce these provisions for projects (additions, remodels, structural repairs) for which we receive a complete building permit application on/after January 01, 2023. Projects with an earlier permit application will be grandfathered into the existing 2019 Building Code and will not need to do the retrofits.

The proposed code language can be found here (starting on page 91):

[https://vcrma.org/docs/images/pdf/bs/Ordinance_\(VCBC2022\)_Exhibit_2.pdf](https://vcrma.org/docs/images/pdf/bs/Ordinance_(VCBC2022)_Exhibit_2.pdf)

I hope that helps clarify a bit. Thank you for your interest in the new provisions. You may also make your thoughts and concerns known to the Board of Supervisors by attending/participating during the Board hearing of October 4th. The item will be heard by the Board at 1:30pm.

Thank you.

ruben

From: Debra Walters <debralynnwalters@gmail.com>

Sent: Tuesday, September 20, 2022 9:29 AM

To: BuildingCodeChanges2022 <BuildingCodeChanges2022@ventura.org>

Subject: Electric Utility Blindside

Excuse me, why are we enforcing a ban on natural gas? Haven't our most devastating wildfires been caused by electrical companies? Thus why are blindly supporting electric power as a resource?

Before blindly adopting the State's misdirection, please consider what is best to support Ventura County.

Please strike the requirement for all-electric appliances and equipment.

And how are "fire hardening measures" going to be enforced on pre-2008 structures?

Thank you,

Debra Walters

805.766.0684

Hi Todd, yes,

If the ordinance is adopted as proposed, we will be enforcing these provisions of the ordinance to require electric stoves, clothes dryers, water heaters, and space heaters in lieu of natural gas. This will help reduce the production of GHG's, which is the main driving force behind our proposed ordinance, but will also have a secondary effect of preventing any hazards associated with small natural gas leaks.

Thanks again.

ruben

From: Todd Collart <collart@west.net>

Sent: Wednesday, September 7, 2022 8:28 PM

To: BuildingCodeChanges2022 <BuildingCodeChanges2022@ventura.org>

Subject: Rethinking cooking with gas | Stanford News

Dear Ruben,

Below is a study I referenced previously that describes the gas leakage from gas kitchen stoves. You believed that since gas is odorized that its presence would be detected. Apparently not. Pipes, connections and valves leak and I contend they will leak from gas fireplaces and barbecues, just as they do from stoves. The leakage from outdoor barbecues would not pose the immediate health risks that arise in an enclosed space like a kitchen, but the leaked gas is methane and very damaging to the environment.

Sincerely,

Todd Collart

<https://news.stanford.edu/2022/01/27/rethinking-cooking-gas/>

Stanford scientists find the climate and health impacts of natural gas stoves are greater than previously thought

By Rob Jordan

January 27, 2022

Humans have cooked with fire for millennia, but it may be time for a change. Natural gas appliances warm the planet in two ways: generating carbon dioxide by burning natural gas as a fuel and leaking unburned methane into the air. A new Stanford-led study reveals that the methane leaking from natural gas-burning stoves inside U.S. homes has a climate impact comparable to the carbon dioxide emissions from about 500,000 gasoline-powered cars.

Video by Lindsay Filgas and Rob Jordan

Stanford researchers found that gas stoves emit far more methane than once thought, and most of the emissions occur while the stove is off. During combustion, stoves also emit dangerous levels of nitrogen oxides, a toxic air pollutant.

This extra warming from home methane leaks contributes about a third as much warming as the carbon dioxide generated by combustion of the stove's natural gas, and sometimes exposes users to respiratory disease-triggering pollutants. The [findings](#), published in *Environmental Science & Technology*, come as legislators in numerous U.S. municipalities and at least one state – New York – weigh banning natural gas hookups from new construction.

“Surprisingly, there are very few measurements of how much natural gas escapes into the air from inside homes and buildings through leaks and incomplete combustion from appliances,” said study lead author Eric Lebel, who conducted the research as a graduate student in Stanford’s [School of Earth, Energy and Environmental Sciences](#) (Stanford Earth). “It’s probably the part of natural gas emissions we understand the least about, and it can have a big impact on both climate and indoor air quality.”

An overlooked contributor to a growing problem

Although carbon dioxide is more abundant in the atmosphere, methane’s global warming potential is about 86 times as great over a 20-year period and at least 25 times as great a century after its release. Methane also threatens air quality by increasing the concentration of tropospheric ozone, exposure to which causes an estimated 1 million premature deaths annually worldwide due to respiratory illnesses. Methane’s relative concentration has grown more than twice as fast as that of carbon dioxide since the beginning of the Industrial Revolution because of human-driven emissions.

While pipeline leaks of natural gas, which is more than 90 percent methane, have been studied extensively, natural gas-burning cooking appliances have received comparatively little attention.

Over one-third of U.S. households – more than 40 million homes – cook with gas. Unlike other gas appliances, such as space and water heaters that are usually placed away from living quarters, cooking appliances directly expose people to their emissions, which can include formaldehyde, carbon monoxide and nitric oxides that can trigger asthma, coughing, wheezing and difficulty breathing, occasionally resulting in hospitalization. Hood use and ventilation help reduce concentrations of nitrogen oxides and other co-produced pollutants in kitchen air, yet surveys show that home cooks on average use hoods for kitchen ventilation only 25–40 percent of the time.

Findings and implications

To better understand cooking appliances' potential climate and health impacts, the researchers measured methane and nitrogen oxides released in 53 homes in California, not only during combustion, ignition and extinguishment, but also while the appliance was off, something most previous studies had not done. Their study included 18 brands of gas cooktops and stoves ranging in age from 3 to 30 years.

Stanford graduate student Eric Lebel samples natural gas from a home stove. *(Image credit: Rob Jackson)*

The highest emitters were cooktops that ignited using a pilot light instead of a built-in electronic sparker. Methane emissions from the puffs of gas emitted while igniting and extinguishing a burner were on average equivalent to the amount of unburned methane emitted during about 10 minutes of cooking with the burner. Interestingly, the researchers found no evidence of a relationship between the age or cost of a stove and its emissions. Most surprising of all, more than three-quarters of methane emissions occurred while stoves were off, suggesting that gas fittings and connections to the stove and in-home gas lines are responsible for most emissions, regardless of how much the stove is used.

Overall, the researchers estimated that natural gas stoves emit up to 1.3 percent of the gas they use as unburned methane. While the U.S. Environmental Protection Agency

(EPA) does not report emissions from specific residential natural gas appliances, it does report methane emissions for residential appliances collectively. From stoves alone, the researchers estimated total methane emissions to be substantially more than the emissions currently reported by the EPA for all residential sources.

Larger stoves tended to emit higher rates of nitric oxides, for example. Using their estimate of emissions of nitrogen oxides, the researchers found that people who don't use their range hoods or who have poor ventilation can surpass the EPA's guidelines for 1-hour exposure to nitrogen dioxide outdoors (there are no indoor standards) within a few minutes of stove usage, particularly in smaller kitchens.

"I don't want to breathe any extra nitrogen oxides, carbon monoxide or formaldehyde," said study senior author [Rob Jackson](#), the Michelle and Kevin Douglas Provostial Professor and professor of Earth system science. "Why not reduce the risk entirely? Switching to electric stoves will cut greenhouse gas emissions and indoor air pollution."

Yes, something else we need to consider in the near future.

Although this is not something we are considering for this code change proposed for January 1, 2023, we will keep on the radar for consideration in the near future.

Although these fan systems are already allowed, they are not required by the California Energy Code. Not impossible to do, but should be evaluated and studied carefully, so that such systems could be regulated and enforced effectively. For example, having open ducts into the attic where the fan is circulating can have some practical difficulties to implement...for example, such register openings can break the insulation envelope and become sources of heat loss/gain, putting the home in violation of the California Energy Code. Also, open registers would be sources of dust and other particulates that homeowners would dislike. But...the whole idea of using an attic fan, even to ventilate the hot attic, is a good one.

Thanks

ruben

From: Todd Collart <collart@west.net>

Sent: Wednesday, September 7, 2022 4:10 PM

To: BuildingCodeChanges2022 <BuildingCodeChanges2022@ventura.org>

Subject: Attic Cooling

Ruben,

This is a case by a LA resident who could have benefitted by an attic fan to cool his dwelling

I believe such systems should be mandatory to cool dwellings in the warming future. They might be used instead of AC, but used in conjunction with AC attic fans could reduce the energy demand on AC systems.

I would think an attic fan system could be connected to the existing heating duct system and draw hot air through ceiling registers and sent outside. A separate duct could collect attic air (hot) and join the rest of the ducts sending hot air out of a dwelling.

Todd Collart

Yes, something else we need to consider in the near future.

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ruben

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Sent: Wednesday, September 7, 2022 4:10 PM
To: BuildingCodeChanges2022 <BuildingCodeChanges2022@ventura.org>
Subject: Attic Cooling

WARNING: If you believe this message may be malicious use the Phish Alert Button to report it or forward the message to Email.Security@ventura.org.

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Todd Collart



Hello Alexis. Thank you for your interest in the proposed Code Changes for Ventura County.

Yes, there is still time for public input. You can send your comments to this same email address at buildingcodechanges2022@ventura.org.

We will be taking the item to the Board of Supervisors for Public Hearing on October 4th. You can make your concerns, support, thoughts on the matter, etc heard by the Board on that date, or earlier. Oct 4th will likely be the last day to hear public input as the BOS will direct staff on what changes, if any, should be made to the draft ordinance before they vote on its adoption later, in November. The draft ordinance goes back to the Board for a second reading on Nov 1st for final adoption.

If adopted, the ordinance becomes effective on January 1, 2023. It takes effect for projects having a Building Permit application date of January 1st, 2023, or later. Projects with an earlier application date are "grandfathered" by the previous ordinance and are exempt from the new provisions.

I hope that helps.

Thanks

ruben

From: Alexis Rizo <alexis.rizo@cecmail.org>
Sent: Wednesday, September 7, 2022 9:40 AM
To: BuildingCodeChanges2022 <BuildingCodeChanges2022@ventura.org>
Subject: Building Code Changes

Hello,

I am hoping that you can help answer some questions regarding the Ventura County Building Code Changes process and timeline.

Is there a deadline to submit public comments? What are the next steps for approval process once community input is closed? In addition, is there a rough timeline of the process that you can share?

Thank you for an insightful workshop and presentation! Looking forward to hearing from you soon.

Sincerely,

Alexis Rizo

Alexis Rizo {she/her}

Policy Associate

[Community Environmental Council](#)

1219 State Street, Santa Barbara CA 93101

(805) 963-0583 Ext. 221

[Facebook](#) | [Instagram](#) | [Twitter](#) | [LinkedIn](#)

CEC advances rapid and equitable solutions to the climate crisis. See our [impact report](#) to learn why we are a 2020 California Nonprofit of the Year, a 2020 City of Santa Barbara Climate Hero, and a recipient of the highest possible ratings from Charity Navigator and Guidestar.

CEC (por sus siglas en inglés) avanza soluciones rápidas y equitativas a la crisis climática. Vea nuestro [informe de impacto](#) para saber por qué somos la Organización Sin Fines de Lucro del Año 2020 de California, el 2020 Ciudad de Santa Bárbara Héroe del Clima y tenemos las calificaciones más altas posibles en Charity Navigator y Guidestar.

Community
Environmental
Council

BOLD CLIMATE ACTION
ACCIÓN CLIMÁTICA AUDAZ



Yes, got it. Will keep under consideration.

Thanks again Todd.

ruben

From: Todd Collart <collart@west.net>
Sent: Tuesday, September 6, 2022 6:14 PM
To: BuildingCodeChanges2022 <BuildingCodeChanges2022@ventura.org>
Subject: Gas Stoves: Health and Air Quality Impacts and Solutions - RMI

Ruben,

More information about the adverse health impacts of indoor gas appliances. While you point out that children can be injured by electrical systems (paper clips in wall sockets, etc.), Doing away with electrical powered in homes is not an option. But eliminating gas in homes can be done with electrical options (fireplaces). Barbecues using propane tanks vs. piped gas at least occurs outdoors and the canisters relieves homeowners of the long-term expenses of being linked to increased gas infrastructure expenses.

TODD

<https://rmi.org/insight/gas-stoves-pollution-health/>

Gas Stoves: Health and Air Quality Impacts and Solutions

Health Effects from Gas Stove Pollution

Rocky Mountain Institute, Physicians for Social Responsibility, Mothers Out Front, Sierra Club

Across the United States, millions of homes and apartments rely on gas appliances for heating and cooking. Burning gas in buildings is not only a threat to climate action but also to human health, as these appliances are sources of indoor air pollution. Gas

stoves, particularly when unvented, can be a primary source of indoor air pollution. What's more, a robust body of scientific research shows the pollutants released by gas stoves can have negative health effects, often exacerbating respiratory conditions like asthma.

Despite this growing body of evidence, indoor air pollution remains largely unregulated. In this report, we synthesize the last two decades of research and offer recommendations for policymakers, researchers, health care professionals, and the public to work to swiftly to mitigate the health risks associated with gas stoves. Air pollution is preventable, and we hope this report can spur the necessary action to protect public health.

[Indoor Air Pollution: The Link between Climate and Health by Brady Seals](#)

Click the "Download" button above for a PDF of the full report. The infographics below are also available for download.

Yes, thank you!

ruben

From: Todd Collart <collart@west.net>

Sent: Tuesday, September 6, 2022 6:09 PM

To: BuildingCodeChanges2022 <BuildingCodeChanges2022@ventura.org>

Subject: Overextended: It's Time to Rethink Subsidized Gas Line Extensions - RMI

Ruben,

The article below discusses how gas users contribute to expansion of gas line infrastructure that then needs to be paid for by customers. So any gas service to a home facilitates this practice.

TODD

<https://rmi.org/insight/its-time-to-rethink-subsidized-gas-line-extensions/>

Overextended: It's Time to Rethink Subsidized Gas Line Extensions

A new natural gas customer is added to the system every minute in the United States, and existing gas customers are covering their construction costs through subsidies known as line extension allowances. Each year, these extensions of gas service enable utilities to pass hundreds of millions of dollars in costs to existing customers while expanding the fossil fuel system for decades to come.

While these policies may have made sense in prior contexts, the climate and economic justifications have changed dramatically. Now, a suite of factors challenges the rationale for line extension allowances, including expected reductions in future gas use, the growing costs of maintaining the existing distribution system, and the imperative to phase out fossil fuels.

In our new insight brief, we examine the prior rationales for these policies and lay out the case for change. Utility regulators in every state should reform line extension

allowances to eliminate subsidies for gas, align with state climate policies, and reduce the financial burden on existing gas customers.

Thanks Todd. Yes, you make good points. I will take it all into consideration.

BTW, sorry for slow response time. I was out of town for about 4 days.

Thanks!

ruben

From: Todd Collart <collart@west.net>

Sent: Tuesday, September 6, 2022 6:03 PM

To: BuildingCodeChanges2022 <BuildingCodeChanges2022@ventura.org>

Subject: Fwd: VCC UCLA Report on gas health hazards

Ruben,

below is a reference to a UCLA study of indoor air quality from gas. I leave it to you to look up the full study after reading the pertinent quotes below from a Climate Activist. I will send you other articles on gas hazards. As you are considering the amount of gas emitted from fireplaces and barbecues, remember that the approval of gas hookups will produce GHGs for the life of the dwelling. I suspect the average age of a home before it is torn down is about 75 to 100 years old. Even in small increments GHGs add up over a dwelling's lifetime.

TODD

EFFECTS OF RESIDENTIAL GAS APPLIANCES ON INDOOR **AND OUTDOOR AIR QUALITY** AND PUBLIC HEALTH IN CALIFORNIA is the first place I've seen accounting for the outdoor pollution coming from use of gas indoors. The Ex Summary has a good list of indoor health impacts and why low-income families are more likely to be harmed. The closing paragraphs are noteworthy also:

OUTDOOR AIR QUALITY

- Gas appliances are also a source of outdoor air pollution, and literature shows that the pollutants released by combustion can lead to illness and premature death.
- ...approximately 12,000 tons of CO and 15,900 tons of NOX (see Figure 3-1 in Section 3.2.1) were emitted to outdoor air from the use of residential gas appliances in California in 2018.
- If all residential gas appliances were immediately replaced with clean electric alternatives, the reduction of outdoor NOX and PM2.5 would result in 354 fewer deaths, as well as 596 fewer cases of acute bronchitis and 304 fewer cases of chronic bronchitis annually in California (Table 3-1). This is equivalent to approximately \$3.5 billion in monetized health benefits over the course of one year. T

In summary,highlights several potential benefits, both health-related and economic, of residential electrification throughout the state of California.it does not consider the full spectrum of costs and benefits associated with residential building electrification. Policymakers and stakeholders are encouraged to use this report, alongside existing research on building decarbonization, electrification, and other related topics, as a tool to develop stronger regulations and protections that limit indoor and outdoor air pollution from gas appliances, and to support new policy development to improve public health, particularly for communities disproportionately burdened by pollution from fossil fuels

UCLA Fielding School of Public Health Department of Environmental Health Sciences April 2020

Hi Todd,

I included responses to your comments, ideas, questions below, in red.

Thanks

ruben

From: Todd Collart <collart@west.net>

Sent: Wednesday, August 31, 2022 4:07 PM

To: BuildingCodeChanges2022 <BuildingCodeChanges2022@ventura.org>

Subject: Re: Comments on decorative fireplaces and barbecues

Thank you Ruben for a thoughtful reply to my comments. They make sense, even though these lightly used gas appliances increase the cost of a gas support homes by several thousand dollars. The cost for the infrastructure is usually not considered by home buyers, but they will be paying for it in the home mortgage. They will also pay to maintain the gas infrastructure, one example being a new gas compressor plant off Ventura Avenue in West Ventura. They will also be paying for losses associated with accidents such as the gas well blow out in the San Fernando Valley a few years ago. Perhaps the gas exemptions should be excluded when “Affordable” homes are being developed. No gas to the home lowers the cost of the home and on-going expenses to home occupants **I responded to this statement separately, under my previous email, where I respond to this or similar statement you wrote in your email of 09/05/22.**

On another matter, I would like you to consider adding a feature to the electrical code that allows home occupants to readily hook up a portable generator or storage battery to the home’s main electrical panel so that the occupants can power critical circuits in the home. **This is already allowed under the electrical code. I understand the State is contemplating adding a provision to require battery back up systems in the near future.** Auxiliary power is essential for medical purposes, but also for taking information during disasters and preserving food. **Agreed.** The State is now pushing harder to rely electrical power (finally), and the public is naturally concerned about brown and black outs caused by wind and fires and overloaded transmission

lines. This keeps the public from embracing the shift to electrically powered services over fears of power outages. Being able to easily plug in auxiliary power supplies would significantly allay such concerns, while also managing their affairs during outages. **Yes, but any work to set up a panel or a circuit in a home to do this needs to be done under an electrical permit that our office will issue to a qualified contractor.**

Another recommendation related to two-way charging of EVs Grid to car and car to grid. I have a Tesla that cannot do this, as far as I know, but I have seen videos about such arrangements in Europe that are managed by a San Diego Company. 2-way charging is coming and is a smart way to address the peak power demands once the sun sets on renewable solar generation. Please consider requiring the equipment now in anticipation of the strategy being more widely applied in the near future. **Yes, we will look into this but will need more time to research and prepare such provisions. Will consider for the next code cycle.**

Thank you for your work.

Sincerely,

TODD Collart

805 746-4929

On Aug 31, 2022, at 3:21 PM, BuildingCodeChanges2022 <BuildingCodeChanges2022@ventura.org> wrote:

Hi Todd,

Thank you for your feedback....and yes, I understand your concerns. These are real concerns that we also discussed at some length in B&S early-on, when we were deliberating the proposed code language to ensure the provisions are enforceable, practical, and can make a true difference in the intended results.

The reasons for our current proposal, and why we decided to propose the listed exemptions for certain types of gas-fired equipment are:

1. Some homeowners insist on fireplaces with a flame, not an electronic version with lights to simulate flames. In most cases, fireplaces are not a high-use items in a home, like cooking ranges, water heaters, clothes dryers, and space heaters. Especially in So. Calif and Ventura

where the weather is great, most home occupants use the fireplace only sparingly, and only for ambiance/decorative purposes during holiday parties...and they want the flames to look real, not fake. We researched and found there are some fireplaces that offer realistic-looking flames, but are still not real...they are simulations of flames created by lights and plastic reflectors that some owners dislike. This can become an enforcement battle that may cause much grief, as some property owners will insist on gas-fired fireplaces. If disallowed, they will claim that they do not have an electric appliance equivalent, as electric fireplaces do not really produce a flame. Moreover, decorative gas fireplaces are not included in the energy conservation performance or prescriptive compliance methods of the California Energy Code for determination of the allotted energy use of a building. This is because these appliances are not considered to be a significant source of energy use, as they are not used frequently. In the same light, we should exempt them in the Green Building Code, as we currently propose.

2. Most fireplaces are not large BTU-rated appliances. We compared an average standard gas fireplace (40,000 btu's) with an average gasoline vehicle. The annual CO2 output of the car is equivalent to about 10 households running their gas fireplace 2 hrs/day, 5 days per week, for 5 months out of the year. You may agree that the typical household likely uses their fireplace much less frequently but we used these numbers for comparison. So, a single vehicle produces about as much, or much higher amounts of carbon in a year, as 10 fireplaces. So, depriving customers from having a gas fireplace in their home seemed a bit excessive, given that these are very desirable decorative devices for some property owners will insist on a gas-fired version for their new home.
3. Many homes now install natural gas burning equipment in their outdoor kitchens in lieu of charcoal...or propane, which is more expensive and less convenient. Bootlegging other gas-fired equipment is always a slight possibility. But most homeowners will likely adjust and become accustomed to most of their other electric equipment, and should not be inclined to go back to install a bootlegged gas appliance after the expense has been made for all-electric equipment. So we feel this is not a likely scenario. Also, the installation of a new gas line in an existing home is not a DIY project for most homeowners...and a contractor will likely prefer to obtain permits for this work, when requested, in lieu of bootlegging the project.

I hope that helps explain some of our reasoning. We are really interested in helping property owners build their dream homes, despite the heavily-regulated construction environment. But we understand and agree that something must be done to address this important issue of climate change. We think these exceptions will not be used for all new homes, and hope the exceptions will help in avoiding unnecessary battles with some permitting customers.

Thanks Todd for your feedback. We will continue to consider yours, and all other public comments as we move forward with refining the proposed code language for presenting it to the Board.

Ruben

From: Todd Collart <collart@west.net>
Sent: Tuesday, August 23, 2022 5:22 PM
To: BuildingCodeChanges2022 <BuildingCodeChanges2022@ventura.org>
Subject: Comments on decorative fireplaces and barbecues

I am sending this email in response to webinar put on by B&S staff on August 23, 2022 where it requested comments on allowing exemptions for gas barbecues and decorative indoor fireplaces as part of the County's "Reach Code" additions to the State building codes.

I am concerned that allowing gas piping onto property for either barbecues or fireplaces will lead to unwanted bootlegged gas appliances and equipment.

Backyard barbecues that are commercially purchased are usually configured to use canisters of propane gas. Even stand-alone and specially constructed barbecues can be powered the same way. They do not require piped natural gas.

The visual effect of a gas fireplace can now be achieved with flat screens that project images of burning logs while electric heat is produced and blown outwards to achieve a very life-like experience. I also suspect that crackling fire sound effects and fragrances can also be provided, but I have not seen such a product. The internet has scores of sites selling electric fireplaces some starting for less than \$300.00.

So, in conclusion, gas fired outdoor barbecues are very feasible without resorting to gas piping from a gas utility; and the sight, sound, smell and warmth of an indoor gas fire place can be replicated electrically, OR one can burn wood the old fashioned way.

Thanks Todd for these suggestions.

These proposals are in reference to the Energy Code. The Calif Energy Commission has strict requirements for amending that code. Unfortunately, we have gone past the timeframe necessary to initiate these new ideas for a code change that can be supported by data needed by the Energy Commission to approve such a code change.

In some cases attic fans and/or whole house fans are already required. But can be installed anytime voluntarily in an existing home.

Although we are not proposing any amendments to the State Energy Code, these could be good things to consider for the next Code cycle.

Thank you.

ruben

From: Todd Collart <collart@west.net>

Sent: Thursday, September 1, 2022 2:46 PM

To: BuildingCodeChanges2022 <BuildingCodeChanges2022@ventura.org>

Subject: Reach Code Suggestions

Dear Ruben,

I offer another suggestion for the County Reach Code.

Simply put it is a requirement that home designs include passive heating and cooling features to minimize the demand on auxiliary heating and AC. These auxiliary systems add to the State's power demands and on local distribution lines and equipment. I see no reason to burden this infrastructure any more than necessary. As the Climate grows warmer, heating will be in less demand, but cooling will become more of a necessity. This is where passive and non-AC cooling systems can be a cheaper option for many areas of Ventura County instead of reflexively including AC systems into homes.

My daughter added a whole house - attic fan system in her Costa Mesa home and I experienced the dramatic cooling effect this simple heat extraction system was able to create. I have surveyed my home's attic here in Ventura to how such a system could extract heat from rooms and the attic. I can see that having uninterrupted attic

spaces is critical along with a suitable exit vent for an exhaust fan. Extracting heat from rooms from ceiling vents would also be important.

This suggestion is not as simple to implement as preventing gas-powered appliances, but it could save on energy costs to homeowners; reduce demands on a fragile GRID and reduce greenhouse gases

Sincerely,

Todd Collart

Hi Todd, thanks again for your thoughts, ideas and comments. I offer some responses in red, below. Thank you!!

ruben

From: Todd Collart <collart@west.net>
Sent: Monday, September 5, 2022 5:44 PM
To: BuildingCodeChanges2022 <BuildingCodeChanges2022@ventura.org>
Subject: Gas connections to new dwellings

Dear Ruben,

I had commented a couple times on your Division's work on a Reach Code for the County. As mentioned previously I do not favor an exemption for gas fireplaces or outdoor barbecues. The reasons were:

1. The infrastructure built into the environment to service a single home costs thousands of dollars (\$4,000?) and adds to the cost of housing when there is increased emphasis on building affordable housing. **Agreed, this is true. We would not require the installation for gas infrastructure in a home, nor would we require the installation of the exempted equipment. But we would allow it, if someone wanted to pay for it and install one or more exempted appliance(s).**
2. Market forces cause fluctuations in gas prices, but they almost always increase, so the cost for this power source will undoubtedly rise. **Agreed. This is true...but installing an exempt appliance is a voluntary measure, not required. Plus, the use of a fireplace, fire pit, or outdoor gas grill is not a necessary life-sustaining measure, like heating equipment for the winter, cooking range for cooking daily meals, water heating for a shower, or even clothes drying. If gas prices increased, a homeowner can easily cut down on the use of their decorative fireplace, fire pit, or gas grill. Also, some may argue that the price of electricity also fluctuates and can increase dramatically, as can the price of natural gas.**
3. One can reduce their electric bills with a home solar system, but there is no similar way to reduce one's gas bills except by replacing gas appliances with electric alternatives. In this sense electric power provides people with more control over their energy bills. **Yes, I agree...except that I can replace my**

clothes dryer or water heater for about \$2,000 if I needed to. But it cost me \$31,000 to get a new solar system last year. Even if the solar system came with the house, you are paying for it in the mortgage.

4. One's monthly bill is not just for the price of gas, but also for the ongoing maintenance of the entire gas distribution system; its repairs; up-grades; expansion (e.g. the So Cal Gas Co. compressor plant in West Ventura - "The Avenue"); and up-sets such as the explosions and months-long gas leak from the Aliso Cyn. storage basin. Once one is in the gas system all these costs fall on rate payers. Yes, I agree...but we are also paying for the cost of SCE's \$1.2 billion settlement from the 2017 Thomas Fire.
5. Once gas is brought to a new building other connections can be bootlegged from it. Not always...once the electric, or gas, appliances and equipment are installed, they will likely/generally stay. We believe that homeowners will learn to like and appreciate their electric equipment...and will only contemplate replacing them if they absolutely, positively hate them. But our consultants tell us (assure us) that the electric equipment now available in the market is top notch and works equally well.
6. There are alternatives to barbecues using piped gas since most barbecues use bottled gas (which would be exempt), and fireplaces could burn real wood, OR use electric heaters with crackling fire images with sound and smells starting under \$300.00 Yes, we prefer to encourage homeowners to continue using piped natural gas instead of reverting back to firewood, which produces a lot of GHG's and is also more contaminating with particulates into the air. Not such a big problem along the coast...but can be more problematic in communities inland, like Ojai or Simi Valley.

You responded by saying:

1. The staff did not want to risk losing the entire package of code changes due to opposition over bans on piped-gas fireplaces and barbecues
2. You did not believe the amount of gas burned would produce a significant amount of GHGs.

I wrote back thanking you for the feedback and explanation for your pending position. I understood your logic.

I have several more points for you to consider:

1. Studies by Stanford of CA kitchens found a surprisingly large amount of piped-gas just leaking away into the dwelling and eventually the surrounding atmosphere. The leaks come from pipe fittings/connections, and from the internals of appliances. I am not convinced that this is a significant problem. Natural gas is odorized in order to detect it when leaking. If the quantities are so small that it is undetectable, then perhaps it is not a significant hazard. This leaking gas is methane which is a much more potent GHG than Co2 released during the combustion of gas. Yes, I agree with this statement.
2. The leaking gas and its combustion by-products within a building affects the health of its occupants. One study I read about found the levels of contaminants to be higher than outdoor EPA standards. So, allowing gas in dwelling is putting people's health at risk. Reflective of this concern is the fact that the State Legislature just passed a bill requiring oil and gas wells to be set back at least 3200' from sensitive uses such as dwellings and schools. We have no conclusive data that demonstrates that natural gas leaking in homes is a significant health hazard. Perhaps we can research this topic further during the next code cycle.
3. The release of gas and its combustion byproducts in buildings raises equity issues for vulnerable children who must live with the decisions of adults and tenants who must live with property owners' preference for gas powered appliances and equipment in homes. I am not a natural gas proponent, and not necessarily opposed to using electricity...but one can argue that children also live with the decisions made by parents who allow electricity in their homes, where children are sometimes shocked or electrocuted each year when they put a paperclip in a socket. Over 2,000 children are shocked each year when tampering with electrical outlets.
4. The leaking of piped gas is not just a problem in buildings but throughout the entire distribution system. Pipes corrode and leak. Joints and fittings leak. Equipment like compressor plants leak (including the one in Ventura). Gas leaks from storage basins and tanks as happened with Aliso Canyon. And gas wells leak at the wellhead. So, the continued deployment of new gas connections perpetuates a system that is bad for our health and a

increasing generator of GHGs that are released into the environment and impact everyone. If we stop expanding the system, it might wither over time to be less of an impact. Yes, but this may be a better question for Planning to see if gas infrastructure can be discouraged or prohibited altogether from Ventura county in the future.

5. If exceptions are allowed for fireplaces and barbecues, they should be required to have electronic ignition. Pilot lights should be banned because they just produce GHGs on a continual basis for no productive purpose. Yes, agreed. This is a good idea.
6. So, when calculating the generation of new GHGs generated by allowing piped-gas fireplaces and barbecues, please factor in all the GHGs that will be created from the gas wellhead to the fire log and decide if the GHGs are insignificant and their alternatives adequate. Just trying to be reasonable with our provisions in the Building Code. I think we are already making a great difference by electrification of the appliances used most frequently in a home. If we don't allow for some degree of reasonable-ness (is that a word??) then construction will be more difficult, and more expensive, and ultimately people will be allowed to do less of what they want to do in their new home. So, this is why we are proposing these measures and exemptions.

Hello Mr Melendez.

Thank you for your input.

This proposed amendments to the State Building Code include no provisions related to AB 2201.

Thank you!

ruben

From: Ernie Melendez <erniesrm@gmail.com>

Sent: Monday, August 29, 2022 11:03 AM

To: BuildingCodeChanges2022 <BuildingCodeChanges2022@ventura.org>

Subject: Opposing AB2201

This is Ernie im opposing the pass of AB2201, I do not agree with passing this new building codes change

Ernie Melendez

General Manager

State Ready Mix inc./ Grimes Rock inc.

(805)832-2944 Cell

(805)647-3759 Fax

(805)647-2817 Office

Dear Clerk of the Board,

I support taking climate action and making new buildings sustainable and carbon-free! New all-electric buildings will improve people's health by reducing toxic air pollution; combat climate change by reducing greenhouse gas emissions; and improve housing affordability by saving construction costs and lowering utility bills.

A study for the LA Dept of Water and Power finds that "all-electric new construction results in savings of \$130-\$540 per year relative to a gas-fueled home over the life of the equipment." All-electric buildings are less expensive to build and less expensive and healthier to live in.

Thank you for maintaining Ventura County's environmental leadership.

Sincerely,

Joe Swift
591 Corte Castano
Camarillo, CA 93010
rdswift1@verizon.net
(805) 987-5019

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Lillian Miller at Sierra Club at core.help@sierraclub.org or (415) 977-5500.

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Thank you for maintaining Ventura County's environmental leadership.

Sincerely,

Jerami Prendiville
12619 Ridge Drive
Camarillo, CA 93012
jerami@rebar-vfx.com
(805) 380-4313

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Lillian Miller at Sierra Club at core.help@sierraclub.org or (415) 977-5500.

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Sincerely,

Stuart Niebel
501 W. Aliso St
Ojai, CA 93023
sniebel@gmail.com
(805) 798-3871

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Thank you for maintaining Ventura County's environmental leadership.

Sincerely,

christina ciesla
3734 red hawk ct.
simi valley, CA 93063
christinaciesla@yahoo.com
(805) 791-3674

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Lillian Miller at Sierra Club at core.help@sierraclub.org or (415) 977-5500.

Dear Clerk of the Board,

I definitely support requiring all electric appliances to be used in new buildings. Gas is unhealthy. Also, dangerous! I suffered through 2 major earthquakes (1971 and 1994) in the Valley. Both times, the earthquake caused gas lines to erupt and houses were burned down. It will be much safer to not have to deal with natural gas. AND, it will be better for the environment!! Thank you for considering this important matter.

Sincerely, Norene Charnofsky

I support taking climate action and making new buildings sustainable and carbon-free! New all-electric buildings will improve people's health by reducing toxic air pollution; combat climate change by reducing greenhouse gas emissions; and improve housing affordability by saving construction costs and lowering utility bills.

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Thank you for maintaining Ventura County's environmental leadership.

Sincerely,

Norene Charnofsky
10180 Norwalk St.
Ventura, CA 93004
ncharnofsky@gmail.com

(805) 659-2968

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Lillian Miller at Sierra Club at core.help@sierraclub.org or (415) 977-5500.

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Thank you for maintaining Ventura County's environmental leadership.

Sincerely,

Susan Hancock
167 N Garden St
Ventura, CA 93001
s.hancock@orneassociates.com
(760) 767-3050

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Thank you for maintaining Ventura County's environmental leadership.

Sincerely,

Doug Evans
3901 Sheldon Dr -3
Ventura, CA 93003
doug7840@yahoo.com
(805) 646-7840

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Director

October 5, 2022

Ruben Berrera, Ventura County Building Official
Hall of Administration
800 S. Victoria Ave.
Ventura, CA 93009-1740
via email: buildingcodechanges2022@ventura.org

RE: Comments on the 2021 Update to the County Building Code

Dear Mr. Berrera:

Thank you for the opportunity to provide comments on the proposed update to the County Building Code.

Existing Buildings Constructed Prior to 2008

VC CoLAB recognizes and appreciates Building and Safety staff's efforts to address both the need for improved fire-hardening of existing structures and the need to avoid creating economic hardship for property owners and project applicants. We support the proposed updated language establishing a 50% size/value threshold for required fire-hardening and the 10% of the project cost maximum cap on fire-hardening upgrade costs.

We suggest that the County *consider adding a provision that would allow for project applicants to request a waiver on a case-by-case basis that would allow for lowering the 10% cap on projects involving remodeling or upgrading of low-income and farmworker housing units.* Adding such a waiver may help the County avoid inadvertently and unintendedly discouraging these much-needed types of residential structures from being upgraded and improved.

Some locations participate in programs that assist homeowners and project applicants with the cost of fire-hardening existing residential structures (one example: <https://yubafiresafe.org/home-hardening-cost-share-program/>). We encourage the County to *consider and support establishing such a program here in Ventura County (with received cost-share funding applied towards the applicant's 10% cost cap).* As you stated at the Building Code update public workshops, the County's goal is for communities to become more resilient and less susceptible to damage and destruction from wildfires over time. Cost-sharing programs have the potential to shorten the overall timeline for achieving this goal.

New Construction Near Tall Slopes

We appreciate that the proposed Building Code update provides project applicants with options to meet requirements for construction near tall slopes. It would be helpful for public review and future project applicants if the County *provided a map of the locations where these specific requirements may be needed*. Providing this information in the most easily understood (often visual: a map) and easily accessible manner will assist future project applicants in planning for and meeting permitting requirements more quickly and collaboratively with the County. A map link might be added to the Building and Safety Division website or as a layer on the County's CountyView GIS map (maps.ventura.org/Countyview).

Some future projects may inadvertently fall into situations where the proposed requirements under the Building Code conflict with requirements and direction from other County ordinances. One such example: Some of the existing structures in the County's wildland-urban interface areas were constructed over 50 years ago and could potentially be cultural heritage sites. Such sites are subject to the County's Cultural Heritage Ordinance and oversight by the County's Cultural Heritage Board. It is reasonably foreseeable that an extensive remodeling or upgrade project at such a site may trigger fire-hardening/fire-resistance requirements. However, the fire-hardening/fire-resistance structure requirements may not align with the restrictions on cosmetic and structural changes found in the Cultural Heritage Ordinance. To ensure that project applicants can maneuver the County's permitting process in a cost-effective and timely manner (and avoid getting "stuck" between two or more conflicting ordinances), we recommend that the County *conduct an internal review of its ordinances and permitting requirements for potential conflicts and develop a process to help project applicants address these potential conflicts*.

It is unclear how these proposed provisions would be applied to non-residential/non-commercial structures, such as barns (which are often designed and built to have permanent open-air structural features), workshops, and equipment storage structures. *Additional information regarding potential exemptions for these types of (non-inhabited) structures and examples of how the proposed requirements may be met may be needed*.

Proposed Provisions for All-Electric Buildings

While VC CoLAB recognizes the goals of a potential Reach Code to reduce greenhouse gas emissions, we are very concerned about the impacts of increasing utility costs, costs of existing building electrification, electrical supply shortages, and the electrical grid infrastructure.

Cooking food and boiling water are basic human needs and essential to maintain during periods of extended electrical power curtailments. In the General Plan EIR, the County recognized that one of the major concerns associated with implementing a reach code is that households unable to cook or boil water during power outages will foreseeably experience much more significant health and safety risks than those able to utilize non-electric appliances. The County's proposal to carve out specific exemptions for "decorative indoor fireplaces and outdoor barbeques" does not address the issue of providing for basic human needs. Decorative

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indoor fireplaces and outdoor barbeques are not often built into low-income or farmworker housing. As a minimum consideration, we urge the County *to expand this exemption to include appliances used for cooking, heating, and boiling water.*

Beyond this minimum consideration for basic human needs is the issue of affordability and energy poverty. California has the highest electricity costs in the United States (Energy Information Agency). Many existing structures in the unincorporated area will require upgrades in electrical infrastructure to support conversion to all-electric. In 2018, Navigant Consulting reported that replacing natural gas appliances in existing households with all electric appliances would cost single-family homeowners in Southern California "over \$7,200 and increase energy costs by up to \$388 per year." Data from the EDD reports that the average salary in Ventura County for a male worker in 2019 was \$60,044. For a woman in 2019: \$50,642. Many households in Ventura County simply cannot bear these additional costs for electric conversion and utilities.

Any proposed reach code must include mitigation measures that prevent the policies from causing economic hardship for Ventura County residents. We urge the County to *delay the implementation of any policies mandating conversion to all-electric structures until measures to address economic hardship, electricity supply, and grid stability have been implemented and completed.*

We want to thank you again for your hard work in developing a proposed path forward to address both the need for improved fire-hardening of existing structures and the need to avoid creating economic hardship for property owners and project applicants. And we look forward to working together with the County to develop a path forward that will allow a proposed reach code to both address the need to lower greenhouse gas emissions and avoid unintended economic and physical hardship for Ventura County residents.

Sincerely,

A handwritten signature in black ink, appearing to read 'Louise Lampara', with a stylized, looping flourish at the end.

Louise Lampara
Executive Director



October 6, 2022

Ventura County Board of Supervisors
County Government Center
800 S. Victoria Avenue Ventura, California 93009
Via email: clerkoftheboard@ventura.org
cc: BuildingCodeChanges2022@ventura.org

RE: October 11: First Public Hearing regarding adoption of an Ordinance for the Fire Zone Construction Standards and Reach Codes for all Electric Buildings - SUPPORT

Dear Ventura County Board of Supervisors,

Thank you for your on-going climate leadership and progress enacting measures in your General Plan to reduce greenhouse gas pollution, including updates to the Ventura County Building Code requiring that all newly constructed buildings be all-electric.¹

A recent op-ed in the LA Times makes the case that local building code updates like this are one of the most impactful thing we can be doing about the climate crisis right now,² and their editorial board has called for more cities in our region to pass electrification reach codes in light of the 2015 Aliso Canyon gas disaster and the climate-fueled wildfire disasters since then, calling such codes, “essential for cleaner, healthier communities and the planet.”³ By passing an ordinance now, Ventura County is taking an important and timely step to mitigate the climate, health, safety, and housing affordability crisis.

¹ VENTURA COUNTY BUILDING CODE (VCBC) 2022 EDITION ([https://vcma.org/docs/images/pdf/bs/Ordinance_\(VCBC2022\)_Exhibit_2.pdf](https://vcma.org/docs/images/pdf/bs/Ordinance_(VCBC2022)_Exhibit_2.pdf))

² Climate change is a big problem. Citizens must demand many small solutions (<https://www.latimes.com/opinion/story/2022-09-18/climate-change-citizen-action-building-codes-energy-efficiency>)

³ Times Editorial Board, “Five years after the Aliso Canyon methane leak, California is still too reliant on fossil fuels,” LA Times, October 23, 2020

First, by adopting this, unincorporated Ventura County will join a wave of cities and counties across California in declaring that fossil fuels must be phased out of our homes, commercial buildings, and communities, and that we have a right to clean, safe, and affordable energy. Ventura County will not be alone in deciding to phase out gas in new construction. Right now, **60 cities and counties in California** have implemented reach codes to shift to all-electric new construction and many more are in consideration.

The ordinance will improve air quality and public health for Ventura County residents. All-electric new construction will improve indoor air quality for county residents. On average, Californians spend 68 percent of their time indoors, making indoor air quality a key determinant of human health.⁴ The combustion of gas inside our homes produces harmful indoor air pollution, specifically nitrogen dioxide, carbon monoxide, nitric oxide, formaldehyde, acetaldehyde, and ultrafine particles.⁵ These odorless and undetectable gas combustion pollutants can cause respiratory diseases, as well as more serious conditions, including death.⁶ Lawrence Berkeley National Laboratory recently found that air pollution levels in the 55-70 percent of homes with gas stoves exceed EPA's definition of clean air, i.e. air pollution levels indoors in these homes would be illegal if found outdoors.⁷ One study found that gas stoves may be responsible for up to 12 percent of childhood asthma cases.⁸

All-electric new construction will also be key to mitigating outdoor air pollution in California. Hazardous air pollution is a particularly acute issue for low-income communities and people of color, who are exposed to higher incidences of particulate matter (PM 2.5) and other harmful pollutants.⁹ While most think of trucks, power plants and industry as the major culprits of air pollution, buildings have for too long gotten a free pass. Gas combustion appliances lack modern-day pollution controls and are a major source of air pollution, particularly in the winter from gas heating. Gas appliances in residential and commercial buildings produce nearly nine times more nitrogen oxide (NOx) emissions than gas power plants.¹⁰ Nitrogen oxide is a precursor to ozone and PM 2.5, two pollutants that cause asthma, lung cancer, respiratory diseases, and premature death.¹¹ All-electric new construction is an essential step to improving air quality in Ventura County and Southern California as a whole.

The reach code will lower the cost of new construction and support affordable housing. All-electric homes can be cheaper to build¹² than gas-heated buildings — and they can lower monthly utility bills for unincorporated Ventura residents and businesses.¹³ Ensuring all new construction is built without gas hookups will help developers build more quickly and affordably as there will be no need for new costly gas infrastructure — an advantage in the ongoing housing crisis. An analysis by the Statewide Utility Codes and Standards Team found that building all-electric already reduced construction costs on average \$5,000 for single-family homes and over \$2,000 per unit in a multi-family building. In addition, the California Public Utilities Commission just announced it is removing subsidies for gas hookups meaning that gas expansion in new housing will likely push the price of gas and the cost of new gas homes up even further. Subsidies under the Inflation Reduction ACT will further lower the cost of construction and appliances for new electric homes.

⁴ Klepeis, N. E.; Nelson, W. C.; Ott, W. R.; Robinson, J. P.; Tsang, A. M.; Switzer, P.; Behar, J. V.; Hern, S. C.; Engelmann, W. H. The National Human Activity Pattern Survey (NHAPS): a resource for assessing exposure to environmental pollutants. *J. Expo. Anal. Environ. Epidemiol.* 2001, 11 (3), 231–252.

⁵ See, Jennifer Logue et al., “Pollutant Exposures from Natural Gas Cooking Burners: A Simulation-Based Assessment for Southern California” *Environmental Health Perspectives* Vol. 122 No. 1 pp. 43-50, (2013); Victoria Klug and Brett Singer, “Cooking Appliance Use in California Homes—Data Collected from a Web-based Survey,” Lawrence Ventura County National Laboratory (August 2011); John Manuel, “A Healthy Home Environment?” *Environmental Health Perspectives*, Vol. 107, No. 7 1999, pp. 352–357; Nasim Mullen et al., “Impact of Natural Gas Appliances on Pollutant Levels in California Homes” Lawrence Ventura County National Laboratory, 2012.

⁶ CARB, “Combustion Pollutants” (reviewed July 14, 2020). Available at <https://www.arb.ca.gov/research/indoor/combustion.htm>

⁷ “Pollution in the Home: Kitchens Can Produce Hazardous Levels of Indoor Pollutants” <https://newscenter.lbl.gov/2013/07/23/kitchens-can-produce-hazardous-levels-of-indoor-pollutants/>

⁸ “Cooking with gas, damp housing may cause childhood asthma: study,” <https://www.brisbanetimes.com.au/national/queensland/cooking-with-gas-damp-housing-may-cause-childhood-asthma-study-20180415-p4z9pz.html>

⁹ “Inequity in consumption of goods and services adds to racial–ethnic disparities in air pollution exposure” <https://www.pnas.org/content/116/13/6001>

¹⁰ “Emission Inventory Data” <https://www.arb.ca.gov/ei/emissiondata.htm>

¹¹ “Health Effects of Ozone and Particle Pollution” <https://www.lung.org/our-initiatives/healthy-air/sota/health-risks/>

¹² “Decarbonization of Heating Energy Use in California Buildings” <https://www.synapse-energy.com/sites/default/files/Decarbonization-Heating-CA-Buildings-17-092-1.pdf>

¹³ “The Economics of Electrifying Buildings” <https://rmi.org/insight/the-economics-of-electrifying-buildings/>

Building all-electric will also save costs for Ventura County residents and businesses in the long-term as we transition to a carbon-neutral economy. Gas distribution pipeline extensions to new homes are expected to become stranded assets¹⁴ well before the end of their useful life as more buildings electrify over the coming years. Stopping investments in new gas infrastructure is a fiscally prudent strategy to avoid saddling ratepayers and taxpayers with the costs of maintaining and ultimately decommissioning stranded gas infrastructure.

The reach code will make unincorporated Ventura County's homes and businesses safer and more resilient in the face of climate change. California is experiencing an increasing occurrence of extreme heat waves, with practically each summer breaking previously held record temperatures.¹⁵ Many Ventura County residents, particularly low-income families, do not have air conditioning and are not prepared to adapt to these heat waves, posing new health and safety risks. Air conditioning is an important bonus from replacing gas furnaces with electric heat pump space heaters, as the heat pumps can operate in reverse and provide high efficiency cooling when needed. Electrification offers greater comfort, safety, and climate resiliency when temperatures peak.

Lastly, gas pipelines are vulnerable to methane leakage, over-pressurization, earthquakes and fires. Aliso Canyon (2015/16), Bakersfield (2015), Carmel (2014), San Bruno (2010), and Rancho Cordova (2008), and recent fires in North Carolina, Massachusetts, and San Francisco are but a few of the important and unfortunate reminders of the gas system's inherent risks. In our region, gas infrastructure is located in particularly dangerous, populated areas that pose an on-going risk to area residents. For instance, the Ventura Compressor Station is in a populated area next to an elementary school. Given the earthquake faults in California, fires exacerbated by gas pipelines after earthquakes are of significant concern. Communities with gas pipelines in Ventura County face increased risks of fires as gas pipeline leaks are highly flammable. Aging pipelines and associated equipment, and inflexible pipeline materials are vulnerable to shifts in the earth and buildings that put additional stress on pipelines, causing cracks and potentially explosive methane leaks.

Solar panels are already required on new homes. Paring solar with increasingly affordable home batteries make new homes immune to an emergency outage. Moreover, utility-scale batteries have already helped us avoid outages during high demand events and will continue to get more robust. SCE and the Clean Power Alliance support all-electric building ordinances. New homes with all-electric heat pumps are better than separate gas heat and air conditioning on price, quality and load efficiency headed into a climate future.

Passing an all-electric new building ordinance is an appropriate step to do our part in achieving California's climate goals, including carbon neutrality by 2045 or sooner. Electricity in Ventura County is rapidly getting cleaner, with the Clean Power Alliance 100% renewable energy default. As a result, shifting to electric power in our buildings dramatically lowers greenhouse gas emissions. The prohibition of new Natural Gas Infrastructure is a crucial part of Ventura County's future. By mandating gas-free construction for all new buildings, Ventura County will protect the health of its residents and the affordability of its housing, while implementing the critical climate protections necessary for dramatic greenhouse gas reductions.

Sincerely,

Katie Davis
Chair, Sierra Club Santa Barbara-Ventura Chapter

Haley Ehlers
Associate Executive Director, Climate First: Replacing Oil & Gas (CFROG)

¹⁴ "The 'Rush To Gas' Will Strand Billions As Renewables Get Cheaper, Study Says"
<https://www.forbes.com/sites/jeffmcmahon/2018/05/21/the-rush-to-gas-will-cost-billions-in-stranded-assets-as-renewables-get-cheaper-institute-says/#52a7065c3a0d>

¹⁵ "U.S. sweltered through third-hottest summer on record: August 2022 saw remarkable heat, historic flash floods," NOAA, September 9, 2022
<https://www.noaa.gov/news/us-sweltered-through-third-hottest-summer-on-record>

Sigrid Wright
CEO/Executive Director, Community Environmental Council

Linda Krop
Chief Counsel, Environmental Defense Center (EDC)

Pierre Delforge
Director – Clean Buildings, Natural Resources Defense Council

Tomás Morales Rebecchi
Central Coast Organizing Manager, Food and Water Watch

Maricela Morales, Executive Director
Central Coast Alliance United for A Sustainable Economy (CAUSE)

Kathleen Nolan, Board of Directors
Ojai Valley Green Coalition

Liz Campos, Steering Committee
Westside Clean Air Coalition

Jan Dietrick, Policy Team Leader
350 Ventura County Climate Hub

Kathleen Wheeler, Policy Coordinator
Ventura Climate Coalition

Rose Ann Witt, Co-Founder
Conejo Climate Coalition

Wayne Morgan, Board Chair
The Climate Reality Project-Ventura County

Faith Grant and Adrian Conway, Co-Group Leads
Ventura County Citizens' Climate Lobby (CCL)

Sven Thesen
Founder, ProjectGreenHome.org

Craig Lewis
Executive Director, Clean Coalition

Shawn Jacobson
Vice President of Operations, Swell Energy Inc.

Jeremy Favier
COO & Co-Founder, BRIGHTEN SOLAR CO.

Sean Armstrong,
Managing Principal, Redwood Energy

Rocio Lozano, Executive Director
MERITO: Multicultural Education for Resources Issues Threatening Oceans

Leah Stokes
Anton Vonk Professor of Environmental Politics, UCSB

Vic Thasiah
Environmental Studies Professor, California Lutheran University
Chief Advocacy Officer, Runners for Public Lands

Paul Poirier
AIA, LEED AP, Paul Poirier + Associates Architects
VP Advocacy, USGBC Central Coast Green Building Council

Dennis Allen
Chairman of the Board, Allen Construction

Luz Reyes-Martin
Vice President, Planned Parenthood Central Coast Action Fund

Abigail Thomas
Environmental Employee Engagement
Patagonia Inc.

Dear Clerk of the Board,

I support taking climate action and making new buildings sustainable and carbon-free! New all-electric buildings will improve people's health by reducing toxic air pollution; combat climate change by reducing greenhouse gas emissions; and improve housing affordability by saving construction costs and lowering utility bills.

A study for the LA Dept of Water and Power finds that "all-electric new construction results in savings of \$130-\$540 per year relative to a gas-fueled home over the life of the equipment." All-electric buildings are less expensive to build and less expensive and healthier to live in.

Thank you for maintaining Ventura County's environmental leadership.

Sincerely,

Arthur Valenzuela Jr
324 E Cedar St
Oxnard, CA 93033
arthurvalenzuela00@gmail.com
(805) 236-7615

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Lillian Miller at Sierra Club at core.help@sierraclub.org or (415) 977-5500.

Dear Clerk of the Board,

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Thank you for maintaining Ventura County's environmental leadership.

Sincerely,

Ruth Cooper
818 Sunset Place
Ojai, CA 93023
ruthcoopermft@gmail.com

(805) 368-1564

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Lillian Miller at Sierra Club at core.help@sierraclub.org or (415) 977-5500.

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Thank you for maintaining Ventura County's environmental leadership.

Sincerely,

Jennifer Herren
941 Channel Islands Dr
Camarillo, CA 93012
herrenj22@gmail.com
(661) 618-4674

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Thank you for maintaining Ventura County's environmental leadership.

Sincerely,

Brad Nelson
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This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Lillian Miller at Sierra Club at core.help@sierraclub.org or (415) 977-5500.

From: [Chris Tull](#)
To: [ClerkoftheBoard](#)
Subject: Comment on Item 42 for Oct 11 Meeting
Date: Sunday, October 9, 2022 5:06:05 PM

Hello,

I am writing to support the building code amendment for "All Electric Appliances for New Construction". Preventing the construction of new fossil fuel infrastructure is a relatively low-cost way to help us meet our climate goals.

Best, Chris

Christopher Tull
Oxnard, CA 93036

From: [Frances Lee](#)
To: [ClerkoftheBoard](#)
Subject: Line item 42 REACH codes
Date: Saturday, October 8, 2022 6:01:07 PM

To The Board of Supervisors, Oct. 11/22 meeting:

I would like to comment on item 42 regarding new REACH codes for new buildings to be All-Electric in Lieu of natural gas. I support this adoption of the Ordinance to building codes.

As a county, this will guide the cities to adopt these climate saving building practices to eliminate GHG emissions from new buildings that will otherwise lock-in fossil fuel infrastructure for decades to

come. All-electric will save money to both the builders and the residents for cleaner, safer indoor air and healthier living, especially for children.

Thank-you,

Frances Lee

Moorpark,CA

