Bliss, Sandi

14.3

From: Pauline Allen <pauline@rahus.org>
Sent: Thursday, November 7, 2019 10:19 PM
To: _CityCouncilListPublic
Subject: [EXTERNAL] Support for electric REACH code

Dear Council member,

I'm writing to encourage the passage of the electric REACH code in Santa Rosa. This measure is an important action toward reducing the use of methane contained in natural gas. Electric homes are more efficient, less costly and emit far fewer GHGs than gas homes.

Thank you for considering such a wise action in the face of the climate emergency that our community faces, especially in light of the recent Kincaid Fire.

Respectfully, Pauline Allen

14.3

Bliss, Sandi

From: Steve Birdlebough <scbaffirm@gmail.com>
Sent: Thursday, November 7, 2019 5:44 PM
To: _CityCouncilListPublic
Subject: [EXTERNAL] Endorsement of REACH Code by Regional Climate Protection Authority
Attachments: RCPA All Electric Reach Code Policy 2019-10.docx

Mayor Schwedhelm and Members of the City Council— The attached recommendation for adoption of REACH codes throughout Sonoma County was adopted by the Regional Climate Protection Authority of Sonoma County at its October meeting. I understand that the Santa Rosa City Council will consider such such an action at its next meeting.

I urge you to follow the RCPA recommendation as an important step toward reducing greenhouse gas emissions in the City. While the code only affects new construction, it is a significant step in the right direction.
Steve Birdlebough
576-6632

To:

SCTA/RCPA Board of Directors

Meeting Date:

10/14/19

From:

Carolyn Glanton, Climate Programs Manager

Item Number:

4.5.2

Subject:

All Electric Reach Code Policy Approach

Consent Item: ☐ Regular Item: ☒ Action Item: ☒ Report: ☐

Staff Report

Issue

Shall the RCPA Board express formal support for Sonoma County jurisdictions reducing greenhouse gas emissions through the adoption of energy reach codes?

Recommendation

That the RCPA Board express support for Sonoma County jurisdictions seeking to reduce greenhouse gas emissions through the adoption of energy reach codes.

Advisory Committee Recommendation

None.

Alternatives Considered

The RCPA Board supports the adoption of the current California Energy Code without supporting the pursuit of additional reach codes that could increase reductions in greenhouse gases generated from new buildings.

Executive Summary

Many California local governments are considering energy reach codes that encourage or require building electrification in new, low-rise, residential construction to achieve greenhouse gas reduction goals. The electrification of buildings can offer many benefits including improved safety, healthier indoor air, and significant reductions in greenhouse gas emissions. Concerns about requiring electrification often arise regarding costs to

build an all-electric home and the overall attractiveness of an all-electric home in a market where dual-fuel homes are the norm. RCPA has created fact sheets and communications materials for our member jurisdictions to address these and other concerns.

Sonoma County jurisdictions have committed to ambitious climate goals that require significant reductions in energy use in buildings. With a much cleaner electricity grid, switching appliances from natural gas to electricity has a tremendous environmental impact. Reach codes are an effective tool for Sonoma County jurisdictions to begin to address emissions from the use of natural gas in buildings.

Policy Impacts / Nexus to Agency Goals

Supports RCPA policies and goals.

Climate Action 2020 and Beyond (CA2020), adopted July 2016, outlines switching equipment from fossil fuel to electricity, and converting building equipment to electricity as a key goal in meeting our greenhouse gas reduction targets (Building Energy Goal 3).

The RCPA Strategic Plan 2025, adopted July 8, 2019, outlines decarbonization as a major initiative, including supporting reach code development to discourage fossil fuel use in new buildings and encourage electrification.

The RCPA Climate Emergency Resolution, adopted September 9, 2019, commits RCPA to working with member and partner agencies to implement Climate Emergency Mobilization efforts countywide including topics of reducing greenhouse gas emissions, electrification and grid reliability.

Financial Implications

Is there a fiscal impact?

Yes ☐ No ☒

Is there funding in the current budget?

Yes ☒ No ☐

The funding source(s) to be used are:

In 2019, RCPA secured $48,745 in additional funding from the Bay Area Regional Energy Network to support our member jurisdictions in adopting reach codes by providing policy and communications support and guidance on best practices.

Background

Every three years, the California Building Standards Code is updated through the efforts of the California Building Standards Commission. Known as a code cycle, it is mandatory for each local government to adopt and enforce the current version of the California Building Standards Code. The next code cycle will be the 2019 California Building Standards Code, which becomes effective on January 1, 2020. Embedded in the California Building Standards Code are the State Energy Code and the California Green Building Standards Code (CalGreen) chapters.

Local governments can go a step further and develop building codes that exceed the State's minimum standards. These local codes are referred to as "reach codes". Reach codes require additional measures – such as the

installation of solar or building techniques that increase energy efficiency – to achieve greenhouse gas reductions above and beyond what would occur through the state Building Standards Code. Reach codes can be adopted at any point in the code cycle. For this upcoming code cycle, many Sonoma County and other Bay Area jurisdictions are looking to exceed the 2019 State building codes by requiring all-electric buildings for new development and construction projects.

An energy reach code must be at least as stringent as the statewide code and must meet the following requirements:

- Must be cost effective – meaning that the money saved from the reduced energy costs needs to be enough to cover the initial cost within the standard lifetime of the additional energy efficiency measures.
- Requires a minimum of two public hearings prior to adoption.
- Must be approved by the California Energy Commission (CEC).
- Needs to be re-approved every three years with each Energy Code update.

Table: Examples of Reach Codes Implemented in Sonoma County

Jurisdiction	**Type of Reach Code**	**Applied to**	**Effective Date**
Healdsburg	Energy Efficiency	New construction for single family and multifamily residential, nonresidential	July 2017
Sebastopol	Solar Photovoltaic	New construction, additions and alterations for single family and multifamily residential, nonresidential	May 2013
All	CALGreen Tier 1	New construction, additions and alterations for single family and multifamily residential, nonresidential	Various

Reach Codes as a Tool to Meet Local Climate Action Goals

Over fifty California local governments, many of them in the Bay Area, are currently adopting or considering adoption of energy reach codes to achieve environmental goals. Most of these governments are looking at options

that encourage or require building electrification by discontinuing the use of natural gas. A cost effectiveness study has been completed by the Statewide Codes and Standards Team and has shown all-electric reach codes to be cost effective.

The electrification of homes and buildings can offer many benefits to occupants including improved safety, healthier indoor air, and significant reductions in greenhouse gas emissions. With a much cleaner electricity grid, switching appliances from natural gas to electricity has a tremendous environmental impact.

Cities and counties across California have committed to ambitious climate goals that require significant reductions in energy use in buildings. These goals reflect the ambitious targets set by California in order to meet our greenhouse gas (GHG) reduction targets outlined in AB 32 – the Global Warming Solutions act of 2006 as well as subsequent legislation that provides milestones to achieve these targets:

- 2016 – SB 32 mandates reduction in GHG of 40% by 2030
- 2018 – SB 100 requires our electric sector to be 60% renewable by 2030 and 100% carbon-free by 2045
- 2018 – Exec Order B-55-18 requires statewide carbon neutrality by 2045
- 2018 – AB 3232 requires 40% GHG reductions in buildings by 2030
- 2018 – SB 1477 provides $200 million in incentives for low-emission buildings and equipment

At a local level, Sonoma County jurisdictions have pledged climate action given the magnitude of human-induced climate change and the projected catastrophic effects from continued global warming. Reducing greenhouse gas emissions has become an environmental and societal imperative.

Reach codes are an effective tool for Sonoma County jurisdictions to begin to address emissions from the use of natural gas in buildings. In Sonoma County, over the next 3-5 years, it is estimated that 15,000 new housing units could be built. The 2019 Energy Standards result in significant carbon dioxide (CO_2) reduction in buildings, with reach codes reducing emissions even further. Electrified buildings have the lowest CO_2 emission levels. The electricity available in California is much cleaner than ever before and getting even cleaner as utilities must meet the California Renewable Portfolio Standard to source 50% of electricity from renewable sources by 2030. Under the 2019 Energy Standards, buildings can include natural gas, which will create expensive infrastructure that will generate greenhouse gas emissions for the life of the building (30+ years), unless the building is retrofitted to all electric later, with additional costs to retrofit.

Graph: Single Family Home Emissions per Year (MT CO_2e) with Sonoma Clean Power

Source: Sonoma Clean Power

Graph: Single Family Home Emissions per Year (MT CO_2e) with Healdsburg Electric

Source: Healdsburg Electric

Common Questions and Concerns Regarding All Electric Reach Codes

RCPA staff have supported Santa Rosa, Healdsburg and Windsor staff with community outreach, including to the building and construction community. Common questions and feedback include:

- performance of electric appliances
- power outage ramifications
- availability of incentives
- assumptions of the cost effectiveness study
- concern of consumer perception
- acceptance of all-electric appliances such as induction cooking and electric fireplaces
- grid reliability concerns
- government overregulation
- additional burden on an already stressed local construction system and
- a rushed process

RCPA Role

RCPA has been participating in statewide and regional reach code coordination efforts through the Bay Area Regional Energy Network (BayREN) in order to provide information and resources to members. Hearing a need for resource support in Sonoma County, RCPA requested additional funding from BayREN to support member jurisdictions in successfully adopting reach codes. RCPA has developed and built on existing materials to tailor information to Sonoma County, creating a template staff report, template presentation slides and providing answers to a list of frequently asked questions. RCPA will continue to work with partners support member jurisdictions in adopting policies that help meet countywide greenhouse gas reduction goals.

Supporting Documents

Attached: Frequently Asked Questions

Link: Template Reach Code Staff Report

Link: Template Reach Code PowerPoint

143

Bliss, Sandi

From: Tony White <tonwhite@sonic.net>
Sent: Wednesday, November 6, 2019 1:44 PM
Subject: [EXTERNAL] Reach building code and Natural gas ban in Mountain View

Here is an article from the Mtn. View Voice I thought you'd find interesting.

https://www.mv-voice.com/news/print/2019/11/05/mountain-view-city-council-backs-natural-gas-ban-for-all-new-homes

Tony White

Bliss, Sandi 14.3

From: Hilary Noll <hilaryn@Mithun.com>
Sent: Tuesday, November 5, 2019 2:58 PM
To: _CityCouncilListPublic
Cc: Hilary Noll
Subject: [EXTERNAL] Support for Building Electrification
Attachments: Mithun_LetterofSupport_AllElectricReachCodes_FINAL_11-05-19.pdf

Dear Councilmembers of Santa Rosa:

Mithun, a local Bay Area integrated architectural design firm, supports efforts by your jurisdiction to adopt 'reach codes' that will reduce carbon emissions from the building sector by requiring new buildings to be all-electric. In our professional experience, it's proven that all-electric buildings are affordable, reliable, and a good solution for our clients.

Mithun currently has six all-electric multifamily developments under design or construction in the Bay Area. Our team has been conducting an R&D initiative to analyze and compile the strategies and lessons learned – from the technical, financial, regulatory and operational considerations for eliminating natural gas from this construction type. We will be sharing those findings at the NZ19 and Getting to Zero conferences in the coming weeks.

The first-cost analysis across all of these projects has concluded that it is either cost-neutral or *cost-saving* (of up to about $247,000, or $2,352/dwelling unit) to build all-electric and eliminate natural gas. I'm happy to share with you one particular project's detailed cost breakdown, below for your use. All numbers are construction cost estimates or bids from our GC and subs between Q2 and Q3 this year, in the San Francisco market.

Additional benefits of significant consideration to us, our owner/developer clients, engineers and contractors include:

- Elimination of new underground gas lines in new development areas.
- Reduced risk of compounded disasters; fire and explosions
- Reduction of minimum energy use standards in some codes and for some green building rating systems.
- Elimination of gas connection and associated time and cost of gas meter design, approval, scheduling and construction.
- One less bill to pay
- Projected operational cost savings on lower utility bills, based upon energy models.
- "Net Zero Ready" and "Fossil-Fuel–Free Ready" as California's electric grid gets cleaner.
- Battery-Ready for time-of-use and future smart grid technologies.
- Buildings which are situated to benefit from future PV, battery and other innovative smart-grid technology developments.
- Reduced risk of having to eliminate the gas systems in the future, as gas becomes a stranded asset, and as codes and technologies move toward low carbon options.

Mithun operates under the mission of 'design for positive change' and we are proud to support measures for increased energy efficiency, building decarbonization and collective community resilience.

We welcome any feedback or questions regarding our project findings.

Regards,

Hilary Noll **Anne Torney**

Senior Associate, Sustainability Integration Leader
AIA, LEED AP BD+C, Fitwel Ambassador
(415) 489 4860

Partner
AIA, LEED AP
(415) 489-4851

Enclosure: Sample Project Cost Comparison Data

mithun.com

Seattle | San Francisco | Los Angeles

November 5, 2019

MITHŪN

Re: Information in support of Building Decarbonization Reach Codes and All Electric Multifamily Housing

Seattle
Pier 56
1201 Alaskan Way #200
Seattle, WA 98101

San Francisco
660 Market Street #300
San Francisco, CA 94104

Los Angeles
Mithun | Hodgetts + Fung
5837 Adams Boulevard
Culver City, CA 90232

mithun.com

To Whom it May Concern:

Mithun, a local Bay Area integrated architectural design firm, supports efforts by your jurisdiction to adopt 'reach codes' that will reduce carbon emissions from the building sector by requiring new buildings to be all-electric. In our professional experience, it's proven that all-electric buildings are affordable, reliable, and a good solution for our clients.

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- *Reduction of minimum energy use standards in some codes and for some green building rating systems.*
- *Elimination of gas connection and associated time and cost of gas meter design, approval, scheduling and construction.*
- *One less bill to pay*
- *Projected operational cost savings on lower utility bills, based upon energy models.*
- *"Net Zero Ready" and "Fossil-Fuel–Free Ready" as California's*

electric grid gets cleaner.

- *Battery-Ready for time-of-use and future smart grid technologies.*
- *Buildings which are situated to benefit from future PV, battery and other innovative smart-grid technology developments.*
- *Reduced risk of having to eliminate the gas systems in the future, as gas becomes a stranded asset, and as codes and technologies move toward low carbon options.*

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We welcome any feedback or questions regarding our project findings.

Regards,

Hilary Noll
Senior Associate, Sustainability Integration Leader
AIA, LEED AP BD+C, Fitwel Ambassador
(415) 489 4860

Anne Torney
Partner
AIA, LEED AP
(415) 489-4851

Enclosure: Sample Project Cost Comparison Data

Sample Project Cost Comparison Data

Multifamily Type IIIA / Type IA Building: 105 units

			Natural Gas				
DHW	Colmac HPHW	$ 106,820	Boiler RayPack	$ 30,580			
	Tanks	$ 29,131	Tanks	$ 14,900			
	Add Labor/HR	$ 14,104			**DHW Equipment Comparison:**		
					Electric DWH	$150,055	
					Gas DHW	$ 45,480	$ 104,575
Solar HW	None	$ -	40% Fraction	$ 219,000			
ReCirc	same	$ -	same	$ -			
Bldg	NA	$ -	Gas Trench, backfill, pipe, stubout inside	$ 25,000			
	NA	$ -	flextend joints	$ 10,000			
	NA	$ -	Gas Meter Room	$ 28,550			
	NA	$ -	Gas piping to Boiler Room	$ 11,904			
	NA	$ -	Insulated copper pipe to Solar Thermal to Tanks	$ 25,000			
	NA	$ -	Gas to Laundry	$ 9,933	**Assoc. Bldg Costs (beyond DHW Equip)**		
	NA	$ -	Gas Ventilation	$ 8,000	Electric DWH		$ -
					Gas DHW		$ 133,387
Utility Connection	No Gas Connection	$ -	Gas Connection	$ 15,000			
					Electric Building Savings:		
TOTAL		**$ 150,055**		**$ 397,867**	Includes SHW		$ 247,812
Solar PV	*Array 123,000kW*	*$ 443,566*	*assume half*	*$ 221,830*			
Battery	*Backup Wall Packs*	*$ 100,000*					
					Electric Building Savings		
TOTAL w PV		*$ 593,621*		*$ 619,697*	Includes Solar PV + Battery		$ 26,076

Bliss, Sandi

4.3

From: Ardath Lee <alee@sonic.net>
Sent: Friday, November 8, 2019 4:15 PM
To: _CityCouncilListPublic
Subject: [EXTERNAL] REACH code

Dea Council Members,

Please pass the REACH code for Santa Rosa. It's an important step in the right direction. We all know how important it is to do all we can to reduce GHG emission. This could really help.

Thank you for your service for the city of Santa Rosa.

Sincerely,

Ardath Lee
1714 Spring CreeK Drive
Santa Rosa, CA 95405
707-546-2803

Bliss, Sandi 14.3

From: rick.luttmann@sonoma.edu
Sent: Friday, November 8, 2019 3:20 PM
To: _CityCouncilListPublic
Subject: [EXTERNAL] REACH codeDear Council member, I'm writing to encourage the passage of the electric REACH code in Santa Rosa. This measure is an important action toward reducing the use of methane contained in natural gas. Electric homes are more efficient,...

Manis, Dina

From: Elenita Strobel <lenystrobel@sbcglobal.net>
Sent: Saturday, November 9, 2019 9:03 PM
To: _CityCouncilListPublic
Subject: [EXTERNAL] REACH Code

Dear Council member,

I'm writing to encourage the passage of the electric REACH code in Santa Rosa. This measure is an important action toward reducing the use of methane contained in natural gas. Electric homes are more efficient, less costly and emit far fewer GHGs than gas homes.

Thank you for considering such a wise action in the face of the climate emergency that our community faces, especially in light of the recent Kincaid Fire.

Respectfully,

Leny Strobel
282 Beech Ave
Santa Rosa, CA

14.3

Manis, Dina

From: Marsha Dupre <marshad@sonic.net>
Sent: Monday, November 11, 2019 6:44 AM
To: McBride, Chuck; Guhin, David; Manis, Dina; Nutt, Jason; Olivares, Ernesto; Tibbetts, Jack; Sawyer, John; Combs, Julie; Schwedhelm, Tom; Rogers, Chris; Fleming, Victoria; McGlynn, Sean; Gallagher, Sue
Subject: [EXTERNAL] RE: Agenda Highlights for the 11/12/19 Council meeting.

Dear SR CC Members & Staff:

14.1 Objective Design Standards for Streamlined and Ministerial Residential Developments.

Please keep the processes of Open Government and Transparency rather than Fast Tracking for the sake of enriching the development community's ease/wealth.

14.3 Ordinance Introduction to adopt by reference a City Code change requiring All Electric-Ready housing.

We are in China – the smog is devastatingly terrible. The solar and wind generating powers are largely untapped. Positive change needs to happen and I encourage the City of Santa Rosa to continue to be the fine leader in these efforts.

Sincerely,
Marsha

Marsha Vas Dupre, Ph.D.
Former Santa Rosa City Council Vice Mayor, SRJC Trustee
3515 Ridgeview Drive
Santa Rosa, CA 95404
707-528-7146

14.3

Manis, Dina

From: Tony White <tonwhite@sonic.net>
Sent: Monday, November 11, 2019 8:27 PM
To: _CityCouncilListPublic
Subject: [EXTERNAL] Reach Code

Mayor Schwedhelm and City Council Members,

Congratulations on making progress on addressing the climate crisis we are facing in Santa Rosa and Sonoma County. Also, thanks for acting with dispatch in adopting a minimum wage of $15, rent limits and a just cause eviction policy, all of which should greatly benefit low-income families in the city.

But I am writing you to encourage support for the electric Reach code for new residential construction, one step towards net zero and also reducing the release on methane through the extraction of natural gas.

I would also like to suggest that measures be developed to encourage the retrofitting of existing structures and that Santa Rosa consider installing solar on city property rather than paying Sonoma Clean Power for the Evergreen option. With the electrification of city transit, Santa Rosa can reduce greenhouse gas emissions significantly by becoming energy self-sufficient.

Respectfully,

Tony White

Manis, Dina

From: Michelle Vie <horsetime@icloud.com>
Sent: Tuesday, November 12, 2019 7:25 AM
To: _CityCouncilListPublic
Subject: [EXTERNAL] Give Santa Rosa a Choice -- We Don't Want All Electric

Michelle Vie
5259 Sebastopol Rd
Santa Rosa, CA 95407

November 12, 2019

Dear Tom Schwedhelm,

RE: City of Santa Rosa Development of All-Electric Reach Codes

Dear Mayor Schwedhelm,

I am writing to express my opposition to the proposed all-electric Reach Code being considered by the City Council and any ordinance that will discourage energy choice in the City of Santa Rosa. Specifically, I am concerned that the definition of "All-Electric Building or All-Electric Design" in the proposed Reach Code, does not allow for new construction to build with propane.

Propane is a clean alternative energy that provides millions of residents with a low-cost fuel for washing clothes, cooking, hot water and heat. Propane is also a vital fuel source for rural and low-income residents, providing an affordable energy source often when other energy solutions are not available.

Propane is also part of the green energy movement. Propane provides complementary power for all solar powered homes, as a source of electricity when solar power batteries are depleted. California is also leading the nation with the availability of renewable propane, providing a sustainable solution from sources like animal fat, vegetable oil, and dead trees associated with forest preservation. Disincentivizing propane will limit the reach of solar powered homes to provide uninterrupted power.

Over the past couple weeks, planned power outages and safety power shutoffs have become a reality across California. Most recently 2.2 million Californians were left without power in their homes. For those powering life-sustaining equipment, such as people on dialysis or those who rely on electric powered wheelchairs, electricity is not simply a convenience it's a necessity.

As the city proceeds to draft building decarbonization regulations, we demand that propane be excluded from any regulation that creates a disincentive for the fuel as it will drive up consumer energy prices and potentially eliminate the availability for propane. Thank you for your consideration.

Sincerely,
Michelle Vie

14.3

Manis, Dina

From: Meredith Caplan <merefrog@sonic.net>
Sent: Tuesday, November 12, 2019 7:37 AM
To: _CityCouncilListPublic
Subject: [EXTERNAL] re: Climate Emergency Response

Dear Santa Rosa City Council,

Thank you for all you do for our city and county. I support you in passing the strongest Climate Emergency Response. It is the most crucial issue of our times and effects all other issues. Please ask for fully electric houses and to go fossil fuel free as soon as possible. There is no time to waste. Our children, grandchildren and theirs will thank you for whatever strong measures you can provide.

Thank you, Meredith Caplan, Santa Rosa Teacher

Manis, Dina

From: HAROLD BECK <hal_beck@sbcglobal.net>
Sent: Tuesday, November 12, 2019 2:35 PM
To: _CityCouncilListPublic
Subject: [EXTERNAL] Agenda item 14.3 All Electric Reach code
Attachments: Irony of Emission Free 001.jpg; SR Council No Gas Hook-ups.htm

Hal Beck

2017 Zinfandel Ave., Apt. 301

Santa Rosa, CA 95403

707-292-2595 hal_beck@sbcglobal.net

Re: Agenda item 14.3 - All Electric Reach Code

I cannot see a single reason for the Santa Rosa City Council to prohibit natural gas hook-ups for new construction.

- Electrical energy is not reliable. Natural gas and Propane are. During the recent PG&E blackouts, those who had gas or propane could cook and heat. Those who did not could not.

- Electrical energy is not "emission free." The 2019 Camp Fire was caused by the failure of an electrical transmission line. As a result the San Francisco Bay area had the worst air quality on the planet for a week, worse than Beijing, worse than Mumbai.

- Homo sapiens learned to control and use fire for heating and cooking half a million to two million years ago. Natural gas or Propane burners are used in commercial kitchens and by professional and amateur chefs at home. Electric "hot plates" are used who have no alternative or have no concern for the quality of food coming out of the kitchen. 60 years ago there was an "All Electric Medallion Home" promotion in California. It failed.

- Relying on electricity as a reliable source of heat could cost you your life, even in relatively mild Sonoma County.

Fortunately there is a "work-around" should the council actually enact such a prohibition. People can purchase propane tanks, stoves and heaters. They can continue to feed their families and keep them warm.

Attached please find my November 2018 letter to the editor at the height of the Camp Fire as well as today's On Fire ad.

Irony of 'emission free'

EDITOR: Millions of Bay Area residents face another week of dangerously polluted air and ongoing reminders to stay inside, to avoid strenuous activities and to "spare the air."

I can't help but enjoy the irony of the Santa Rosa City Council considering an all-electric-ready ordinance supported by advocates forecasting gloom and doom if we continue to use natural gas. The same goes for all those self-righteous "emission free" bumper stickers.

Like many other human activities, the production, transmission and consumption of electrical power has its risks. Emissions can and do occur when transmission lines fail. Electricity doesn't come out of a plug, just as milk doesn't come from the store.

HAL BECK

Manis, Dina

From: zook@sonic.net
Sent: Tuesday, November 12, 2019 5:55 PM
To: _CityCouncilListPublic
Subject: [EXTERNAL] Electric Reach Code

Dear Council members,

We are long time resident of Santa Rosa and very concerned citizens about climate change.
We are writing to encourage the passage of the electric Reach code in Santa Rosa.

In light of the climate emergency in our city, especially Kincaid Fire, it is a very important and timely issue. Electric homes are more efficient, less expensive and emit fewer GHG than gas homes.

Thank you for considering this very crucial action.

Sincerely,
Barbara and John Zook

Bliss, Sandi

From: rex barney <rex@ahlbornco.com>
Sent: Monday, November 4, 2019 9:34 AM
To: _CityCouncilListPublic
Subject: [EXTERNAL] Give Santa Rosa a Choice -- We Don't Want All Electric

rex barney
581 coachlight place
Santa Rosa, CA 95403

November 4, 2019

Dear Tom Schwedhelm,

RE: City of Santa Rosa Development of All-Electric Reach Codes

Dear Mayor Schwedhelm,

I am writing to express my opposition to the proposed all-electric Reach Code being considered by the City Council and any ordinance that will discourage energy choice in the City of Santa Rosa. Specifically, I am concerned that the definition of "All-Electric Building or All-Electric Design" in the proposed Reach Code, does not allow for new construction to build with propane.

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As the city proceeds to draft building decarbonization regulations, we demand that propane be excluded from any regulation that creates a disincentive for the fuel as it will drive up consumer energy prices and potentially eliminate the availability for propane. Thank you for your consideration.

Sincerely,
rex barney

REACH CODES

There are 11,502,870 household in the State of California.

California Census Data: Households & Families

Location	*Total Households*
United States	*105,480,101*
California	*11,502,870*

Source: California Housing Statistics

On average, about 80,000 new homes are built in California each year.

Over the last decade, California has seen about 80,000 new homes built each year, far short of the projected need of 180,000 new homes needed annually, according to the state's

Source: Housing and Community Development Department. Jul 23, 2019

That means 0.0069% of new housing is contributing to the overall housing stock. New homes utilize 96% efficient Furnaces and water heaters (sealed combustion condensing type) as mandated by Current Energy Codes.

87% of the housing stock in California was built prior to 1980. In 1978 the California Energy Commission came into existence and started developing new standards, which we live by today.

Year Structure Build	*# of units*	*%*
1999 to March 2000	*191,345*	*1.6%*
1995 to 1998	*541,056*	*4.4%*
1990 to 1994	*845,325*	*6.9%*
1980 to 1989	*2,098,028*	*17.2%*
1970 to 1979	*2,504,157*	*20.5%*
1960 to 1969	*2,047,205*	*16.8%*
1940 to 1959	*2,834,883*	*23.2%*
1939 or earlier	*1,152,550*	*9.4%*

Source: California Housing Statistics

Homes built prior to 1980 have 78% or worse efficient furnaces and 67% or worse efficient water heaters.

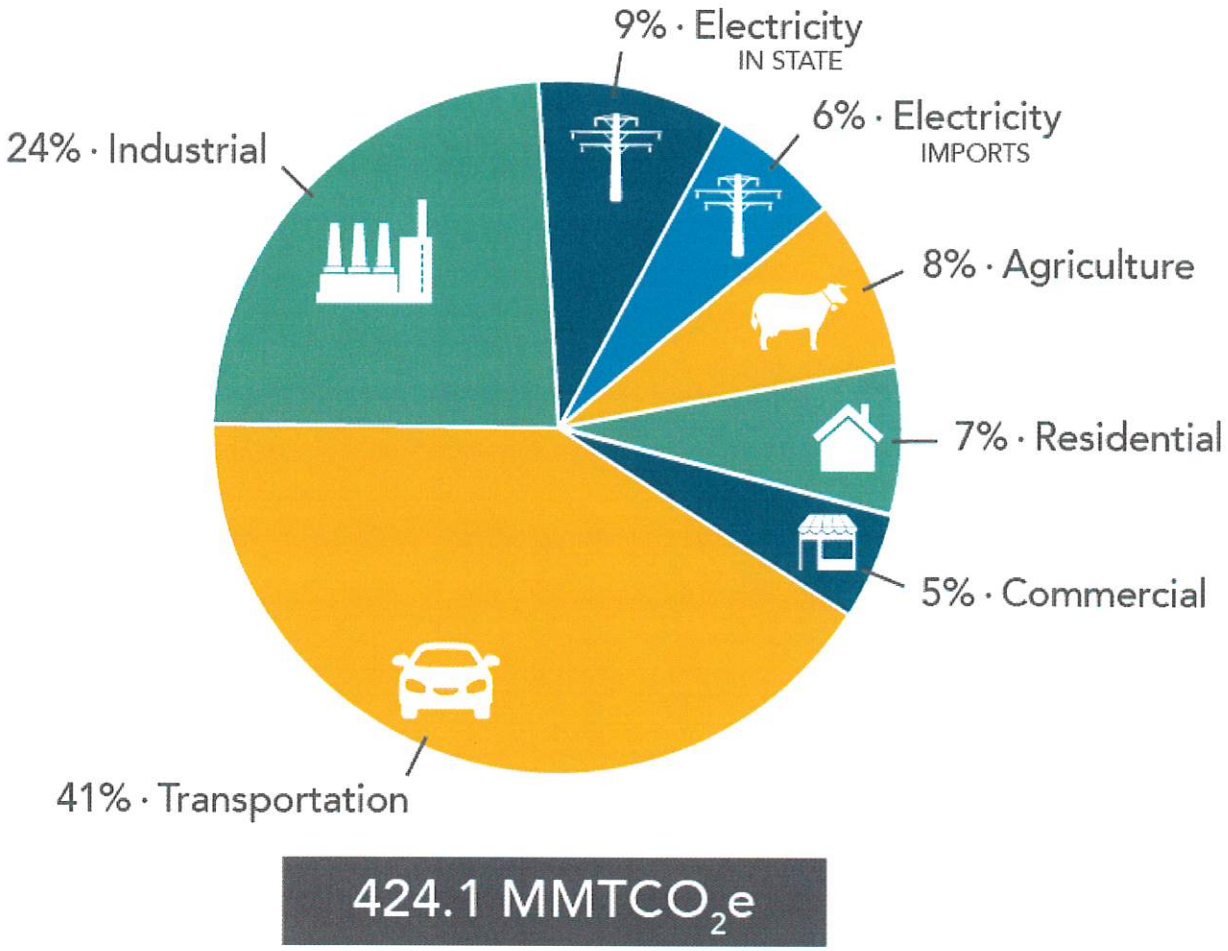
Simple math, new homes are therefore producing 0.0016% greenhouse gases. That's one ten thousandth of one percent.

By the way, I've provided house heating type by fuel for the State of California, so you have some context.

House Heating Fuel	*# of Units*	*%*
Utility Gas	*8,114,829*	*70.5%*
Bottled, tank, or LP gas	*434,972*	*3.8%*
Electricity	*2,505,406*	*21.8%*
Fuel oil, kerosene, etc.	*36,675*	*0.3%*
Coal or coke	*734*	*0.0%*
Wood	*204,699*	*1.8%*
Solar energy	*13,508*	*0.1%*
Other fuel	*27,791*	*0.2%*
No fuel used	*164,256*	*1.4%*

Source: California Housing Statistics

Finally, residential housing contributes 7% to Green House gases in the State of California, not 27% as quoted in your report. My references for all of this are from the California Air Resources Board, August 12, 2019.



It would seem to me that focusing your energy and efforts on Industrial and Transportation would be much more effective than chasing the one, one-thousands of a percent of new homes.

Craig A Lawson