

DOCKETED

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108511

DATE: December 7, 2021

TO: Board of Supervisors

FROM: Jacqueline R. Onciano, Director, Dept. of Planning and Development
Jasneet Sharma, Director, Office of Sustainability

SUBJECT: Ordinance Adopting Reach Codes for Unincorporated Santa Clara County

RECOMMENDED ACTION

Adoption of Ordinance No. NS-1100.135 repealing and re-enacting Chapter III, and adding Chapter VII, of Division C3 of Title C of the Santa Clara County Ordinance Code relating to amending the 2019 California Green Building Standards Code and 2019 California Energy Code to require building electrification and electric vehicle infrastructure.

- Introduce, waive reading, and preliminarily adopt on December 7, 2021.
- Adopt (Final) on December 14, 2021.

COMMITTEE RECOMMENDATIONS

On October 27, 2021, the Administration presented two versions of the proposed Ordinance adopting Reach Codes to the Housing, Land Use, Environment, and Transportation (HLUET) Committee. One version of the Ordinance requiring building electrification for new construction in unincorporated Santa Clara County included an exception from the all-electric building provisions for multifamily residential building projects for which the Board is the approving authority and has approved the project on or before December 31, 2022; the other version did not include this exception.

The Committee requested the Administration return to its November 9, 2021, meeting to provide additional information including the status of Reach Code ordinances among all San Mateo County jurisdictions, “cultural issues” associated with cooking with electric appliances, the feasibility and application of larger space heating systems (especially for multifamily housing), cost analysis of Electrical Vehicle (EV) infrastructure, and the impact of the proposed code requirements on Stanford University.

On November 9, 2021, the HLUET Committee received the supplemental report and forwarded to the Board of Supervisors staff’s proposed Ordinance to amend the County

Green Building Standards Code and establish a County Energy Code to promote building electrification and EV infrastructure for new construction without the multifamily housing exception.

FISCAL IMPLICATIONS

Adoption of the Ordinance would not have an impact on the County's General Fund.

REASONS FOR RECOMMENDATION

The California Building Standards Code, organized in Title 24 of the California Code of Regulations, allows cities and counties to adopt local energy amendments above its minimum building standards. Most surrounding jurisdictions, including 14 cities in Santa Clara County as of October 2021, have adopted electrification "Reach Codes." These codes go beyond the state minimum requirements for building design and construction to require or encourage electrification of buildings and to require additional electric vehicle (EV) infrastructure to increase energy efficiency, reduce greenhouse gas (GHG) emissions, and meet climate action goals. Because these Reach Codes amend the California Energy Code, they must be filed with and approved by the California Energy Commission (CEC) before they can be enforced.

Executive Summary

The proposed Ordinance is an electrification Reach Code that requires electrification of new buildings and expands electric vehicle (EV) infrastructure to support increased EV usage. If adopted, the Ordinance would accomplish three main purposes:

1. Reduce GHG emissions in unincorporated Santa Clara County;
2. Improve indoor air quality and safety; and
3. Meet cost-effectiveness requirements.

In furtherance of the County's Climate Action Plan efforts and in accordance with the County's Sustainability Master Plan, the Administration is proposing adoption of code requirements that exceed the building standards adopted by California every three years:

1. All-electric Reach Codes for new construction that require the building to use electricity as the source of its energy and have no natural gas infrastructure installed within it (with limited exceptions), and
2. An EV infrastructure code for new construction.

This report provides an overview of the Reach Codes adopted by local jurisdictions, proposed Reach Code recommendations for the 2019 building cycle for the unincorporated county, and community benefits and cost effectiveness findings. The supplemental HLUET staff report is also attached to this report.

Effective Strategies to Address Climate Change

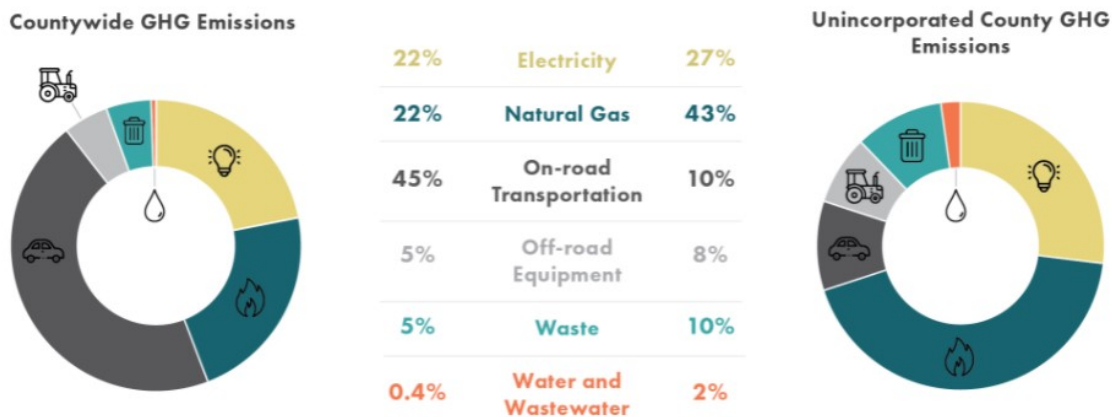
The impacts of climate change are already being felt throughout Santa Clara County. The 2020 SCU Lightning Complex fires, for example, burned over 165,000 acres in Santa Clara County alone. CAL FIRE spent over \$77 million in suppression and repair costs, and the County incurred over \$4 million in damage repair costs for roads, bridges, parks, and recreational facilities and debris removal.

Santa Clara County also experienced 20 days above 90 degrees Fahrenheit (extreme heat days) in 2020 compared to a 30-year average of 4 days observed between 1980-2005 and declared a local emergency due to extreme drought conditions in June 2021. These impacts are projected to worsen due to higher temperatures, diminished coastal fog, rising sea levels, more devastating El Niño storms, and increasingly severe droughts.

The County and other jurisdictions can contribute to minimizing the scale and impact of climate change with efforts to reduce greenhouse gas emissions now and in the coming years. Building electrification is considered one of the lower-cost and lower-risk emissions reduction strategies available to achieve climate goals. Within unincorporated Santa Clara County, 43% of total GHG emissions are attributed to commercial and residential natural gas use (nearly twice as high compared to the whole county). Reducing or eliminating natural gas usage in the building sector is a key element of climate mitigation to achieve the County's carbon neutrality goals.

Figure 1

2017 GHG Inventory for Countywide and Unincorporated County¹



In 2018, the Board of Supervisors, in line with California’s own goal, adopted a resolution establishing a commitment to achieve 100% carbon neutrality² for County operations by 2045 and an interim target of 40% emission reductions below 1990 levels by 2030. The California legislature is currently considering additional policies to reduce GHG emissions by up to 80% below the 1990 levels by 2030 and to achieve carbon neutrality by 2035 to help prevent a series of tipping points beyond which recovery from climate breakdown may become impossible.

A number of jurisdictions in California have already responded to this call to action by adopting emission reduction targets that exceed State targets. Under the direction of a deputy county executive, Office of Sustainability (OOS) and Facilities and Fleet (FAF) staff are currently assessing feasibility and potential actions to accelerate the County’s carbon-neutral goal for operations and are developing a Climate Roadmap for unincorporated Santa Clara County (more information available at www.sccgov.org/climateroadmap).

Reach Codes Adopted by Other Local Jurisdictions

As of September 2021, 50 cities and counties in California have enacted electrification Reach Codes. Within Santa Clara County, 14 cities have adopted building electrification Reach Codes and a majority of these cities require new buildings within their jurisdiction to be all-electric unless limited exceptions are met.

¹ More information about the GHG emission inventory available at www.sccgov.org/climateroadmap

² Carbon neutrality refers to achieving net zero carbon dioxide emissions by balancing emission reduction with purchase of carbon offsets for projects that reduce fossil fuels such as wind or solar farms and carbon dioxide removal from the atmosphere or carbon storage through tree planting, forest preservation and farming practices.

Table 1

Summary of Ordinances Adopted by Counties of Santa Clara and San Mateo

City	Status	Building Reach Type			EV Reach
		All-Electric ³	Mostly Electric ⁴	Electric Preferred ⁵	Higher than CALGreen
County of Santa Clara (unincorporated)	Proposed	X			
Cupertino	Adopted	X			X
Los Gatos	Adopted	X			X
Morgan Hill	Adopted	Natural gas ban			
Mountain View	Adopted	X			X
Palo Alto	Adopted	X			X
San José	Adopted	Natural gas ban			X
Santa Clara	Adopted	X			
Sunnyvale	Adopted	X			X
Campbell	Adopted		X		
Los Altos	Adopted		X		X
Los Altos Hills	Adopted		X		
Saratoga	Adopted		X		X
Milpitas	Adopted			X	X
Monte Sereno	Adopted			X	X
Gilroy	Declined				
City	Status	Building Reach Type			EV Reach
		All-Electric	Mostly Electric	Electric Preferred	Higher than CALGreen
Brisbane	Adopted	X			
Burlingame	Adopted	X			X
East Palo Alto	Adopted	X			X
Menlo Park	Adopted	X			X
Millbrae	Adopted	X			X
Pacifica	Adopted	X			
Redwood City	Adopted	X			X
San Carlos	Adopted	X			
San Mateo	Adopted	X			X
County of San Mateo	Adopted	X			
Daly City	Adopted	X			
South San Francisco	Adopted	Natural gas ban (residential)			X
Colma	Adopted			X	
Woodside	Declined				
Belmont	Evaluating				
Half Moon Bay	Evaluating				

³ Appliances must be electric.

⁴ Mostly Electric (electric, except for gas cooking and/or gas drying) and paired with pre-wiring for future electric appliance

⁵ Allows mixed-fuel buildings (electric + natural gas inside) with high energy performance, requiring additional energy efficiency measures, battery storage, and/or pre-wiring for buildings to be electric-ready.

Atherton	Evaluating	
San Bruno	Evaluating	
Hillsborough	No efforts underway	
Foster City	No efforts underway	
Portola Valley	No efforts underway	

Proposed Reach Code for Unincorporated Santa Clara County

Based on the research findings and community outreach, described later in this report, the following Reach Code requirements for newly constructed buildings are proposed. Please refer to Table 2 and Table 3 for a summary of the proposed amendments.

California Energy Code Amendments

The California Energy Code amendments for consideration would require new buildings in the unincorporated areas of the county to be all-electric and would specify that buildings use no natural gas for water heating, space heating, cooking, clothes drying, indoor and outdoor fireplaces, and decorative appliances.

Proposed Exceptions:

- New Junior Accessory Dwelling Units (JADUs),⁶ due to their limited square footage and the requirement that they are contained within a single-family residence, would be permitted to extend existing infrastructure, such as natural gas piping, provided in the primary residence.
- New non-residential F, H, I, and L occupancies, such as hospitals and correctional facilities, would not be required to be all-electric within this code cycle., though pre-wiring for all-electric will be required. Hospitals and correctional facilities have significant heating requirements due to their 24/7 occupancy and, in hospital settings, the need to sterilize medical equipment using steam. Information on natural gas heating alternatives and such technology as applied to hospitals and correctional facilities is limited or cost-prohibitive at this time. The Administration will engage with hospital and correctional facility stakeholders to determine the best approach for electrification of these building types and will present amended requirements for consideration in future code cycles.
- For other new buildings where constructing an all-electric building is not feasible, the developer would be able to request a modification from the Building Official.
- Any building exempted from the all-electric requirement would be required to be pre-wired for future all-electric to reduce transition cost to all-electric use in the future.

⁶ A JADU is no more than 500 square feet and must be contained entirely within a single-family residence. It must have a separate entrance and an efficiency kitchen but may share a bathroom with primary dwelling.

Currently, under the 2019 Title 24 Standards, solar photovoltaic (PV) installation is required in all new residential construction of three or fewer stories. The proposed amendments would also expand the minimum solar PV requirements standards to all building types and would require prewiring residential construction of three stories or fewer for installation of battery storage to ensure resiliency, cost-effectiveness, and environmental sustainability.

Table 2
Summary of Proposed Amendments to Energy Code for
New Construction in Unincorporated Santa Clara County

Building Type	Proposed Electric Requirement	Exceptions/Modifications
Single Family and Accessory Dwelling Units	<ul style="list-style-type: none"> ▪ All electric building required⁷ ▪ Prewiring for installation of battery storage of up to 5 kwh required 	<ul style="list-style-type: none"> ▪ JADUs exempted ▪ Not feasible
Low rise residential (3 stories or fewer)	<ul style="list-style-type: none"> ▪ All electric building required ▪ Prewiring for installation of battery storage with a minimum of 5 kwh required 	<ul style="list-style-type: none"> ▪ Not feasible
High rise residential (4 stories or more), non-residential, and hotel/motel buildings	<ul style="list-style-type: none"> ▪ All electric building required ▪ Solar PV system that is equivalent in size to 15 percent of the roof area required 	<ul style="list-style-type: none"> ▪ Non-Residential F, H, I, and L occupancies (such as hospitals and correctional facilities) ▪ Not feasible ▪ Building Official may also grant a modification to solar PV requirement for over-generation, shading issues, or if vegetative roofs are being installed.

Green Building Code Amendments

The Green Building Code amendments would require additional EV charging infrastructure for newly constructed buildings. Increased EV infrastructure would enable more people to purchase, drive, and charge EVs in Santa Clara County. The proposed amendments would require:

⁷ All electric: no gas for water heating, space heating, cooking, clothes drying, indoor and outdoor fireplaces and decorative appliances in all new construction.

- For new single-family homes and townhouses, two EV outlets.
- For new multifamily dwellings, EV charging access for each dwelling.
- For new non-residential, non-office construction with ten or more parking spaces, 10% of the parking spaces equipped with Level 2 EV charging stations.
- For new offices with ten or more parking spaces, 20% of spaces equipped with Level 2 EV charging stations⁸ and an additional 30% of spaces to be EV capable.

Proposed Exceptions:

New buildings that have no commercial power supply, and ADUs and Junior ADUs without additional parking spaces and electrical panel upgrades would be exempted.

The requirements and exceptions are based on model requirements studied by Silicon Valley Clean Energy. A summary of the amendments is provided below in Table 3.

⁸ Level 2: parking space served by a complete electric circuit with 240 volt, 40Amp (service capacity typically used for larger appliance loads in homes).

Table 3

**Summary of Proposed Amendments to Green Building Code for
New Construction in Unincorporated Santa Clara County**

Building Type	Proposed EV Infrastructure Required	Exceptions ⁹
One and two-family dwellings and townhouses with attached private garages	One Level 2 EV Ready Space and one Level 1 EV Ready Space. ¹⁰ <ul style="list-style-type: none"> ▪ For Dwelling Units (DU) with only one parking space, install one Level 2 EV Ready Space. 	ADUs and JADUs with no parking or electrical panel upgrades
Multi-family dwellings	≤ 20 DUs: Level 2 EV Ready Space per DU parking space ≥ 20 DUs: <ul style="list-style-type: none"> – Level 2 EV Ready Space in the first 20 DU parking spaces – Level 2 EV Ready Space at 25% of remaining DU parking spaces – Level 1 Ready Space in remaining DU parking spaces 	No requirements for DUs without parking spaces.
Non-residential non-office	≥ 10 or more parking spaces <ul style="list-style-type: none"> ▪ Level 2 EV Charging Stations (EVCS) at 10% of available parking space ▪ One Direct Current Fast Charger may substitute for 11 Level 2 EVCS spaces after a minimum of 11 Level 2 EVCS spaces are installed. 	None
Office Buildings	≥ 10 or more parking spaces <ul style="list-style-type: none"> ▪ Level 2 EV Charging Stations (EVCS) at 20% of available parking spaces ▪ Additional 30% of spaces to be at least EV Capable ▪ One Direct Current Fast Charger may substitute for 11 Level 2 EVCS spaces after a minimum of 11 Level 2 EVCS spaces are installed. 	None

⁹ As noted above, new buildings without commercial power supply are also excepted for each type of building

¹⁰ Level 1: parking space served by a complete electric circuit with a minimum of 120V, 20 Amp capacity (equivalent to a standard home outlet); Level 2: parking space served by a complete electric circuit with 240 volt, 40Amp (service capacity typically used for larger appliance loads in homes) and DC Fast Charging (Level 3) capable of charging at 20-400kW (charger used for Tesla Superchargers and DC Fast Chargers at some supermarkets).

Benefits of All-Electric and EV Infrastructure Reach Codes for New Construction

There are important benefits to communities now and in the future.

Climate Change

Building and transportation electrification is central to the County's and California's ambitious climate change targets and the eventual strategic decommissioning of natural gas infrastructure, and can create significant long-term sustainability benefits. Buildings account for nearly a quarter of GHG emissions in California overall. Within buildings, natural gas combustion appliances like furnaces, water heaters, and stoves account for roughly two-thirds of GHG emissions from the building.

Natural gas, which is made up of 92% methane and is a "super pollutant," traps 28 times more heat than carbon dioxide over 100 years and is one of the largest sources of GHG emissions in buildings. In fact, the CEC considers electrification to be one of the lower-cost and lower-risk emissions climate change strategies available to achieve California's climate goals.¹¹ Since Silicon Valley Clean Energy (SVCE) is already providing 100% carbon-free electricity in the unincorporated areas, reducing or eliminating natural gas usage in the building sector, which accounts for 43% of total GHG emissions from commercial and residential natural gas use, electrification is an important component of climate mitigation to achieve the County's carbon neutrality goals.

Indoor Air Quality

Unhealthy air pollutants, such as nitrogen dioxide and carbon monoxide, regularly exist inside homes at levels that would often be unlawful outdoors. UCLA researchers found that, in more than 90% of scenarios, households that use a residential gas oven and stove for an hour will exceed outdoor acute air quality thresholds for nitrogen dioxide while inside of their homes.¹² The California Air Resources Board has recognized the link between exposure to pollutants emitted from gas appliances and numerous health harms, including asthma, allergies, cancer, premature death, increased respiratory and cardiovascular diseases, carbon monoxide poisoning, and endocrine disruption.¹³ Exposure to pollutants inside the home is a key determinant of health for Californians, whom the California Air Resources Board

¹¹ Cal. Energy Comm'n. *Deep Decarbonization in a High Renewables Future*, [CEC-500-2018-012 at 64 \(2018\)](https://www.ethree.com/wp-content/uploads/2018/06/Deep-Decarbonization-in-a-High-Renewables-Future-CEC-500-2018-012-1.pdf), <https://www.ethree.com/wp-content/uploads/2018/06/Deep-Decarbonization-in-a-High-Renewables-Future-CEC-500-2018-012-1.pdf>.

¹² UCLA Fielding Sch. of Pub. Health, *Effects of Residential Gas Appliances on Indoor and Outdoor Air Quality and Public Health in California 6* (2020) [hereinafter UCLA, *Effects of Residential Gas Appliances*], <https://ucla.app.box.com/s/xyzt8jc1ixnetiv0269qe704wu0ihif7>.

¹³ Cal. Air Res. Bd., *California Indoor Air Quality Program Update, Resolution 20-32* (Nov. 19, 2020) [hereinafter CARB, *Resolution 20-32*].

estimates spend an average of 87% of their time indoors.¹⁴

The health harms are often exacerbated in low-income communities, which already suffer from worse outdoor air quality, and where smaller home size, more people inside the home, older gas stoves, inadequate stovetop ventilation, and/or use of stoves for household heating can increase pollutant concentrations indoors.

Use of natural gas-powered appliances also represents a significant contribution to ambient outdoor air pollution. UCLA researchers estimate that based on the amount of carbon monoxide and nitrogen emitted to outdoor air from the use of residential gas appliances in California in 2018, switching to electric appliances would result in 354 fewer deaths, 596 fewer cases of acute bronchitis, and 304 fewer cases of chronic bronchitis annually in California, with approximately \$3.5 billion in health benefits over the course of a single year.¹⁵

The County can improve community health for all residents of the county by passing Reach Codes that prohibit natural gas infrastructure and ensure that new buildings will not further the harmful health impacts associated with gas appliance combustion, particularly for at-risk communities.

Resilience and Reliability

All-electric construction offers resilient and safe construction. Although all-electric appliances are vulnerable during power outages, so are new heating and gas appliances. Most modern instantaneous gas water heaters and gas appliances being installed in new construction homes that adhere to the new energy code have electronic ignition and electric powered computers in the case of water heaters to control flow and require electricity to operate.

To the contrary, a heat pump water heater continues to provide hot water in a power outage based on the storage capacity of the tank, since the water stored in the insulated tank is already heated up. Induction cooktops improve air quality and enhance safety with the automatic shut-off feature when not in use, thereby eliminating a leading cause of house fires. Electric appliances can be combined with microgrids (in the near future), rooftop solar, and storage, including batteries within EVs, to operate without the electrical grid's power supply. Natural gas infrastructure often takes longer to restore than the electric system, further reducing the reliability of gas appliances during extreme weather events.

¹⁴ *Id.*

¹⁵ UCLA, *Effects of Residential Gas Appliance* at 8.

Operating Costs

While energy costs on average are \$7/month higher for all-electric single-family homes compared to mixed fuel, the required installation of solar photovoltaic in all new residential construction three stories or fewer, including ADUs under the 2019 Title 24 Standards, makes all-electric construction on average \$5/month cheaper to operate. California residential natural gas costs increased three times faster than electricity prices from 2012 to 2018 and the trend is expected to accelerate as the fuel demand is projected to decline dramatically due to broad electrification of buildings in the future (statewide decarbonization). Low-income customers could be hard hit by the rising natural gas costs where the few remaining customers would have to pay higher utility bills to cover the fixed costs of the natural gas system.

Cost-Effectiveness Studies and Local Applicability

The CEC requires a cost-effectiveness study to accompany the amendments to the California Energy Code, specifically Title 24, Part 6, that demonstrates that the amendments to the code are financially responsible and do not represent an unreasonable burden to the non-residential and residential applicants. A cost-effectiveness study is not required for amendments to the California Green Building Standards Code (Part 11).

A Statewide cost-effectiveness study¹⁶, funded by the California investor-owned utilities and led by the California Statewide Codes and Standards Program, examined approaches for the construction of new building prototypes (please see cost-effectiveness studies attached). The building prototypes include single-family, low-rise residential, high-rise multifamily, and non-residential or commercial buildings.

SVCE and Peninsula Clean Energy leveraged the statewide cost-effectiveness analysis to estimate costs to build all-electric buildings compared to mixed fuel (natural gas and electricity) at the time of new construction. The study found that all new construction electric buildings, including single family homes, are typically less expensive to build as natural gas plumbing, metering, and venting are not required.

The study addressed the cost to the consumer and found that despite electricity being three times more expensive than natural gas currently, electrification is cost-effective over a 30-year period both through the required installation of solar PV in new residential buildings with three or fewer stories, including ADUs, or when using construction cost savings to

¹⁶ California Energy Codes and Standards, "2019 Cost -effectiveness Study: Low-Rise Residential New Construction", available at <https://peninsulareachcodes.org/wp-content/uploads/2019/09/2019-Res-NC-Reach-Codes.pdf>

invest in additional solar PV in high-rise buildings. A parallel study¹⁷ found that electrification is cost-effective on its own when installing high-efficiency electric appliances.

Staff worked closely with SVCE's consultants to interpret and apply the results of the cost-effectiveness study for the building prototypes prevalent in the unincorporated areas of Santa Clara County. The single-family homes, multifamily homes, and non-residential or commercial building prototypes are applicable to Santa Clara County development. The County has averaged 30 new single-family homes constructed each year over the past five years and many approved development projects, including Stanford University and County Non-Residential projects. Stanford University will be required to comply with the California Green Building Standard Code (CALGreen) and the CEC along with the Reach Code Amendments.

The proposed all-electric reach codes for new construction meet the requirements of the CEC for cost-effectiveness and compliance with the codes requirements is anticipated to be cost-effective over the lifetime of the building systems for new construction buildings within the unincorporated County. The cost-effectiveness studies are attached to linked Legislative File 107749.

Community Outreach

Department of Planning and Development (Department) staff held three community outreach meetings in 2019 to introduce the proposed electrification reach codes: an open meeting on December 12, 2019 in San José; an open meeting on December 16, 2019 in San Martin; and a presentation of the Reach Codes at the San Martin Planning Advisory Committee meeting on January 22, 2020.

In addition, two in-person public meetings were held in 2021: a July 27, 2021 meeting in San Martin and a July 28, 2021 meeting in San José. The Department also provided information on Nextdoor and through its website that included a draft of the SVCE model Reach Codes along with frequently asked questions. Feedback in favor of building electrification was provided during in-person meetings and through email included the reduction in GHG emissions and the health benefits of all-electric appliances. The Department received one email, right after the passage of the natural gas ban ordinance in the City of San José in 2020, expressing support for the regulations that discouraged the use of fossil fuels but opposing prohibitions on natural gas in new construction as unnecessarily broad and limiting of people's freedom to cook as they choose.

¹⁷ Energy and Environmental Economics, "Residential Building Electrification in California: Consumer economics, greenhouse gases and grid impacts", available at https://www.ethree.com/wp-content/uploads/2019/04/E3_Residential_Building_Electrification_in_California_April_2019.pdf

California Environmental Quality Act (CEQA) Exemption

The Department of Planning and Development has analyzed the proposed amendments to the California Green Building Standards Code and the California Energy Code and issued a Statement of Exemption from CEQA. The amendments are not covered by CEQA because they are not a project as defined by CEQA and, even if they were, they would be exempt. They are not a project because they will not have the potential to result in a physical change to the environment. Even if they were found to be a project, they qualify for the Class 8 categorical exemption (section 15308), which addresses actions taken by a regulatory agency to assure the maintenance, restoration, enhancement, or protection of the environment where the regulatory process involves procedures for protection of the environment.

CHILD IMPACT

The recommended action will have positive impacts on children by reducing their exposure to pollutants in their indoor and outdoor environments and by contributing to local efforts to mitigate climate change.

SENIOR IMPACT

The recommended action will have positive impacts on seniors by reducing their exposure to pollutants in their indoor and outdoor environments and by contributing to local efforts to mitigate climate change.

SUSTAINABILITY IMPLICATIONS

Supporting EV infrastructure and transitioning to all-electric new construction will reduce County residents' exposure to indoor and outdoor air contaminants and contribute to the County's efforts to reduce greenhouse gas emissions and mitigate climate change.

BACKGROUND

The County of Santa Clara has demonstrated a commitment to taking bold action to combat climate change and its harmful effects. In 2009, the County adopted a Green Building Ordinance (NS-1100.107) based on the Green-Point Rating system for residential construction and LEED for new non-residential construction prior to the release of CALGreen. In 2013, the County also developed an ordinance (NS-1100.118) to adopt local amendments to the California Green Building Standards Code related to Plug-In EV Charging Stations.

In December 2018, the Board adopted Resolution 2018-145, codifying the County's goal to achieve 100% carbon neutrality for County operations by 2045. In 2019, the Board adopted a

Climate Emergency Declaration, recognizing that “global climate change demands immediate mobilization of resources and labor at a massive scale and at every level.” Most recently, in January 2021, the Board adopted the County Sustainability Master Plan that declares an intent to adopt Energy Reach Codes by June 2021 and seeks to expand zero-emission transportation and infrastructure.

On September 10, 2019 (please refer to linked Legislative File 98411), the Board approved a referral by Supervisor Cortese directing the County Administration to report on the feasibility of adopting an electrification reach code ordinance supporting “the electrification of new and existing buildings and transportation vehicles.”

On October 31, 2019 (please refer to linked Legislative File 99202), the Department reported back to the Housing, Land Use, Environment, and Transportation (HLUET) Committee that adoption of an electrification reach code would benefit the County by contributing to the County’s goals of reducing GHG emissions, creating a healthier environment by improving indoor air quality and safety of the County’s building stock, and combatting climate change.

In January 2021 (please refer to linked Legislative File 103483 A), the Board adopted the County Sustainability Master Plan that declares an intent to adopt Energy Reach Codes by June 2021 and seeks to expand zero-emission transportation and infrastructure.

On October 27, 2021 (please refer to linked Legislative File 107749), the Administration presented two versions of an Ordinance adopting Reach Codes to the HLUET Committee—one version with an exemption from the all-electric building provisions for multifamily residential building projects for which the Board has approved the project on or before December 31, 2022, and one version without this exception.

On November 9, 2021 (please refer to linked Legislative File 108281), the Administration responded to questions from the Committee and presented the version of the Ordinance without the above exemption from the all-electric building provisions for multifamily residential building projects for which the Board has approved the project on or before December 31, 2022; the Committee forwarded this version to the Board.

CONSEQUENCES OF NEGATIVE ACTION

The Administration would not bring forth proposed amendments to Chapters III and VII of Division C3 of the County’s Ordinance Code amending the California Green Building Standards Code and the California Energy Code to the Board for adoption.

STEPS FOLLOWING APPROVAL

The Administration requests the Clerk of the Board notify Jacqueline Onciano and Michael Alvarez in the Department of Planning and Development, and Jasneet Sharma in the Office of Sustainability once the Ordinance is executed. A fully executed copy of the Ordinance and the findings shall be filed with the California Building Standards Commission and the California Energy Commission by the County Building Office.

LINKS:

- **Linked To: 98411 : Consider recommendations relating to Building Electrification Reach Codes. (Cortese)**
- **Linked To: 99202 : Receive report from the Department of Planning and Development relating to the progress of developing Electrification Reach Codes for potential adoption by the Board of Supervisors.**
- **Linked To: 103483 : Consider recommendations relating to the Sustainability Master Plan. (Office of the County Executive)**
- **Linked To: 107749 : Receive report from the Department of Planning and Development and Office of Sustainability (Office of the County Executive) relating to an Ordinance to amend the County Green Building Standards Code and establish a County Energy Code to promote building electrification and electric vehicle infrastructure for new construction, and forward to the Board of Supervisors for consideration with a favorable recommendation.**
- **Linked To: 108281 : Receive report from the Department of Planning and Development and Office of Sustainability relating to an Ordinance to amend the County Green Building Standards Code and establish a County Energy Code to promote building electrification and electric vehicle infrastructure for new construction, and forward to the Board of Supervisors for consideration. (Referral from October 27, 2021, Item No. 9)**

ATTACHMENTS:

- **Electrification Reach Codes Ordinance (clean) (PDF)**
- **Electrification Reach Codes Ordinance (strikethrough and additions) (PDF)**
- **Supplemental Report - Responses to Reach Codes Request for Information October 27, 2021 HLUET (PDF)**