To: Sunnyvale Planning Commission
From Bruce Naegel, Carbon Free Silicon Valley, Sustainable Silicon Valley
Date September 14, 2020
Re: Sunnyvale REACH codes

Thank you for the opportunity to comment on REACH codes. This letter explores two items on a more global basis. The first is the power of unity among the cities behind REACH codes. The second is to think about who will ultimately be served by this REACH code.

The power of unity.

A few years ago, Sunnyvale had a great idea on how to start working on their climate goals. They would form a Community Choice Aggregation (CCA) organization. Sunnyvale could then buy only zero carbon electricity for their customers. They then mentioned this to Cupertino, Mountain View, and unincorporated Santa Clara County. These 4 jurisdictions had a feasibility study done and found it was feasible to form a CCA.

The 4 cities got to work to get all the cities in Santa Clara County who could join the organization. They eventually got all the cities that were possible candidates to join. They formed a CCA called Silicon Valley Clean Energy.

Palo Alto and Santa Clara were not candidates to join Silicon Valley Clean Energy since they have their own municipal utility. San Jose decided to create their own CCA (San Jose Clean Energy). All the rest of the cities joined.

Since the start of SVCE, the population of CCAs has grown. According to the CCA organization CalCCA,(cal-cca.org) there are 21 CCAs in California today serving 10M customers in 170 cities. Sunnyvale helped make that happen. Thank you, Sunnyvale, for your leadership.

A similar thing is happening with REACH codes. There are over 28 cities that have released REACH codes. As more cities release REACH codes, this can influence the 2022 building code. The 2025 code was the one positioned to focus on all-electric buildings. There is sentiment to have the all-electric code move to the 2022 code. Sunnyvale joining the cities that have REACH codes will add to the chorus to move REACH codes forward. They are likely to positively influence the move to an advanced 2020 building code basis. So, thanks for your consideration of joining the REACH code movement.

Who gets the most benefit from the REACH codes and an upgraded 2022 base code?

The population that is most concerned about climate change are the high school students . They see the need to address climate. They will inherit the earth we leave to them. They are seeing the future of what the world will look like 40 years from now and it is not a pretty sight.

This last week has shown climate change in increased storms in the Atlantic Ocean and the wildfires in the West. If the world continues down our current path, we will see more severe storms and wildfires.

I was moved by a comment from Mountain View Mayor Abe-Koga during the City Council REACH code discussion. Mayr Abe-Koga stated she was supporting the REACH code especially since her children stated they were very concerned they would not be able to live on earth.

Her children are not the only ones. There are active movements of students who have organized. The Sunrise movement is one of the leading youth climate organizations (https://www.facebook.com/BayAreaSunrise/)

Passing the REACH code in Sunnyvale further strengthens the effort from Mountain View to build a sustainable future. Please add Sunnyvale's voice to the chorus supporting REACH codes.

Thanks for listening.

.

From: Douglas Kunz
To: PlanningCommission AP
Subject: Please Pass Reach Codes with Recommendations for Strengthening Them
Date: Monday, September 14, 2020 10:42:52 AM

Dear Members of the Planning Commission,
I'm writing to urge you to adopt Alternative 2 (Alternative 1 with Modifications) for the "Reach Codes" Item on tonight's agenda (File #20-0783).

These Reach Codes are a critical step in meeting the City's GHG emission reduction goals by cutting building- and transportation-related emissions over the decades that newly constructed buildings are expected to be in service. Staff's proposal is already a strong start, but given the urgent need for action to address the climate crisis, it is critical that we make the most of this opportunity by strengthening Phase 1 of the Reach Codes as follows:

1. **Exceptions**
   a. Eliminate blanket exceptions for Factory/Industrial, High Hazard, and Laboratory uses & non-residential kitchens;
   b. Exception requests should be reviewed and decided at a public hearing.
   c. If an exception is granted to a nonresidential kitchen, Energy Star appliances should be required in addition to the pre-wiring requirements for future retrofits.
2. **Electric Vehicle Readiness in Phase 1:** Include EV readiness 'reach' beyond state requirements for new construction in Phase 1 for all building types.**
3. **Phases 3 and 4** Identify the steps that need to be taken or criteria to be met to move into Phases 3 and 4, to enable partners (such as SVCE) to assist the City with supporting and accelerating a move into Phases 3 and 4 based on the defined steps.

Thank you for your consideration.

Sincerely,
Douglas Kunz
Vice Chair, Sustainability Commission (listed for identification only - writing as an individual)

** Suggested EV readiness requirements for new construction include:

Single Family Residential: Level 2 'ready' one per dwelling. *Includes the 240V outlet and breaker so residents can plug in their desired EVSE (electric vehicle service equipment) when they get an EV (a second electrician visit is not required)*

Multifamily Residential: Utilize SVCE model code, and San Jose adopted code to create a Sunnyvale code that ensures that first residents will have 10% of spaces (and at least one) to charge onsite (EVSE), and which includes an additional mix of 'ready' (20%) and 'capable' (70%) so every space could eventually support charging as more people get EVs. *Apartment renters are currently unable to get EV charging equipment installed and therefore often do not consider purchasing an EV, thus creating an equity concern.*

Hotels: Utilize San Jose adopted code that requires 10% of spaces have level 2 EVSE and an additional 50% to be capable of expansion as demand increases. *Hotel employees and guests will increasingly need to charge during the day and overnight as EV adoption accelerates.*

Non-Residential (office and commercial): Utilize San Jose adopted code to create a Sunnyvale code that ensures a minimum 10% of spaces have level 2 EVSE installed and that an additional 40% of all spaces will be capable to support EV charging as demand increases. *Combining a minimum ability to charge cars on opening day with capability to expand over time makes sense. Increasing the availability for people to charge during the day when renewable solar is plentiful will help with electric grid resiliency.*

All: Ubiquitous, clear identification/signage, with plain language "Electric Vehicle Outlet" on parking space side. *Signage accelerates EV adoption--identities the outlet's*

purpose, provides education and sparks thoughts of potential EV ownership.

From:	James Tuleya
To:	PlanningCommission AP
Subject:	Requesting Strong Reach Code Action (File #20-0783)
Date:	Monday, September 14, 2020 2:49:08 PM
Attachments:	climate-change-health-impacts-california-ib.pdf

Dear Members of the Planning Commission,

I live and work in Sunnyvale and am writing on my own personal behalf to request that you adopt Alternative 2 (Alternative 1 with Modifications) for the "Reach Codes" Item on tonight's agenda (File #20-0783). I support the details of what other advocates have already provided in separate emails, including what Douglas Kunz provided, among others.

Such action to strengthen the Staff proposal (especially regarding adding EV reach codes for new construction in Phase 1 that at least matches or exceeds what SVCE has provided to the city to use) meets our city's own adopted policies in our Climate Action Playbook for both decarbonizing buildings and transportation.

Please adopt as strong a set of modification recommendations as you can with urgency for Phase 1, since from what we have felt, seen and breathed lately, we are clearly out of time to take action and lead others in the state and nation to also accelerate Climate Action. If we in rich and highly-capable Silicon Valley do not lead asap, then the nation will not move soon enough when they follow.

I wanted to share the attached "Issue Brief" from NRDC about the health impacts from Climate Change in California that they wrote *over 18 months ago* since it seems now eerily prescient -- these bad consequences they cover are now *already here*, as we have been experiencing first-hand this past month. The brief discusses the details (with scientific study backing per references in the document) what we all should have expected to happen related to increasing problems with extreme events including worsening wildfires, concerns about increasing the negative effects of infectious diseases, and other negative health impacts that would be on their way at some point. Let's get moving!

Thank you and Sunnyvale Staff for what you are doing to help address our Climate Crisis as urgently as possible.

Kind Regards,
James

James Tuleya
Sunnyvale 20+ year Resident
Past Vice-Chair of Sunnyvale's Climate Action Plan (CAP 2.0) Advisory Committee (CAC)

Chairperson, Carbon Free Silicon Valley
Leadership Team Member, Sunnyvale Cool

FEBRUARY 2019
IB: 18-10-A

ISSUE BRIEF

CLIMATE CHANGE AND HEALTH IN CALIFORNIA

Climate change is altering seasonal patterns in California, making hot days hotter, and increasing the severity of extreme events such as the historic drought from late 2011 to early 2017 and fires like the devastating Camp Fire in 2018.[1] As a result, Californians face a variety of increasing health problems such as more heat related illnesses, breathing and heart troubles, food and water contamination, traumatic injuries, mental health challenges, and exposure to infectious diseases.[2] These threats will only increase for Californians as long as big polluters and our buildings and transportation systems continue to pump climate changing pollution into the air.

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www.twitter.com/NRDC

Protecting the health of Californians requires tackling climate change. We can protect ourselves from these impacts by implementing cleaner and more efficient energy strategies and by preparing more effectively for future climate and health disasters.[3] We must also ensure that communities and health departments have the resources they need to deal with present-day health threats.[4]

CALIFORNIA'S FIRE SEASON IS GETTING LONGER AND MORE DANGEROUS

Climate change and expanding urban development in fire-prone areas are putting more Californians in the path of dangerous wildfires over longer periods of the year.[5] The relationship between climate trends and wildfire has not been uniform across California's many different habitats and climate zones, and projections of the future number and extent of fires are uncertain.[6] Broadly speaking, however, high temperatures and more severe droughts in the western United States reduce water availability and dry out vegetation.[7] These conditions create more days with extreme fire weather and can fuel larger wildfires. For example, in 2017, the combination of extremely high temperatures from May through September and delayed autumn rainfall contributed to the severity of that year's fire season.[8] The run up to the Camp Fire was also hot and dry, with below average precipitation and above average temperatures from June through November 2018.[9]

These conditions are making California wildfire seasons worse. Four of California's worst fires on record occurred between October 2017 and November 2018 alone. The Camp Fire (November 2018) was the deadliest and the most destructive in terms of structures lost in state history, and the Tubbs Fire (October 2017) was the second most destructive.[10] The Mendocino Complex (July 2018) was the largest in terms of area burned, and the Thomas Fire (December 2017) the second largest.[11] California wildfires killed at least 46 people in 2017 and at least 105 people in 2018, primarily in the Paradise area burned by the Camp Fire.[12] Many of those who died in the Camp Fire were elderly or had a disability or illness that prevented or dissuaded them from evacuating ahead of the fire.[13]

Wildfires create health risks that extend well beyond the direct path of the burn zone. Wildfire smoke contains contaminants, including fine particulate matter (i.e., soot). These contaminants can degrade air quality hundreds and even thousands of miles away from an actual fire.[14] For instance, smoke from the Camp Fire in 2018 choked northern California for 11 days, closing schools, leading to shortages of protective face masks, and prompting emergency measures by San Francisco city officials to protect homeless people from 24-hour smoke exposure.[15] However, the full health toll of the extraordinary smoke from the Camp Fire remains unclear. As one health researcher at University of California Davis put it: "This is something we've never seen before. This is unprecedented in the Bay Area. We really don't know how to respond."[16]

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Exposure to wildfire smoke has been linked to health problems such as respiratory infections, cardiac arrests, low birth weight, mental health conditions, and exacerbated asthma and chronic obstructive pulmonary disease.[17] Long-term exposure to wildfire smoke generated an estimated $76 billion to $136 billion per year in health costs across the continuous United States from 2008 to 2012, with some of the most significant impacts in northern California.[18]

Small particles from wildfires are a particular threat to adults aged 65 and older, who made up nearly 14 percent of California's population in 2017.[19] During the severe 2015 California fire season, researchers found a 22 percent increase in risk of coronary artery disease and a 42 percent increase in risk of heart attacks one day after exposure to dense smoke among adults aged 65 or over.[20] A study from 2004 to 2009 analyzing the number of hospital admissions for respiratory conditions among Medicare recipients in the western United States found about 7 percent more admissions on smoke-wave days (days with high concentrations of particle pollution) compared to non-smoke-wave days.[21]

California is experiencing a housing shortage, both in large cities such as San Francisco where housing costs have skyrocketed, and in less populated surrounding regions.[22] The state is among the worst-ranked states in the nation for homeownership rates, housing cost burdens, and severe home overcrowding.[23] Destructive wildfires have exacerbated this problem, making it impossible for some individuals and families to find affordable housing in an already tight market.[24] This has increased the threat of homelessness and disrupted community and family networks that can help people bounce back from disasters.[25]

Damage to homes, forced relocation, missed work time, and the loss of loved ones can lead to severe stress, depression, and unhealthy coping behaviors like drug use.[26] Anyone can

experience short-term mental health issues from wildfires, but children, economically-disadvantaged people, and people who already live with mental illness are especially sensitive.[27] For instance, the October 2007 wildfires in San Diego destroyed or damaged 1,350 homes and forced more than half a million people to evacuate.[28] A survey of public mental health clinics in early November 2007 found that about 18 percent of clients who evacuated sought increased levels of mental health assistance after the fires, compared to about 2 percent in non-evacuation areas.[29] In wake of the Camp Fire in late 2018, school and health officials in Butte County were particularly worried about the mental health of children, many of whom had lost their homes and had gone nearly four weeks without the normalcy of school.[30]

More severe fire seasons may also increase mental health problems among first responders, who tend to have a high prevalence of mental health conditions such as anxiety, post-traumatic stress disorder, and sleep disturbances.[31] Nationally, wildland firefighters already seem to be at greater risk for suicide than non-wildland firefighters. As wildfire season grows longer, the mental, physical, and emotional demands placed on firefighters and other first responders will only increase, leading to adverse health outcomes for this crucial population.[32]

CLIMATE CHANGE WILL WORSEN CALIFORNIA'S SMOG PROBLEM

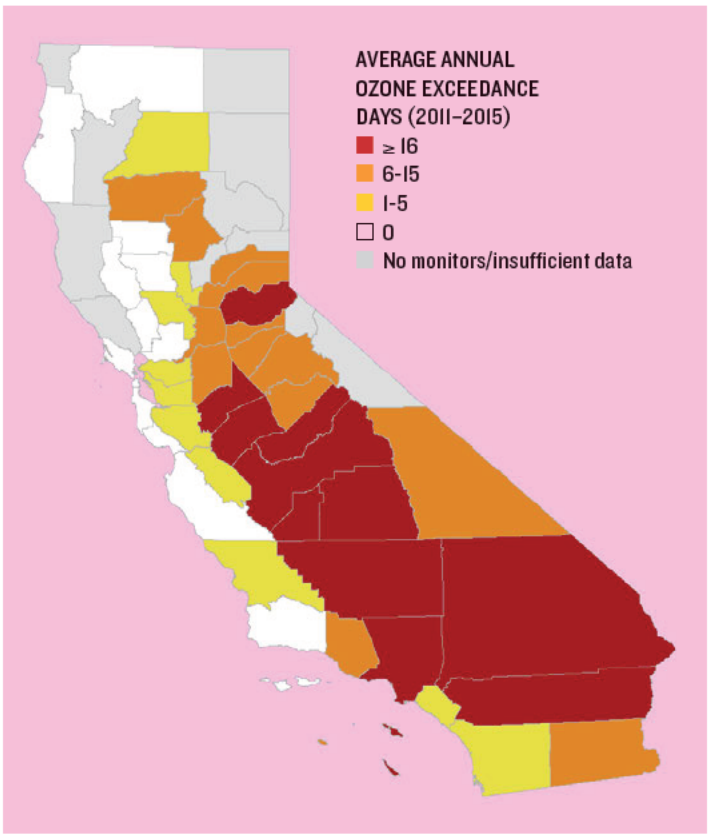
California doesn't just face a smokier future under climate change; it also faces a smoggier one. Despite improvements in the state's air quality since the early 1990s, 34 California counties, home to 33.8 million people, experience at least one unhealthy ozone pollution (i.e., smog) day per year (Figure 1).[33] More than one-third of those counties experience at least 16 unhealthy smog days per year.[34] Eleven of the nation's 25 smoggiest cities from 2014 to 2016 were in California, with Los Angeles topping the list.[35]

Unfortunately, climate change is likely to make the current air quality problem worse and undermine the state's future progress toward cleaner air.[36] Rising temperatures speed up smog-forming chemical reactions between sunlight and pollution from sources such as power plants.[37]

In 2014, about 5.2 million Californians had asthma, a chronic lung disease that is triggered by smog.[38] One study of 3.7 million emergency room visits in California from 2005 to 2008 found that even small increases in smog pollution significantly increased the number of visits for asthma.[39] African-American, American Indian/Alaskan Native, and Puerto Rican Californians are between 28.6 and 132.5 percent more likely to be diagnosed with asthma than white Californians, leaving these populations particularly sensitive to smog.[40] This disparity in asthma prevalence may be due in part to diet, poorer quality housing, and higher exposure to air pollution.[41] Smog has also been linked to other health problems, including reduced lung function, cardiac arrest, and cognitive decline.[42]

FIGURE 1: CALIFORNIA COUNTIES AVERAGING ONE OR MORE UNHEALTHY GROUND-LEVEL OZONE DAYS PER YEAR, 2011–2015

Ozone exceedances are days when an eight-hour average concentration of ozone exceeds the EPA's 2015 Ozone National Ambient Air Quality Standard of 0.070 parts per million.



EXTREME HEAT IS BAD FOR CALIFORNIANS' HEALTH—AND COULD BECOME DEADLIER

California summers are already dangerously hot, and they could become even more extreme in just a few decades. Since 1895, average annual temperatures in California have climbed 2.2 degrees Fahrenheit, and July 2018 was the state's hottest month on record.[44] The warming trend is accelerating: average summer temperatures in California rose over three times faster from 1975 to the present than from 1895 to the present (Figure 2).[45] More than 31.8 million (or 83 percent of) Californians lived in counties that experienced between 9.6 and 22.2 extreme heat days per summer from 2007 to 2016 (Figure 3).[46] In July 2018, record-breaking heat and the resulting demand for air-conditioning led to power outages for more than 90,000 customers in the Los Angeles area.[47] At least 990 residents went without electricity for more than three days while maximum daytime temperatures in downtown Los Angeles exceeded 96 degrees Fahrenheit.[48]

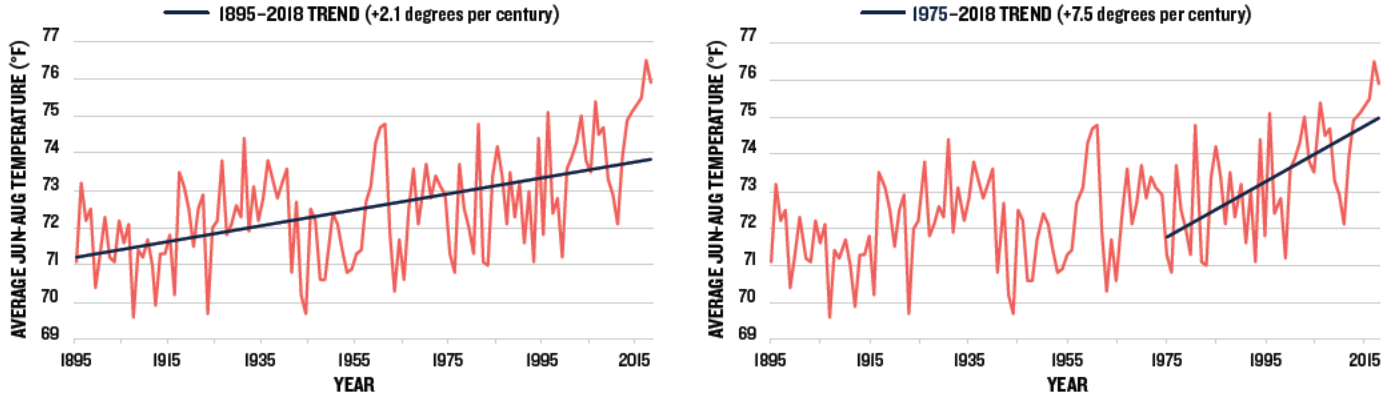
If we don't drastically cut global carbon emissions, the number of extreme heat days will continue to rise. Sacramento, for example, could see 24 days per year above 103.9 degrees Fahrenheit by the 2070s, compared to 4 days per year from 1961 to 1990.[49]

Heat already poses a range of threats to California residents, from minor illnesses like heat cramps to potentially deadly conditions such as heatstroke or heat-related heart attacks.[51] During the 2006 California heat wave, Sacramento, Modesto, and Woodland Hills broke records for the longest stretch of days over 100 degrees Fahrenheit. Six locations also set new records for all-time highest temperatures. Woodland Hills, for instance, hit 119 degrees Fahrenheit on July 22, 2006, exceeding its 1985 record by 3 degrees.[52] Over the entire heat wave, there were approximately 655 premature deaths, more than 1,600 excess hospitalizations, and more than 16,000 excess visits to emergency rooms statewide related to the heat.[53] In total, the heat wave generated more than $5.3 billion in health costs.[54]

Anyone can get sick from extreme heat, but young children, older adults, people experiencing poverty, people with chronic diseases like diabetes, homeless people, and outdoor workers are particularly vulnerable.[55] For instance, one California study found that with every increase of 10 degrees Fahrenheit in daily apparent temperature (a measure combining heat and humidity), emergency room visits for mental health issues increased by nearly 5 percent across all ages. In addition, visits for self-injury or suicide increased by 6 percent.[56] During higher temperatures, children aged 6 through 18 specifically had a 72 percent greater increase in risk of negative mental health outcomes than adults.[57]

Heat vulnerabilities associated with age, occupation, and socioeconomic factors are especially pronounced in cities due to the urban heat island effect, which is produced by tall buildings that block airflow, an abundance of heat-absorbing surfaces like asphalt, and a lack of tree cover and other green space.[58] During summers, most of California's larger cities are up to 9 degrees Fahrenheit warmer on average than surrounding suburban and rural areas.[59] In the Riverside-San Bernardino area, where multiple heat islands form an "urban heat archipelago," there can be a difference of up to 19 degrees Fahrenheit in average temperatures between urban and non-urban areas.[60]

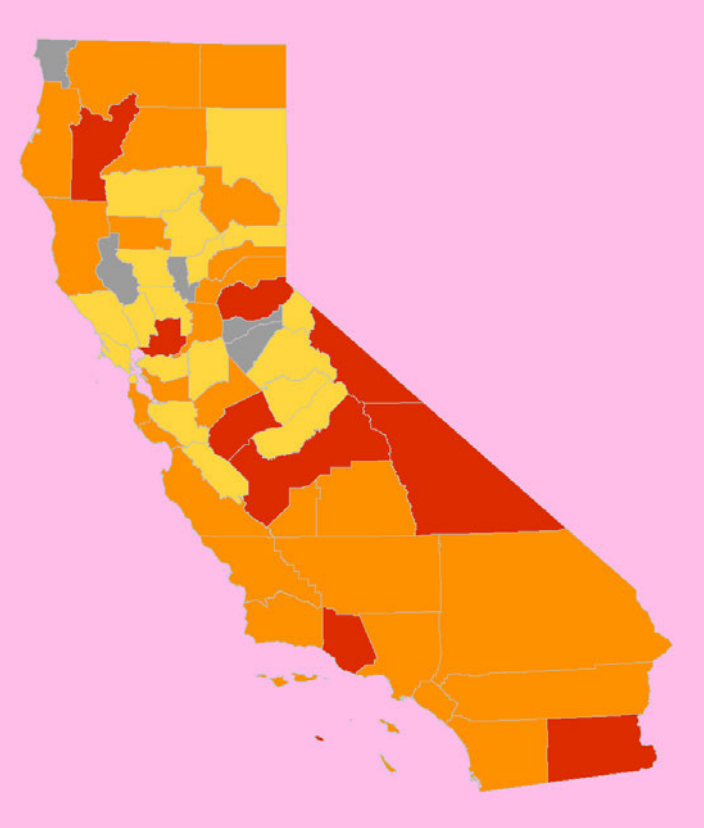
FIGURE 2: AVERAGE JUNE–AUGUST TEMPERATURES IN CALIFORNIA, 1895–2018



Source: NOAA.[50]

FIGURE 3: AVERAGE NUMBER OF EXTREME SUMMER HEAT DAYS EACH YEAR IN CALIFORNIA COUNTIES, 2007-2016

"Extreme heat days" are defined here as days from June 1 to August 31 on which the maximum temperature at a given station was as hot as (or hotter than) the top 10 percent of maximum readings at that station from 1961 to 1990. We used the June, July, and August days from 1961 to 1990 to calculate the top 10 percent of temperature readings. Nine of these extreme heat days per summer, on average, would be expected if temperatures remain stable. County-level values represent the average of station-level data within a given county.



Source: NRDC.[61]

Low-income households and communities of color are often concentrated in the hottest urban neighborhoods.[62] A 2010 study analyzed areas in Los Angeles with little plant cover, a high density of urban development, and high land surface temperatures. The research found those areas tended to have more people of color, more disabled people, fewer high school graduates, fewer owner-occupied homes, and lower household incomes.[63]

Low-income households may be unable to afford life-saving air-conditioning; they also may lack access to cooling centers.[64] In 2015, just nine of Los Angeles County's 94 official cooling centers were located in the most heat-vulnerable census tracts. These areas had high percentages of renters, foreign-born residents, people below the poverty level, and households with no vehicles and no health insurance.[65] In San Diego County, from 1999 to 2013, people from households in ZIP codes where central air-conditioning is uncommon were hospitalized significantly more often for heat-related causes on days with a maximum temperature of 89 degrees Fahrenheit or higher, compared to days cooler than 75 degrees Fahrenheit.[66] Hospitalizations did not significantly increase on hot days in ZIP codes with high ownership of air-conditioning.[67]

In early 2017, a quarter of the nation's homeless population lived in California and 68 percent of homeless people in the state lived on the street, with no refuge from extreme heat.[68] African-Americans comprised nearly one-third of the state's unsheltered people in 2017.[69] Homeless people also are more likely to have high rates of chronic disease, mental health conditions, and drug and alcohol dependencies—all of which can increase sensitivity to extreme heat.[70]

California's estimated 423,700 farmworkers and 854,000 construction workers are especially vulnerable to heat-related illnesses and death.[71] From 2000 to 2010, the risk of heat-related deaths was 35 times higher among U.S. farmworkers and 13 times higher among construction workers than workers in other industries.[72] Researchers in Los Angeles found that from 2005 to 2010, there was an estimated 8 to 11 percent increase in heat-related emergency room visits for every 1 percent increase in the number of residents working in agriculture, forestry, fishing and hunting, and mining.[73] Foreign-born farmworkers, who make up about 90 percent of California's agricultural workforce, may be particularly at risk for heat-related illnesses on the job. Language barriers or concerns about their immigration status could potentially hinder their access to heat-safety information and their willingness to report illness to employers or submit workplace safety complaints to California's Division of Occupational Safety and Health.[74] Furthermore, many foreign-born farmworkers are paid by the amount they harvest, which can dissuade them from taking breaks for shade or water.[75] As one worker said in a 2013 focus group, "Yes, we continue working because we want to advance to earn what we are supposed to for the day ... we have to continue working, until we can't handle it anymore."[76]

SEVERE DROUGHTS THREATEN FOOD AND WATER SECURITY IN RURAL CALIFORNIA

From late 2011 to early 2017, California endured its worst drought in at least 1,200 years.[77] The drought caused $5 billion or more in damage to the state's agriculture industry and affected water supplies, fisheries, and infrastructure.[78] In 2015, spring and summer runoff was at less than half of normal values at 14 points on major Central Valley rivers. And from spring 2011 to spring 2016, groundwater levels at nearly half of California wells declined by more than 10 feet.[79]

There is increasing evidence that record-high temperatures in 2014, 2015, and 2016 contributed to the historic drought.[80] First, extreme heat increased water loss

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from plants and soils, which exacerbated dry conditions associated with low precipitation.[81] Second, warm winter weather increased snowmelt and decreased the amount of precipitation falling as snow, which dramatically reduced the amount of water stored in California's mountain snowpack.[82] From late 2011 to early 2015, warmer weather reduced snowpack levels in the Sierra Nevada Mountains—which supply about 60 percent of California's fresh water—by an average of 25 percent.[83] If global carbon emissions continue to climb, the snowpack could be reduced by up to 85 percent by the end of this century.[84]

Nearly 4,000 California households—mostly in the agricultural, majority-Hispanic southern San Joaquin Valley—experienced dry or failing water supplies from January 2014 to early August 2016.[85] Two-thirds of the water shortages in the San Joaquin Valley's Tulare County were in very low-income communities.[86] Many families relied on bottled water or emergency water tanks provided by state and local governments, corporate donations, or nonprofit organizations, but still had to ration for daily hygiene, drinking, and cooking needs.[87] In some communities, the emergency tanks stayed empty over the weekends when water trucks failed to arrive on time.[88] Some residents reported injuries and worsening arthritis symptoms associated with hauling water bottles and walking long distances to public water supplies.[89] As of early June 2018, 320 San Joaquin Valley households still did not have access to well water.[90]

The 2011 to 2017 California drought also harmed water quality in the San Joaquin Valley. Groundwater withdrawals by industrial farming operations exacerbated decades-old pollution problems by decreasing the volume of well water, thus increasing the concentration of nitrates and arsenic.[91] Nitrate contamination, which in rural areas largely comes from fertilizers and animal feedlots, can be deadly to infants.[92] Researchers have linked arsenic exposure to chronic illnesses including diabetes and multiple forms of cancer.[93]

Finally, the drought made it hard for the poorest residents of the San Joaquin Valley to get enough food. In 2016, 13.4 percent of people (61,452 individuals) in the San Joaquin Valley's nine counties experienced food insecurity, compared to 11.7 percent of California as a whole.[94] In 2015 alone, there were more than 10,000 seasonal farm jobs lost across California.[95] The combination of seasonal job losses and rising household water bills during the drought increased food bank usage by farming families.[96] One food bank in Tulare County, for example, served 5,000 more people in May 2014 than in typical months.[97] A resident of Cantua Creek, in Fresno County, said at a community meeting, "We have to decide now if we bathe with water or if we eat!"[98]

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SOUTHERN CALIFORNIANS FACE MORE VALLEY FEVER UNDER CLIMATE CHANGE

In Southern California, increases in temperature and changes in rainfall patterns fueled by climate change may be contributing to more cases of Valley fever.[99] Valley fever is an airborne fungal infection that can cause fatigue, shortness of breath, and, in rare cases, serious infections of the lungs, brain, skin, or bones.[100] Approximately 40 percent of people infected with Valley fever need hospitalization.[101] California accounted for about 45 percent of the 11,829 cases of Valley fever across the United States in 2016.[102] The number of Valley fever cases increased about fivefold from 1998 to 2016 in California and four other southwestern states.[103]

Additionally, Valley fever can worsen asthma symptoms, leading to more medication and trips to the doctor.[104] The San Joaquin Valley is a hotspot in California for both asthma and Valley fever.[105] Fifty-seven percent of the state's Valley fever cases from 2000 to 2015 were in the San Joaquin Valley, and 11.4 percent of adults in the San Joaquin Valley had active asthma in 2015 and 2016, compared to 8.3 percent of adults across the state.[106]

Construction workers, military personnel, oil and gas workers, and others who use heavy machinery outdoors are also vulnerable to Valley fever, because the fungus that causes the infection lives in soil.[107] Occupational exposures accounted for more than half of the Valley fever cases during 47 worldwide outbreaks from 1940 to 2015.[108]

STORMS AND SEA LEVEL RISE THREATEN CALIFORNIA'S DRINKING WATER AND COULD DISRUPT TRANSIT AND EMERGENCY SERVICES

Coastal California, which is home to more than 70 percent of California residents, faces significant risks from the combination of rising sea levels and more damaging rainstorms.[109]

The average sea level at San Francisco's tide gauge has increased by about 7 inches since 1900, consistent with the global average of 7 to 8 inches since 1890.[110] In Northern California's Humboldt Bay, the relative sea level rise is more than double the global rate.[111] That's because dikes have long prevented natural land-building processes in what used to be tidal wetlands, leading to local land settling and sinking.[112]

As a result, parts of California are experiencing an increase in the number of high tide floods (also called "nuisance" or "sunny day" floods) that can block roads and damage infrastructure.[113] From 2000 to 2015, San Diego, La Jolla, Los Angeles, and Humboldt Bay saw a 25 to 50 percent increase in high tide floods. San Diego had 13 high tide flood days in 2017, a new record for the city.[114] Under an intermediate sea level rise scenario (about 3 feet by 2100), the coast from Arena Cove in Mendocino County to San Diego could see high tide flooding increase from an average of 1.4 days per year in 2015 to 35 days per year in 2050.[115]

California also faces a future of stronger rainstorms like the series of severe storms that hammered the state from November 2016 through March 2017.[116] If high levels of global carbon emissions continue, the frequency of extremely wet winter/spring seasons along California's coast could increase by an estimated 150 percent by the 2070s, compared to 1850.[117] From 2018 to 2060, San Francisco and Los Angeles may even face at least one wet season similar to the devastating winter of 1861 to 1862, in which 45 days of rain forced the temporary relocation of the state legislature from Sacramento to San Francisco and "destroyed almost one-third of the taxable land of California."[118]

Sea level rise and more frequent storms could lead to more contaminated runoff and more failures of wastewater treatment facilities along California's coast.[119] Wastewater treatment plant failures can lead to outbreaks of gastrointestinal infections such as norovirus, crypto, and giardia.[120] One foot of sea level rise beyond 1988 levels could flood eight wastewater treatment plants that serve more than 1 million Californians.[121] Six feet of sea level rise could flood 36 plants serving nearly 5.6 million people. Thirty of those vulnerable wastewater treatment plants are in the San Francisco Bay area.[122] In small communities like Marin County's Stinson Beach, sea level rise will push groundwater and waste from septic fields upward into yards, streets, and homes.[123] Groundwater flooding associated with 3 feet of sea level rise could inundate about 11 percent of Stinson Beach.[124]

San Francisco is the only city along California's coast with a combined sewer system.[125] This outdated system, which carries sewage and stormwater in the same pipe, was designed to overflow during heavy rain.[126] During intense rainstorms, sewage from the combined system can leak into streets and flow into the San Francisco Bay.[127] Based on sewer overflow data from 2009 to 2014, the San Francisco neighborhoods most likely to flood during heavy rain are Haight Ashbury, Hayes Valley, Mission, Outer Mission, and South of Market (SOMA).[128] Mission, Hayes Valley, and SOMA have higher percentages of residents living below 100 and 200 percent of the Census Poverty Threshold than the city as a whole.[129] Outer Mission and SOMA also have higher percentages of people of color than the city as a whole. People in lower-income communities may not have the money to repair flood damage to their homes or to relocate to safer, less flood-prone areas.[130]

Coastal flooding associated with sea level rise and heavy rainstorms can also cause serious and long-lasting damage to health and safety facilities such as emergency shelters and hospitals.[131] Currently, about 25 critical state-owned facilities on California's coast could be flooded by a 100-year event (severe floods with a 1 percent chance of occurring in a given year) and another 29 could be operationally disrupted.[132] By the 2080s and 2090s, 100-year floods could damage 30 facilities and disrupt the operations of 38 others. More than one-third of the facilities expected to flood at the end of the century are in communities disadvantaged by pollution exposure, existing health challenges, and socioeconomic factors.[133]

Sea level rise will also disrupt public transit services, resulting in travel delays and loss of service. According to a national-level survey in 2016, 68 percent of recent tidal flooding and storm surge events had minor to moderate impacts on transit service.[134] In December 2014, for example, a storm that produced 18 inches of storm surge resulted in several Bay Area Rapid Transit (BART) and Municipal Railway (MUNI) delays and closures in the San Francisco area.[135]

Recurring losses of emergency and public transit services will be especially serious for people who require regular care for chronic illnesses and those who can't drive to medical appointments or emergency rooms.[136] From 2006 to 2010, an estimated 10.7 percent of African-American households in California's coastal counties lacked access to a vehicle, compared to 6.5 percent of white households.[137] In San Francisco, interviews in 2014 with 50 elderly residents who received home care services revealed that 41 percent had health issues or disabilities that kept them trapped at home.[138]

ACTING ON CLIMATE CAN PROTECT OUR HEALTH

The good news is that cutting back on fossil fuels and switching to cleaner energy will help limit the dangerous effects of climate change and protect our health.

California's greenhouse gas emissions have declined by 10 percent since 2004, thanks to a wide range of state clean energy and energy efficiency policies including the California Global Warming Solutions Act of 2006.[139] From 2007 to 2015 alone, California's wind and solar power plants averted the production of nearly 74.6 million metric tons of carbon dioxide.[140] That's the equivalent of what 183 billion passenger vehicle miles, or more than 73 million trips around the Earth, would produce. These renewable energy sources also averted 326 metric tons of sulfur dioxide and more than 19,000 metric tons of nitrogen oxides (the building blocks of smog and particle pollution).[141] California has ambitious goals to reduce the state's economy-wide greenhouse gas emissions by 40 percent from 1990 levels by 2030, and to achieve carbon neutrality by 2045.[142] But achieving these targets will require a lot more work.[143]

Reductions in fossil fuel-related air pollution have already improved the health of California's children. For example, air quality improvements in eight Southern California communities significantly reduced the probability of coughing, chest congestion, and other bronchitic symptoms from 1993 to 2012.[144] Among 10-year-old children with asthma, the prevalence of bronchitic symptoms declined 16.3 percent per median decrease in ozone and 15.4 percent per median decrease in fine particle pollution.[145]

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California has taken strong steps to reduce the carbon pollution causing climate change, but can continue to improve. The transportation sector is California's largest source of climate-changing pollution and one of the main causes of the state's current air quality problem, even though transportation emissions have declined since 2007.[146] Transportation electrification is a critical part of continued climate and clean air progress in California and the rest of the country.[147] This process involves switching from vehicles powered by dirty fossil fuels to ones powered by low- or zero-carbon sources of clean energy.

California metropolitan planning organizations (regional committees of city and county officials) should also increase the ambition of their long-term transportation plans.[148] The existing plans, which include carbon pollution reduction targets and increased alternatives to car travel (e.g., public transportation and infrastructure to increase cycling), can deliver numerous health benefits, including less traffic jam-induced stress and improved response times by paramedics.[149] However, making these plans more ambitious in California's five largest planning regions can further reduce air pollution and increase physical activity. By 2040, these efforts could help California avoid more than 900 deaths each year and the equivalent of more than 16,000 years lost to disability or poor health.[150]

Buildings account for about a quarter of California's carbon emissions. Building electrification and increased energy efficiency can improve the health of Californians and help them save money on heat and hot water bills.[151] Measures like increasing insulation and installing better windows can make buildings more efficient and help keep them dry and comfortable. These efforts also help protect occupants from extreme heat and indoor asthma triggers such as mold.[152] Using clean electricity generated from pollution-free renewable resources like wind and solar to power high-efficiency electric heating and water heaters can produce immediate health benefits by reducing air pollution from fossil fuel combustion.[153]

More energy savings from efficiency would also benefit the health of low-income Californians who may need to choose between paying for utility bills and other necessities like food or medicine. A recent survey of 750 low-income families in Southern California found that 2 in 3 households had their electricity shut off in the previous three years.[154] In 2016, power disconnections affected more than 884,000 California households across Pacific Gas and Electric's service territory. Eighty percent of the residents in the 20 ZIP codes with the highest shutoff rates in 2016 were people of color.[155] Rising temperatures and population growth only fuel more demand for air-conditioning, which will increase the importance of energy efficiency.[156] Without smarter energy use in Los Angeles County, for example, electricity demand could increase up to 87 percent by 2060.[157]

Finally, California needs to continue to refine its plan to address the harmful health impacts of climate change that are already being felt today. The 2018 update to the California Natural Resources Agency's *Safeguarding California Plan* is one of the most comprehensive climate resilience roadmaps in the country.[158] Policy recommendations in the health chapter include improving emergency preparedness in local health departments and transit agencies, promoting strategies that reduce carbon pollution and help keep heat-sensitive neighborhoods cool, and developing data analyses and tools to guide health interventions. The plan also addresses socioeconomic inequities that make people more vulnerable to the health impacts of climate change.[159] For example, measures to make California's agricultural system less energy intensive and more resilient to climate change could improve the financial and food security of farmworkers and increase access to fresh, healthy foods in urban areas.[160]

However, as the plan's authors point out, the recommendations "do not serve as comprehensive guidance for how to adapt to climate change." For instance, one of the action items is to "encourage agencies to make resources available to support people suffering mental health consequences." There are no details about how to actually implement this action item—which is perhaps not surprising, given California's complex funding mechanism for mental health services.[161] California must continue to work with both internal and external stakeholders to turn many of the next steps in *Safeguarding California* into detailed, implementable projects and programs.[162]

The bottom line is that California residents have much to gain from climate action—and lives to lose if we fail to clean up climate-changing pollution and build resilience to the present-day harms of climate change.

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From: Jean Staats
To: PlanningCommission AP
Subject: "Reach Code" for Sunnyvale
Date: Friday, September 11, 2020 11:20:33 PM

Dear Planning Commission Members,

As a Sunnyvale resident concerned about Climate Change and in favor of measures for slowing global warming, I support a city requirement that all new buildings in Sunnyvale be all electric (with no “natural” gas hookups). Jean Staats

From:	Kaushik Tota
To:	PlanningCommission AP
Subject:	Youth Urge the Passage of Robust Reach Codes in Sunnyvale
Date:	Sunday, September 13, 2020 9:55:52 PM
Attachments:	Reach Codes - Letter to Planning Commission.pdf

Hello,

My name is Kaushik Tota, and I am a senior at Saint Francis High School and a Sunnyvale resident. I am working with two climate policy advocacy groups, and we are very interested in the draft reach codes that have been proposed in the city of Sunnyvale. We have studied staff presentations and have a few suggestions, for which we would greatly appreciate your support and recommendation to Council. Attached to this email is a PDF of a letter from the Sunnyvale Youth Climate Action Team and the Sunnyvale Youth Public Policy Institute with a more detailed writeup of our thoughts. Thank you for your time and consideration.

Regards,
Kaushik

--
Kaushik Tota
Founder, Climate Youth Ambassador Program
Founder, Science&Robotics
Co-Lead, Sunnyvale Youth Climate Action Team (Silicon Valley Youth Climate Action)
President, Sunnyvale Youth Public Policy Institute

9/13/20

RE: Sunnyvale Youth Urge the Passage of Robust Reach Codes

Dear Sunnyvale Planning Commission Chair Daniel Howard and Commissioners Harrison, Howe, Olevson, Rheaume, Simons, and Weiss,

In light of the need to reduce greenhouse gas emissions in our cities, we urge you to take action to transition our buildings to non-polluting energy sources. A swift shift away from fossil fuels is necessary to avoid the worst irreversible impacts of climate change. The proposed reach codes in Sunnyvale are an excellent start. However, as concerned youth, we have a set of suggestions that we strongly encourage the Sunnyvale Planning Commission to recommend to the City Council.

Our Asks:

1. **Eliminating Exceptions**
    a. Eliminate blanket exceptions for Factory/Industrial, High Hazard, and Laboratory uses & non-residential kitchens.
    b. Exception requests should be reviewed and decided at a public hearing.
    c. If an exception is granted to a nonresidential kitchen, Energy Star appliances should be required in addition to the pre-wiring requirements for future retrofits.
2. **Improving Electric Vehicle Readiness**
    a. Include EV readiness ‘reach' beyond state requirements for new construction in Phase 1 for all building types. Suggested EV readiness requirements for new construction include:
        i. Single Family Residential: Level 2 ‘ready’ - one per dwelling.
        ii. Multifamily Residential: First residents will have 10% of spaces to charge onsite (EVSE), and which includes an additional mix of ‘ready’ (20%) and ‘capable’ (70%) so every space can eventually support charging.
        iii. Hotels: 10% of spaces have level 2 EVSE and an additional 50% to be capable of expansion as demand increases.
        iv. Non-Residential (office and commercial): A minimum 10% of spaces have level 2 EVSE installed and an additional 40% of all spaces will be capable of supporting EV charging as demand increases.
        v. All: Signage with clear language (e.g. “EV Outlet”) on parking spaces.
3. **Identification of Progression to Phases 3 and 4**
    a. Identify the steps that need to be taken or criteria to be met to move into Phases 3 and 4.

For rationale regarding our suggestions, please refer to the explanations below:

Ask 1: Eliminating blanket exemptions

A: We propose the elimination of blanket exemptions for process loads facilities (Exception 1) and nonresidential kitchens (Exception 4), instead utilizing a case-by-case exemption process as outlined in Exception 5. Large buildings such as data servers, which are commonplace in Sunnyvale and will only continue to appear with the growth of the technology sector, will emit large amounts of greenhouse gases if exempted. Similarly, nonresidential kitchens with gas-powered appliances can contribute significantly to GHG emissions. With future planned development in Moffett Park and downtown Sunnyvale, the GHG emissions that could arise from exempted development could be quite detrimental to the city's goal of reducing carbon footprint by 80% by 2050.

B: We also propose that exemption requests be handled through a public hearing. Public hearings enable Sunnyvale residents and those affected by new constructions to have their voice heard, further democratizing development in the city.

C: Finally, assuming the removal of Exception 4, we propose that nonresidential kitchens which are allowed gas cooking equipment through Exception 5 are required to equip their facilities with Energy Star appliances. If gas exemptions are granted to a kitchen, it is vital that the highest-available efficiency appliances are installed. This minimizes the GHG emissions of exempted kitchens, keeping Sunnyvale in line with its decarbonization goals.

Ask 2: Increase EV readiness

A: We propose improving EV readiness in residential buildings by raising the percentages of EV-ready and EVSE chargers required to be installed in homes, apartments, and other residential buildings. For single family residences, we propose at least one Level 2-ready outlet per household so that residents can simply plug in the EVSE (electric vehicle service equipment) of their choice when necessary. For multifamily residential buildings, we propose that first residents have 10% of spaces (and at least one) to charge onsite (EVSE), in addition to a mix of EV ready (20%) and EV capable (70%) spaces so every space can eventually support charging as EV adoption increases - these percentages are in accordance with the recently-adopted codes of San Jose[1]. SVCE's model EV code[2] has other percentages that could also be referenced. Apartment residents are currently unable to install EV charging infrastructure on their own, so the lack of pre-existing EV infrastructure deters EV purchases, slowing adoption rates and creating an equity issue between homeowners and renters in Sunnyvale. Finally, we propose that hotels, in line with San Jose's adopted reach codes, are required to have 10% of spaces equipped with Level 2 EVSE, and an additional 50% capable of expansion. Hotel employees and guests will require greater access to charging facilities as EV

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[1] "San José's Natural Gas Infrastructure Prohibition and Reach Code Ordinances ." *SAN JOSE REACH CODE*, 2019, website: www.sanjoseca.gov/your-government/departments-offices/environmental-services/climate-smart-san-jos/2019-reach-code-initiative. Reach code summary: https://www.sanjoseca.gov/home/showdocument?id=45668

[2] "Reach Codes." *SVCE*, www.svcleanenergy.org/reach-codes/.

adoption increases, necessitating this addition to the current reach codes. Across the board, adding more EV charger infrastructure at an earlier stage ensures that money is not unnecessarily wasted in the future by trying to install wiring, outlets and breakers after the initial construction.

Percentages of EV-ready and EVSE chargers should also be raised for nonresidential buildings. Similar to the residential improvements we have suggested thus far, we propose following San Jose's model by mandating a minimum 10% of spaces have level 2 EVSE installed and that an additional 40% of all spaces will be capable of supporting EV charging as demand increases. The benefits of starting with a minimum EVSE capacity and setting up for future growth are multifold. Since many cars are left at locations such as workplaces and grocery stores for hours on end, daytime charging is a critical component of resilient EV infrastructure. Paired with plentiful solar energy during the daytime hours, these mandates also mesh with overall grid capacity. In addition, the accessibility of EV chargers will reduce "range anxiety" amongst those considering the purchase of an EV, accelerating adoption rates.

Finally, it would be beneficial to move Stage 2 of the EV readiness component (EV pre-wiring requirements) to Stage 1 to expedite electrification. Currently, phase 1 has no EV component. The reach code phases for EV electrification can be simplified by not having "empty phases" and instead moving Stage 2 to Stage 1.

Ultimately, exceeding state EV capability requirements will be necessary to achieve Sunnyvale's goals of 25% zero-emission vehicle usage by 2030 and 75% by 2050, as defined in Sunnyvale's Climate Action Playbook[3]. The proposed reach code draft does not appear to have any "reaches" for EV in any sense of the word, and we thus urge that these suggestions are considered to lay the groundwork for a zero-emission transportation sector in Sunnyvale.

Ask 3: Identification of Progression to Phases 3 and 4

A: It is essential to have a detailed plan and milestones so that Sunnyvale residents can clearly see how far along Sunnyvale is with combating climate change. Without a plan with action items (such as public outreach, a special study issue, etc.), we as a city are not aware of how far along we are in our goals. Government works best when it informs the community of progress toward goals and milestones so that the community members can give feedback to their city leaders. With some kind of system to gauge this, representatives are also held responsible by the people for their promises to help fight climate change. By including milestones to begin stages 3 and 4 Sunnyvale will be more transparent in regards to where it stands in reach code implementation.

[3] "CLIMATE ACTION PLAYBOOK." City of Sunnyvale, sunnyvale.ca.gov/civicax/filebank/blobdload.aspx?BlobID=26529.

As you are all aware, fires have been raging in our state for the past three weeks, obliterating more than 2.2 million acres of land[4]. Thousands of Californians have been displaced, and millions more are uncomfortable with leaving their homes due to unhealthy air quality. Some have even lost their lives. One thing is for sure: this has drastically been the worst wildfire season our state has seen, with dramatic lasting effects. Now, more than ever, we must focus our efforts on fighting climate change to reduce the probability of more wildfire seasons like this one. By taking steps such as environmentally-friendly reach codes for new construction, we can create a large, lasting impact, lowering our greenhouse gas emissions, and healing our home slowly but surely. We want our future to be green and lively, and a safe and healthy environment for many generations to come. We want to see a bright future, but when we look out the window, we see orange toxicity and danger. We worry for friends and family, for ourselves, and for our planet's future. We urge the Sunnyvale Planning Commission to recommend our suggestions to City Council in order to set up our community for a sustainable future. Thank you for your time and consideration.

Sincerely,
Kaushik Tota - Co-lead, Sunnyvale Youth Climate Action; President, Youth Public Policy Institute
Peri Plantenberg - Co-lead, Sunnyvale Youth Climate Action
Radhika Goel - Co-lead, Sunnyvale Youth Climate Action
Anika Khandavalli - Sunnyvale Youth Climate Action
Annabelle Law - Sunnyvale Youth Climate Action
Mallory Mitton - Sunnyvale Youth Climate Action
Pranay Mamileti - Treasurer and Environmental Commission Chair, Youth Public Policy Institute
Sannath Mathapathi - Youth Public Policy Institute
Ritu Atreyas - Youth Public Policy Institute
Rathik Murtinty - Youth Public Policy Institute
Rushil Roy - Youth Public Policy Institute

[4] ROSEMURGEY, EMMA. "California Wildfires Have Burned A Record 2 Million Acres Of Land." Unilad, 8 Sept. 2020, www.unilad.co.uk/news/california-wildfires-have-burned-a-record-2-million-acres-of-land/.

From: Kevin Ma
To: PlanningCommission AP
Subject: Support for a Strong, All-Electric Reach Code
Date: Friday, September 11, 2020 10:45:11 PM

Dear Sunnyvale Planning Commissioners,

As a South Bay resident, we were all shocked earlier this week to wake up to murky, brown skies. The impacts of Climate Change are making themselves more apparent, and if we do not take strong environmental steps, the day the South Bay is as red as Oregon or as orange as SF is going to come ever closer, not to mention the flooding that may occur. Some of you have families; do you want future generations to normalize days of thick ash or weeks of heat waves?

Environmentalism is everyone's duty, and every jurisdiction must address it. Many of the cities in the South Bay have already taken up strong, all-electric reach codes. There will be voices that say these are too onerous, or that adopting it in a place like Sunnyvale is just posturing. However, it is time to push the economic system to a better path, and the state is paying attention to cities when drafting their next statewide building codes in 2023. So be bold with what you have, and pass an all-electric reach code.

Sincerely,
Kevin Ma

From: Stephanie Morris
To: PlanningCommission AP
Subject: All Electric Reach Code
Date: Monday, September 14, 2020 9:54:36 AM

Dear Planning Commissioners,
Smoke-filled skies have made the climate crisis somehow much more....clear. As a mother deeply concerned about our children's health and future, I urge you to adopt the strongest possible all-electric reach code to reduce greenhouse emissions, ensure healthy indoor air, and reduce the risk of fires and explosions.

Our electricity in the Bay Area comes from solar, wind, and other climate-safe sources. We need to shift to all electric for a smarter energy future and a better climate for today and the future.

Stephanie Morris
Landscape Architect and member Mother's Out Front Silicon Valley Leadership

Unitarian Universalist Church of Palo Green Sanctuary Committee
505 East Charleston Road in
Palo Alto, CA 94306
14, September 2020

Mayor Larry Klein and Council Members, City of Sunnyvale Planning Commission & City Staff
City of Sunnyvale
456 W. Olive Ave
Sunnyvale CA 94086

Via email: planningcommission@sunnyvale.ca.gov & (council@sunnyvale.ca.gov

RE: Support for an Equitable Electric Vehicle Reach Code

Dear Mayor Larry Klein, Council Members the Sunnyvale Planning Commission and City Staff

The Unitarian Universalist Church of Palo Alto Green Sanctuary (UUCPA-GS), with multiple members that reside in Sunnyvale, requests that the City of Sunnyvale adopt a more equitable Electric Vehicle (EV) Reach Code than what has been proposed. Simply, UUCPA-GS strongly requests that the city adopt the EV Reach Code as proposed by Silicon Valley Clean Energy (SVCE), Peninsula Clean Energy (PCE) and the Office of Sustainability, San Mateo County.

SVCE and PCE's EV Reach Code as summarized in the attached slides from PeninsulaReachCodes.org, addresses the biggest barrier to electric vehicle adoption, the lack of home charging by providing at least one outlet dedicated for an EV per residential unit. And, by providing options for either Level 1, Level 2 and or load sharing, the code does so in an extremely cost-effective manner. Further, required signage identities the EV outlet's purpose, provides education and sparks thoughts of potential EV ownership.

When SVCE and PCE were drafting these Reach Codes, they were acutely aware of the difficulties of installing EV chargers in residential buildings particularly multifamily dwellings. Simply landlords (and condominium associations) do to not want to spend money on anything unless they absolutely have to. To preempt the fight between tenants and the management to install chargers in "EV Capable" spaces (which to do so necessitates the services of an electrician, city permitting and more - all of which has an associated cost), SVCE and PCE simply required each unit to have at least one space per unit be plug and play or "EV-Ready." This was determined to be the long term, least expensive option with the added benefit of accelerating EV adoption.

While some may deem that the current EV adoption rate does not warrant this level of infrastructure deployment, by providing each unit with an EV-Ready parking space, the city addresses the chicken and egg problem. Simply, people are not going to acquire EVs unless they know where they are going to charge; home is simply the best place to do so and at the point of construction is the most cost-effective place to do so by far.

Please do not hesitate to contact me with questions. Our Green Sanctuary Committee has significant experience with electric vehicles[1], our membership recognizes (and long enjoyed) the cost and time savings from driving EVs while simultaneously protecting the health of our children and planet.

Cordially,
Jeralyn Moran, Co-Chair, UUCPA Green Sanctuary

CC: John Supp, SVCE; Rafael Reyes, PCE; Sven Thesen, UUCPA-GS

[1] ~80% of our committee members have at least one EV and some have been driving on electric since 2003. In 2013, UUCPA installed our 1st EV charger and are planning on installing 17 more in the next 12 months.

Slides from PeninsulaReachCodes.org, Adoption Tools

EV Terms, Readiness of Charging Station

EV **Capable** - *Some Assembly Required*
Panel **capacity**, raceway (**conduit**) only at critical areas (underground, pinch points, etc.) Definition is less stringent than CALGreen 2019

EV **Ready** - *Plug & Play*
Panel **capacity**, raceway (**conduit**), overcurrent protection device (**breaker**), **wire**, **receptacle** & signage.
Can refer to Level 1 or Level 2

EV **Charging Station** (EVCS) - *Level 2 Charge!*
Charging station fully installed. All the equipment needed to deliver electrical energy from an electricity source to the EV at Level 2

SILICON VALLEY CLEAN ENERGY

PENINSULA CLEAN ENERGY | 3

Electric Vehicle Terms - Background

Speed

Level 1
"Trickle Charging"

Level 2
"Standard Charging"

Level 3
"DC Fast / SuperCharging"

SILICON VALLEY CLEAN ENERGY

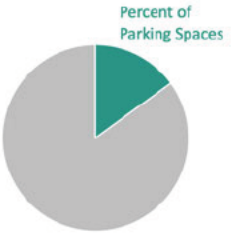
Readiness

EV **Capable**

EV **Ready**

EV **Charging Station**

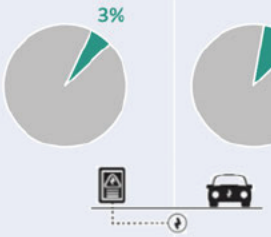
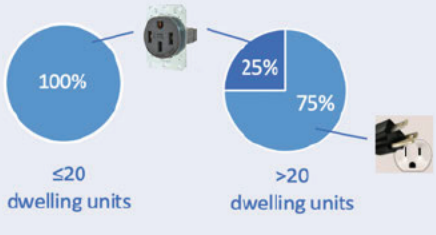
Number



PENINSULA CLEAN ENERGY | 4

Electric Vehicles - Multifamily New Construction

ELECTRIC VEHICLE OUTLET

	2016 CALGreen	2019 CALGreen	PCE/SVCE Proposed
	Mandatory	Mandatory	
Multi-Family	 **3%** Level 2 EV Capable for buildings with ≥17 units	**10%** Level 2 EV Capable	 ≤20 units: One Level 2 EV Ready **per dwelling** >20 units: Of all dwelling units, • **25%** Level 2 EV Ready (10% in affordable housing) • **75%** are Level 1 EV Ready (90% in affordable housing)

From: Tara Martin-Milius
To: PlanningCommission AP
Subject: Re: Planninng@sunnyvale.ca.gov
Date: Monday, September 14, 2020 1:55:42 PM

Apologies, Planning Commissioners,
I sent the letter to the wrong address the first time.
Tara Martin-Milius

On Mon, Sep 14, 2020 at 1:52 PM Tara Martin-Milius [redacted] wrote:

> Dear Planning Commissioners,
> For your convenience, below is the content of the letter attached.
> Tara Martin-Milius
>
> 14 September 2020
>
> To: Sunnyvale Planning Commissioners
>
> Re: EV charging stations
>
> Planning Commissioners:
>
> You will be reviewing and voting on the issues around EV charging tonight. The Unitarian Universalis Church of Palo Alto Green Sanctuary Committee has written you a letter. As a member of the Unitarian Universalist Fellowship of Sunnyvale, a Sunnyvale resident, and climate advocate, I endorse all they have said in their letter of September 14, 2020.
>
> It is the responsibility of those in our various governmental structures to make the decisions that affect us now and in the future. Our future has a short timeline given the acceleration of climate change and the effects we are currently experiencing. I agree very strongly with this paragraph taken from the UUCPA-GS letter. Transit is ~40% of our GHG emissions:
>
> > SVCE and PCE's EV Reach Code as summarized … from PeninsulaReachCodes.org, addresses the biggest barrier to electric vehicle adoption, the lack of home charging by providing at least one outlet dedicated for an EV per residential unit. And, by providing options for either Level 1, Level 2 and or load sharing, the code does so in an extremely cost-effective manner. Further, required signage identities [identifies] the EV outlet's purpose, provides education and sparks thoughts of potential EV ownership.
>
> We must act to make changes before 2050: 2030, is the current outside limit for getting to 1.5 C to mitigate the worst of the climate change impacts. Not having EV chargers in the new built environment is not a responsible decision to make based on current conditions. Please adopt the SVCE reach codes the State mandates will not meet either our policy goals or the very real need to avoid the worst of climate change will do to us all. To electrify or not may be a choice for some individuals, but cannot be the choice for responsible governance. We must have policies that enable and encourage electrification earlier rather than later.
>
> Respectfully, but with great urgency, please approve the SVCE reach codes for Sunnyvale now.
>
> Tara Martin-Milius

Concerned Advocate & Resident