**“Reach” Codes And Building Electrification:**

**California Cities Are Leading The Nation**

**WHAT?**

* California allows cities to set stricter building codes than the state, called “reach codes”. Cities in essence “reach” beyond state requirements to tackle the climate crisis. Local governments adopt local building codes that ban fossil fuel hook up. This reduces the burning of natural gas (methane) and expands the electrification of buildings. When that electrification is run on renewable energy, it shrinks the climate footprint of buildings. More info from BayREN on Reach Codes [Here](https://www.bayrencodes.org/reachcodes/reach-code-types/) and a description of the General Process [Here.](https://www.bayrencodes.org/reachcodes/process-for-reach-code-development-adoption/)

**WHY?**

Burning natural gas (methane), is capable of warming the planet 87 times more than CO2 when released into the atmosphere. We must stop constructing buildings that will rely on fossil fuel into the future.

Cities in California can help the state meet its binding climate target of reaching carbon neutrality by 2045. San Francisco[city estimates](https://sfenvironment.org/sites/default/files/fliers/files/2018_sfe_ee_climate_at_a_glance.pdf) report that buildings account for 44% of total greenhouse gas emissions. Natural gas is responsible for the bulk of that. Electricity powered by Utility scale solar and wind is now cheaper than natural gas in almost every case and the trend is continuing. All-electric buildings are less expensive to build and less expensive to operate, thereby saving occupants money. Eliminating the burning of natural gas will also improve indoor air quality. Local government policies will inspire broader statewide and nationwide action.

**WHERE?**

Momentum is increasing for policies that switch buildings to electricity rather than gas. So far, 42 California cities have adopted “reach” building codes to reduce - and in some cases ban - the burning of methane and expanding electrification,

Various groups have pulled together Lists of Cities with Best Practice policies on Electrification.

* The Sierra Club Compiled a great list of Best Practices. [Here](https://www.sierraclub.org/articles/2021/01/californias-cities-lead-way-gas-free-future).
* The Building Electrification Institute links/lists eleven participating cities [Here](https://www.beicities.org/cities-participating).
* Direct Links to best practices in the bay area cities include these following links: [San Carlos](http://sancarlosca.iqm2.com/Citizens/FileOpen.aspx?Type=1&ID=3153&Inline=True), [Albany](https://albanyca.granicus.com/MetaViewer.php?view_id=2&clip_id=2448&meta_id=143665), [Oakland](https://oakland.legistar.com/View.ashx?M=F&ID=8932328&GUID=A76989E1-478B-4FA5-AA29-7566B7F208BF), [Ojai](https://drive.google.com/file/d/1S_2TnmCzzolHTEO3SjdmoSDrJkiNO_Mw/view), [Sunnyvale](https://sunnyvaleca.legistar.com/View.ashx?M=F&ID=8869018&GUID=1DFD5236-F85D-4141-9263-90C27266CE93), [Millbrae](https://portal.laserfiche.com/Portal/DocView.aspx?id=11674&repo=r-c2783ec8&searchid=cf9af8b7-a8ad-42e4-800d-824d51273cbe), [Los Altos](https://los-altos.granicus.com/MetaViewer.php?view_id=7&event_id=380&meta_id=66434), [East Palo Alto](http://eastpaloalto.iqm2.com/Citizens/FileOpen.aspx?Type=1&ID=1262&Inline=True), [Redwood City](https://meetings.redwoodcity.org/AgendaOnline/Documents/ViewDocument/ATTACHMENT%20A%20%E2%80%93%20ALL-ELECTRIC%20REACH%20CODE%20ORDINANCE.pdf?meetingId=2138&documentType=Agenda&itemId=4397&publishId=6815&isSection=false), [Piedmont](https://ci.piedmont.ca.us/government/city_news___notifications/council_to_consider_reach_codes_july_20th), [San Anselmo](https://sananselmo-ca.granicus.com/MetaViewer.php?view_id=1&clip_id=411&meta_id=67297), [Burlingame](https://burlingameca.legistar.com/LegislationDetail.aspx?ID=4584168&GUID=90C1DDF2-D966-40B5-97FE-4B293A8F97A2), [Santa Cruz](http://scsire.cityofsantacruz.com/sirepub/mtgviewer.aspx?meetid=1360&doctype=AGENDA), [Hayward](https://hayward.legistar.com/LegislationDetail.aspx?ID=4345454&GUID=25134FC7-B7A3-4060-955A-F7A30A27567A), [Richmond](http://sireweb.ci.richmond.ca.us/sirepub/cache/2/5pod14htlky31xjs4h4iy21r/58235502242020101430928.PDF), [San Mateo County](https://sanmateocounty.legistar.com/LegislationDetail.aspx?ID=4321430&GUID=A74A5241-F81C-4E04-8714-3348F847AC99), [Campbell](https://www.ci.campbell.ca.us/AgendaCenter/ViewFile/Agenda/_02042020-2039), [San Francisco](https://sfgov.legistar.com/View.ashx?M=F&ID=8911593&GUID=A0CEC5DB-30DE-4576-AAAD-6BF8266CC67C), [Los Altos Hills](https://losaltoshills.granicus.com/MetaViewer.php?view_id=2&event_id=436&meta_id=87172), [Cupertino](http://cupertino.legistar.com/gateway.aspx?M=F&ID=5ca87afb-cc24-4227-85aa-778a08d835f3.DOCX), [Los Gatos](https://meetings.municode.com/d/f?u=https://mccmeetings.blob.core.usgovcloudapi.net/losgatos-pubu/MEET-Packet-caf242554dd246b79dddf7365c1a494e.pdf&n=AgendaPacket-Council%20Meeting-December%2017,%202019%207.00%20PM.pdf), [Healdsburg](http://healdsburgca.iqm2.com/Citizens/FileOpen.aspx?Type=1&ID=1927&Inline=True), [Brisbane](http://brisbaneca.org/sites/default/files/CCAR20191121_Ord643_CH.pdf), [Saratoga](https://legistarweb-production.s3.amazonaws.com/uploads/attachment/pdf/473928/Attachment_A_Ordinance_FINAL.pdf), [Mill Valley](https://cityofmillvalley.granicus.com/MetaViewer.php?view_id=2&clip_id=1436&meta_id=67837), [Pacifica](https://pacificacityca.iqm2.com/Citizens/FileOpen.aspx?Type=1&ID=1273&Inline=True), [Santa Rosa](https://santa-rosa.legistar.com/Calendar.aspx), [Milpitas](https://mccmeetingspublic.blob.core.usgovcloudapi.net/milpitas-meet-2a8c785448b74b47bb16545f9745bd65/ITEM-Attachment-001-0e272f66c0ff44abb9efbcf4bfc9074b.pdf), [Alameda](https://alameda.legistar.com/LegislationDetail.aspx?ID=4205739&GUID=4C03354A-091F-448E-9407-B2C1907DC29A), [Palo Alto](https://www.cityofpaloalto.org/civicax/filebank/documents/73790), [Morgan Hill](http://morganhillca.iqm2.com/Citizens/Detail_LegiFile.aspx?Frame=&MeetingID=1821&MediaPosition=2725.237&ID=2508&CssClass=), [Mountain View](https://mountainview.legistar.com/LegislationDetail.aspx?ID=4198030&GUID=9A1AB443-F524-4487-8E8E-07BEE56C3C83&Options=&Search=), [Marin County](http://www.buildingdecarb.org/uploads/3/0/7/3/30734489/reach_code_overview_september_2019__002_.pdf), [Davis](https://drive.google.com/file/d/0B1CjIKwIjNVhZkJtNjJMdUVuZ0h5M0JaN2tsS1o4RHhOSG5z/view?usp=sharing), [San Jose](https://sanjose.legistar.com/View.ashx?M=F&ID=8945019&GUID=B8ED8E96-E24F-4095-9BB6-D542081A0118), [Menlo Park](https://www.menlopark.org/DocumentCenter/View/22773/F5---20190910-Intro-reach-code-ord---CC?bidId=), [Santa Monica](http://santamonicacityca.iqm2.com/Citizens/Detail_LegiFile.aspx?Frame=&MeetingID=1192&MediaPosition=&ID=3681&CssClass=), [San Mateo](https://www.cityofsanmateo.org/DocumentCenter/View/82369/Agenda-Report---Building-Electrification-Reach-Codes), [San Luis Obispo](https://www.slocity.org/home/showdocument?id=23818), [Windsor](https://drive.google.com/file/d/1yfCNuSH5KtbCRYgO-i0QU2_Fgyy104t3/view), [Berkeley](https://www.dropbox.com/s/2e2bmk8gtlvcjku/2019-12-3%20Agenda%20Packet%20-%20Council%20-%20WEB.pdf?dl=0), and [Carlsbad](https://www.carlsbadca.gov/services/depts/pw/environment/cap/waterheat.asp).

The state of California and our local cities continue to use their opportunity to “reach” for what science and citizens are demanding to address the climate crisis.

* **State of California -** City and county leadership is essential for local climate action but also to help drive the California Energy Commission(CEC) to require or at least support all-electric new construction in the [statewide building code (Title 24](https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards)).  CEC updates these building codes every 3 years. The 2019 version went into effect January 1, 2020. The CEC is now working on the version for 2022 [to go into effect on January 1, 2023]. Local electrification policy and advocacy is pushing for more-ambitious statewide building codes that align with climate science and require all-electric new construction.
* **Contra Costa County, CA-** The County passed a Climate Emergency Resolution (CER) Sept 2020, that includes the language: “BE IT FURTHER RESOLVED that Contra Costa County should develop policies to require all new construction to be fully electric through the adoption of reach building codes” <https://www.contracosta.ca.gov/DocumentCenter/View/68175/County-Unanimously-Passes-Emergency-Climate-Resolution>

Beyond California

As in this 2016 [paper](https://www.sciencedirect.com/science/article/pii/S1040619016301075%22%20%5Ct%20%22_blank) on environmentally beneficial electrification: “Widespread electrification is not only coming, it is likely necessary to decarbonize the global economy. Mounting research suggests that aggressive electrification of energy end uses -- such as space heating, water heating, and transportation -- is needed if the United States and the world are to achieve ambitious emission reduction goals for carbon dioxide” –National Renewable Energy Lab (NREL)

* **New York City –** Fossil fuel hookups will be phased out in new construction by 2030 or sooner**.** By banning fossil fuel hookups, New York will be “literally ensuring that our only choice is renewable energy,” de Blasio said in his 2021 state of the city address. [**https://www.naturalgasintel.com/new-york-city-to-ban-new-gas-hookups-by-2030-as-de-blasio-calls-to-renounce-fossil-fuels-fully/**](https://www.naturalgasintel.com/new-york-city-to-ban-new-gas-hookups-by-2030-as-de-blasio-calls-to-renounce-fossil-fuels-fully/)
* **Brookline, Massachusetts** (a suburb of Boston) Passed a ban on natural gas hookups in new buildings in 2019 on a town meeting vote of 207 to 3, but the state’s attorney general[struck down](https://www.boston.com/news/local-news/2020/07/22/maura-healey-brookline-oil-gas-ban-ruling) the ban because their state law preempted the city’s ordinance. California’s constitution, on the other hand, allows city regulations to exceed the state, allowing California cities to lead on this issue. <https://www.wbur.org/cognoscenti/2019/12/02/brookline-bylaw-gas-ban-frederick-hewett>

**Arizona, Tennessee, Oklahoma and Louisiana-** all passed laws in 2020 to prohibit local governments from adopting municipal electrification measures or natural gas bans. There is also a bill in Texas supported by utilities. Many of these are being challenged in the courts. This is a national fight and forward-thinking municipalities are on the right side of history.

**HOW?**

There is no need to reinvent the wheel. There are numerous best case examples of how cities are incorporating electrification in its policies. Reach out to your elected officials:

* General Plan Updates is great opportunity to add language to direct future building construction. [https://coda.io/@gazoe-siegel/demistifying-general-plans](https://coda.io/%40gazoe-siegel/demistifying-general-plans)
* Building codes and ordinances are also updated periodically <https://www.sierraclub.org/articles/2021/01/californias-cities-lead-way-gas-free-future> .
* Cities can also put this language in their Climate Action Plans; and pass a
* Climate Emergency Resolution. <https://cccclimateleaders.org/issue-of-the-month/climate-emergency/>

Additional Resources

* The Building Electrification Institute envisions a world where we no longer burn fossil fuels in our buildings <https://www.beicities.org/about>; [Peninsula Clean Energy](https://www.peninsulacleanenergy.com/%22%20%5Ct%20%22_blank) (PCE), [Silicon Valley Clean Energy](https://www.svcleanenergy.org/%22%20%5Ct%20%22_blank) (SVCE) and the [San Mateo County Office of Sustainability](https://www.smcsustainability.org/%22%20%5Ct%20%22_blank) (OOS) have joined together <https://peninsulareachcodes.org/> to reduce greenhouse gas (GHG) emissions within their service territories by developing forward-thinking building and transportation electrification reach codes.

Funding:

* In support of municipalities and counties in PCE & SVCE service territory, PCE & SVCE are providing extensive technical assistance plus a $10,000 incentive to each city that brings reach codes to their council. <https://peninsulareachcodes.org/>
* Contra Costa to receive $223 Million Dollars under the American Rescue Plan. Read about the basics and background [Here](https://www.counties.org/csac-bulletin-article/president-biden-signs-covid-19-relief-package-including-76-billion-federal) and get more details on the $ specifics in this Summary Table by County [here](https://www.naco.org/resources/featured/state-and-local-coronavirus-fiscal-recovery-funds#table).

Some good local resources for Residents and advocates can be found here:

* This resource includes a lot of background, as well as petitions, and sample letters for. <https://350bayarea.org/its-critical-and-possible-to-stop-using-natural-gas-in-the-bay-area>
* And Residents who want to write to their local elected officials, can use these template letters that include excellent arguments for a strong electrification “reach” code in your city: <https://ccag.ca.gov/wp-content/uploads/2019/09/6.4-Reach-Code-Letters-of-Support.pdf>

*“Sometimes we are lucky and get to participate in a movement with a big effect. Forming Peninsula Clean Energy was one of those events. You have another opportunity with the REACH codes. A building lasts 50 years. A REACH code now saves 50 years of burning gas”.*