



IDEAS Z2 Design Facility, San Jose (Credit: David Wakely)

Natural Gas Prohibition Expansion

San José City Council
November 17, 2020

Presented by Kerrie Romanow, Director, ESD
Ken Davies, Deputy Director, ESD
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Why Expand the Ban on Natural Gas?

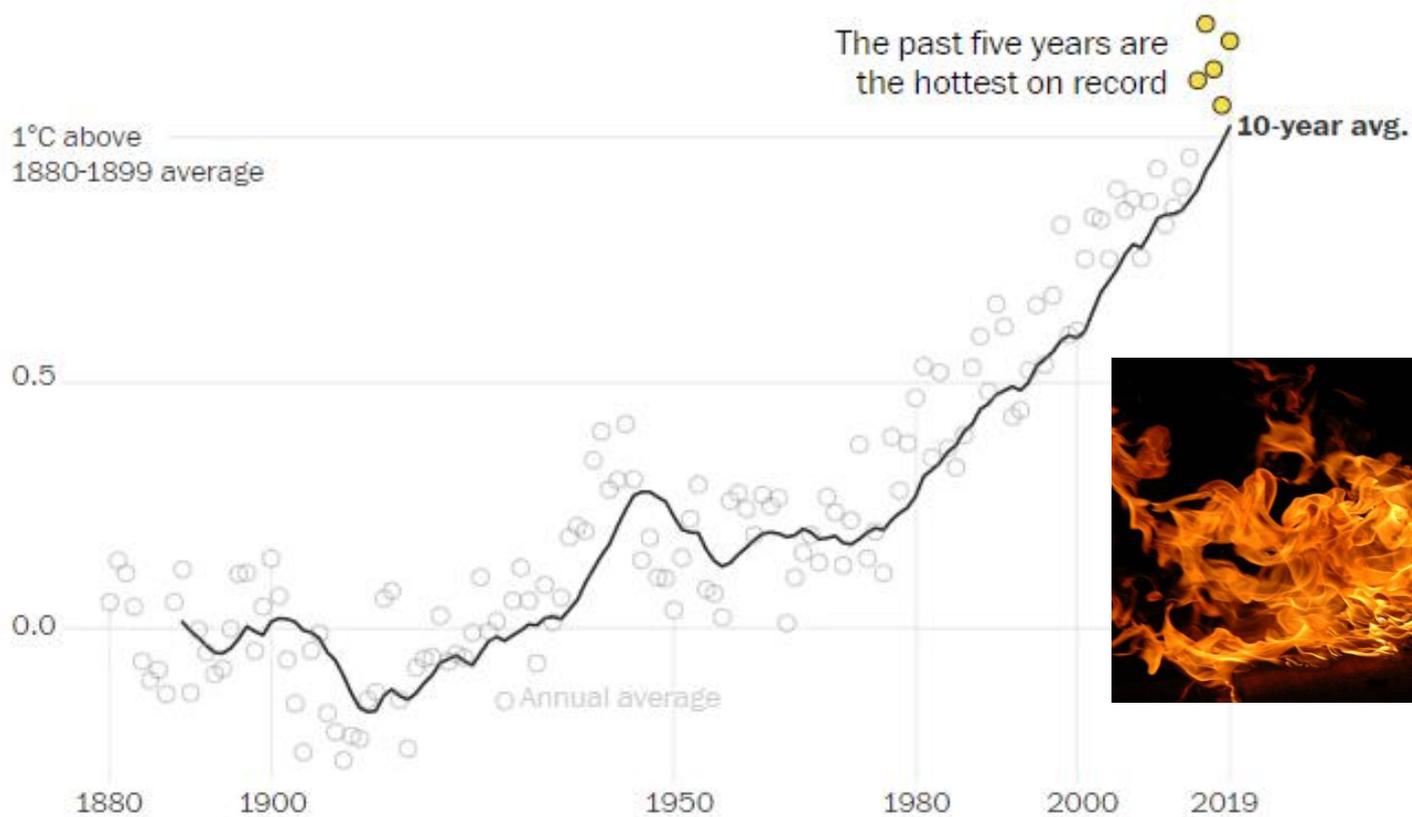
- Natural Gas:
 - Is primarily methane – a powerful GHG!
 - Produces harmful byproducts when combusted
 - Escapes from extraction and transmission facilities
- Timing is urgent:
 - The Climate Crisis is accelerating
 - Progress on Climate Smart and American Cities Climate Challenge goals

“There is a growing consensus that building electrification is the most viable and predictable path to zero-emission buildings.”

California Energy
Commission

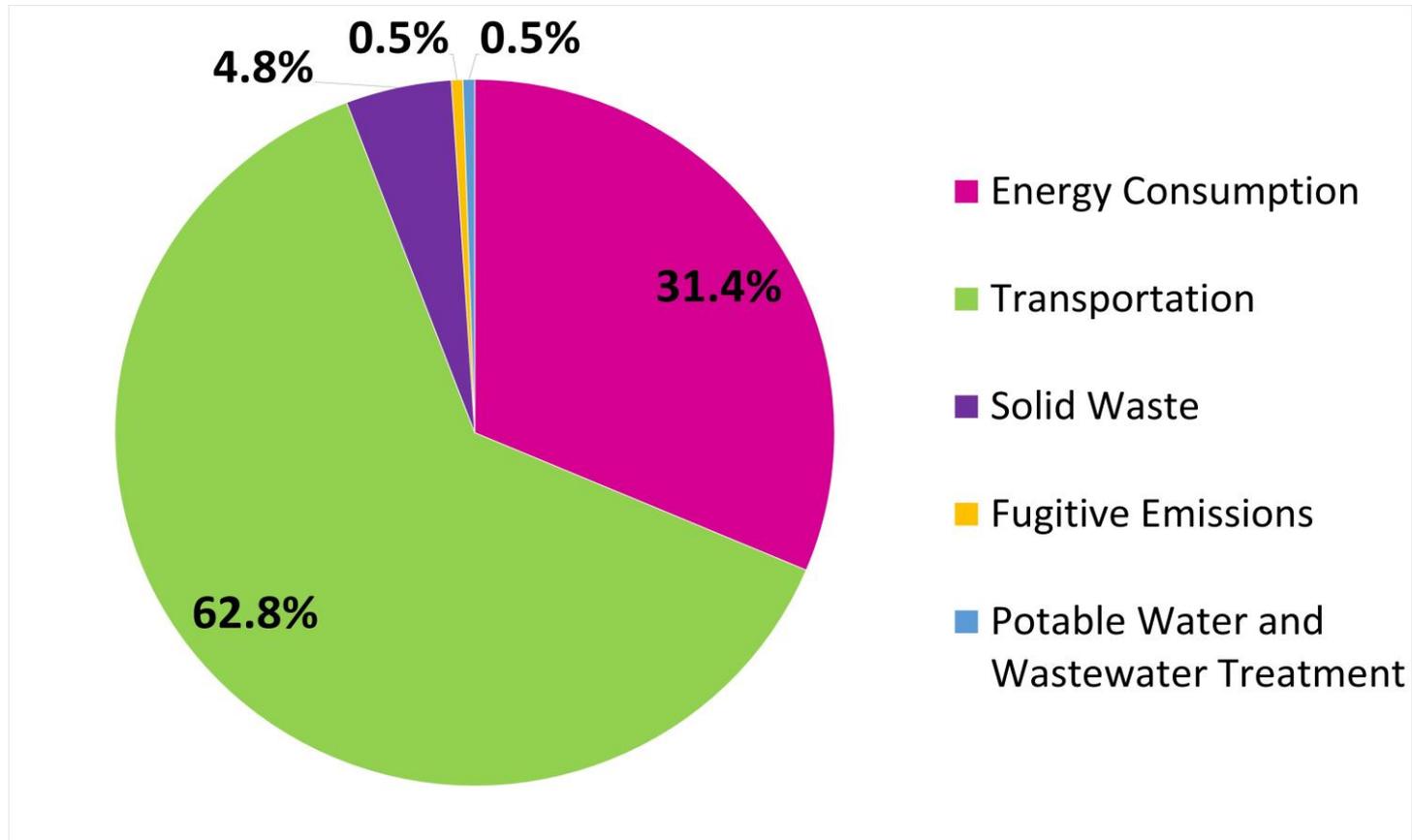
*2018 Integrated Energy Policy
Report Update (Jan. 2019)*

2010s = Hottest Decade EVER!



Source: NASA's Goddard's Global Surface Temperature Analysis (GISTEMP)

San José 2017 GHG Emissions Profile



CLIMATE SMART SAN JOSE

A People-Centered Plan for a
Low-Carbon City



How will the natural gas ordinance will help us reach our Climate Smart goals?

- All-electric homes: 47%
- Zero net carbon (ZNC) homes: 37,975
- ZNC commercial buildings: 70M sq. ft.
- EVs: 61%
- Solar: 668 MW
- Results in cost-effective, safer, and healthier buildings
- Preempts future retrofitting costs
- Pathway for significant emissions reductions

San José Electrification Reach Code & Natural Gas Ban

- Adopted September 17, 2019
- Natural Gas Prohibition
 - Adopted October 29, 2019
 - Applies to Single-Family, Detached ADUs, and Low-rise Residential buildings up to 3 stories
- Council Direction
 - Return to Council in 2020 with analysis on expanding the Gas Ban to all buildings



Stakeholder Engagement Summary

- City reach code webpage
- Over 65 stakeholders and 200 Neighborhood Associations included in outreach efforts
- Five stakeholder engagement workshops (July-Oct 2020)
- Four additional public presentations
- Individual project meetings, as requested
- Technical Assistance



Health & Safety Benefits



Credit: Inaglory, Brocken <https://commons.wikimedia.org/w/index.php?curid=11488373>



Credit: MisterOh <https://commons.wikimedia.org/w/index.php?curid=11469838>



Indoor Air Quality



Financial Benefits

All-electric buildings are a low-cost construction option

Many are already being built in California...



Quetzal Gardens, San Jose



Santana Row, San Jose



Linda Vista, Mountain View



200 Park
San Jose, CA
937,000 SF Office
Developer: Jay Paul
Architect: Gensler

...and more
are coming to
San José!



CityView
San Jose, CA
3,800,000 SF Office
Developer: Jay Paul
Architect: Gensler
MEP: PAE

Cost-Effectiveness Study

- Report concludes that all-electric, high-rise multifamily buildings are cost effective in San José based on the CEC's definition
- Study uses a “clustered” approach where water heating is provided by a distributed set of heat pump water heaters (HPWHs) each serving a handful of units in a 12-story building



Title 24, Parts 6 and 11
Local Energy Efficiency Ordinances

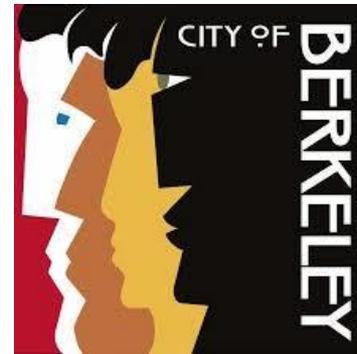
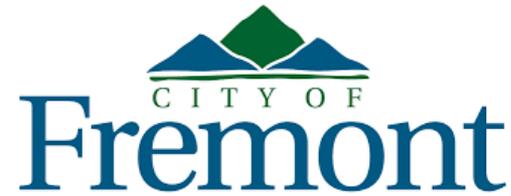
**2019 High-Rise Residential New
Construction Reach Code Cost-
Effectiveness Study
For the City of San Jose (Climate Zone 4)**



Affordable Housing

“First Community Housing strongly supports the goals of the City in electrifying buildings as a way to mitigate climate change. The Roosevelt Apartments project was FCH’s first all-electric building and understanding the requirements of the City’s new Reach Code, special considerations for all-electric design, and how to navigate the CEC’s compliance software would not have been possible without the ready assistance of City staff, and the technical assistance made easy by Nick Young of AEA, the City’s partner through the American Cities Climate Challenge.”

Regional All-Electric Efforts



“Switch is On” Campaign

- Campaign to encourage residents to electrify their homes
- Partnering with other local government agencies, electricity providers, and the Building Decarbonization Coalition
- Planning began in May 2020. Campaign scheduled to launch mid-November.
- Target audience is single family homeowners, including early EV and solar PV adopters, and residents from underserved and low-income communities, as well as multi-family property owners.
- Messaging in English, Spanish and Vietnamese through the website and ad collateral, including digital advertisements and videos, radio, mailers



**BUILDING
DECARBONIZATION
COALITION**



Post-adoption Implementation Actions

- Provide trainings and resources for City staff and the public
- Work closely with projects permitted since January 1, 2020 (code interpretation and tech support – funded thru ACCC)
- Support expansion of CEC compliance options for centralized HPWH systems
- Pursue funding opportunities to incentivize all-electric buildings, EVs, and EVCI in San José
- Collect and report data on the reach code impact (gas v. electric, until full gas ban in place)





www.ClimateSmartSJ.org

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