Building Electrification Policies for Multifamily Construction

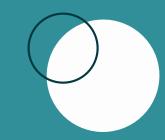


San Mateo City Council July 20, 2020



Building Electrification

- All-electric buildings are constructed without natural gas service
- Electric appliances and systems for space heating, water heating, clothes drying and cooking



Reach Codes



"Reach Codes" are local amendments to the State Energy Code and Green Building Code

LEGAL REQUIREMENTS

- must be cost-effective
- must be at least as stringent as the State Energy Code
- must be approved by the California Energy Commission
- must be adopted with local findings
- must be re-approved with every code cycle

City's Adopted Electric Preferred Reach Codes

SINGLE FAMILY AND DUPLEX

Two compliance pathways:

- 1) All-electric 0%
- 2) Mixed-fuel 15%

BUILDINGS WITH OFFICE USE

Two compliance pathways:

- 1) All-electric 0%
- 2) Mixed-fuel 10%

Policy Options

Reach Code:

Electric

Preferred

Reach Code:

All-Electric

Pathway

Required

Muni

Ordinance:

Prohibition of

Natural Gas

Infrastructure

Electric Preferred Reach Code

LOW-RISE MULTIFAMILY (3 STORIES OR LESS)

Two compliance pathways:

- 1) All-electric 0%
- 2) Mixed-fuel 0.5 Efficiency Energy Design Rating Margin*

*(roughly 5% compliance margin)

MID-RISE MULTIFAMILY (4-7 STORIES)

Two compliance pathways:

- 1) All-electric 0%
- 2) Mixed-fuel 5%

All-Electric Required Reach Code

LOW-RISE MULTIFAMILY
(3 STORIES OR LESS)

All-electric building required

MID-RISE MULTIFAMILY (4-7 STORIES)

All-electric building required

Muni Ordinance

ALL MULTIFAMILY BUILDINGS

- Prohibits new natural gas infrastructure in new construction
- Triggered by entitlement process

SIC Feedback



- Electric Preferred Reach Codes offer the most flexibility and offers incentive-based approach
- Directed staff to solicit feedback from developers before City Council Study Session

Stakeholder Feedback



• Electric Preferred Reach Codes offer the most flexibility and offers incentive-based approach

ALL-ELECTRIC MANDATE CONCERNS

- Challenges with heat pump hot water systems for multifamily
- Consumer demand for gas stovetops
- Need for natural gas for commercial kitchens

Policy Discussion



- Cost-effectiveness
- Opportunity to customize ordinance by building type
- Lawsuits against all-electric mandates
- Reach Codes vs. Municipal Ordinance



Feedback and direction needed

1) Policy options that encourage or require building electrification in new multifamily construction

2) Interest in revising the City's adopted Electric Preferred Reach Codes for other building types ___