## Municipal Building Sector Natural Gas Limitations in the United States

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## Introduction

#### Client: Public Service Commission of the District of Columbia

#### **Primary Research Question**

• What municipal limitations on residential and commercial natural gas have been enacted or proposed in the US and what similarities or differences exist between the proposals that have been pursued?

#### Secondary Research Questions

- What is the current landscape of natural gas distribution infrastructure limitation policies in the United States?
- For policies of interest for the case study, what impacted legislative and regulatory proceedings of the proposals?

#### Methodology

- Policy analysis
- Stakeholder Interviews
- Selection of case study cities for in-depth review

## Outline

#### •Case Study Discussion

- California
  - Berkeley
  - San Jose
  - Davis
- Massachusetts
  - Brookline
- Washington
  - Seattle

#### Analysis

#### Outlook

CALIFORNIA END USE GREENHOUSE GAS EMISSIONS<sup>1</sup>



Source: California Energy Commission (2017)

### California Regulatory Overview

- California Building Energy Efficiency Standards for Residential and Nonresidential Buildings under Title 24, Part 6 of the California Code of Regulations.
  - Lead Agency: California Energy Commission (CEC)
- •Municipalities are encouraged to pursue and enact local ordinances that are more stringent than state requirements, known as "reach codes"
- •To date, 30 cities in California representing 10% of state's populations in California have enacted a reach code
- •Nine California reach codes approved by the CEC and currently in force prohibit natural gas infrastructure in certain building applications

### Berkeley, California Case Study

#### **Political Landscape**

- First in the nation natural gas ban
- Berkeley Climate Action Plan
- Climate emergency and fossil fuel-free declaration
- Natural gas 27% of city GHG emissions and 73% of building sector emissions

#### **Policy Summary**

- Ordinance July 16, 2019
  - Bans natural gas hookups in residential construction
  - Commercial ban applies to building types deemed by CEC as suitable for electrification and shown to be cost effective
  - Planning staff
- Supplemental reach code Dec 3, 2019
  - All-electric or mixed fuel construction that is electrification ready
  - Applies to building types not yet modeled by CEC and buildings that gain exemptions from the ban

## Berkeley Ordinance & Reach Code Development Process

### July 9th 2019 Original **Proposal**

Full ban

Exemption for gas tanks

### July 16th 2019 Ordinance

Partial ban with additional building types added based on CEC modeling

Exemption for gas tanks removed

Public interest exemption added

### December 3rd 2019 Reach Code

Added electrification readiness Cover buildings not covered under ordinance

## Berkeley, CA: Stakeholder Engagement

Dec. 3, 2019 Comments Supporting Reach Code In Addition to Existing Ordinance



### San Jose, California Case Study

#### **Political Landscape**

- Climate Smart San Jose
  - Ambitious emissions reduction targets, including building sector emissions
- Bloomberg American Cities Challenge Grant

#### **Policy Summary**

- Reach Code adopted September 17, 2019
  - Energy efficiency-only included director to staff to return with natural gas prohibition ordinance
- Supplement to reach code adopted October 29, 2019
  - Prohibits natural gas infrastructure in all new residential construction below 7 stories
- California Energy Commission approved San Jose reach code on December 11, 2019
- Effective January 1, 2020

### San Jose Reach Code Development Process

#### Initial Proposed Reach Code (July 10, 2019)

• Energy efficiency requirements above CA base code across all mixed fuel building types

#### Reach Code Introduction (September 9, 2019)

- Revised energy efficiency requirements (lower compliance margin than July 10 proposed reach code)
- Electrification-readiness requirement across all mixed fuel building types

#### Initial Adopted Reach Code (September 17, 2019)

- Energy efficiency compliance margins restored to levels near July 10 proposal
- Council staff directed to return with ordinances prohibiting natural gas in low-rise residential buildings and municipal buildings

#### Final Reach Code with Supplemental Natural Gas Prohibition Ordinance (October 29, 2019)

- Energy efficiency compliance margin restored to levels near July 10 proposal
- Council staff directed to return with ordinances prohibiting natural gas in low-rise residential buildings and municipal buildings

#### San Jose Mayor Memo to City Council (September 13, 2019)

- Advocated for:
  - Natural gas ban in residential buildings
  - Return to July 10 compliance margin levels

## San Jose, CA: Stakeholder Engagement

Environmental community dominated public record

Regional collaboration

## Mayoral intervention

### Davis, California Case Study

#### **Political Landscape**

- Affordable Housing Crisis
- Climate Emergency Resolution (March 5, 2019)
  - Carbon Neutrality by 2040
- Davis has adopted reach codes every cycle since 2008

#### **Policy** Summary

- Reach Code adopted Oct 8, 2019
- New construction must be approximately 15% more efficienct than CA base code and electrification ready
- The city estimates mixed fuel buildings meeting these requirements will be more expensive to build than fully electric buildings

## Davis, California Justification for Incentive Based Policy

01

Simplify green building requirements 02

Avoid exacerbating affordable housing crisis

03

Avoid opposition in building community

04

Avoid possible litigation

### Davis Stakeholders



## Massachusetts State Overview

### **Climate Objectives**

- Reduce GHG emissions:
  - 10-25% below statewide 1990 levels by 2020
  - 80% below statewide 1990 levels by 2050
- Massachusetts' Renewable Portfolio Standard
- Greener state building code

### Policies

- 2008 Global Warming Solutions Act
- 2008 Green Communities Act
- 2020 Clean Energy and Climate Action Plan

### Brookline, Massachusetts Case Study

### Policy Summary

- Prohibits natural gas infrastructure in *all new construction* and *major renovation projects* for commercial and residential buildings in Brookline, with some exemptions for medical infrastructure, cooking, among other exemptions.
- Effective January 1, 2021.
- Legality currently pending review from the Attorney General of the Commonwealth of Massachusetts

### Brookline Warrant Article Development Process

Citizen Proposal	Community Feedback Sessions	Town Meeting	Pending Approval of State Attorney Genera	
July 2019 No exemptions	August – September 2019 Feedback led to narrowed policy & new exemptions	November 2019 Passed by 211-3 vote	February 2020 Progress stalled	
Policy Exemptions Added   Medical facilities Medical research facilities			Opposition coalities submitted request	<b>on</b>
Renovations of more than 75% of property Back-up generators	Waldo- Durgin Development Project Cooking purposes		Developers Shopping Real Estate Retail Energy Restaurants Providers	)

## Brookline, MA: Stakeholder Engagement

Environmental Community	Homeowners	Local Culinary Industry	Developers
Real Estate	Energy Providers	Medical Research Community	Architects

## Washington State Overview

### **Climate Objectives**

- Overall goal: 25% reduction in CO<sub>2</sub> pollution levels by 2035
- Specific targets: clean electricity generation, EV adoption, limiting hydrofluorocarbons, reducing building emissions

### Clean Buildings Act

- Reduce emissions from commercial buildings
- Currently account for 27% of state's carbon pollution

### Seattle, Washington Case Study

#### Political Landscape

- Historically Climate Progressive City
  - Net-zero GHG target by 2050
- Seattle Climate Action Plan
  - Reduce residential and commercial building emissions by 32% and 45% respectively

#### **Policy Summary**

- City Council ordinance proposed in September 2019
- Would prohibit natural gas infrastructure in all new buildings
- Waiver process for certain infrastructure
- Two committee meetings held to hear public feedback on September 10 and September 17, 2019
- Issue currently pending before Sustainability and Renters' Rights Committee

## Seattle, WA: Stakeholder Engagement



Lack of critical	Rushed	
analysis	proposal	
anarysis	process	

### Common Policy Concerns





#### Public Comments to California Energy Commission

### Example: Public Comments to California Energy Commission

### **Contextual Factors**

Climate change concerns superseded other considerations Rapid legislative process = less opposition in most case study cities Limiting options for future residential construction is a concern

Local utility organization important factor in stakeholder support/opposition

Cooperative regional efforts sought by neighboring cities State regulatory structures and legal authorities can impact municipal policy

## Policy Design

### **Less Stringent**

### **More Stringent**



## Study Limitations

 Availability of data limited to jurisdictions that have pursued a reach code

 Report engaged wide variety of stakeholders and policymakers, but not all interested parties were able to provide comment

• COVID-19 pandemic exacerbated this issue

# Outlook

Momentum to prohibit natural gas will continue to grow, especially in climate-focused cities

City-specific contextual factors are critical

Future policy design not limited to strategies pursued by cities covered in this report