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 Regulatory Overview

  - 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

Source: California Energy Commission (2017)
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

- Fire Department Safety Recommendations
- Government Agency Support
- Public Support
- Business Cost Effectiveness Concerns
- Pacific Gas & Electric Support
- Restaurant Association Lawsuit
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- Restaurant Association Lawsuit

![Bar Chart]
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
- Limited opposition
- Supportive local utility
- 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 efficient 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

- Chamber of Commerce
- Cool Davis Support
- Lack of Engagement from Building Community
- Public Support
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
- July 2019
- No exemptions

Community Feedback Sessions
- August – September 2019
- Feedback led to narrowed policy & new exemptions

Town Meeting
- November 2019
- Passed by 211-3 vote

Pending Approval of State Attorney General
- February 2020
- Progress stalled

Policy Exemptions Added
- Medical facilities
- Renovations of more than 75% of property
- Back-up generators
- Medical research facilities
- Waldo-Durgin Development Project
- Cooking purposes

Opposition coalition submitted request
- Developers
- Real Estate Energy Providers
- Shopping
- Retail
- Restaurants
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 CO₂ 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

- Limited local support
- Strategic utility opposition
- Strong concerns about job loss
- Lack of critical analysis
- Rushed proposal process
Common Policy Concerns

- Energy Choice
- Reliability
- Cost
- Climate
- Public Health
- Public Safety
- Housing Affordability
- Alternative Technologies
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

- Davis: Electrification Incentives
- San Jose: Residential Ban
- Berkeley: Full Ban With Cost-Effectiveness Exceptions
- Brookline: Full Ban With Limited Exceptions
- Seattle: Full Ban With Waiver Process

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