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Municipal Bans on Natural Gas Hookups/ All-Electric Construction Codes

In New York Towns & Cities

Amy E. Turner
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Associate Research Scholar, Columbia Law School

New Yorkers for Clean Power

January 28, 2021

Why Ban Natural Gas (or Electrify Buildings)?

- Buildings account for about 40% of U.S. energy use and greenhouse gas emissions (and more than that in some urban areas).

- Building electrification is one of three key components to decarbonizing the building sector: (1) energy efficiency; (2) electrification of 100% of building systems; and (3) transition the electricity grid to 100% clean or renewable sources.

- New buildings are a great place to start – it's cheaper to build electric than to electrify later.

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What is a Legal Pathway?

Legal pathway □ a law or set of laws and legal tools that can be used to advance an identified policy goal.

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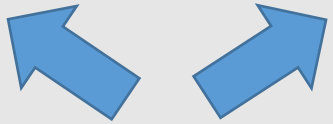
A Note on Terminology

“Natural gas ban” **(or other more politically-palatable term)**		**“All-electric construction code”**
Umbrella term for policies that prohibit or restrict natural gas connections for new and/or renovated buildings	 **These are functional equivalents**	Range of construction code requirements and structures that require or incentivize all-electric construction A version of a natural gas ban

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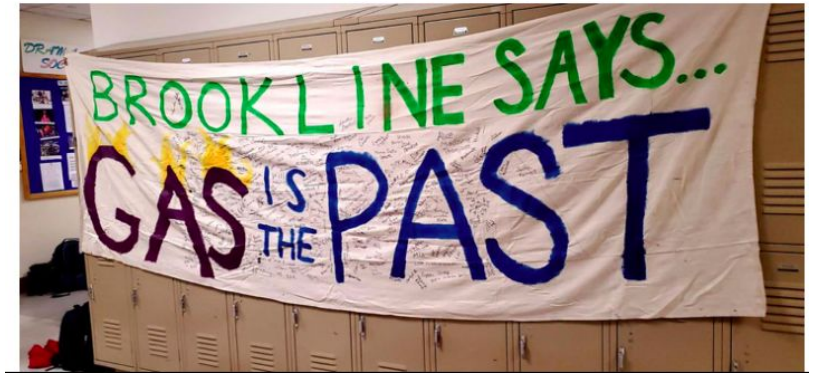
Legal Pathway #1: Municipal Home Rule/ Police Powers

Berkeley first city in California to ban natural gas in new buildings

The city of Berkeley will no longer allow natural gas pipes in many new
. 1, 2020. It's the first city in California to pass such a

In a first for Massachusetts, Brookline votes to ban oil and gas pipes in new buildings

By David Abel Globe Staff, November 20, 2019, 9:16 p.m.



Municipal Home Rule Authority in MA includes local laws:

(1) For directing and managing their prudential affairs, preserving peace and good order, and maintaining the internal police.

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(18) For regulating the inspection, materials, construction, installation, alteration or use of pipes, fittings and fixture through which gas is supplied within buildings and other structures.

Mass. G.L. Ch. 40 Sec. 21

Legal Pathway #1: Municipal Home Rule/ Police Powers

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In a first for Massachusetts, Brookline votes to ban buildings

By David Abel Globe Staff, Nove

AG rejects Brookline's ban on oil, gas pipes in new buildings

By David Abel Globe Staff, Updated July 21, 2020, 3:31 p.m.

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Municipal Home Rule Authority in MA includes local laws:

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Legal Pathway #2: Local Building Code Authority

San Jose Becomes First Major US City to Ban Natural Gas in New Construction

Harrison Kral

To fight climate change, California cities look to ban natural gas

Amy Harder, author of Generate

Santa Rosa latest in North Bay to move toward ban on natural gas in new home construction

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Local Building Codes – Example

Santa Monica Ordinance 2617 (2019)

High-rise building requirements (Sec. 8.36.030):

(a) All-Electric Buildings. All new all-electric high-rise residential, non-residential, and hotel and motel buildings shall be designed to code established by the 2019 California Energy Code.

(b) Mixed-Fuel Buildings.

i. All new mixed-fuel non-residential buildings shall be designed to use ten percent less energy than the allowed energy budget established by the 2019 California Energy Code.

ii. All new mixed-fuel high-rise residential and hotel and motel buildings shall be designed to use five percent less energy than the allowed energy budget established by the 2019 California Energy Code.

- Other building typologies that are not built electric have different requirements.
- See White paper by Caitlin McCoy, *The Legal Dynamics of Local Limits on Natural Gas Use in Buildings*

Pathways as Applied in New York State

- Legal Pathway #1 – Municipal Home Rule and Police Powers
- Legal Pathway #2 – Local Building Code Authority

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Pathways as Applied in New York State (Pathway #1: MHR/Police Powers)

(i) every local government shall have power to adopt and amend local laws not inconsistent with the provisions of the constitution or not inconsistent with any general law relating to its property, affairs or government and,

(ii) every local government, as provided in this chapter, shall have power to adopt and amend local laws not inconsistent with the provisions of the constitution or not inconsistent with any general law, relating to the following subjects:

(11) The protection and enhancement of its physical and visual environment.

(12) The government, protection, order, conduct, safety, health and well-being of persons or property therein.

N.Y. Municipal Home Rule Law Sec. 10

Pathways as Applied in New York State (Pathway # 2: Local Building Codes)

- NYS Energy Conservation Construction Code ("Energy Code") □ higher local standards **IF** "more stringent than the [state] code." (N.Y. Energy Law Sec. 11-109)
  - Local government must file code with NYS Fire Prevention and Building Code Council but may start enforcing right away and only stop if Council later determines local code is not more stringent than state code.
- NYS Uniform Fire & Building Code ("Uniform Code") □ higher local standards **IF** the "more restrictive standards are reasonably necessary because of special conditions prevailing within the local government." (N.Y. Executive Law. Sec. 379)
  - NYS Fire Prevention and Building Code Council decides; affirmative approval is needed for code changes to go into effect.

“Obligation to Serve”

Grist / Peter Dazeley / gerenme / Getty Images

DUTY BOUND

Does your state want to cut carbon emissions? These old laws could be standing in the way.

By Emily Pontecorvo on Aug 10, 2020

grist

”It is hereby declared to be the policy of this state that the continued provision of all or any part of such gas, electric and steam service to all residential customers without unreasonable qualifications or lengthy delays is necessary for the preservation of the health and general welfare and is in the public interest.”

NYS 2 Public Service L. § 30

“In the case of any application for service to a building which is not supplied with electricity or gas, a utility corporation or municipality shall be obligated to provide service to such a building, provided however, that the commission may require applicants for service to buildings located in excess of one hundred feet from gas or electric transmission lines to pay … material and installation costs.”

NYS 2 Public Service L. § 31(4)

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Other potential legal issues (for muni attys)

- U.S. EPCA preempts energy standards for many classes of appliances. Drafters should take care that any new building code provisions comply with exceptions to EPCA preemption.
- Environmental review claims – SEQRA.
- City attorneys should review applicable franchise agreements to ensure restrictions on natural gas development do not conflict with the franchise rights of natural gas franchisees.
- Additional legal considerations for municipalities with publicly-owned electric utilities.

Thank You!

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http://blogs.law.columbia.edu/climatechange/category/cities-climate-law-initiative/
http://blogs.law.columbia.edu/climatechange/2020/01/09/municipal-natural-gas-bans-round-1/
http://blogs.law.columbia.edu/climatechange/2020/07/29/municipal-natural-gas-bans-round-2-the-evolution-of-state-preemption-law/

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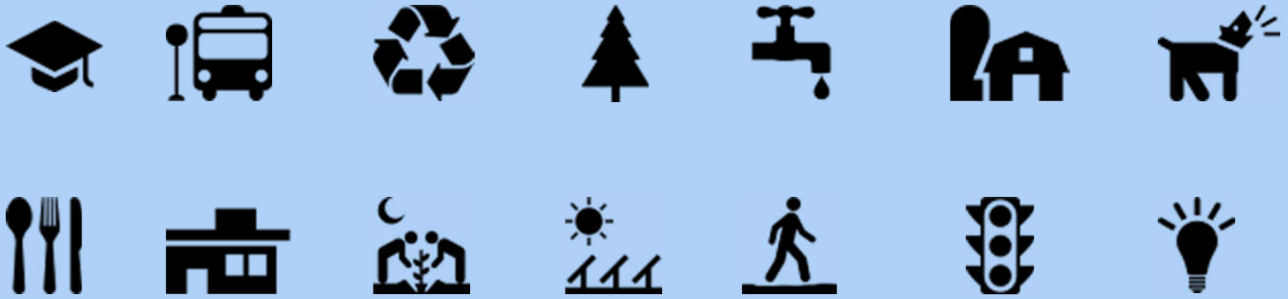
Promoting Electrification through the Ithaca Energy Code Supplement

NICK GOLDSMITH, SUSTAINABILITY COORDINATOR
TOWN OF ITHACA & CITY OF ITHACA

PRESENTATION FOR
NEW YORKERS FOR CLEAN POWER
JANUARY 28, 2021



Ithaca Green New Deal

Main Goals

- Achieve **carbon-neutrality community-wide by 2030**
- Ensure **benefits are shared** among all local communities to **reduce historical social and economic inequities**

CITY OF ITHACA
GREEN NEW DEAL
AN EQUITABLE TRANSITION TO CARBON NEUTRALITY BY 2030

Ithaca Energy Code Supplement

Requirements

Requirements

- 2021: 40% reduction in GHG emissions
  - Compared to state code and local practices
  - Must also comply with all NYS codes
- 2025: 80% GHG reduction
- 2030: Net-zero carbon buildings and no fossil fuels

Easy Path Overview

Six points are needed to comply.

Efficient Electrification

Affordability Improvements

Renewable Energy

Other Points

Easy Path Overview

Six points are needed to comply.

Efficient Electrification	
EE1 - Heat pumps for space heating	2 - 5 points
EE2 - Heat pumps for domestic hot water heating	1 point
EE3, EE4 - Other electrification	1 - 3 points
Affordability Improvements	
AI1 - Smaller building/room size	1 - 2 points
AI2 - Heating systems in heated space	1 point
AI3 - Efficient building shape	1 point
AI4 - Right-lighting	1 point
AI5 - Modest window-to-wall ratio	1 point
Renewable Energy	
RE1 - Renewable energy (non-biomass) system	1 - 3 points
RE2 - Biomass system for space heating	3 - 5 points
Other Points	
OP1 - Development Density	1 point
OP2 - Walkability	1 point
OP3 - Electric Vehicle Parking Spaces	1 - 2 points
OP4 - Adaptive reuse	1 point
OP5 - Meet NY Stretch Energy Code	1 - 2 points
OP6 - Custom energy Improvement	1 - 2 points

Thank You!

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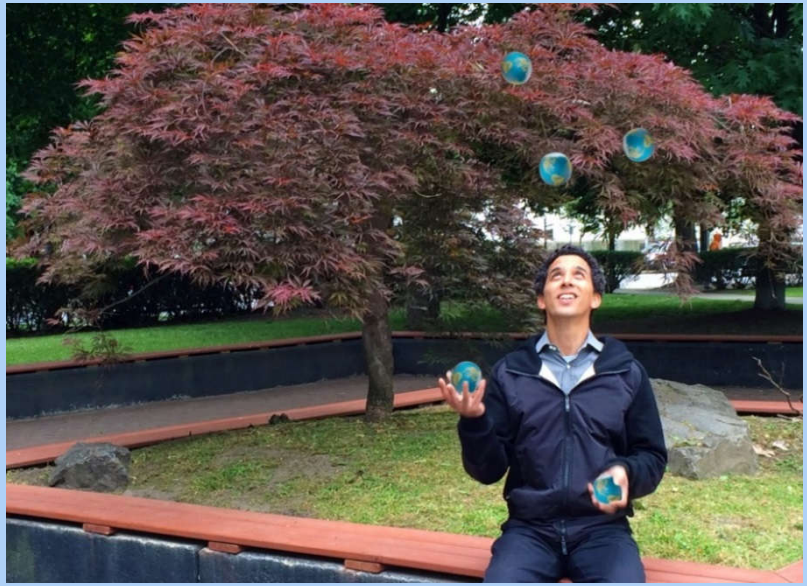

Info about Energy Code Supplement:
www.IthacaGreenBuilding.com

BUILDING DECARBONIZATION WITHIN LOCAL COMMUNITIES

MARK THIELKING

DIRECTOR OF ENERGY AND SUSTAINABILITY, TOWN OF BEDFORD

Introduction

- Town of Bedford's CO2 Reduction Experience and Future
- CLCPA Goals
- Local Government + De-Carbonization of Existing Buildings Project:
  - Bedford, Ithaca, Saratoga Springs
  - Columbia Sabin Center
  - Hodgson Russ LLP

Town of Bedford's Experience

- 2009: Community Wide Inventory (2004)
  - 68% Buildings/27% Trans/5% Waste
- 2010: 20% x 2020
  - Town + Bedford 2020/2030 Actions
    - Energize Bedford: 5% of homes
    - Solarize Bedford: <1% of homes
    - EIC Commercial PACE: 1 project
    - Heat Smart/Clean Heat: < 1% of homes
    - Composting/Recycling/Meatless Mondays
    - CCA: 60% of homes and small commercial

Town of Bedford's Experience

- 2019: 44% CO2 Reduction (2017 data)
  - 66%: contribution from buildings
  - 20%: contribution from transportation
  - 14%: contribution from waste
- Buildings:
  - 4% reduction in energy use
  - 64%: reduction in CO2 intensity NYUP Grid
  - 31%: reduction in CO2 intensity NYC/West Grid

Town of Bedford's Future

- 2020: 80% x 2030
  - Existing Buildings = 50% of emissions
    - Remaining Fossil Electricity = 13.7%
    - Fuel Use in Buildings = 36.3%
  - Transportation = 48% of emissions
- Problems heading to 2030
  - Transportation: cars passing through
  - Buildings: 73% of emissions from fuel use
    - Voluntary action: slow, expensive, not equitable
    - Our buildings are really bad!!

Climate Leadership Community Protection Act (CLCPA)

- 40x30 85x50 reductions and a carbon neutral economy
- 70% renewable energy 2030 (now 29%)
- 100% clean electricity by 2040
  - 9000mw offshore wind by 2035 < 30% of NYS demand
  - 6000 mw of dist solar 2025 < 2400 mw in Fall 2020
  - 3000 mw of energy storage by 2030
  - **185TBTu on site energy savings by 2025**
    - 1/3 of delivered carbon reductions
    - 23% improvement across building sector
    - OR decarbonize 1,600 commercial buildings, 67,000 residential units annually over 10 years

Local Government + De-Carbonization of Existing Buildings Project

Examination of Local Government Powers

Public Benefits = Protecting Citizens

- safe streets
  - police services and street improvements
- safe sidewalks
  - façade improvements and sidewalk improvements
- water quality
  - water filtration, water supply into buildings, sewage connections to treatment plants
- air quality
  - trash removal in place of on-site incineration, ban oil use in buildings

Local Government + De-Carbonization of Existing Buildings Project

Creating a new Public Benefit: Decarbonization of Existing Buildings

Local Priorities + Local Action

- Public Benefits are provided through local laws which require a local public process
  - Allows for local priorities and essential buy-in
- Must show a ”harm”
  - GHG Emissions
  - Pollution
  - Climate Change Threats
  - Lack of Economic Development and Jobs
    - Poor Competitiveness
  - Poor Indoor Health
  - Poor Affordability

Local Government + De-Carbonization of Existing Buildings Project

Applicable Models: Clean Water

Local Action + State Support = Clean Water

- State legislated mandates and State legislated support for Local Public Goods and Services
  - State and Federal Clean Water Mandates
    - Wastewater Treatment
    - Stormwater Management
    - Clean Drinking Water
- State Authority (EFC) provides assistance to Local Governments to build the local services that support the Public Benefit mandate in State and Federal law

APPLICABILITY: EXISTING BUILDING DECARBONIZATION BEDFORD POTENTIAL

CLEAN DRINKING WATER

- $21mm water filtration plant
  - EFC's Series 2013 Debt
  - 2137 Bedford connections
  - $660 avg a year on Tax Bill
    - @10% of Town tax bill
  - Pay separate water usage fee of $50-$150 per quarter

HIGH PERFORMANCE BUILDINGS

- $26.5mm cost for upgrades
  - (Resi only @ $12,400 per upgrade)
- 2137 housing units
  - 72% owner occupied
- $1001 per year on Tax Bill
  - 15yrs@ 2.5%

APPLICABILITY: EXISTING BUILDING DECARBONIZATION STATEWIDE NEED + POTENTIAL

NYS HOUSING STATS

- 7.6mm housing units
- 3.2mm Single Family Homes
- 1.78mm 1-4 attached units
- 2.6mm in 5+ unit buildings
- 6.23mm (88%) use fuels for heating
- 74% of all units built before 1969

NYS NEED

5mm units of SFH + 1-4 attached units

ASSESSMENTS:

- $400 per unit
- **$2 billion of capital needed**

UPGRADES:

- $12400 per unit
- **$62 billion of capital needed**[11]

Legislating Public Benefits + State support to reduce "harms" from poorly performing buildings

- **Rapid implementation**
- **Equitable application - economic disparities related to affordability are eliminated**
- **Clear market signal to service providers and supply chains - massive economies of scale**
- **Local Economic Development + Local Employment**
- **Access to deep pools of low-cost bond financing**
- **Improves competitiveness of local building stock**

QUESTIONS:

- How would this initiative work in small rural towns with low population, low housing density, lower quality homes trailers, fixed and lower income populations, low bond ratings, etc?

The outline provided states that this solution would "Mitigate racial and economic divisions related to affordability" Does this apply across municipalities or only within a given municipality?

Is Local Govt indebtedness to fund Building Improvement Services using the existing EFC model a violation of New York State Constitution Article 8 which prohibits a town from issue general obligation bonds and pledging its faith and credit to a private purpose?

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