



Public Facilities Committee Report

City of Newton In City Council

Wednesday, June 23, 2021

Present: Councilors Leary (Chair), Laredo, Kelley, Danberg, Kalis, and Crossley

Absent: Councilors Norton and Gentile

Also Present: Councilor Albright

City Staff Present: Chief Operating Officer Jonathan Yeo, City Engineer Lou Taverna, Co-director of Sustainability Ann Berwick

#233-21 **Eversource petition for Grant of Location in Church Street and Billings Park**
EVERSOURCE ENERGY petitioning for a grant of location to install 177'± of conduit in a southwesterly direction from the existing pole (514/9) located in front of #67 Church Street to an existing handhole in front of #12 Billings Park. (Ward 1 & 7).

Action: **Public Facilities Approved 6-0**

Note: Maureen Carroll, Eversource Representative presented the request to install 177'± of conduit in a southwesterly direction from the existing pole (514/9) located in front of #67 Church Street to an existing handhole in front of #12 Billings Park. This is to provide underground electric service to #12 Billings Park. Ms. Carroll explained that currently the homeowner has overhead service coming from the backyard.

Councilors asked the following question:

Q: What is the cost to underground these wires?

A: Ms. Carroll explained that she will have an account representative from Eversource answer this question.

The public hearing was opened and with no member of the public wishing to speak the public hearing was closed.

Councilor Laredo motioned to approved which passed unanimously.

#294-20 **Discussion to require or encourage the use of efficient electric technology**
COUNCILORS CROSSLEY, KELLEY, LEARY, NORTON, ALBRIGHT, GREENBERG, AUCHINCLOSS, MARKIEWICZ, NOEL, DANBERG, KALIS, DOWNS, LAREDO & HUMPHREY requesting a discussion with the Sustainability Team to consider creating an ordinance that may require and/or encourage the use of efficient electric technology for heating, cooling, hot water, cooking and other appliances in new and substantially renovated

Action: **Public Facilities Held 6-0**

Note: The Chair noted that this discussion will include a public hearing to be able to get the perspective of the public and building professionals on electrification. Liora Silkes, Energy Coach, Ann Berwick and Bill Ferguson, Co-directors of Sustainability joined the committee for this discussion.

Brookline did try to pass a by-law to require electrification, but the State did rule that the town did not have the authority to regulate fossil-fuel use. The State explained to Brookline that they would need to file the Home-Rule petition to be able request additional authority that is not currently allowed under State law. The goal is for Newton, along with a number of other communities, to send the attached Home-Rule Petition and draft ordinance to the State Legislature regarding electrification. It was noted that a new docket item will be submitted so that the City Council is able to vote to send the Home-Rule Petition to the State.

Ms. Berwick summarized the attached memo. She also noted that there had also been a slight change to a previous draft of the Home-Rule petition which is shown attached. The draft ordinance will also need to match what is being asked for in the Home-Rule petition.

Ms. Silkes explained that her role in this as the Energy Coach will be to educate and support people in Newton on electrification. She explained that they are starting a program where residents can set up time with her to discuss questions and comments related to issues that fall under the Energy Coach position.

The public hearing was opened.

Public Comments

Letita Upton, 249 Lake Ave noted that she is speaking on behalf of Mother's Out Front. Ms. Upton explained that the group supports the Home-Rule petition and draft ordinance. The hope is that this petition will urge the State to take the next necessary steps to meet the Climate Action Goals. Mother's Out Front would support a city-wide effort to inform residents about the benefits of induction cooking instead of providing an exemption for cooking in the ordinance.

Dan Reuben, 175 Auburn Street noted that he is the Chair of Green Newton and explained that Green Newton endorses the Home-Rule petition. He noted that this is a necessary step to phase out natural gas and dealing with the climate crisis. Mr. Reuben explained that the Country, the State and the City have all set climate action goals which means there should not be new fossil fuel infrastructure built. Green Newton would also like to see electric cooking included in the

ordinance if possible. This does improve indoor air quality and reduces the risk for fires and explosions.

Students from the Newton Public Schools explained that they do support Newton sending the Home Rule Petition and draft ordinance to the State. They noted the importance of doing as much as possible to help with the climate crisis.

Ellie Goldberg, 79 Elmore Street provided the attached testimony in support of the Home Rule Petition and draft ordinance. She noted that it is important to also address the number of gas leaks in Newton and there should be further conversations with National Grid on the infrastructure. Ms. Goldberg also stated that indoor cooking with gas does cause air pollution.

Jonathan Kantar, 672 Chestnut Street expressed his support for the Home Rule petition and draft ordinance. Mr. Kantar explained that he is a contractor in Newton and noted that most houses can fairly easily be transformed into an all-electric homes. He noted that there does need to be more education on electrification for residents and building professionals.

Peter Barrer, 60 Endicott Street expressed his support for submitting the Home-Rule Petition and draft ordinance to the State along with a number of other communities.

Halina Brown, 56 Cloverdale Road noted that she is the Chair of the Citizens Commission on Energy. Ms. Brown explained that she does not believe there should be an exemption for cooking in the ordinance. She noted the importance of not being too cautious in this matter.

Philip Vergragt, 56 Cloverdale Road explained that he supports the Home-Rule Petition and draft ordinance but does not support the exemption of cooking and outdoor heating/cooling. He noted that this will help in avoiding investing anymore funds into the gas infrastructure and there are health risks when cooking with gas indoors.

Elizabeth Sockwell, 78 Bishopsgate Road explained that this does need to be moved fast and implementing this ordinance would be groundbreaking. She noted that there was a bill that had a state-wide ban on new fossil fuel infrastructure but that was vetoed by the Governor. Ms. Sockwell explained that banning fossil fuel in new construction is the simplest thing that can be done and is necessary to reach the City's/State's climate goals.

Patrick Powdermaker, 117 Cypress Street explained that he owns Strongheart Construction and that he supports the Home-Rule Petition and ordinance. He did note that he also does not support the exemption of cooking in the ordinance. Mr. Powdermaker explained that getting rid of the gas line to the house is important help stop the gas leaks. He noted that the costs are reasonable and there are ways to save money by removing the gas lines from the home.

A resident noted that there is a concern with making sure that Eversource has the capacity to support the new construction.

Rachel Alder Golden, 20 Clarendon Street noted that she is the co-coordinator for Mothers Out Front and expressed the importance of moving forward with the Home-Rule Petition.

The public hearing was closed.

Committee members made the following comments:

It is important to have as much input from the public and building professionals as possible as the Council moves forward with the Home-Rule Petition and beyond that.

Cooking should be included in the ordinance and it was noted that the induction stove is easier to use than some might think.

The Home-Rule petition should be submitted as soon as possible and in terms of cooking the Committee should take their guidance from Ms. Berwick.

Ms. Berwick noted that the administration does prefer to exempt cooking. She noted that she does not know if exempting or not exempting cooking will be more persuasive to the legislature. Cooking is also a small part of the emissions and residents will not likely attach the gas line for just cooking if they are required to make the rest of their house electric. Mr. Berwick also stated that she feels from hearing from the public that outdoor heating appliances should not be excluded.

Councilors noted that many people bought outdoor heating appliances during the pandemic and it is unclear how this would be enforced since these would not require a direct hook up to the gas line. Ms. Berwick noted that this will only apply to new construction or major renovation but she did agree that the ordinance language could say that outdoor heating appliances that are hooked up to the gas main are not allowed.

It was noted that there could be a way to promote electric cooking without having to put it in the Home – Rule petition. There can be a conversation with the legislature if cooking will make a difference in submitting the Home-Rule petition. The next item on the agenda could also reveal the cost of adding the gas line for just cooking.

Councilors thanked those who have attended and participated in the public hearing.

Councilor Kalis motioned to hold which passed unanimously.

Referred to Zoning & Planning and Public Facilities Committees

#12-21 **Request for energy efficiency analysis during construction**
COUNCILORS CROSSLEY, BOWMAN AND ALBRIGHT requesting a discussion and possible ordinance to require that property owners who are proposing new construction or major renovations, submit an analysis and pricing for providing all electric high efficiency HVAC and appliances as an alternative to fossil fuel powered equipment.

Action: **Public Facilities Held 6-0**

Note: The Chair noted that this is an important item due to the fact that when National Grid comes to the Committee to petition to install a new gas line that is too late in the process to

educate the homeowner on their options. This will require homeowners to submit an analysis and pricing for providing all electric high efficiency HVAC and appliances as an alternative to fossil fuel. It was noted that this is a preliminary discussion to introduce the item. This item is intended to help bridge the gap from when the legislature chooses to act on the Home-Rule petition. Additionally, this will need to be discussed with the Law Department and other city staff.

Councilors asked the following question:

Q: Will this apply to residential and commercial properties?

A: This would affect both up until a special permit is required. It was noted that again this is to be able to educate homeowners until the legislature rules on the Home-Rule petition. Additionally, this can be used if the legislature decides not to accept the petition.

Councilors made the following comments:

This item may not be needed until the City knows what the legislature will do with the Home-Rule petition. The Council should be able to quickly enact the ordinance that was discussed in the previous docket item (#294-20) once approved by the legislature. Creating this type of potential ordinance could take a long period of time to determine the legality and other aspects.

It was noted that this item is important because the process with the legislature may take a long time and it is important to be able to educate homeowners now on the difference in cost between electric and fossil fuels. The work on this ordinance can be done in a working group and it is important to figure out how this can aid the Energy Coach.

Ms. Silkes explained that she will be interested at looking at the projects that are currently not being addressed or that may not be addressed by the Home-Rule petition. There may be a way to reach projects that are considered minor renovations to educate the homeowners on their options and investigating this potential ordinance can assist with that.

It was noted that for minor projects what work is being done needs to be considered. There also can be a flier at Inspectional Services so that they know the Energy Coach exists.

There will be further conversations on this item to look at what this potential ordinance will entail.

Councilor Crossley motioned hold which passed unanimously.

The committee adjourned at 9:00 p.m.

Respectfully Submitted,

Alison M. Leary, Chair

Draft Proposed Home Rule Petition for Discussion

Date: July 5, 2021

CHAPTER _____ AN ACT RELATIVE TO THE ELECTRIFICATION OF NEW AND
SUBSTANTIALLY REMODELED OR REHABILITATED BUILDINGS IN THE CITY OF
NEWTON

Be it enacted by the Senate and House of Representatives in General Court assembled, and by the authority of the same, as follows:

SECTION 1. Notwithstanding the State Building Code; the Gas Code; M.G.L c. 142, sec. 13; M.G.L. c. 164, and any other general or special law to the contrary, the City of Newton may by ordinance require new and substantially remodeled or rehabilitated buildings to use electricity instead of fossil fuels for heating and cooling systems and hot water appliances, and for hot water, by electricity or thermal solar.

SECTION 2. As used in this chapter, the following words shall have the following meaning unless the context clearly indicates a different meaning:

“Substantially remodeled or rehabilitated” means a renovation that affects 50% or more of the building floor area.

SECTION 3. An ordinance adopted under this Act may require new and substantially remodeled or rehabilitated buildings to use electricity instead of fossil fuels for heating and cooling systems and hot water appliances, and for hot water, by electricity or thermal solar.

SECTION 4. The City of Newton may require that building permit applications for new and substantially remodeled or rehabilitated buildings identify the heating and cooling systems and hot water appliances that will be used in the building.

SECTION 5. The City of Newton may withhold the issuance of a building permit for a new or substantially remodeled or rehabilitated building that does not use electricity instead of fossil fuels for heating and cooling systems and hot water appliances, and for hot water, by electricity or thermal solar.

SECTION 6. An ordinance adopted under this Act may provide for exemptions from and waivers of the requirement set forth in Section 3 herein.

SECTION 6. This act shall take effect upon its passage.

Draft Newton Electrification Ordinance

Purpose

The City of Newton adopts this Ordinance to require new and substantially remodeled or rehabilitated buildings to use electricity instead of fossil fuels for heating and cooling systems and hot water appliances or, for hot water, to use thermal solar. The Ordinance will protect the health and welfare of the City's inhabitants and the environment by reducing greenhouse gases, which cause climate change, and by reducing other air pollutants since electricity can be created by solar, wind and other fossil-free sources.

Definitions

"Substantially Remodeled or Rehabilitated" means a renovation that affects 50% or more of the building floor area.

Applicability of Electrification Requirements

Any building project that requires a building permit involving the construction of a new building or a Substantially Remodeled or Rehabilitated Building located or to be located in whole or in part within the City of Newton shall install only heating and cooling systems and hot water appliances powered by electricity and, for hot water, by electricity or thermal solar. In no event shall such installed heating and cooling systems or hot water appliances be powered by fossil fuels.

Exceptions

The requirements of this Ordinance do not apply to any of the following:

- A. Indoor cooking appliances.
- B. Freestanding outdoor cooking appliances that are not connected to the household natural gas or propane infrastructure.
- C. Freestanding outdoor heating appliances that are not connected to the household natural gas or propane infrastructure.

- D. Emergency generators.
- E. Appliances to produce potable or domestic hot water from centralized hot water systems in commercial buildings with a Gross Floor Area of at least 10,000 square feet, provided that the architect, engineer, or general contractor on the project certifies by affidavit that no commercially available electric hot water heater exists that could meet the required hot water demand for less than 150% of installation costs, compared to a conventional fossil fuel hot water system.

Application Requirements

When applying for a building permit for a new or Substantially Remodeled or Rehabilitated Building, the applicant must submit documents with the application that identify the heating and cooling systems and hot water appliances that will be installed and used in the building. The submitted documents must include, at a minimum, XXX *[an alternative: such documents as are specified in guidance issued by the Commissioner of Inspectional Services]*.

Compliance

The Commissioner of Inspectional Services shall not issue any building permit for the construction of a new or Substantially Remodeled or Rehabilitated Building unless the applicant submits the documentation set forth in Section XXX, Application Requirements. The Commissioner of Inspectional Services shall not issue a certificate of occupancy for any building subject to this article prior to inspection and confirmation that the heating and cooling systems and hot water appliances installed in the building comply with the applicant's documents submitted pursuant to Section XXX, Application Requirements *[an alternative: such documents as are specified in guidance issued by the Commissioner of Inspectional Services]*.

Waivers

- A. The Commissioner of Inspectional Services may grant a waiver from the provisions of this Ordinance in the event that compliance makes a project financially infeasible or impractical to implement. Compliance with this Chapter may be considered infeasible or impractical to implement if, without

limitation, as a result of factors beyond the control of the proponent, the additional cost of the project over the long term, including any available subsidies, would make the project economically unviable.

- A. Waiver requests shall be supported by a detailed cost comparison, including available rebates and credits.
- B. Waivers may be subject to reasonable conditions. Where possible, waivers shall be issued for specific portions of a project that are unviable or unsuitable to implement, rather than for entire projects.
- C. The Commissioner of Inspectional Services shall issue guidance on the granting of waivers and the imposition of conditions.

Effective Date

The requirements of this Article XXX shall not apply to any building permit, special permit or comprehensive permit issued prior to the effective date of XXX, 2021.

To: Alison Leary, Chair, Public Facilities Committee
From: Ann Berwick, Co-Director of Sustainability, for the Sustainability Team
Re: Electrification of new buildings and substantial renovations
Date: June 14, 2021

The purpose of this memo is to explain the views of the Sustainability Team on the draft Home Rule Petition and Ordinance on building electrification.

Why Double Down on Electricity?

Newton's Climate Action Plan's motto is "Use Less, Green the Rest." The "Use Less" actions are straightforward. To reduce greenhouse gas emissions, we need to use less energy (by insulating our homes, turning off lights when they are not in use, walking or biking instead of driving, etc.).

But surprisingly, perhaps, to "Green the Rest" we need to use more electricity and less fossil fuel. Burning fossil fuels is the main cause of climate change, because it results in the emission of greenhouse gases. Thankfully, we can make the electric grid cleaner and greener by generating electricity with cleaner, greener renewable sources, especially solar and wind. Renewables dramatically reduce the greenhouse gases from generating electricity.

In Newton, over 60% of our greenhouse gas emissions come from our homes, apartments, and commercial buildings. So, the way we heat and cool these buildings, heat our water, and keep the lights on matters a lot as we work to meet our City-wide greenhouse gas emission reduction goals.

Therefore, to "Green the Rest" we want to electrify everything we can with increasingly "green" electricity. (Massachusetts is on the verge of adding a lot of offshore wind power.) In other words, we can make electricity cleaner and greener, so we need to use electricity for more of the things for which we use energy.

Technological innovations are also helping us use more electricity. New electric heat pump technology for heating, cooling, and hot water are extremely efficient and significantly reduce greenhouse gas emissions.

How Can Newton Require that New Buildings and Major Renovations Be Electric?

Brookline, Arlington and Lexington have approved Home Rule petitions, which request that the Massachusetts Legislature allow their towns to require new buildings and major renovations to use electricity for heating, cooling, and hot water.

These new requirements would apply only to new construction and “substantially remodeled or rehabilitated” buildings (defined in the draft Newton electrification Ordinance as a renovation that affects 50% or more of the building floor area). We want new and remodeled buildings, which will last for many decades, to be fueled with clean, modern, efficient technology.

Should Newton Require Electric Induction Stoves as Well?

While people in Newton already have positive experiences with electric heat pumps for heating, cooling, and hot water, familiarity with electric induction stoves is less widespread. While we understand the argument for requiring them, many people are deeply devoted to their gas stoves. On balance, we prefer to wait to require electric induction stoves. It’s noteworthy that Brookline, Arlington, and Lexington are also exempting cooking from their proposed bylaws.

No Substantial Financial Burdens

Thankfully, electrifying new construction and significant renovations is relatively low cost and becoming more so.

Heat pumps for heating, cooling, and hot water are not currently a money-saver. The cost of purchasing and installing the equipment is fairly comparable to the cost of natural gas technology. But while the annual operating cost of heat pumps is slightly above that of a gas system (but below that of an oil system), the total annualized cost of installation and operation is well less than 1% of the annual cost of owning a new home in Newton. Additionally, the State intends to help make electrification more attractive financially by increasing the rebates for heat pump equipment and through other policies that will decrease the cost of renewable power and increase the costs of fossil fuels.

Conclusion

Newton arguably leads the State in addressing climate change. Electrification of new homes and major renovations is the right next step for Newton’s climate efforts and will be influential throughout the State.

On behalf of [Mothers Out Front Newton](#)
 Ellie Goldberg, 79 Elmore Street, Newton, MA 02459
 June 22, 2021

Testimony in support of the [Home Rule Petition 70759](#) and the [draft Ordinance 70761](#).

I support Home Rule Petition 70759 and the draft Ordinance 70761 because I support all measures to protect the health and welfare of Newton residents.

However, I am concerned that the proposed ordinance needs to acknowledge the serious threat of our extremely leaky, dangerous, and wasteful pipeline system. ([Newton Gas Leaks Map](#))

We can't allow gas stoves and connections to a degrading gas infrastructure if we truly want to protect Newton's health and welfare.

Allowing gas stoves ignores the evidence that gas appliances create indoor air pollution. And, equally important, it doesn't consider that Newton's pipeline leaks emit 293 metric tons of methane every year— more than any other city in Massachusetts, including Boston (!). [This Stinks! Newton Emits Most Methane](#) (See below.)

Therefore, I propose that the City add the following disclosures and agreements to the regulatory and permitting process.

Any permit or ordinance should require signed acknowledgement by the builder, contractors and owners,

- that the gas pipeline system is known to be leaky, dangerous and wasteful,
- that gas stoves contribute to indoor air pollution and cause respiratory injury and illness, especially in children and other vulnerable populations, and the occupant accepts the exposure and subsequent impacts.
- and acceptance of liability for any injuries or loss in the event of a fire or explosion related to the gas line. (And proof of insurance covering the acknowledged hazards.)

To be sure every signatory is "informed," the permit needs to include specifics provided by National Grid detailing the history of the pipeline that the new or rehabbed building would be connected to.

The details need to include

- the age and condition of the main and distribution line,
- the history of leaks. repairs or replaced sections of pipe,
- the location of each repair or replacement, (Map)
- the number of unrepair leaks in the pipeline as of time of application for permit, (Map)
- and location and condition of the nearest turn-off valve. **

I believe that only with full disclosure of the harm that gas is doing to our health and the imminent danger it poses, can we counter the gas company misinformation campaigns designed to weaken public action.

As we advocate for clean energy, conservation, efficiencies, and electrification, the fossil fuel companies and utilities spend millions of dollars on deceptive advertising (promoting the “love” of cooking with gas) and lobbying to kill climate action legislation.

[How the Fossil Fuel Industry Convinced Americans to Love Gas Stoves](#) And why they're scared we might break up with their favorite appliance. Mother Jones, Rebecca Leber, February 11, 2021

[The Gas Industry Is Paying Instagram Influencers to Gush Over Gas Stoves](#)
Mother Jones, Rebecca Leber, June 17, 2020

Thank you for your consideration.

Ellie Goldberg

It could happen here.

(See [Flaming Gas Leak Forces Evacuation of a Dozen Homes in Mass. June 1, 2021](#). A gas leak ignited Saturday morning in front of a residence in Marshfield, MA sending plumes of flames into the air and forcing officials to evacuate about a dozen homes...The fire continued to burn throughout the day and into the evening until it was put out around 7 p.m. according to the Marshfield Police Department...Eversource crews were unable to find a valve to shut off the gas fueling the fire, and had to dig trenches on either side to seal off the main.)

This Stinks! Newton Emits Most Methane, Mothers Out Front Newton,
Melanie Renaud June 2021

Newton's hundreds of leaky gas pipelines spew 293 Metric Tons of fossil gas into our air, more than any other town or city in the state, including the city of Boston.*

Fossil gas is not safe, not green, not clean. It is primarily methane, a greenhouse gas that has 86% more warming power than CO2.

Fossil gas can cause explosions, pollutes our air -- indoors and out, and kills our trees. Plus, the utilities charge ratepayers for the lost gas.

The nonprofit organization [HEET.org](#) maps the leaks reported by gas utilities in every town in the Commonwealth. It also estimates methane emissions by town.

This year the maps not only identify the safety grade of each leak but also the super emitters, the largest leaks that have significant environmental impact (SEI). Thanks to a BU study, we know that the largest 7% of the leaks are the source of approximately 50% of all leak emissions.

Newton has adopted a far-reaching Climate Action Plan but we will never achieve the goals of reducing our emissions if these leaks continue to spew greenhouse gases.

National Grid has said that fixing all the leaks will take many years. That is not acceptable. To protect the health and safety of our community, it is imperative that National Grid prioritize fixing the super emitters while we all work for a fast transition to clean renewable energy, optimal efficiencies and electrification.

*HEET.org takes the information reported by National Grid.

The explanation of the system for calculating the Emissions Estimates is at <https://heet.org/gas-leaks/gas-leak-maps/>.

Newton Gas Leaks Map

