#### **Mayor Ballantyne**

# City of Somerville

Fossil Fuel Free Demonstration Program Application



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# CITY OF SOMERVILLE, MASSACHUSETTS KATJANA BALLANTYNE MAYOR

November 10, 2023

Commissioner Mahony Department of Energy Resources 100 Cambridge St #1020 Boston, MA 02114

RE: Letter of Support for Somerville's Fossil Fuel Free Demonstration Program Application

Dear Commissioner Mahony,

On behalf of the City of Somerville, I am very pleased to submit an application to the Fossil Fuel Free (FFF) Demonstration Program to become one of the first 10 communities in the Commonwealth to be allowed to restrict the use of fossil fuels in new construction and major renovation projects. Our diverse, densely populated community both experiences the public health impacts of fossil fuel emissions and has a demonstrated commitment to reducing fossil fuel dependence.

Two-thirds of Somerville's carbon emissions originate from buildings, but our residential and commercial buildings are mostly occupied by renters who have limited ability to influence decisions about a building's major systems. Poor air quality resulting from the combustion of fossil fuels, such as oil and gas, often disproportionately impacts Somerville's most vulnerable residents and contributes to childhood asthma and adult chronic obstructive pulmonary disease (COPD).

To address these challenges, Somerville has become a leader in climate action with a track record of innovative steps to support equity, increase resilience, and improve energy efficiency. Since 2011, the City has participated in DOER's Green Communities program. In 2018, we published our Climate Forward Action Plan, which prioritizes 13 action areas for working towards carbon neutrality, preparing for climate change, and ensuring equity in the distribution of climate-related burdens and opportunities.

Last year, when the FFF program was codified into law, we were the first community to submit a home rule petition creating a net-zero fossil fuel emissions policy for new construction and major renovations, and we did so with unanimous support from City Council. This year, we were one



of the first four communities to adopt and enact the Specialized Stretch Code that requires a more stringent building energy code.

Somerville is therefore ideally positioned to be an active participant in the FFF Program and test the effectiveness of fossil fuel restrictions in new and renovated buildings. By participating in this Program, we will reduce fossil fuel use, protect residents from the negative health impacts of fossil fuel emissions, and create cleaner, more resilient residential and commercial properties. I appreciate your consideration of our application and hope that Somerville will have the opportunity to participate in this important initiative.

Sincerely,

Katjana Ballantyne

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Mayor

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  - (b) Copy of proposed by-law or ordinance for participation in the Demonstration Project.
  - (c) Explanation of differences and rationale.
  - (d) Implementation plan, including:
    - i. If Local Approval of the community's proposed by-law or ordinance has not been acquired, the community's plan, including any associated timelines, for acquiring Local Approval of the proposed by-law or ordinance;
    - ii. If Local Approval of the community's proposed by-law or ordinance has been acquired, timeline and effective dates of the by-law or ordinance's provisions or requirements;
    - iii. A demonstrated commitment to collaborate with the Department on data collection, reporting, and outreach/training;
    - iv. Description of the current process within each city and town for storing building permit data and certificates of occupancy;
    - v. Description of how the by-law or ordinance will affect the use of fossil fuels for commercial and industrial Process Load in buildings subject to the by-law or ordinance, including but not limited to, restaurants, dry cleaners, and manufacturing uses;
    - vi. Description of exemption or waiver process from any requirements, if any, to be included in the by-law or ordinance.
  - (e) Documentation sufficient to demonstrate that the applicant has achieved at least one of the three housing production eligibility thresholds set forth in 24.05(2).
    - i. Prioritized and Substitute Communities that do not meet one of the three housing production and eligibility thresholds set forth in 24.05(2) at the time of application may submit an application but must include an explanation of its current status and the applicant's plan to meet such criteria on or before February 11, 2024.
    - ii. Prioritized and Substitute Communities that do not meet one of the housing production and eligibility thresholds set forth in 24.05(2) at the time of application must provide updates at regular intervals, to be established by the Department, on its status and progress in meeting such criteria on or before February 11, 2024.
- (2) Additional Materials for Substitute Communities. In addition to the above components, an application from a Substitute Community must include a description of the actions it has taken or will take after the adoption of the proposed by-law or ordinance, to encourage the production of multi-family housing. This description should include, but is not limited to:
  - (a) The community's progress toward creation of a multi-family zoning district compliant with Sec. 3A of G.L. Ch. 40A, if applicable.

- (b) Initiatives taken by the community to support the preservation and production of housing units, including multi-family housing.
- (c) Substitute Communities may submit letters of support from community leaders and/or community members.
- (3) Selection Criteria. In addition to ensuring that Substitute Communities meet the requirements set forth in 225 CMR 24.04 and 225 CMR 24.05, the Department will consider the following factors when evaluating applications and selecting Substitute Communities for participation up to a total of 10 Participating Communities and may consider such additional factors as the Department deems appropriate.
  - (a) Contribution to the overall Demonstration Project, including diversity of Participating Communities which includes but is not limited to gateway cities, environmental justice communities, diversity of demographics, diversity of size, scale of building development, and type of housing development;
  - (b) Ability to meet Department reporting requirements and effectively monitor and ensure code compliance and implementation;
  - (c) Consistency of proposed by-law or ordinance to the model rule provided by the Department;
  - (d) A preference for cities and towns that meet the compliance guidelines implementing section 3A of chapter 4OA of the General Laws through an approved zoning ordinance or, in the case of a town that must seek by-law approval from the Attorney General (AGO) pursuant to G.L. c.40 § 32, an AGO-approved by-law that provides for at least 1 district of reasonable size in which multi-family housing is permitted as right, or, if not applicable, a similar commitment to multi-family housing production as determined by the Department, in consultation with the Executive Office of Housing and Economic Development;
  - (e) Localized electric grid investments needed to support the Demonstration Project as determined through consultation between the Department and electric distribution companies;
  - (f) Demonstrated support from community members and municipal leaders.

# (1)(a) Copy of home rule petition and date submitted and proof of Local Approval.

Please see Appendix A.

# (1)(b)(i) Copy of proposed by-law or ordinance for participation in the Demonstration Project.

The Fossil Fuel Free Ordinance passed City Council on November 9, 2023 unanimously. Please see Appendix B for complete text.

# (1)(b)(ii) Draft goals and incentives to inform the forthcoming Zoning Amendment.

The draft goals and incentives to inform a zoning incentive are listed below.

- (a) If an entity regulated by the Fossil Fuel Free Ordinance installs additional electric capacity on private property and would allow outside parties to access additional capacity for the purposes of electrification of buildings and vehicles, then it could be considered a community benefit, and the entity may be eligible for incentives, which may include:
  - (1) Height and number of floors,
  - (2) Dimensional flexibility from setbacks,
  - (3) Density (unit size requirements),
  - (4) Others.
- (b) Properties that are exempt or eligible for waivers under the Fossil Fuel Free Ordinance may be eligible for incentives, which may include:
  - (1) Height and number of floors,
  - (2) Dimensional flexibility from setbacks,
  - (3) Density (unit size requirements),
  - (4) Others.

# (1)(c)(i) Fossil Fuel Free Ordinance: Explanation of differences and rationale.

On November 9, 2023, the Somerville City Council voted to adopt Somerville's Fossil Fuel-Free Demonstration Ordinance. The City of Somerville is committed to addressing the climate crisis and building a more sustainable future for all residents. In partnership with our community, we have developed a Fossil Fuel Free Demonstration Project ordinance that is ambitious, yet achievable for developers and property owners.

The ordinance includes modifications to the Department of Energy Resources Model Rule. These changes were informed by extensive community outreach, including specialized focus groups with representatives from important community sectors such as higher education institutions, development corporations, the business leaders, boards and commission members, members of the public, and affordable housing providers. Staff also held a public focus group with members of the

Somerville Commission on Energy Use and Climate Change and an internal focus group with a wide range of City departments. Finally, staff conducted neighborhood canvassing to engage with a diverse number of business owners and constituents, including laundromats, restaurants, and autobody shops. This public engagement directly informed the ordinance and led staff to begin developing a separate, forthcoming Zoning Ordinance Amendment to incentivize compliance from developers and property owners.

Below, please find an explanation for each section of the Ordinance.

Section 6-91, Definitions: In addition to the definitions provided in the Model Rule, Somerville defined the following: Conditioned Floor Area, Historic Building, and Residential Building. These definitions were added in response to recommendations from internal and external focus groups whose participants emphasized the need for clear language on what standards this ordinance would utilize. They also noted the importance of uniformity across existing codes to reduce confusion. As such, each of the three definitions refers to the International Energy Conservation Code and the International Existing Building Code most recently adopted by Massachusetts. This structure also allows the definitions to evolve over time with the statewide codes, reducing confusion, administrative burden, and risk of builds not being constructed to code.

Section 6-92, Purpose: This section maps to the Model Rule.

Section 6-93, Applicability: This section maps to the Model Rule.

**Section 6-94, Fossil Fuel-Free Demonstration:** The proposed changes to the Model Rule in this section are designed to ensure that the transition to fossil fuel-free requirements is feasible and practical for all sectors of the community. The additions reflect the feedback received through community engagement, considering the specific needs and circumstances of residents and businesses, as well as the community's commitment to reducing carbon emissions. These changes will make a significant contribution to achieving shared sustainability goals.

At the recommendation of external focus groups and staff, Somerville added three exceptions to the Model Rule for low rise residential projects. The language for the three exceptions was adapted from the City of Cambridge's Fossil Fuel Free Ordinance and reviewed with the focus groups and across departments, including, but not limited to, Somerville Sustainability, Fire, Planning, Inspectional Services, and Legal department staff.

- "Emergency and standby power systems, as defined as level 1 and level 2 systems in the NFPA 110 (2022) Section 4.4." This exception helps to address a priority need for public safety infrastructure, a key finding that was identified in the <a href="Lower Mystic Vulnerability">Lower Mystic Vulnerability</a>
   Assessment (September 2021), a study of how social and built infrastructure would stand up in the event of extreme weather, funded by a Municipal Vulnerability Preparedness Grant. These systems are exempted due to the critical need for emergency backup systems to enhance the city's resiliency and energy reliability.
- "Heating and hot water supplied to a building through a district energy system or central utility plant." There are normally three pathways under the Stretch Energy Code: Zero Energy, All-Electric, and Mixed-Fuel. The Specialized Energy Code takes Zero Energy and

Mixed-Fuel off the table and only permits All-Electric for new construction unless otherwise exempted. Without this exemption, anyone with a district energy system would be required to follow the All-Electric pathway and would not be able to introduce a new building into the system. With this exemption, these projects are still obligated by the Stretch Energy Code, and other relevant provisions under the Specialized Energy Code, but may use Zero Energy or Mixed-Fuel when using a District Energy System. This exception allows those who have invested in these systems to connect new or majorly renovated buildings into the system, which is reported to be more cost-effective and technically feasible than requiring buildings to switch to another fuel source before the life cycle of the system has reached a point where it would be more economical to fuel-switch.

"Freestanding outdoor heating and cooking appliances that are not connected to the building's natural gas or propane infrastructure and are used to facilitate outdoor dining." This exception is included to align with existing City policies allowing narrow applications of fires on residential properties for cooking purposes. Due to the risk of fires spreading in Somerville, a densely populated community with an older housing stock predominantly constructed of wood frame dwellings which are built closely together, charcoal, wood, electric, and propane grills are not allowed on porches, balconies, fire escapes, or roofs. Propane tanks, outdoor fireplaces, fire pits, and chimineas are prohibited. All fires used for cooking should be on charcoal briquette grills or propane gas grills.

At the recommendation of external focus groups and staff, Somerville added eight exceptions to the Model Rule for commercial and all other projects and slightly amended language for the Model Rule to better suit community needs. The language for exceptions was adapted from the City of Cambridge's Fossil Fuel Free Ordinance and reviewed with the focus groups and across departments, including, but not limited to, Somerville Sustainability, Housing, Housing Stability, Fire, Planning, Inspectional Services, and Legal department staff. Buildings that qualify for exceptions will still be mandated to meet applicable Stretch and Specialized Energy Code requirements.

- "Research laboratories and facilities for research and development, scientific or medical research, whether in a singular or mixed-use structure." This exception is slightly modified from the Model Rule to include a broader range of research and development. This is because research being conducted at incubators like Greentown Labs, for example, may be using fossil fuels as part of their work. Additionally, language to specify that this exception applies to research laboratories and facilities located in mixed-use structures is critical as many new developments have, for example, commercial store fronts on the ground level that may be subject to other requirements under the ordinance.
- "Hospitals regulated by the department of public health as a health care facility, whether
  in a singular or mixed-use structure." This exception is slightly modified from the Model
  Rule to specify that it applies to hospitals located in mixed-use structures. The exception
  is critical as many new developments have, for example, commercial store fronts on the
  ground level that may be subject to other requirements under the ordinance.

- "Medical offices regulated by the department of public health as a health care facility, whether in a singular or mixed-use structure." This exception is slightly modified from the Model Rule to specify that this it applies to medical offices located in mixed-use structures and is critical as many new developments have, for example, commercial store fronts on the ground level that may be subject to other requirements under the ordinance.
- "Multifamily buildings over 12,000 square feet with permit application filed prior to January 1, 2027 may utilize gas or propane for domestic water heating as the only combustion equipment." This section maps to the Model Rule.
- "Emergency and standby power systems, as defined as level 1 and level 2 systems in the NFPA 110 (2022) Section 4.4." This exception helps to address a priority need for public safety infrastructure, a key finding that was identified in the <a href="Lower Mystic Vulnerability Assessment">Lower Mystic Vulnerability Assessment</a> (September 2021), a study of how social and built infrastructure would stand up in the event of extreme weather, funded by a Municipal Vulnerability Preparedness Grant. These systems are exempted due to the critical need for emergency backup systems to enhance the city's resiliency and energy reliability. Since all-electric backup options are currently limited for larger facilities and critical loads, the use of fossil fuels for emergency and standby power systems is exempted. This decision was based on an analysis performed by the City of Cambridge, which has buildings and a building portfolio similar to those of the City of Somerville,
- "Autobody shops." Currently, the types of tools used in autobody shops are likely to be
  fossil-fuel powered with limited to no fossil fuel-free alternatives. Additionally, gaspowered vehicles are the dominant form of travel amongst vehicle owners and currently
  require certain hydrocarbons or synthetics. Massachusetts has banned the sale of new
  gas-powered vehicles after 2035. This exception will be reviewed during biannual
  reporting for applicability as technologies and the regulatory landscape evolve.
- "Onsite vehicle fueling connections." These connections, relevant to fleet fueling facilities, are exempt because they do not relate to energy used in the building.
- "Equipment in critical use facilities for medical care and intensive research that meet the definitions of Critical Operations Data Systems and Critical Operations Power Systems as defined by the Massachusetts Electrical Code." Focus group participants recommended including this language to continue to encourage development of these types of projects in Somerville. These buildings would still be obligated to meet applicable requirements of the Specialized and Stretch Energy Codes.
- "Heating and hot water supplied to a building through a district energy system or central utility plant." There are normally three pathways under the Stretch Energy Code: Zero Energy, All-Electric, and Mixed-Fuel. The Specialized Energy Code takes Zero Energy and Mixed-Fuel off the table (and only permits All-Electric) for new construction unless otherwise exempted. Without this exemption, anyone with a district energy system would be required to follow the All-Electric pathway and would not be able to hook a

new building into the system. With this exemption, these projects are still obligated by the Stretch Energy Code, and other relevant provisions under the Specialized Energy Code, but may use Zero Energy or Mixed-Fuel when using a District Energy System. This exception allows those who have invested in these systems to connect new or majorly renovated buildings into the system, which is reported to be more cost-effective and technically feasible than requiring buildings to switch to another fuel source before the life cycle of the system has reached a point where it would be more economical to fuel switch. It is our understanding that institutions have connected with the Department of Energy Resources regarding this issue. Given this, the ordinance does not seek to prohibit district energy.

- "Commercial cooking equipment used in a restaurant or cafeteria in a building that has applied for a building permit prior to January 1, 2035, provided that the electrical panel has sufficient capacity for the later installation of fully electric food preparation equipment." Currently, there are 700 restaurants and food services across the City, and this number is expected to grow as commercial development continues. This exemption was informed by the City of Cambridge's research for their own Fossil Fuel Free ordinance. Cambridge's restaurant culture is similar to Somerville's, with many small businesses serving vibrant cuisine. The City of Cambridge anticipates that all-electric technologies will evolve to fully serve a wide range of cooking needs by 2035. Focus group participants importantly noted that in order to facilitate this transition, restaurants owners will need to establish new vendor relationships, acquire new equipment (which is not available for all cuisines at this time), and perfect different cooking techniques, which will require substantial time to develop. They recommended including the language in Somerville's ordinance. It was also recommended that the exception be extended to cafeterias, who reportedly face the same challenges as restaurants.
- "Freestanding outdoor heating and cooking appliances that are not connected to the building's natural gas or propane infrastructure and are used to facilitate outdoor dining."
   Many developers are attracted to Somerville because of the vibrant dining and nightlife scene. The City wants to preserve that. Creating an exception for commercial outdoor dining, popularized by the pandemic, will help.

Subsection c, "Equipment or appliances used for space heating, service water heating, cooking, clothes drying, and/or lighting that can utilize coal, oil, natural gas, other fuel hydrocarbons, including synthetic equivalents, or other fossil fuels may not be installed as part of any residential or non-residential Major Renovation, with the exception of a.i.1 through a.i.3 and b.i.1 through b.i.11 above. All Major Renovations associated with a.i.1 through a.i.3 and b.i.1 through b.i.11 must follow applicable Stretch and Specialized Energy Code requirements as applicable," maps to the Department of Energy Resources Model Rule and was adapted only to add the three additional low-rise residential and eight additional commercial and other project exceptions.

#### Section 6-95, Waivers:

• External and internal focus group members recommended that a subject matter expert who is a City staff member and not part of the enforcing department review applications for

waivers for noncompliance. They also advised that the Office of Sustainability and Environment would be the most appropriate arbiter. Authorizing a department director or their designee to make such a determination is standard language and practice in Somerville ordinances. While the director's position is likely to remain consistent in title and function, other positions within a department are more likely to change over time. This language allows for sustainability as well as flexibility over time.

- If a project applies for and receives a waiver, then it would be allowed to not comply with the ordinance. A waiver may be considered under four circumstances:
  - o "Any equipment, appliance, or building system for which sufficient utility electric service cannot or is not projected to be reasonably available and there is no alternative fossil fuel-free technology or system reasonably available by the time of building occupancy." As discussed extensively later in this application, larger multifamily homes and commercial buildings are having difficulty going all-electric due to distribution capacity being needed in front of the meter. Somerville has several planned upgrades for transmission and distribution system upgrades, and Eversource estimates many more will be needed to meet net-zero goals. Preliminary results of the Climate Forward survey showed 5% of nearly 500 respondents would like to do more energy upgrades, but they need to increase electrical capacity. Increasing capacity, particularly on an individual basis, adds costs to a project and can greatly extend the timeline. Internal and external focus groups recommended adding a waiver for this in addition to mechanisms to incentivize adding capacity to the grid through community benefits. The former is addressed here, and the latter will be addressed through a forthcoming zoning amendment. As part of this waiver application, applicants must submit a letter signed by a licensed electrician, design professional, or a utility, describing service limitations. This is modelled off of a current development review process. Projects going through the Zoning or Building Permit process are required to complete a questionnaire. This questionnaire requires property owners and developers to reach out to the public utility to determine if there are any service limitations.
  - o "Within a multifamily building in which less than 50% of the total housing units are undergoing a Major Renovation, a unit that shares a heating system with another housing unit that is not undergoing a Major Renovation, as demonstrated by the applicant." Most buildings in Somerville are multifamily residential buildings. Some multifamily homes have complex building systems that are interconnected between units. Focus group participants recommended putting standards in place to explain how the ordinance would apply if one unit in a multifamily building is undergoing a major renovation while others are not. The City is using the 50% threshold to be consistent with the definition of Major Renovation, while creating an opportunity for buildings with interconnected systems to apply for a waiver when less than 50% of the units are being renovated to avoid disruptive upgrades to a system when it may not be the most opportune or economical time for system replacement. Additionally, we want to avoid creating hesitancy for completing necessary building upgrades.

- o Historic buildings may also apply for a waiver to comply with the ordinance. The criteria they must meet to qualify as historic are adapted directly from Massachusetts' most recently adopted International Existing Building Code with applicable Massachusetts amendments. Somerville is home to over 300 historic buildings, nearly 100 of which are included in the National Park Service's National Register of Historic Places. Historic districts can also be found throughout the city, including the Bow Street, Spring Hill, Mount Vernon Street, and Westwood Road districts. The Spring Hill Historic District alone includes 69 historically significant buildings. Focus group participants were concerned about the added cost and complexity associated with decarbonizing historic buildings, in addition to the ability to maintain their historic relevance and appearance. For this reason, historic buildings may be eligible to receive a waiver.
- "Manufacturing process loads if the process load cannot physically or reasonably be converted to a fossil fuel-free process, as demonstrated by the applicant." Somerville is known as the city of homes, with 32,000 housing units over four square miles. Somerville is also home to a diverse, vibrant range of commercial spaces, including offices, retail, and some industrial facilities. According to the Department of Economic Research, professional and technical services, health care and social assistance, and other services account for half (50%) of all establishments in Somerville. 10% of establishments are classified as accommodation and food service. Two percent (2%) of all establishments are classified as manufacturing. Somerville has few industrial and manufacturing buildings. Since the new Zoning Ordinance was updated and adopted in December 2019, the community has begun to undergo a transformation in its building stock, adding several large, new developments, including apartments, research and development space, laboratories, and mixed-use buildings, primarily located in transformative development areas of the city. The current Zoning Ordinance, Specialized and Stretch Energy Codes, incentives, consumer demand, a changing climate, and development trends more generally, have given rise to the proliferation of LEED and Phius builds across Somerville.

Through the development of the Fossil Fuel Free Ordinance, the City engaged external and internal stakeholders and subject matter experts to better understand how the Ordinance may impact the operations of commercial and other non-residential buildings. City staff analyzed feedback and as a result, incorporated eight additional exceptions for commercial properties. Many of the buildings with significant process loads are exempt from the Ordinance. Several of the exceptions may apply to small-scale commercial buildings, too. For example, restaurants, which make up a significant portion of small-scale commercial businesses, are granted an exception through 2035 due to current technological limitations.

Somerville staff also spoke with laundromats and drycleaners. According to the Chamber of Commerce, there are about 13 dry cleaning businesses in Somerville

and up to 70 laundromats. They expressed concerned about the availability of

comparable fossil fuel-free equipment. Analysis showed that there are electric commercial washers and dryers comparable to gas versions. Additionally, it is unlikely that replacement of the machines at an existing laundromat will necessitate compliance with the Ordinance. The Ordinance also includes the option to apply for a waiver under specific circumstances, including for manufacturing and process loads, which extend beyond space heating requirements for fossil fuels to conduct daily business operations.

Due to these measures, the City is confident the requirements of the Ordinance will not pose an undue burden to manufacturing and process loads. In the Ordinance, thoughtful exceptions with periodic evaluations, as well as the authority to issue waivers, will allow the City to implement the Ordinance judiciously in a manner supportive of businesses and development while effectively reducing the City's greenhouse gas emissions.

**Section 6-96, Reports:** The section includes a requirement for planning, building, and occupancy permit applicants to submit energy reports as part of the application process. This section of the ordinance also establishes a recurrent review process by which subject matter experts will review the exceptions in the ordinance for appropriateness and report findings and recommendations to the City Council. If it is recommended that an exception is no longer necessary due to technological advances, cost or incentives, or any other reason, then the City Council may vote to consider amending the Ordinance.

Section 6-97, Effective Date: The Ordinance sets the effective date 180 days after Somerville's Home Rule Petition is approved or on January 1, 2025, whichever is sooner. In focus groups, it was recommended to extend the timeline beyond the typical 90 days to allow time to educate the community and the workforce about the changes and build understanding of fossil-fuel free techniques. It was also noted by City staff that other code changes should be taken into consideration. The Commonwealth typically gives 180 days' notice for building code changes. This timeline was also recommended by the Department of Energy Resources regarding the Specialized Energy Code. Somerville has followed this precedent. The alternative effective date of January 1, 2025 acts as a stop-gap, allowing Somerville to begin collecting data by the first day of the first reporting year for the Department of Energy Resources, per 225 CMR 24.07.

**Section 6-98, Conflicting Provisions:** In the unlikely event there are any conflicting provisions between this ordinance and another local or state ordinance, the City will prioritize public safety, health, and general welfare in that order. Focus group attendees noted they wanted clear standards to be set in the ordinance. While the ordinance was developed to avoid this issue, this language attempts to preemptively reconcile any disputes that may arise while keeping the overarching goals as the priority.

**Section 6-99, Severability:** If any part of the ordinance is invalidated by a court of competent jurisdiction, the ordinance shall remain in effect except for the invalidated component. This is standard language for Somerville ordinances.

## (1)(c)(ii) Draft Zoning Goals and Incentives: Explanation of differences and rationale.

During the Focus Groups, internal and external stakeholders noted the importance of including incentives for developers and property owners to comply with the ordinance and increase electric capacity to facilitate electrification, which will contribute to the success of the demonstration project. Staff determined the best place for incentives would be in the Zoning Ordinance. Therefore, incentives are not included in the Code of Ordinances.

Staff are in the process of developing goals for the Zoning Ordinance and appropriate incentives. We recognize this goal is incredibly ambitious and look forward to bringing it to fruition. Staff will follow up this application with progress reports to the Department of Energy Resources monthly through February 2024 or more frequently as requested.

#### (1)(d) Implementation plan

- If Local Approval of the community's proposed by-law or ordinance has not been acquired, the community's plan, including any associated timelines, for acquiring Local Approval of the proposed by-law or ordinance.
  - a. The Fossil Fuel Free Ordinance was passed November 9, 2023.
  - b. The timeline for the Fossil Fuel Free Zoning Incentive Project is as follows:
    - November-mid December: Goal and incentive development with interdepartmental staff, boards and committees and stakeholders to inform zoning incentives.
    - Mid-December: Submit proposed language to the Land Use Committee and Planning Board.
    - December 27-January 3: Advertise publicly.
    - January 4: Present at Joint Meeting.
    - January 5-12: Written record open.
    - Revise goals and incentives as needed.
    - January 18: Vote is taken at both Land Use Committee and Planning Board meetings.
    - Approx. January 25: City Council vote

      Places find a visual representation of the timeline below (Fig. 1).

      Places find a visual representation of the timeline below (Fig. 2).

Please find a visual representation of the timeline below (Figure 1).

- If Local Approval of the community's proposed by-law or ordinance has been acquired, timeline and effective dates of the by-law or ordinance's provisions or requirements.
  - a. The Ordinance is effective 180 days after acceptance into the Demonstration Program and by January 1, 2025, whichever is sooner.
  - b. Coinciding with the Ordinance, staff will recommend the Zoning Amendment take effect on January 1, 2025, or 180 days after acceptance into the Fossil Fuel Free Demonstration Project, whichever is sooner, or upon approval of any Home Rule Petition authorizing the City of Somerville to establish a net zero

emissions standard for new constructed buildings and Major Renovation projects.

### iii. A demonstrated commitment to collaborate with the Department on data collection, reporting, and outreach/training.

The City is looking forward to collaborating with the Department of Energy Resources on outreach and training for the Fossil Fuel Free Program. Once Somerville is notified of acceptance into the program, the City will work quickly to release informational materials. These will include a public announcement via press release, community and SustainaVille e-newsletters (over 15,000 subscribers combined), and one-minute videos on social media, website, and more.

Staff will host an internal kick-off coordination meeting and meet monthly afterwards to ensure staff are prepared to evaluate and track new projects and administer the waiver process. The City will coordinate with the Massachusetts Clean Energy Center, Mass Save, the State, sustainable building professionals, manufacturers, local organizations, businesses like restaurants and laundromats, and contractors to identify training strategies and pathways. Staff will regularly discuss the program's implementation with Eversource and National Grid.

Simultaneously, staff will develop, translate, and disseminate multimedia marketing materials online and in print, most notably during block walking and flyering at local businesses. The City will host a kickoff event with a presentation tailored for the workforce audience. This event will be in person, as well as live streamed and recorded. Staff will also conduct outreach at community events, including trainings, neighborhood association meetings, tabling events, festivals, libraries, nonprofits, community organizations, businesses, and more. The purpose will be to educate the community about the program and guide them to resources for making fossil fuel free improvements and workforce development pathways.

180 days after Somerville is accepted into the program and by January 1, 2025, the Ordinance will go into effect. Once the Ordinance goes into effect, staff will continue to meet regularly to review generated reports, evaluate implementation, and adjust the program as needed.

Educational outreach will be conducted by City staff as well as volunteers. We have many engaged and knowledgeable residents who volunteer for the Commission and Ambassadors programs as well as community events. We also have a "meeting in a box" toolkit that makes it easy for anyone to host or attend an engagement event. The program will leverage these resources to educate residents about the program's goal, requirements, as well as financing and incentives available. The City will also engage local businesses, tradespeople, and contractors about the program, working with local leaders to identify the most effective ways to reach these audiences. Focus group attendees expressed they would like to see the City involved in setting the standards for workforce training and apprenticeship programs and promotion. These programs would ultimately be used to retrain workers who primarily install fossil-fueled systems to create career pathways in clean energy.

The City's Office of Sustainability and Environment staff have run several successful nationally recognized residential energy outreach campaigns and programs and have contributed to the US Department of Energy Better Buildings Residential Network Community-based Social Marketing Toolkit. The office also has two full-time sustainability planner positions and a full-time community engagement specialist. In addition, on November 9 the City Council voted to approve a new position for the Office of Sustainability and Environment called the Residential Decarbonization Program Manager. The projected start date for this position is February 1, 2024. These staff will coordinate across departments, including with Economic Development, Planning and Zoning, Housing, Inspectional Services, and Communications to implement the public education, workforce development, and overall program successfully. Below is a chart detailing the engagement and education strategy (Figure 2).

iv. Description of the current process within each city and town for storing building permit data and certificates of occupancy.

Somerville utilizes Citizenserve, a comprehensive permitting and data platform, for all zoning, building, and certificate of occupancy permitting citywide. Reports are conveniently accessible and easy to run as often as needed. The City's zoning and building permit review process and Fossil Fuel Free Ordinance includes energy reporting requirements that will facilitate detailed energy reporting to the Department of Energy Resources. Please see section (3) (b) for additional information.

v. Description of how the by-law or ordinance will affect the use of fossil fuels for commercial and industrial Process Load in buildings subject to the by-law or ordinance, including but not limited to, restaurants, dry cleaners, and manufacturing uses.

Please see section (1)(c).

vi. Description of exemption or waiver process from any requirements, if any, to be included in the by-law or ordinance.

The Ordinance includes a waiver process. The Director of the Mayor's Office of Sustainability and Environment or Designee, as the subject matter experts and as a separate department outside of the enforcing department (Inspectional Services), will publish, maintain, and implement the waiver process. This will include in-print and webbased applications available publicly at multiple City buildings and on the website, somervillema.gov and Somerville Citizenserve portal, where building and zoning permit application information is available. Both electronic and print versions of the application will be available in at least six additional languages, including but not limited to Spanish, Portuguese, Haitian Creole, Nepali, and both traditional and simplified Chinese. The City also offers translation and interpretation services in these languages and more, including Mandarin and Cantonese.

Figure 1: Implementation strategy: Fossil Fuel Free Zoning Incentive Project Timeline

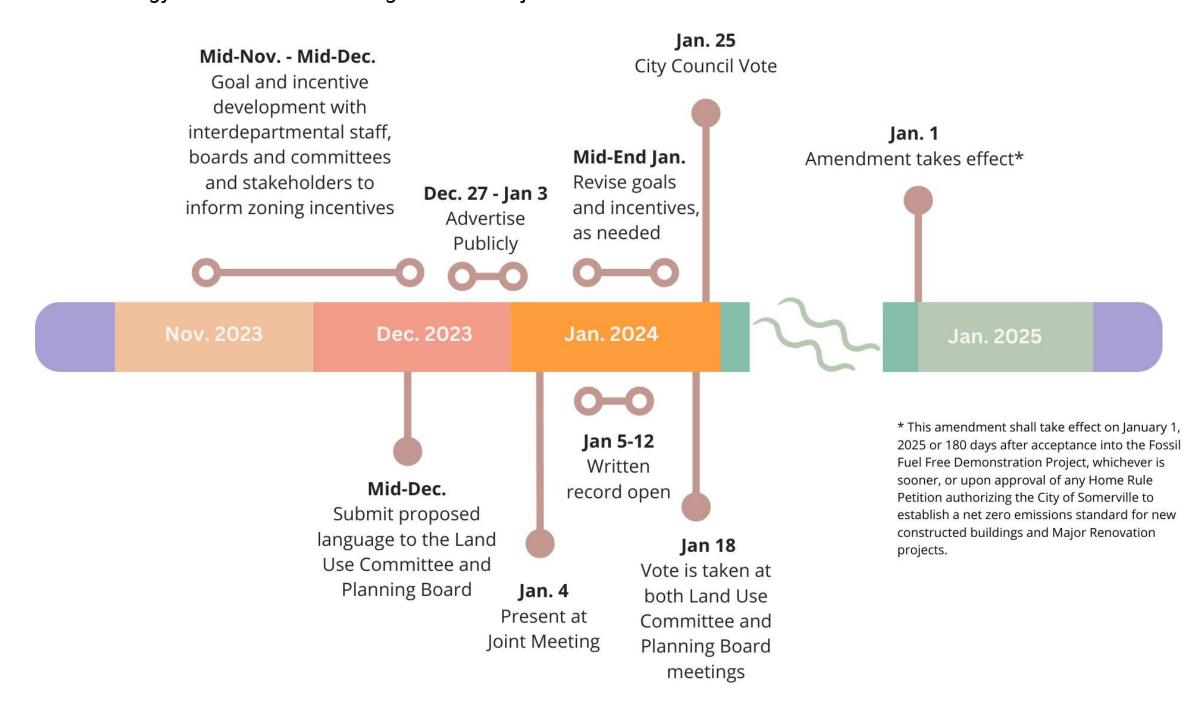
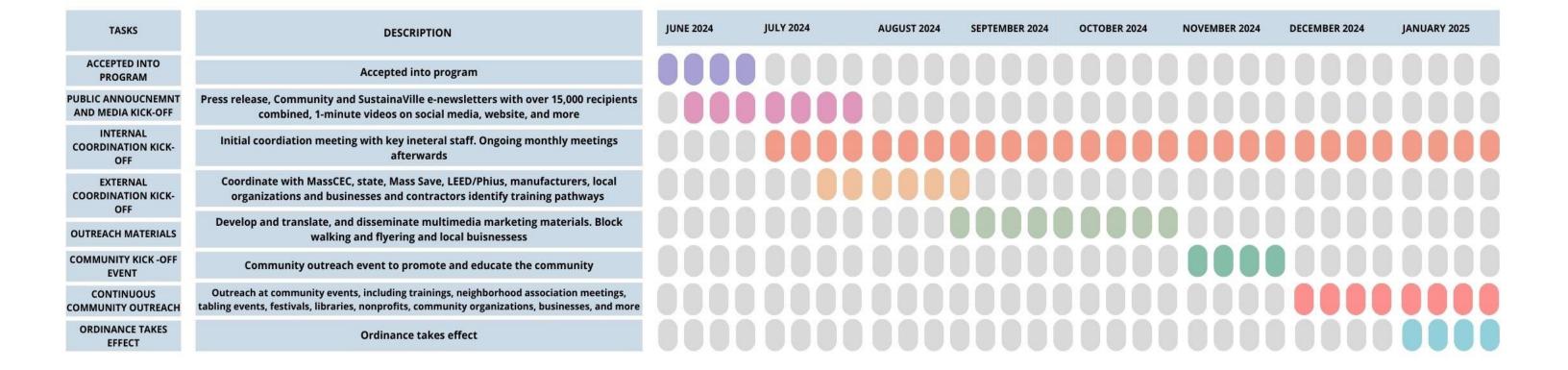


Figure 2: Implementation strategy: Education and engagement



# (1)(e) Documentation sufficient to demonstrate that the applicant has achieved at least one of the three housing production eligibility thresholds set forth in 24.05(2).

- i. Prioritized and Substitute Communities that do not meet one of the three housing production and eligibility thresholds set forth in 24.05(2) at the time of application may submit an application but must include an explanation of its current status and the applicant's plan to meet such criteria on or before February 11, 2024.
- ii. Prioritized and Substitute Communities that do not meet one of the housing production and eligibility thresholds set forth in 24.05(2) at the time of application must provide updates at regular intervals, to be established by the Department, on its status and progress in meeting such criteria on or before February 11, 2024.

The City of Somerville is currently working to amend its zoning ordinance for compliance with Sec. 3A of G.L. Ch. 40A and to achieve the third housing production and eligibility threshold set forth in 24.05(2) on or before February 11, 2024. Somerville does not currently meet the 10 per cent housing affordability threshold set under chapter 40B and has not been granted safe harbor status through an approved Housing Production Plan. More than 1.5% of the total land area is occupied by sites with Subsidized Housing Inventory eligible housing units. While safe harbor status has not been formally granted, the City of Somerville is confident that it meets the threshold set under MGL Ch. 40B to be granted safe harbor.

On August 18, 2023, the Metropolitan Area Planning Council, in collaboration with the Executive Office of Housing and Livable Communities, provided the City of Somerville with a non-binding analysis of Somerville's proposed 3A related zoning amendments and determined that the proposal successfully fulfills the stipulated requirements of Sec. 3A and HLC's MBTA Communities compliance guidelines for Somerville.

Following this review, the Ballantyne Administration submitted the proposed amendments to the Somerville City Council. The City has submitted a proposal to the City Council and the Planning Board to amend zoning in three ways to meet MBTA Communities requirements and bring Somerville's largest and lowest-density residential zoning district into compliance with Section 3A.

The following three proposals would apply across all residential districts to encourage increased housing units and capacity:

(1) Remove the four-unrelated persons maximum occupancy rule on housing. The current rule restricts the number of occupants to no more than four unrelated persons. Any restriction on the number of occupants is prohibited by MBTA Communities, and a removal of this measure has previously garnered strong City Council support. All state fire, health, safety and occupancy regulations would remain in effect to support safety and prevent overcrowding;

- (2) Allow three units by right, which is also required by MBTA Communities, and
- (3) MBTA Communities requires residential construction to be permitted by right, without the need for a special permit. Somerville currently requires a special permit in all zoning districts for any lot with a steep slope. The City is proposing to move to oversight of steep slope construction into existing Engineering review processes. A virtual Public Hearing on the City's proposals for zoning changes to meet new MBTA Communities law requirements was held at a joint session of the City Council Land Use Committee and the Planning Board at 6:30 p.m., Thursday, October 19, 2023. All proposed changes were kept in committee, but the Planning Board has already recommended approval of all three amendments. All required public hearings have been completed and recommendations from the Somerville Planning Board have been provided to the City Council. Adoption is anticipated on November 21, 2023. If they are approved, all required documentation will be submitted to the Executive Office of Housing and Livable Communities before the end of the year. City staff will provide updates to the Department of Energy Resources monthly and more frequently upon request.

#### (2) Additional Materials for Substitute Communities

(a) The community's progress toward creation of a multi-family zoning district compliant with Sec. 3A of G.L. Ch. 4OA, if applicable.

Somerville is a leader in housing creation, and its zoning policies and community goals for housing and development already meet and exceed the intent of Section 3A. Somerville is the most densely populated municipality in New England and has no single-family zoning; all residential zoning districts allow for multifamily by right. High-density zoning districts are already prioritized around the City's transit nodes and along transit corridors, leading to ample opportunities for multi-family housing development.

Somerville continues to serve as a regional leader and is encouraging the production of multi-family housing. SomerVision, the City's comprehensive Master Plan, has established aggressive City-wide goals for the addition of 30,000 new housing units with 20% of those units being affordable. To achieve many of the City's comprehensive plan objectives, zoning was amended in 2019 to permit development across most of the city either by-right or by site plan approval, with only large-scale transformational redevelopment projects such as Assembly Square, Cambridge Crossing, or Union Square and Boynton Yards requiring discretionary approval of a Master Plan.

(b) Initiatives taken by the community to support the preservation and production of housing units, including multi-family housing.

#### Production

The City of Somerville utilizes numerous innovative strategies to support the preservation and production of housing units. <u>SomerVision 2040</u>, the City's Comprehensive Plan, lists several goals for ensuring housing is available and affordable, including equitably increasing the housing

supply, stopping forced displacement, and making 20% of the housing stock affordable in perpetuity by 2040.

The Somerville Affordable Housing Trust Fund was created in 1989 by a City ordinance to preserve and create affordable rental and homeownership units and carry out programs to directly assist homeowners and renters. Its activities benefit low-to-moderate-income households with incomes at or below 110% of area median income (AMI). All linkage fees from commercial development in Somerville go to the Trust, as do fractional payments made pursuant to the City's Inclusionary Zoning Ordinance. The Trust also receives revenues from the repayment of Trust-funded loans to affordable housing developers, first-time homebuyers, or other loans.

Since FY15, the Trust has administered Community Preservation Act (CPA) funds designated for community housing purposes. At its Sept 14, 2023 meeting, the Trust voted to allocate up to \$500,000 in combined CPA and non-CPA Trust funds in FY24 for housing programs supporting sustainable tenancies.

Somerville's Inclusionary Zoning Ordinance was established in 1990 to implement the housing policy objectives of the City's Comprehensive Plan by increasing the supply of long-term, affordable housing available to existing and future residents of mixed incomes. Through its Inclusionary Housing Program, the City works with private and nonprofit developers to create below-market rate housing opportunities for renters and homebuyers. Somerville also requires new buildings with five or more units to offer at least 20% of the units as affordable.

The City's 100 Homes Program acquires and rehabs multi-family properties in Somerville to create units that are permanently affordable for low- and moderate-income households, i.e., those earning at or below 100% of AMI. The program's focus on acquisition allows it to add affordable units more quickly than through new construction, and its unique scattered site approach intersperses affordable housing throughout Somerville's neighborhoods. The units the 100 Homes Program acquires are deed-restricted at a variety of affordability levels, including units affordable to households at or below 50%, 60%, 80%, and 100% of AMI.

Our Condominium Conversion Ordinance requires property owners who intend to remove rental units from the market to apply to the Condominium Review Board and request a Removal Permit. The ordinance mandates an increased waiting period, relocation payment, and notification period for landlords with elderly, disabled, or low-income tenants.

Somerville's Short-Term Rentals Ordinance allows residents to operate short-term rental units (for example, rooms or units rented on sites such as AirBnB or HomeAway) while also ensuring that those units remain part of the housing stock and do not negatively impact the neighborhood. The ordinance prevents units that are not a primary residence from being taken off the long-term housing market for short-term rental use.

In total, the City has more than 800 total affordable housing units in development, including 453 inclusionary units in development. A few examples are highlighted below.

Along with the Somerville Community Corporation, the City is redeveloping the 216-unit,
 1940s-era Clarendon Hill Public Housing Complex into a 570-unit mixed income

neighborhood, transforming a 70+ year old public housing development into an ethnically, linguistically, and economically diverse neighborhood. The first phase of the project began in May 2023 and is creating 168 affordable units. 115 of these units are funded through the Affordable Housing Trust Fund. The project anticipates a groundbreaking in the fourth quarter of 2024. It will be LEED Platinum certifiable. The project will also provide green and open space as well as pedestrian and bicycle facilities to residents.

- The City's 299 Broadway project will produce 288 units of rental housing in the Winter Hill community, including 132 units of affordable housing which will combat the displacement of Somerville residents and their families. The Office of Sustainability and Environment issued a letter of support for this Chapter 40B project, which enables the Zoning Boards of Appeals to approve affordable housing developments under flexible rules if at least 20-25% of the units have long-term affordability restrictions. The project intends to be Phius certifiable with transit-oriented design without off-street parking.
- The Somerville Housing Authority, who oversees 1,400 affordable housing units in Somerville, has made progress installing many energy efficiency upgrades, as well as developing all-electric affordable housing. Most recently, the Housing Authority began work on 21 affordable units for elderly occupants. These units will be all electric and equipped with heat pumps providing heating and cooling.

#### Preservation

Somerville is densely populated with two to three family homes. 90% of Somerville homes were constructed before lead paint was banned. Between 2001 to 2020, the City earned grant funding from the US Department of Housing and Urban Development to make incomequalifying homes lead safe. 323 Somerville homes were made lead-safe through the program. During the pandemic, the lead program expired and the Housing Rehab and Heating System Replacement Programs were revised to increase funding available, particularly for projects who undertook lead-safe certification and/or energy efficiency initiatives.

The Housing Rehab Program is an income qualifying, 0% interest, deferred loan of up to \$50,000 per housing unit. There is currently \$1.2 million in outstanding loans. The Heating System Replacement Program provides up to \$10,000 through a forgivable loan for energy efficient heating system replacement.

The City's Housing Division has worked for about 10 years with Tufts University Department of Civil Environmental Engineering and a community organization called the Somerville Transportation Equity Partnership (STEP) to study indoor air quality in multifamily affordable housing units near heavily trafficked roadways to inform policy efforts.

Please see section (3)(a) for further examples of Somerville's extensive initiatives to support the preservation and production of housing units.

(c) Substitute Communities may submit letters of support from community leaders and/or community members.

Please see Appendix C.

#### (3) Additional Materials for Substitute Communities

#### (a) Contribution to the overall Demonstration Project

#### Demographic Diversity

Somerville is a small city adjacent to Boston with 80,608 residents in a land area of 4.1 square miles, making it the most densely populated city in New England. According to the 2021 U.S. Census 5-Year American Community Survey data, Somerville's population is 74.3% White, 9.4% Asian, 6.9% biracial/multiracial, 5.0% Black, 4.2% other, and 0.2% American Indian/Alaskan Native. 12.3% of the city's residents are Hispanic/Latino. 4.4% of the population speaks English less than "very well". The poverty rate is relatively low—10.4%—but this hides an economic divide between white collar professionals and the many low-income families that have come to Somerville for a better life. 50.8% of Somerville's public-school students are low-income compared to the state percentage of 42.3%.

#### Environmental Justice

Somerville is home to priority populations that meet the Commonwealth's criteria for Minority, Income, and/or Language Isolation for Environmental Justice (EJ) community designation. Fiftyone (72%) of Somerville's 71 census blocks meet at least one of these EJ criteria, and 59,054 (73%) of the city's residents live in those 51 census blocks. Most of these residents qualify as EJ under the Minority criterion. Three census tract block groups in West Somerville, Winter Hill, and Central Hill qualify under both the Minority and Income criteria. Three separate census tract block groups in East Somerville and West Somerville qualify under the Minority and English Isolation criteria, and one block group in the Innerbelt/Brickbottom neighborhood satisfies all three criteria.

The Federal government's Climate and Economic Justice Screening Tool shows that three census tracts in Somerville qualify as disadvantaged due to high rates of linguistic isolation and people ages 25 years or older who have less than a high school diploma. These census tracts are: (1) 25017351500 in the Innerbelt/Brickbottom neighborhood with a population of 2,313, (2) 25017351403 in the Winter Hill neighborhood with a population of 4,774, and (3) 25017350104 in East Somerville with a population of 7,926.

#### Type and Scale of Building Development

Much of Somerville's building stock is residential. The market-rate, unrestricted rental housing inventory in Somerville includes units in a variety of settings, from new, "4- and 5-star" apartment developments in and around Assembly Square to older walkups, duplexes, and three-unit structures that comprise some two-thirds of the City's housing supply. Somerville's building stock includes over 5,300 midsize, two- or three-story multi-family buildings, not including over 6,000 condo units and apartment buildings. In 2022, Somerville permitted 44 buildings with a total of 115 residential units. Single-family units comprised 23 of the total permits, while the remainder were 21 multi-family buildings with a total of 92 units. These single-family, two-

family, and small multi-family properties define the residential land use pattern. Historically, they have served as a source of so-called "missing middle housing," and give Somerville a human scale feel that mitigates the sense of being in a high-density city.

The City of Somerville aims to sustainably increase the diversity of building development by increasing commercial development. The City's 2018 climate action plan projected new development is anticipated to occur at an annual growth rate of over 1% in both the residential and commercial sectors based on the projected increase in number of residents and local employment, respectively. In SomerVision2040, the City set forth the goal of developing sufficient commercial property to generate 50% of property tax revenue from commercial sources. Additionally, the City made it a goal to promote sustainability in commercial development by ensuring that commercial development uses sustainable design, technology, and practices.

#### Municipal Support

Somerville municipal leadership and community members have demonstrated extensive support for fossil fuel elimination within the past four fiscal years. Throughout this period of time, the City has made investments in projects that aid in fulfilling Somerville's climate action goals, as outlined in the 2018 Somerville Climate Forward Plan. These key goals include leading by example, improved energy performance in existing buildings, and encouraging net-zero and resilient new buildings standards.

Energy use reduction has been identified as a goal in several key sectors of the city government and community. For example, Somerville has established goals to decarbonize the residential sector by 55%, the commercial sector by 50%, and all vehicles in the city by 40% by 2030. To achieve its longer-term goal of becoming carbon net-negative by 2050, Somerville identified numerous short-term (0- to 3-year) implementation steps for energy use reduction in its 2018 Climate Forward Plan, including: (1) Establish net-zero building performance standard for new municipal buildings and significant renovations that includes compliance options for net-zero energy, net-zero emissions, and net-zero ready buildings; (2) Determine potential net-zero compliance pathway of building typologies (including on-site renewable energy potential or access to district energy); (3) Establish rental licensing program; (4) Coordinate with energy utilities to automate process of energy disclosure to tenants; (5) Evaluate and prioritize opportunity sites for curbside EV charging stations within residential neighborhoods; and (6) Explore existing technologies and feasibility of street light and/or utility pole EV charging stations to maximize use of existing electrical infrastructure. The City is currently in the process of updating Climate Forward and secured grant funding for engagement.

Somerville became a Green Community in 2011 and in 2020 completed two Green Communities Grant-funded projects consisting of LED lighting and controls upgrades and steam trap repair and replacement, which saved \$16,581 per year in energy costs and abated approximately 100 metric tons of CO2 equivalent emissions. Smart monitoring technologies were also installed on steam boilers to better optimize boiler performance and improve comfort. The Green Communities program has provided \$1,349,752 to Somerville for over 30 energy conservation projects over the life of the program.

In 2021, the City created the first Energy Stabilization Fund to reinvest savings from energy projects, and between July 1, 2020 and June 30, 2021, Somerville reduced emissions from municipal buildings and vehicles by 421 metric tons, or 5% compared to 2020 levels. This decrease can be attributed to a significant reduction in the use of oil following the redesign of Somerville High School, which is currently the City's most energy efficient building. Over its lifetime, the fund has accrued over \$1.1 million.

As of July 2016, the City had issued at least 338 permits for ductless air source heat pumps, 33 permits for EV chargers, 761 electric permits for the installation of solar panels, and 1,578 building permits for weatherization and insulation upgrades to existing buildings. At least 161 of these weatherization and insulation upgrade projects participated in the Mass Save program.

In 2023, the City secured \$100,000 in state funding to convene focus groups with the goal of establishing a rental licensing ordinance with energy efficiency standards and an energy disclosure. This ordinance is intended to increase awareness of energy efficiency, promote transparency, and improve city management. A draft ordinance has been filed with the City Council. Another \$100,000 in state funding was also secured to support an affordable housing retrofit study. A rental licensing program that would proactively identify rental units that are below sanitary code standards and contribute to efforts to preserve existing housing.

The City of Somerville has advocated for net-zero and resilient new buildings standards for several years. Somerville adopted an updated Zoning Ordinance in 2019 that requires all projects over 25,000 square feet to be LEED Gold certifiable and all projects over 50,000 square feet to be LEED Platinum certifiable. Passive House certification is also incentivized or required in various parts of the code. In residential projects, Passive House certification qualifies for density bonuses. Some Master Planned Districts, including areas around the Green Line Station in Union Square, are required to have Passive House certification, or Living Building certification. Additionally, in Fiscal Year 2021, Somerville revised the permitting process to encourage contact between developers and staff to ensure sustainability goals and mandates are met. As a result, the ordinance has spurred the future development of 1,668 certifiable LEED Gold or Platinum and/or Phius units, with 489 designated for affordable housing.

Somerville staff implemented a pilot low-load building energy calculator for large development projects to better assess projected building energy use against City goals. A Net Zero consultant was hired in Fiscal Year 2023, and this was followed by efforts to update the ordinance and review requirements to complement the specialized code, which was adopted in January 2023 and went into effect in July 2023.

Somerville's Community Choice Aggregation program has been in effect since 2017. Voluntary renewable energy purchases through Somerville's Community Choice Electricity program total nearly 100,000 MWh. In the first five years of the program, participants saved \$10 million across all product offerings. During the Ballantyne Administration, the renewable energy content of the default local green rate doubled from 10% to 20%, as did the total savings, reaching \$22 million by July 2023. Please note, savings compared to Eversource Basic Service cannot be

guaranteed because Basic Service prices change every six months for residential and commercial customers and every three months for industrial customers.

In 2020, Somerville's community GHG emissions totaled approximately 459,707 MT CO2e, a 29% decrease from the 2014 base year. This also represents a 33% reduction in per capita emissions since 2014, demonstrating that the city has been able to grow its population and economy while reducing GHG emissions. In 2020, 60% of emissions came from the stationary energy sector, 35% from transportation, and 5% from waste.

Somerville participated in the National Grid Community Initiative beginning in 2016 and through 2017. Residents that completed Mass Save no-cost Home Energy Assessments and subsequent energy upgrades helped Somerville reach goals set by National Grid and earned grant funding to fund future energy efficiency projects. Staff also provided input to help the program expand statewide. Between 2016 and 2017, Somerville residents completed 1,600+ assessments and 1,200+ energy upgrades. Residents saved more than \$1.1 million and the City earned a reusable water bottle station as part of the Shining Community Award, as well as grant funding for future energy initiatives. Moreover, according to MassSaveData.com, Somerville electric and gas ratepayers saved \$44.2 million between 2013 and 2021.

Solarize Somerville, a limited-time incentive program sponsored by the Massachusetts Clean Energy Center and the Department of Energy Resources, ran from July to December 2016. The program offered a group-buy discount to Somerville property owners who signed contracts to install solar PV with the City's procured installer, SolarFlair. 100 residents installed solar arrays, and Somerville surpassed its goal of installing 400 kW of nameplate solar capacity and were awarded a free, 5 kW solar array for CASPAR, a local nonprofit.

In 2016, Somerville received a grant from the Carbon Neutral Cities Alliance through the Urban Sustainability Directors Network to create individualized programs to enhance the adoption of renewable thermal technology in New England. Somerville staff worked with consultants and other cities to conduct a market equity and adoption analysis and eventually select a renewable thermal technology to promote through the program. Using this analysis, the City coordinated HeatSmart CoolSmart, a time-limited program that ran between August 2017 and February 2018 and helped educate Somerville property owners and residents while also providing a discount on air source heat pumps. Over 200 Somerville property owners completed site visits from the City's procured installers, and 61 cold-climate ductless mini split systems were installed as a direct result.

The City of Somerville has earned SolSmart Gold Designation from SolSmart, a national designation and technical assistance program funded by the U.S. Department of Energy SunShot Initiative. SolSmart nationally recognizes communities for adopting programs and practices that make it faster, easier, and cheaper to go solar. To achieve designation, cities and counties take steps to reduce solar "soft costs," roughly two-thirds of the total price of an installed residential system. A SolSmart designation helps attract solar industry investment and generate economic development and local jobs. Somerville was the first community in Massachusetts to earn Bronze, then Gold designations. In addition, both Somerville's Planning

and Zoning and Inspectional Services departments earned merit awards for their efforts towards the SolSmart initiative.

Municipal support for climate action and reduced dependence on fossil fuels is clear in the expansion of the City's Office of Sustainability and Environment. Since 2019, the City has increased the office's annual funding by over 150% from approximately \$820,000 in FY2019 to approximately \$1.24 million in FY2024. The Office of Sustainability and Environment's full-time staff has tripled since 2019, and new positions, such as Sustainability Planner and Residential Decarbonization Program Manager, have been added specifically to address decarbonization and reduction of emissions in the buildings sector. Additionally, the City maintains a robust website detailing the road to net zero, with incentives and information about various clean energy technologies: <a href="https://www.somervillema.gov/sustainaville">www.somervillema.gov/r2nz</a>.

### (b) Ability to meet Department reporting requirements and effectively monitor and ensure code compliance and implementation.

The City of Somerville will be able to meet the Department of Energy Resources reporting requirements and effectively monitor and ensure code compliance and implementation. Somerville has utilized the Citizenserve online permitting platform since July 2016 for all building permits. In July 2023, all zoning permitting was transitioned onto the Citizenserve platform. All permitting records submitted after July 5, 2023, are stored and collected through Citizenserve. Staff from enforcement and implementing departments, including the Inspectional Services Department; the Planning, Preservation, and Zoning Division; and the Office of Sustainability and Environment access the platform and regularly and frequently coordinate with one another.

#### **Functionality**

Permits are tied to parcel identification numbers, allowing for simple searching. Through the platform, staff are easily able to pull reports based on logic fields and inputs. This allows for thoughtful program creation, streamlined implementation, consistent and frequent monitoring, and data driven evaluation. Staff have made a practice of employing data to inform administrative and policy decision-making. If staff determine any new fields or forms are required for the implementation of the Fossil Fuel Free Demonstration Program, then the City has a direct contact at Citizenserve to work with to develop new forms and processes as needed.

Somerville will support the Department of Energy Resources' biannual report requirements per 225 CMR 24.07 and will be able to submit the following by September 30 annually: name, street address, building usage type, square footage, and estimated construction cost. Additionally, the Fossil Fuel Free Ordinance requires energy reporting that illustrates the expected energy use for each major end use to be submitted with building and zoning permits.

#### Beyond Citizenserve

For two consecutive years, Somerville has earned the highest rating from <u>CDP</u>, an international non-profit for climate data reporting. The City also releases annual progress reports and

regularly releases final reports, found here: <a href="www.somervillema.gov/climateforward">www.somervillema.gov/climateforward</a> and <a href="www.somervillema.gov/somerville-climate-forward-update">www.somervillema.gov/climateforward</a> and <a href="www.somervillema.gov/somerville-climate-forward-update">www.somervillema.gov/climateforward</a> and <a href="www.somervillema.gov/somerville-climate-forward-update">www.somervillema.gov/somerville-climate-forward-update</a>. We are also in the process of developing a public climate action dashboard.

The City has a data clearinghouse and employs GIS data for zoning. GIS mapping provides Assessor's Database information, including, but not limited to, the fuel type of each property, heating system type, and owner's contact information. With this information, the City has projected when buildings would most likely be adopting fossil fuel-free heating systems to inform programming, advocacy, and fundraising efforts. In addition, GIS mapping includes Environmental Justice areas and demographic diversity, as well as projected areas of precipitation and coastal flood mapping for 1, 10 and 100 year 24-hour storms and storm surge through 2070.

Somerville's staff frequently attend and provide education, outreach, engagement, and trainings to industry professionals and groups, students, universities, municipalities, partners, community members, and regional organizations. The Office of Sustainability and Environment regularly and successfully employs a meeting-in-a-box strategy to obtain feedback from community members. Staff are therefore ready to assist the Department of Energy Resources in a variety of public engagement and education efforts.

As part of the permitting process, applicants are required to complete a sustainability and resiliency questionnaire. The City's Office of Strategic Planning and Community Development Housing Division studies the city's housing supply and demand, market, and production, and periodically issues a Housing Needs Assessment. Finally, Somerville is also developing a rental registry and energy disclosure ordinance. If approved, this ordinance will provide additional data on energy features and prices in rental housing, which accounts for approximately 21,000 housing units. These materials may assist the Department of Energy Resources' program evaluation.

(c) Consistency of proposed by-law or ordinance to the model rule provided by the Department.

Please see Section (1)(c).

(d) A preference for cities and towns that meet the compliance guidelines implementing section 3A of chapter 4OA of the General Laws through an approved zoning ordinance or, in the case of a town that must seek by-law approval from the Attorney General (AGO) pursuant to G.L. c.40 § 32, an AGO-approved by-law that provides for at least 1 district of reasonable size in which multi-family housing is permitted as right, or, if not applicable, a similar commitment to multi-family housing production as determined by the Department, in consultation with the Executive Office of Housing and Economic Development.

Please see Section (1)(e).

# (e) Localized electric grid investments needed to support the Demonstration Project as determined through consultation between the Department and electric distribution companies.

Eversource is Somerville's largest utility supplier. It serves all electric, and most gas customers, while National Grid serves about one-quarter of gas customers. As such, electric distribution planning mainly occurs with Eversource.

Eversource and Somerville share a common goal of a clean energy future. We coordinate closely and frequently through biweekly meetings. The topics covered in these coordination meetings span both the distribution and transmission systems. They include short- and long-term projects, from speculative phase to construction and maintenance. The City and Eversource have discussed growth and development, Somerville's goal to be carbon net-negative by 2050, as well as Somerville's application to this program.

Somerville is diversifying its building stock by adding new commercial properties and larger multifamily properties. Because such development and major renovations may need additional electrical capacity and the inability to identify this need early can lead to costly redesigns and project delays, we worked with Eversource to create an early identification process. This process has been integrated into the sustainability and resiliency portion of staff development review.

While Somerville's building emissions are decreasing, the city's overall electric demand is increasing. Currently, Somerville is switching load to Mystic Substation to help mitigate reaching the Distribution Operational Limit. Additionally, we are working towards the installation of a transformer that will increase Somerville Station 402 capacity. The in-service date for the transformer is Q3 2024, perfect timing for the Fossil Fuel Free Demonstration Program. At the same time, the City is coordinating with Eversource on the replacement of underground transmission lines running from Mystic Station in Everett to Prospect Street station in Somerville with higher capacity cable. Construction on this project is anticipated to begin in 2027.

When it comes to electrification, Somerville is thoughtfully strategizing the best way to expand the grid to deliver reliable, lowest cost electricity. Somerville's Community Choice Electricity program has consistently delivered more clean energy for a lower or comparable cost to Eversource Basic Service Rate, saving participants over \$20 million in the first six years of the program (future savings are not guaranteed). There is also considerable demand for home energy conservation from the community. In a preliminary review of responses to the 2023 Climate Forward Survey, 479 respondents answered the question, "What statement best describes your efforts to reduce the amount of energy needed for your home to date?" 53% made at least some effort, 28% said it's important but their landlord needs to make decisions, 8% said it's important but cost is an issue, 3% said it's important but time is an issue, and 4.5% said additional electric capacity is needed. Only 3.5% said it is not a priority.

Through a tabletop exercise, Eversource estimates that by 2050, Somerville will need to double the size of its electric capacity to be net-zero carbon neutral. This will require doubling the existing total number of bulk stations and transformers, distribution feeders, and large distribution service transformers. Through biweekly conversations, we are speculating on paths

to increase electric capacity to meet growing demand stemming from new development itself, not necessarily electrification. The existing substation near Station 402 and the Mystic Corridor is near capacity. A new substation will be needed. Now, we are in the process of determining site and design requirements.

Another speculative discussion has been taking place around increasing the electric capacity available to multifamily properties, and how to facilitate electrification in buildings with three or more stories. Somerville has approximately 33,000 housing units and about 53% are in buildings with three or more stories. These properties may need additional electric capacity for full decarbonization of home and vehicles. One solution we are exploring to unlock decarbonization for multifamily homes is the creation of a network of large distribution transformers. Eversource estimates that installing one underground transformer to power 96 units across 32 triple-deckers will cost up to \$2.2-\$2.7 million, in large part due to undergrounding of the wires. Installing these transformers across the city is estimated to cost somewhere between \$400 million and \$500 million. That number does not include the behind the meter upgrades, such as upgrading electric panels and installing electric building systems or purchasing new vehicles (estimated ~\$1 billion), or costs to the city or state associated with overseeing and facilitating the project. These transformers can also be installed above ground at a reduced cost. Whether installed above or underground, the transformers can be installed on public or private property. It is our understanding that at this this time, these distribution system upgrades would be required even if the community were to implement networked geothermal because those systems are also tied into the electric grid.

Underground large transformers are a great option for Somerville property owners to electrify because they will improve resiliency. They are submersible, will necessitate undergrounding of wires, and reduce reliance on fossil fuels. They are also flexible; unlike networked geothermal, anyone can hook into a transformer at any time, so residents will be able to make the most cost-effective decision in terms of when to fuel switch their home or vehicle. As more homes and vehicles electrify, we can add more transformers to a vault to increase the capacity.

Somerville's Fossil Fuel Free Demonstration Ordinance features a waiver for properties that will not be able to receive additional capacity for a reasonable cost or timeframe. We fully expect that this waiver will be used. To encourage developers and property owners who may otherwise be granted a waiver or an exception to comply with the ordinance, City staff are in the process of developing a compendium Fossil Fuel Free Zoning Ordinance Amendment. Projects that install additional electric capacity and allow others to plug into it may be eligible for incentives. The City would consider this as a community benefit. The timeline for this project will be to introduce the amendments in December for review by the Council and Zoning Review Board before they are considered for adoption by February 11, 2024. The full timeline may be found in section (1)(d).

In Fiscal Year 2024, the City anticipates beginning multiple planning and feasibility studies, which will include an examination of options for networked geothermal and neighborhood-scale distribution transformers to facilitate and accelerate electrification and decarbonization. The City is tracking inquiries and exploring funding options through regional organizations and state and

federal governments to support these efforts. The City is also developing an online form for residents to note whether they need additional electric capacity for a project. We are also considering concepts for micro solar grids and additional electric vehicle supply equipment with Eversource.

We believe Somerville's strong coordination and communication with the public utilities, staff's technical expertise, and communitywide demand for decarbonization and energy efficiency makes Somerville the perfect candidate for Fossil Fuel Free.

(f) Demonstrated support from community members and municipal leaders.

Please see Appendix C.

Appendix A Copy of home rule petition and date submitted and proof of Local Approval

#### The Commonwealth of Massachusetts

PRESENTED BY:

#### Christine P. Barber and Mike Connolly

To the Honorable Senate and House of Representatives of the Commonwealth of Massachusetts in General Court assembled:

The undersigned legislators and/or citizens respectfully petition for the adoption of the accompanying bill:

An Act authorizing the city of Somerville to establish a net zero emissions standard for new constructed buildings and major renovation projects.

#### PETITION OF:

NAME:	DISTRICT/ADDRESS:	DATE ADDED:
Christine P. Barber	34th Middlesex	9/6/2022
Mike Connolly	26th Middlesex	9/6/2022
Patricia D. Jehlen	Second Middlesex	9/6/2022
Erika Uyterhoeven	27th Middlesex	9/7/2022

#### **HOUSE . . . . . . . . . . . . . . . . No. 5291**

By Representatives Barber of Somerville and Connolly of Cambridge, a petition (accompanied by bill, House, No. 5291) of Christine P. Barber, Mike Connolly and others (with the approval of the mayor and city council) that the city of Somerville be authorized to establish a net zero standard for newly constructed buildings and major renovation projects. Telecommunications, Utilities and Energy. [Local Approval Received.]

#### The Commonwealth of Massachusetts

In the One Hundred and Ninety-Second General Court (2021-2022)

An Act authorizing the city of Somerville to establish a net zero emissions standard for new constructed buildings and major renovation projects.

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. Pursuant to Chapter 179, Section 84 of the Acts of 2022 An Act Driving
- 2 Clean Energy And Offshore Wind, and notwithstanding any general or special law or rule or
- 3 regulation to the contrary, the City of Somerville is authorized to adopt or amend general or
- 4 zoning ordinances that require new building construction or major renovation projects to be
- 5 fossil fuel-free, and enforce restrictions and prohibitions on new building construction and major
- 6 renovation projects that are not fossil fuel-free, including through the withholding or
- 7 conditioning of building permits.
- 8 SECTION 2. This act shall take effect upon its passage.



#### City of Somerville, Massachusetts

#### **Signature Report**

File Number: 22-1476 Home Rule Petition: 214201

Proposing a Home Rule Petition, with the Mayor's support, to authorize the City of Somerville to establish a net zero emissions standard for new constructed buildings and major renovation projects.

#### Official Text

WHEREAS, Climate change is in part caused by humans' combustion of fossil fuels.

WHEREAS, The findings of the Community Wide Greenhouse Gas Inventory (2014, 2016, 2018)

demonstrate the built environment is the largest contributor to greenhouse gas

emissions.

WHEREAS, The findings of the Somerville Climate Change Vulnerability Assessment (2017) indicate

Somerville is expected to experience the impacts of climate change through increased heat and precipitation and coastal flooding, which may impact life and property in Somerville.

WHEREAS, The findings of the Somerville Carbon Neutral Pathway Assessment (2017) defines

carbon neutrality and analyzes the technological transformations necessary to achieve
this emissions reduction target through the implementation of policies and programs.

WHEREAS, Strategic community climate action planning through the Somerville Climate Forward

(2018) action plan sets a goal for Somerville to be net-zero carbon neutral by 2050.

Somerville Climate Forward identifies ensuring "buildings and homes are built and retrofitted to be net-zero carbon, healthy, resilient, and affordable" as a priority action necessary to reduce Somerville's contribution to climate change and adapt to its impacts. And, "(i)n order to meet Somerville's carbon reduction goals, all new buildings must be designed and built to produce virtually no (greenhouse gas) emissions."

File Number: 22-1476 Enactment Number: 214201

WHEREAS, The Somerville City Council adopted the SomerVision comprehensive plan for 2010-2030, which among other things affirmed core values to "(b)uild a sustainable future through strong environmental leadership," and included specific goals to "(p)reserve and expand an integrated, balanced mix of safe, affordable, and environmentally sound rental and homeownership units," to "(m)itigate displacement of low- and moderate-income residents..."

WHEREAS, The City Council affirmed the Green New Deal Resolution (2019), recognizing that, while

Somerville "has made some progress towards reducing its dependence on fossil fuels,
that progress is insufficient to make the necessary changes to shift Somerville's
economy to be more equitable and ecologically sustainable. And, "(t)he Somerville City
Council envisions a future where Somerville residents can live healthy, prosperous lives,
free of toxic chemicals and fossil fuels, and the social and ecological well-being of all
people is prioritized over the profits of private corporations."

WHEREAS, Net-zero emissions building construction is an established, achievable standard, demonstrated through proposed and constructed buildings in Somerville, utilizing a combination of passive house, ILFI, LEED, or other energy efficient building design, including but not limited to renewable thermal technologies (e.g., heat pumps), building electrification (no on-site combustion of fossil fuels), on-site renewable energy (e.g., solar PV and/or solar thermal) systems, and offsite renewable energy purchases.

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

(1) Pursuant to Chapter 179, Section 84 of the Acts of 2022 An Act Driving Clean Energy And

File Number: 22-1476 Enactment Number: 214201

Offshore Wind, and notwithstanding any general or special law or rule or regulation to the contrary, the City of Somerville is authorized to adopt or amend general or zoning ordinances that require new building construction or major renovation projects to be fossil fuel-free, and enforce restrictions and prohibitions on new building construction and major renovation projects that are not fossil fuel-free, including through the withholding or conditioning of building permits.

(2) This act shall take effect upon its passage.

Sponsors: Councilor Ewen-Campen, Councilor Davis, Councilor Burnley Jr., Councilor Clingan, Councilor Gomez Mouakad, Councilor Kelly, Councilor McLaughlin, Councilor Pineda Neufeld, Councilor Scott, Councilor Strezo and Councilor Wilson

HOME RULE PETITION APPROVED BY THE CITY COUNCIL OF THE CITY OF SOMERVILLE, MA AT A REGULAR MEETING ON 8/25/2022.

APPROVED BY THE MAYOR OF THE CITY OF SOMERVILLE, MA ON 8/31/2022.

Attest:

Kimberly Wells

**November 10, 2023** 

**Date Certified** 

Appendix B Fossil Fuel Free Ordinance



# City of Somerville, Massachusetts

## **Signature Report**

File Number: 23-1659 Mayor's Request: 216268

Requesting ordainment of an amendment to the Code of Ordinances to add Chapter 6 Article VII to restrict and prohibit new building construction and major renovation projects that are not fossil fuel-free.

#### Official Text

To the Honorable City Council:

The Mayor respectfully submits for this Council's consideration and ordainment an amendment to the Code of Ordinances that would restrict and prohibit new building construction and major renovation projects that are not fossil fuel-free.

Appropriate staff will be available to answer any questions you may have. Thank you for your consideration of this matter.

Respectfully Submitted, Katjana Ballantyne, Mayor

MAYOR'S REQUEST APPROVED BY THE CITY COUNCIL OF THE CITY OF SOMERVILLE, MA AT A REGULAR MEETING ON 11/9/2023.

APPROVED BY THE MAYOR OF THE CITY OF SOMERVILLE, MA ON 11/10/2023.

Attest: November 10, 2023

Kimberly Wells Date Certified

### **CITY OF SOMERVILLE**

# ORDINANCE NO. 2023-22 IN CITY COUNCIL: November 9, 2023

**WHEREAS**, Climate change is in part caused by humans' combustion of fossil fuels.

**WHEREAS**, The findings of Climate Change Vulnerability Assessments (2017, 2023) indicate Somerville is expected to experience the impacts of climate change through increased heat and precipitation and coastal flooding, which may impact life and property in Somerville.

**WHEREAS**, The Consumption-based Emissions Inventory (2023) found "(b)urning natural gas in homes contributes to carbon dioxide emissions and to local indoor and outdoor air pollution" that can "increase the risk of asthma in children and exacerbate asthmatic symptoms in adults."

**WHEREAS**, The findings of the Community Wide Greenhouse Gas Inventory (2014, 2016, 2018, 2020) demonstrate the built environment is the largest contributor to greenhouse gas emissions.

**WHEREAS**, The findings of the Somerville Carbon Neutral Pathway Assessment (2017) defines carbon neutrality and analyzes the technological transformations necessary to achieve this emissions reduction target through the implementation of policies and programs.

WHEREAS, Strategic community climate action planning through the Somerville Climate Forward (2018) action plan sets a goal for Somerville to be net-zero carbon neutral by 2050. Somerville Climate Forward identifies ensuring "buildings and homes are built and retrofitted to be net-zero carbon, healthy, resilient, and affordable" as a priority action necessary to reduce Somerville's contribution to climate change and adapt to its impacts. And, "(i)n order to meet Somerville's carbon reduction goals, all new buildings must be designed and built to produce virtually no (greenhouse gas) emissions."

**WHEREAS**, The Somerville City Council adopted the SomerVision comprehensive plan for 2010-2030, which among other things affirmed core values to "(b)uild a sustainable future through strong environmental leadership," and included specific goals to "(p)reserve and expand an integrated, balanced mix of safe, affordable, and environmentally sound rental and homeownership units," to "(m)itigate displacement of lowand moderate-income residents…"

**WHEREAS**, The City Council affirmed the Green New Deal Resolution (2019), recognizing that, while Somerville "has made some progress towards reducing its dependence on fossil fuels, that progress is insufficient to make the necessary changes to shift Somerville's economy to be more equitable and ecologically sustainable. And, "(t)he Somerville City Council envisions a future where Somerville residents can live healthy, prosperous lives, free of toxic chemicals and fossil fuels, and the social and ecological well-being of all people is prioritized over the profits of private corporations."

**WHEREAS**, Net-zero emissions building construction is an established, achievable standard, demonstrated through proposed and constructed buildings in Somerville utilizing a combination of Phius, ILFI, LEED, or other energy efficient building design, including but not limited to renewable thermal technologies (e.g., heat

pumps), building electrification (no on-site combustion of fossil fuels), on-site renewable energy (e.g., solar PV and/or solar thermal) systems, and offsite renewable energy purchases. *THEREFORE*, *BE IT* 

**ORDAINED** by the City Council, in session assembled, that Chapter 6 of the code of ordinances of the City of Somerville is amended as follows by inserting the following Article VII:

#### Article VII. - Fossil Fuel Free Construction

#### Sec. 6-91. – Definitions.

The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates otherwise:

<u>Conditioned Floor Area</u>: As defined in the most recently Massachusetts adopted International Energy Conservation Code (IECC) edition with applicable Massachusetts amendments.

<u>Fossil fuel free</u> means an entire building or entire unit, and common area as applicable, that does not, in support of its operation after construction, utilize coal, oil, natural gas, other fuel hydrocarbons, including synthetic equivalents, or other fossil fuels.

<u>Fossil Fuel-Free Demonstration</u>. Codified by the entirety of 225 CMR 24.00, the Fossil Fuel Free Demonstration.

<u>Historic Buildings</u>: As defined in the most recently Massachusetts adopted International Existing Building Code (IEBC) edition with applicable Massachusetts amendments.

Major Renovation. As defined in 225 C.M.R. 24.00.

<u>Residential Building</u>: As defined in the most recently Massachusetts adopted IECC edition with applicable Massachusetts amendments.

<u>Specialized Energy Code</u>. Codified by the entirety of 225 CMR 22.00 and 23.00 including Appendices RC and CC, the Specialized Energy Code adds residential and commercial appendices to the Massachusetts Stretch Energy Code, based on amendments to the respective net-zero appendices of the IECC to incorporate the energy efficiency of the Stretch Energy Code and further reduce the climate impacts of buildings built to this code, with the goal of achieving net-zero greenhouse gas emissions from the buildings sector no later than 2050.

#### Sec. 6-92 - Purpose

The purpose of 225 CMR 24.00, also referred to as the Fossil Fuel-Free Demonstration is to restrict and prohibit new building construction and Major Renovation projects that are not fossil fuel-free.

#### Sec. 6-93 – Applicability

This restriction applies to residential and non-residential buildings that qualify as new construction or major renovation, as defined in 225 CMR 24.00. This restriction shall not apply to research laboratories for scientific or medical research, hospitals and medical offices regulated by the department of public health as a health care facility as defined in 225 CMR 24.00

#### Sec. 6-94 – Fossil Fuel-Free Demonstration

The Fossil Fuel-Free Demonstration, as codified by the entirety of 225 CMR 24.00, is herein incorporated by reference into the City of Somerville General Ordinances, Chapter 6, with an effective date as set forth in Section 6-97.

With adoption of the Fossil Fuel-Free Demonstration, and upon approval by the Department of Energy Resources (DOER), the following amendments to the Specialized Energy Code are adopted. This ordinance is enforceable by the Director of the Inspectional Services Department or Designee and shall go into effect for any project seeking a permit after the effective date.

- a. Low-rise Residential Code (225 CMR 22 Appendix RC)
  - i. Sections RC102 and RC101 "Zero Energy Pathway" and "Mixed Fuel Pathway" shall not be permitted for use for new construction, with the following exceptions:
    - 1. Emergency and standby power systems, as defined as level 1 and level 2 systems in the NFPA 110 (2022) Section 4.4,
    - 2. Heating and hot water supplied to a building through a district energy system or central utility plant,
    - 3. Freestanding outdoor heating and cooking appliances that are not connected to the building's natural gas or propane infrastructure and are used to facilitate outdoor dining.
- b. Commercial and All Other (225 CMR 23 Appendix CC)
  - i. Sections CC103 and CC105 "Zero Energy Pathway" and "Mixed-Fuel Pathway" shall not be permitted for new construction, with the following exceptions:
    - 1. Research laboratories and facilities for research and development, scientific or medical research, whether in a singular or mixed-use structure,
    - 2. Hospitals regulated by the department of public health as a health care facility, whether in a singular or mixed-use structure,
    - 3. Medical offices regulated by the department of public health as a health care facility, whether in a singular or mixed-use structure,
    - 4. Multifamily buildings over 12,000 square feet with permit application filed prior to January 1, 2027 may utilize gas or propane for domestic water heating as the only combustion equipment,
    - 5. Emergency and standby power systems, as defined as level 1 and level 2 systems in the NFPA 110 (2022) Section 4.4,
    - 6. Autobody shops,
    - 7. Onsite vehicle fueling connections,
    - 8. Equipment in critical use facilities for medical care and intensive research that meet the definitions of Critical Operations Data Systems and Critical Operations Power Systems as defined by the Massachusetts Electrical Code,
    - 9. Heating and hot water supplied to a building through a district energy system or central utility plant,
    - 10. Commercial cooking equipment used in a restaurant or cafeteria in a building that has applied for a building permit prior to January 1, 2035, provided that the electrical panel has sufficient capacity for the later installation of fully electric food preparation equipment,
    - 11. Freestanding outdoor heating and cooking appliances that are not connected to the building's natural gas or propane infrastructure and are used to facilitate outdoor dining.
- c. Equipment or appliances used for space heating, service water heating, cooking, clothes drying, and/or lighting that can utilize coal, oil, natural gas, other fuel hydrocarbons, including synthetic equivalents, or other fossil fuels may not be installed as part of any residential or non-residential Major Renovation, with the exception of a.i.1 through a.i.3 and b.i.1 through b.i.11 above. All Major Renovations associated with a.i.1 through a.i.3 and b.i.1 through b.i.11 must follow applicable Stretch and Specialized Energy Code requirements as applicable.

#### Sec. 6-95. Waivers.

a. The Director of the Office of Sustainability Environment or Designee shall periodically review and rule on applications for waivers to the Fossil Fuel Free Demonstration.

- b. The Director of the Office of Sustainability Environment or Designee shall determine and publicly release guidance for applying for a waiver. A waiver may be granted for the following:
  - i. Any equipment, appliance, or building system for which sufficient utility electric service cannot or is not projected to be reasonably available and there is no alternative fossil fuel-free technology or system reasonably available by the time of building occupancy, provided that the applicant must furnish a letter signed by a licensed electrician, design professional, or a utility, describing service limitations.
  - ii. Within a multifamily building in which less than 50% of the total housing units are undergoing a Major Renovation, a unit that shares a heating system with another housing unit that is not undergoing a Major Renovation, as demonstrated by the applicant.
  - iii. Historic buildings, as demonstrated by the applicant.
  - iv. Manufacturing process loads if the process load cannot physically or reasonably be converted to a fossil fuel-free process, as demonstrated by the applicant.

#### Sec. 6-96. Reports.

- a. Planning Review Board, Building Permit, and Certificate of Occupancy applications must include electronic copies of any third-party energy reporting on new construction and Major Renovation projects that illustrate the expected energy use for each major end use. These include but are not limited to relevant sections of: final Home Energy Reporting System rating reports; Passive house certification reports; building energy modeling reports used to demonstrate commercial energy code compliance through ASHRAE 90.1 or Thermal Energy Demand Intensity (TEDI) building code compliance pathway.
- b. Biannually, the Director of the Office of Sustainability and Environment or Designee, shall review exceptions. Findings of applicability shall be issued to the City Council.

#### Sec. 6-97. – Effective date.

This ordinance shall take effect on January 1, 2025 or 180 days after acceptance into the Fossil Fuel Free Demonstration Project, whichever is sooner, or upon approval of any Home Rule Petition authorizing the City of Somerville to establish a net zero emissions standard for new constructed buildings and Major Renovation projects.

#### Sec. 6-98. – Conflicting provisions.

Where there are conflicting provisions, the provision securing the greater degree of public safety, health, or general welfare, shall be applied in that order.

#### Sec. 6-99. – Severability.

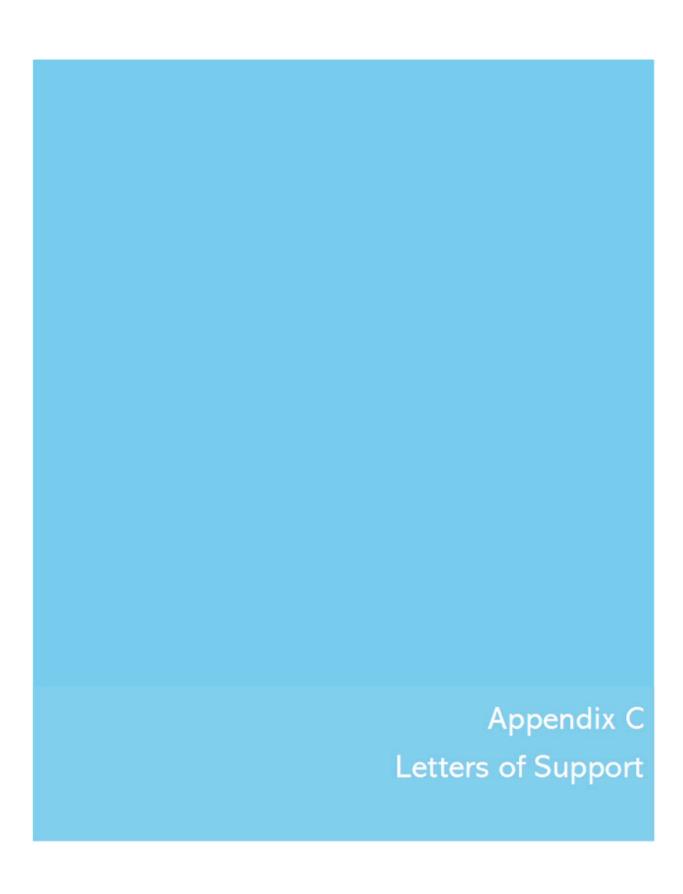
The provisions of this article are severable, and if any part of this article should be held invalid by a court of competent jurisdiction, such invalidity shall not affect the remainder of the article and the remainder of the article shall stay in full force and effect.

Approved:

President

Approved:

Lattera Collantifico





# City of Somerville, Massachusetts

### **Signature Report**

File Number: 23-1662 Resolution: 216243

Supporting Somerville's application to the Fossil Fuel Free Demonstration Program.

#### Official Text

**WHEREAS:** The City Council has steadfastly supported sustainable, carbon-free buildings in Somerville, working to do the most within local authority; and

WHEREAS: In August 2022 when the Fossil Fuel Free Demonstration Program was codified into law, Somerville was the first community to submit a home rule petition to restrict the use of fossil fuels in new construction and major renovation projects and the Somerville City Council voted unanimously at the first full council meeting after the law was codified to support submitting such a petition; and

**WHEREAS:** In January 2023 when municipalities were able to adopt the Specialized Energy Code for the first time, Somerville adopted the code with unanimous support from the City Council, and became one of the first four communities to enact the code on July 1, 2023; and

WHEREAS: The City Council continues to partner with the community and Ballantyne Administration to work towards a carbon net-negative future through coordination with city staff, community members, and developers to organize neighborhood meetings as part of the development review process at which building sustainability and resiliency are discussed and there is a sustained call from constituents for climate action; and

WHEREAS: The need for fossil fuel restrictions in new construction and major renovation projects is particularly urgent in densely-populated Somerville, where residential and commercial buildings are mostly occupied by renters who have limited ability to influence decisions about a building's major systems and landlords therefore have little incentive to make improvements that will reduce dependence on fossil fuels, resulting in a destructive cycle of higher energy burdens and declining public health; and

WHEREAS: Poor air quality stemming from combustion of fossil fuels, such as oil and gas, often disproportionately impacts Somerville's most vulnerable residents and contributes to childhood asthma and adult chronic obstructive pulmonary disease (COPD), which is one of the leading causes of hospitalization and death for Somerville residents, and requiring new and renovated buildings to be fossil fuel-free will reduce the incidence of these illnesses and lead to a healthier environment for all residents; and

WHEREAS: According to Somerville Climate Forward, "new development is anticipated to occur

File Number: 23-1662 Enactment Number: 216243

at an annual growth rate of over 1% in both residential and commercial sectors" and the Fossil Fuel Free program presents an opportunity to accelerate workforce development in the clean energy space, galvanizing contractors, home energy raters, architects, designers, electricians, plumbers, landscapers, and more; and

- **WHEREAS:** The City Council, Ballantyne Administration, partners, and members of the workforce, will work together to learn how to implement and deploy new, fossil fuel-free technologies and practices on a wider scale which will, over time, have both economically and environmentally beneficial effects in the broader region; and
- WHEREAS: To prevent the damaging downstream impacts of locked-in fossil fuel systems, it is critical that buildings built today are built fossil fuel-free and Somerville's participation in the Fossil Fuel Free Demonstration Program will improve public health and accelerate the city's efforts to become carbon net negative; and
- WHEREAS: As an MBTA and Housing Choice community with a demonstrated commitment to equity and climate action, Somerville is uniquely positioned for success in this program and is eager to lead the way in creating cleaner, more resilient residential and commercial properties that reduce indoor and outdoor air pollution and increase energy efficiency; NOW, THEREFORE, BE IT
- **RESOLVED:** That the Somerville City Council strongly supports Somerville's application to the Fossil Fuel Free Demonstration Program to become one of the first 10 communities in the Commonwealth to be allowed to restrict the use of fossil fuels in new construction and major renovation projects and urges the Department of Energy Resources to approve this proposal, submitted on behalf of the community.

Sponsors: Councilor Wilson, Councilor Davis, Councilor Burnley Jr., Councilor Clingan, Councilor Ewen-Campen, Councilor Gomez Mouakad, Councilor Kelly, Councilor McLaughlin, Councilor Pineda Neufeld and Councilor Strezo

RESOLUTION APPROVED BY THE CITY COUNCIL OF THE CITY OF SOMERVILLE, MA AT A REGULAR MEETING ON 11/9/2023.

Attest: November 10, 2023

Kimberly Wells Date Certified



# COMMONWEALTH OF MASSACHUSETTS THE GENERAL COURT STATE HOUSE, BOSTON 02133-1053

#### Dear Commissioner Mahoney,

We are writing to respectfully express our support for the City of Somerville's application to the DOER's Fossil Fuel Free Demonstration Program. As you know, the Commonwealth and the City of Somerville share a net-zero climate goal, but Somerville's achievement of this goal depends on its ability to take the decisive steps that are central to the Program. Without such steps, Somerville risks falling behind in decarbonizing its buildings and will be less likely to achieve its net-zero goal. To eliminate GHG emissions from 50% of its residential building stock by 2030, for example, Somerville would have to decarbonize 4-5 residential buildings every day. In short, there is a lot of work to be done, and Somerville needs the Fossil Fuel Free Demonstration Program's help to reach its goal.

The City of Somerville is committed to becoming carbon net negative by 2050, and participation in the Program is crucial to reaching this goal since it will enable our community to require new building construction and major renovation projects to be fossil fuel-free. When the Fossil Fuel Free Demonstration Pro was codified, Somerville was the first community to submit a Home Rule Petition; however, all 10 spots in the Program were already claimed. Now that one community has dropped out, we believe that Somerville is the top choice to fill that open spot. For years, Somerville has demonstrated a strong commitment to reducing the City's fossil fuel usage and emissions. Somerville was among the first four communities to immediately pass and enact the Specialized Energy Code. The opt-in code is a celebrated, necessary step towards decarbonizing new and renovated buildings. However, it does not require these projects to be fossil fuel free. Somerville and other communities are doing what we can to eliminate emissions from new construction and existing buildings. Somerville has done the most we can do under the state building code and is well-positioned to do more.

To ensure the Program's success, the participating communities should be representative of Massachusetts' 351 cities and towns in terms of population, building stock, and local government resources and capacity. As demonstrated in their application, the City of Somerville offers an opportunity for the DOER to understand how this pilot can be scaled. Comparing population, per capita income, per capita expenditures, tax bills for single families, and community needs, the **community is comparable to other communities across the**Commonwealth, making Somerville a perfect pilot for testing a scalable approach to fossil-fuel-free construction that can be replicated across the state. The proposal showcases Somerville's ability to implement a policy that fits the needs of an extremely diverse community without hindering economic growth. Finally, since 2016, Somerville has employed a streamlined, online system for all building permitting and has recently incorporated zoning into the process, making data reporting and analysis easy.



# COMMONWEALTH OF MASSACHUSETTS THE GENERAL COURT STATE HOUSE, BOSTON 02133-1053

As you know, switching fossil-fueled appliances to be all-electric and greening the grid are key decarbonization strategies. Somerville is a leader in both. City staff collaborate with Eversource biweekly on transmission and distribution system needs. To increase our electric grid infrastructure, one transmission project is already underway, and another is being planned. Somerville will also be releasing a Request for Proposals for a study on the feasibility of installing underground equipment to facilitate electrification of multifamily buildings and is developing language for zoning amendments that would create incentives for developers and property owners to install electric capacity and let others tap into it. By contrast, other cities may not be as far along in investigating these issues, which could hinder their ability to effectively implement the ordinance.

City-wide decarbonization efforts will also have significant benefits for Somerville's underserved and priority populations. Fifty-one (72%) of Somerville's 71 census blocks meet at least one of the Commonwealth's Environmental Justice criteria, and 59,054 (73%) of the city's residents live in these 51 census blocks. The Federal government's Climate and Economic Justice Screening Tool also shows that, among our three likely competitors, Somerville is second only to Boston in the number of census tracts that qualify as disadvantaged. Consequently, we believe that Somerville's participation in the Program will help create a scalable path towards equitable decarbonization.

We commend our colleagues for creating the Fossil Fuel Free Demonstration Program and for its leadership on climate change. Residents, stakeholders, staff, and elected officials have consistently advocated for this authority in Somerville, and we respectfully request that you select Somerville for this program.

We look forward to collaborating with the Healey Administration to address climate change and other related issues. If you or your staff would like to discuss the application further, please do not hesitate to reach out.

Thank you for your consideration of our application.

Sincerely,

Senator Patricia Jehlen Representative Christine Barber Representative Mike Connolly Representative Erika Uyterhoeven



October 26, 2023

RE: Letter of Support for Somerville's Fossil Fuel Free Demonstration Program Application

#### To Whom It May Concern:

I am writing on behalf of the Mystic River Watershed Association (MyRWA) in strong support of Somerville's application to the Fossil Fuel Free Demonstration Program to become one of the first 10 communities in the Commonwealth to be allowed to restrict the use of fossil fuels in new construction and major renovation projects. The City of Somerville is submitting this proposal on behalf of the community, and we urge you to approve it.

The need for fossil fuel restrictions in new construction and major renovation projects is particularly urgent in densely populated Somerville. Residential and commercial buildings are mostly occupied by renters who have limited ability to influence decisions about a building's major systems. Landlords therefore have little incentive to make improvements that will reduce dependence on fossil fuels. A destructive cycle of higher energy burdens and declining public health is the result.

Poor air quality stemming from combustion of fossil fuels, such as oil and gas, often disproportionately impacts Somerville's most vulnerable residents and contributes to childhood asthma and adult chronic obstructive pulmonary disease (COPD). In fact, COPD is one of the leading causes of hospitalization and death for Somerville residents. Requiring new and renovated buildings to be fossil fuel-free will reduce the incidence of these illnesses and lead to a healthier environment for all residents.

To prevent the damaging downstream impacts of locked-in fossil fuel systems, it is critical that buildings built today are built fossil fuel-free. We believe that Somerville's participation in the Fossil Fuel Free Demonstration Program will improve public health and accelerate the city's efforts to become carbon net negative.

As an MBTA and Housing Choice community with a demonstrated commitment to equity and climate action, Somerville is uniquely positioned for success in this program. We are eager to lead the way in creating cleaner, more resilient residential and commercial properties that reduce indoor and outdoor air pollution and increase energy efficiency.

The Mystic River Watershed Association is a nonprofit environmental advocacy organization that started in 1972. The organization centers environmental justice and works to create healthy communities throughout the 21 communities of the watershed. We are active in the climate space. We started the Resilient Mystic Collaborative (RMC) in 2018 to bring our municipalities together for collective action to create a watershed more resilient to a future climate. This work is consistent with our vision for a future that sharply reduces the carbon footprint and creates healthier communities.

Thank you for your consideration of this application.

Sincerely,

Patrick Herron

Patrick In Heurs

**Executive Director** 



November 6, 2023

RE: Letter of Support for Somerville's Fossil Fuel Free Demonstration Program Application

#### To Whom It May Concern:

I am writing on behalf of Charles River Watershed Association (CRWA) in support of Somerville's application to the Fossil Fuel Free Demonstration Program to become one of the first 10 communities in the Commonwealth to be allowed to restrict the use of fossil fuels in new construction and major renovation projects. The City of Somerville is submitting this proposal on behalf of the community, and we urge you to approve it.

The need for fossil fuel restrictions in new construction and major renovation projects is particularly urgent in densely populated Somerville. Residential and commercial buildings are mostly occupied by renters who have limited ability to influence decisions about a building's major systems. Landlords therefore have little incentive to make improvements that will reduce dependence on fossil fuels. A destructive cycle of higher energy burdens and declining public health is the result.

Poor air quality stemming from combustion of fossil fuels, such as oil and gas, often disproportionately impacts Somerville's most vulnerable residents and contributes to childhood asthma and adult chronic obstructive pulmonary disease (COPD). In fact, COPD is one of the leading causes of hospitalization and death for Somerville residents. Requiring new and renovated buildings to be fossil fuel-free will reduce the incidence of these illnesses and lead to a healthier environment for all residents.

To prevent the damaging downstream impacts of locked-in fossil fuel systems, it is critical that buildings built today are built fossil fuel-free. We believe that Somerville's participation in the Fossil Fuel Free Demonstration Program will improve public health and accelerate the city's efforts to become carbon net negative.

As an MBTA and Housing Choice community with a demonstrated commitment to equity and climate action, Somerville is uniquely positioned for success in this program. We are eager to lead the way in creating cleaner, more resilient residential and commercial properties that reduce indoor and outdoor air pollution and increase energy efficiency.

CRWA's mission is to protect, restore, and enhance the Charles River and its watershed through science, advocacy, and the law. We develop science-based strategies to increase resilience, protect public health, and promote environmental equity as we confront a changing climate.

Thank you for your consideration of this application.

Sincerely,

Julie Wood

Climate Resilience Director

**Charles River Watershed Association** 

Julie Dyer Wood



CAAS helps local families and individuals achieve financial security while working to eliminate the root causes of economic injustice.

October 27, 2023

Department of Energy Resources 100 Cambridge St #1020 Boston, MA 02114 Transmitted via email to green.communities@mass.gov

RE: Letter of Support for Somerville's Fossil Fuel Free Demonstration Program Application

To Whom It May Concern:

I am writing on behalf of Community Action Agency of Somerville, Inc. (CAAS) in strong support of Somerville's application to the Fossil Fuel Free Demonstration Program to become one of the first 10 communities in the Commonwealth to be allowed to restrict the use of fossil fuels in new construction and major renovation projects. The City of Somerville is submitting this proposal on behalf of the community, and we urge you to approve it.

The need for fossil fuel restrictions in new construction and major renovation projects is particularly urgent in densely populated Somerville. Residential and commercial buildings are mostly occupied by renters who have limited ability to influence decisions about a building's major systems. Landlords therefore have little incentive to make improvements that will reduce dependence on fossil fuels. A destructive cycle of higher energy burdens and declining public health is the result.

Poor air quality stemming from combustion of fossil fuels, such as oil and gas, often disproportionately impacts Somerville's most vulnerable residents and contributes to childhood asthma and adult chronic obstructive pulmonary disease (COPD). In fact, COPD is one of the leading causes of hospitalization and death for Somerville residents. Requiring new and renovated buildings to be fossil fuel-free will reduce the incidence of these illnesses and lead to a healthier environment for all residents.

To prevent the damaging downstream impacts of locked-in fossil fuel systems, it is critical that buildings built today are built fossil fuel-free. We believe that Somerville's participation in the Fossil Fuel Free Demonstration Program will improve public health and accelerate the city's efforts to become carbon net negative.

As an MBTA and Housing Choice community with a demonstrated commitment to equity and climate action, Somerville is uniquely positioned for success in this program. We are eager to lead the way in creating cleaner, more resilient residential and commercial properties that reduce indoor and outdoor air pollution and increase energy efficiency.

CAAS helps local families and individuals achieve financial security while working to eliminate the root causes of economic injustice. We promote opportunities for Somerville residents in



education, employment, housing, health, and improved neighborhood life, and empower low-income communities whose civic engagement has been obstructed or discouraged by oppression and discrimination. Since its founding in 1981, CAAS has been the leading advocate for low-income Somerville residents, not only advocating for them individually, but also pushing for broader systemic change. Each year we leverage the work of 100 employees, more than 300 volunteers, and \$11 million in federal, state, local and private funding to support over 600 low-income households through early childhood education, housing stability services, free tax filing, and community organizing. Our vision for Somerville is for a city where no one lives in poverty, where we support each other through strong community structures, and where the opportunity to thrive is a lived experience for every resident.

Environmental justice is a key component of economic justice, and support for this proposal is consistent with the fulfillment of our mission. Thank you for your consideration of this application.

Sincerely,

David Gibbs

**Executive Director** 



October 2023

RE: Letter of Support for Somerville's Fossil Fuel Free Demonstration Program Application

To Whom It May Concern:

My name is Dainiel McLaughlin, Program Director of the Center for Teen Empowerment in Somerville, MA. I am in strong support of Somerville's application to the Fossil Fuel Free Demonstration Program to become one of the first 10 communities in the Commonwealth to be allowed to restrict the use of fossil fuels in new construction and major renovation projects. The City of Somerville is submitting this proposal on behalf of the community, and we urge you to approve it.

Poor air quality stemming from combustion of fossil fuels, such as oil and gas, often disproportionately impacts Somerville's most vulnerable residents and contributes to childhood asthma and adult chronic obstructive pulmonary disease (COPD). In fact, COPD is one of the leading causes of hospitalization and death for Somerville residents. Requiring new and renovated buildings to be fossil fuel-free will reduce the incidence of these illnesses and lead to a healthier environment for all residents.

To prevent the damaging downstream impacts of locked-in fossil fuel systems, it is critical that buildings built today are built fossil fuel-free. We believe that Somerville's participation in the Fossil Fuel Free Demonstration Program will improve public health and accelerate the city's efforts to become carbon net negative.

As an MBTA and Housing Choice community with a demonstrated commitment to equity and climate action, Somerville is uniquely positioned for success in this program. We are eager to lead the way in creating cleaner, more resilient residential and commercial properties that reduce indoor and outdoor air pollution and increase energy efficiency.

Thank you for your consideration of this application.

Sincerely,

Danny McLaughlin

**Program Director** 

The Center for Teen Empowerment



November 7 2023

RE: Letter of Support for Somerville's Fossil Fuel Free Demonstration Program Application

To Whom It May Concern:

I are writing on behalf of Tufts University's Air Pollution Lab in strong support of Somerville's application to the Fossil Fuel Free Demonstration Program to become one of the first 10 communities in the Commonwealth to be allowed to restrict the use of fossil fuels in new construction and major renovation projects. The City of Somerville is submitting this proposal on behalf of the community, and we urge you to approve it.

The need for fossil fuel restrictions in new construction and major renovation projects is particularly urgent in densely populated Somerville. Poor air quality stemming from combustion of fossil fuels, such as oil and gas, often disproportionately impacts Somerville's most vulnerable residents and contributes to childhood asthma and adult chronic obstructive pulmonary disease (COPD). In fact, COPD is one of the leading causes of hospitalization and death for Somerville residents. Requiring new and renovated buildings to be fossil fuel-free will reduce the incidence of these illnesses and lead to a healthier environment for all residents.

Tufts Air Pollution Lab, in close partnership with City of Somerville, has been working on advancing the understanding of ambient and indoor air quality and environmental equity issues in Somerville for nearly a decade. We have extensively studied the burdens of fossil fuel combustion generated emission on the environmental justice communities in Somerville. We firmly believe that to prevent the damaging downstream impacts of locked-in fossil fuel systems, it is critical that buildings built today are built fossil fuel-free. We believe that Somerville's participation in the Fossil Fuel Free Demonstration Program will improve public health and accelerate the city's efforts to become carbon net negative.

As an MBTA and Housing Choice community with a demonstrated commitment to equity and climate action, Somerville is uniquely positioned for success in this program. We are eager to lead the way in creating cleaner, more resilient residential and commercial properties that reduce indoor and outdoor air pollution and increase energy efficiency.



Thank you for your consideration of this application.

Sincerely,

Neelakshi Hudda

nhulde

Research Assistant Professor Department of Civil and Environmental Engineering Tufts University Medford, MA 00155



RE: Letter of Support for Somerville's Fossil Fuel Free Demonstration Program Application

To Whom It May Concern:

I am writing on behalf of Somerville Mothers Out Front in strong support of Somerville's application to the Fossil Fuel Free Demonstration Program. We want to become one of the first communities in the Commonwealth to be allowed to restrict the use of fossil fuels in new construction and major renovation projects. The City of Somerville is submitting this proposal on behalf of the community, and we urge you to approve it.

The need for fossil fuel restrictions in new construction and major renovation projects is particularly urgent in densely populated Somerville. Residential and commercial buildings are mostly occupied by renters who have limited ability to influence decisions about a building's major systems. Landlords therefore have little incentive to make improvements that will reduce dependence on fossil fuels.

Poor air quality stemming from combustion of fossil fuels disproportionately impacts Somerville's most vulnerable residents and contributes to childhood asthma and adult chronic obstructive pulmonary disease (COPD). In fact, COPD is one of the leading causes of hospitalization and death for Somerville residents.

It is critical that buildings built today are built fossil fuel-free. We believe that Somerville's participation in the Fossil Fuel Free Demonstration Program will improve public health and accelerate the city's efforts to become carbon net negative.

As an MBTA and Housing Choice community with a demonstrated commitment to equity and climate action, Somerville is uniquely positioned for success in this program. We are eager to lead the way in creating cleaner, more resilient residential and commercial properties that reduce indoor and outdoor air pollution and increase energy efficiency.

Thank you for your consideration of this application.

Sincerely,

Lindsay Lucke

**Acting Coordinator** 

Mothers Out Front | 617-520-4970 | www.mothersoutfront.org Mailing Address: PO Box 55071 23686, Boston, MA 02205



October 2023

RE: Letter of Support for Somerville's Fossil Fuel Free Demonstration Program Application

To Whom It May Concern:

I am writing on behalf of Green & Open Somerville in strong support of Somerville's application to the Fossil Fuel Free Demonstration Program to become one of the first 10 communities in the Commonwealth to be allowed to restrict the use of fossil fuels in new construction and major renovation projects. The City of Somerville is submitting this proposal on behalf of the community, and we urge you to approve it.

Poor air quality stemming from combustion of fossil fuels, such as oil and gas, often disproportionately impacts Somerville's most vulnerable residents and contributes to childhood asthma and adult chronic obstructive pulmonary disease (COPD). In fact, COPD is one of the leading causes of hospitalization and death for Somerville residents. Requiring new and renovated buildings to be fossil fuel-free will reduce the incidence of these illnesses and lead to a healthier environment for all residents.

To prevent the damaging downstream impacts of locked-in fossil fuel systems, it is critical that buildings built today are built fossil fuel-free. We believe that Somerville's participation in the Fossil Fuel Free Demonstration Program will improve public health and accelerate the city's efforts to become carbon net negative.

As an MBTA and Housing Choice community with a demonstrated commitment to equity and climate action, Somerville is uniquely positioned for success in this program. We are eager to lead the way in creating cleaner, more resilient residential and commercial properties that reduce indoor and outdoor air pollution and increase energy efficiency.

	your consid		

Sincerely,

Renée Scott



October 2023

RE: Letter of Support for Somerville's Fossil Fuel Free Demonstration Program Application

To Whom It May Concern:

We are writing on behalf of Carbon Free Somerville in strong support of Somerville's application to the Fossil Fuel Free Demonstration Program to become one of the first 10 communities in the Commonwealth to be allowed to restrict the use of fossil fuels in new construction and major renovation projects. The City of Somerville is submitting this proposal on behalf of the community, and we urge you to approve it.

The need for fossil fuel restrictions in new construction and major renovation projects is particularly urgent in densely populated Somerville. Residential and commercial buildings are mostly occupied by renters who have limited ability to influence decisions about a building's major systems. Landlords therefore have little incentive to make improvements that will reduce dependence on fossil fuels. A destructive cycle of higher energy burdens and declining public health is the result.

Poor air quality stemming from combustion of fossil fuels, such as oil and gas, often disproportionately impacts Somerville's most vulnerable residents and contributes to childhood asthma and adult chronic obstructive pulmonary disease (COPD). In fact, COPD is one of the leading causes of hospitalization and death for Somerville residents. Requiring new and renovated buildings to be fossil fuel-free will reduce the incidence of these illnesses and lead to a healthier environment for all residents.

To prevent the damaging downstream impacts of locked-in fossil fuel systems, it is critical that buildings built today are built fossil fuel-free. We believe that Somerville's participation in the Fossil Fuel Free Demonstration Program will improve public health and accelerate the city's efforts to become carbon net negative.

As an MBTA and Housing Choice community with a demonstrated commitment to equity and climate action, Somerville is uniquely positioned for success in this program. We are eager to lead the way in creating cleaner, more resilient residential and commercial properties that reduce indoor and outdoor air pollution and increase energy efficiency.



Carbon Free Somerville is a group of Somerville residents committed to accelerating the decarbonization of our city to match the urgency of the climate crisis. The group supports community and city initiatives that aim to curb carbon reliance and infrastructure. We believe Somerville is the perfect place to demonstrate what an inclusive carbon-free future can look like.

Thank you for your consideration of this application.

Sincerely,

Carbon Free Somerville

November 2023

RE: Letter of Support for Somerville's Fossil Fuel Free Demonstration Program Application

To Whom It May Concern:

I am writing on behalf of myself and the Jewish Climate Action Network in strong support of Somerville's application to the Fossil Fuel Free Demonstration Program to become one of the first 10 communities in the Commonwealth to be allowed to restrict the use of fossil fuels in new construction and major renovation projects. The City of Somerville is submitting this proposal on behalf of the community, and we urge you to approve it.

The need for fossil fuel restrictions in new construction and major renovation projects is particularly urgent in densely populated Somerville. Residential and commercial buildings are mostly occupied by renters who have limited ability to influence decisions about a building's major systems. Landlords therefore have little incentive to make improvements that will reduce dependence on fossil fuels. A destructive cycle of higher energy burdens and declining public health is the result.

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To prevent the damaging downstream impacts of locked-in fossil fuel systems, it is critical that buildings built today are built fossil fuel-free. We believe that Somerville's participation in the Fossil Fuel Free Demonstration Program will improve public health and accelerate the city's efforts to become carbon net negative.

As an MBTA and Housing Choice community with a demonstrated commitment to equity and climate action, Somerville is uniquely positioned for success in this program. We are eager to lead the way in creating cleaner, more resilient residential and commercial properties that reduce indoor and outdoor air pollution and increase energy efficiency.

The Jewish Climate Action Network works through education, activism, and organizing to add an urgent and visionary Jewish voice to the climate crisis. Members live throughout the Boston area including Somerville.

Thank you for your consideration of this application.

Sincerely,

Marya Axner

November 8, 2023

RE: Letter of Support for Somerville's Fossil Fuel Free Demonstration Program Application

Dear Commissioner Mahony,

The City of Somerville Commission on Energy Use and Climate Change writes to you and the Department of Energy Resources in strong support of Somerville's application to the Fossil Fuel Free Demonstration Program to become one of the first 10 communities in the Commonwealth to be allowed to restrict the use of fossil fuels in new construction and major renovation projects. The City of Somerville is submitting this proposal on behalf of the community, and we urge you to approve it.

The need for fossil fuel restrictions in new construction and major renovation projects is particularly urgent in densely populated Somerville. Poor air quality stemming from combustion of fossil fuels, such as oil and gas, often disproportionately impacts Somerville's most vulnerable residents and contributes to childhood asthma and adult chronic obstructive pulmonary disease (COPD). In fact, COPD is one of the leading causes of hospitalization and death for Somerville residents. Requiring new and renovated buildings to be fossil fuel-free will reduce the incidence of these illnesses and lead to a healthier environment for all residents.

To prevent the damaging downstream impacts of locked-in fossil fuel systems, it is critical that buildings built today are built fossil fuel-free. We believe that Somerville's participation in the Fossil Fuel Free Demonstration Program will improve public health and accelerate the city's efforts to become carbon net negative.

As an MBTA and Housing Choice community with a demonstrated commitment to equity and climate action, Somerville is uniquely positioned for success in this program. We are eager to lead the way in creating cleaner, more resilient residential and commercial properties that reduce indoor and outdoor air pollution and increase energy efficiency.

The Commission on Energy Use and Climate Change is an eight-person commission made of seven Somerville residents and a representative from the Office of Sustainability and Environment serving as ex-officio to the Commission. The Commission is tasked to act as a centralizing force in the city and the community which will address issues of climate change and sustainable environmental policy, providing information, referral, guidance, advocacy and coordination, and offering and providing technical assistance to other public agencies, organizations and institutions engaged in activities intended to reduce the city's greenhouse gas

emissions and contribute to local, regional, national, and international efforts to protect the earth's climate.

Thank you for your consideration of this application.

Sincerely,

The Members of the Commission on Energy Use and Climate Change City of Somerville

October 2023

RE: Letter of Support for Somerville's Fossil Fuel Free Demonstration Program Application

To Whom It May Concern:

I am writing in strong support of Somerville's application to the Fossil Fuel Free Demonstration Program to become one of the first 10 communities in the Commonwealth to be allowed to restrict the use of fossil fuels in new construction and major renovation projects. The City of Somerville is submitting this proposal on behalf of the community, and we urge you to approve it.

The need for fossil fuel restrictions in new construction and major renovation projects is particularly urgent in densely populated Somerville. Poor air quality stemming from combustion of fossil fuels, such as oil and gas, often disproportionately impacts Somerville's most vulnerable residents and contributes to childhood asthma and adult chronic obstructive pulmonary disease (COPD). In fact, COPD is one of the leading causes of hospitalization and death for Somerville residents. Requiring new and renovated buildings to be fossil fuel-free will reduce the incidence of these illnesses and lead to a healthier environment for all residents.

According to Somerville Climate Forward, "new development is anticipated to occur at an annual growth rate of over 1% in both residential and commercial sectors." The Fossil Fuel Free program presents an opportunity to accelerate workforce development in the clean energy space. Contractors, home energy raters, architects, designers, electricians, plumbers, landscapers, and more will be galvanized by this program. The City, our partners, and members of the workforce, will work together to learn how to implement and deploy new, fossil fuel-free technologies and practices on a wider scale. Over time, this will have both economically and environmentally beneficial effects in the broader region.

To prevent the damaging downstream impacts of locked-in fossil fuel systems, it is critical that buildings built today are built fossil fuel-free. We believe that Somerville's participation in the Fossil Fuel Free Demonstration Program will improve public health and accelerate the city's efforts to become carbon net negative.

As an MBTA and Housing Choice community with a demonstrated commitment to equity and climate action, Somerville is uniquely positioned for success in this program. We are eager to lead the way in creating cleaner, more resilient residential and commercial properties that reduce indoor and outdoor air pollution and increase energy efficiency.

Thank you for your consideration of this application.

Sincerely,

Michael McNeley

#### Department of Energy Resources

100 Cambridge Street #1020 Boston, MA 02114 Transmitted via email to green.communities@mass.gov

November 2023



RE: Letter of Support for Somerville's Fossil Fuel Free Demonstration Program Application

To Whom It May Concern:

I am writing in strong support of Somerville's application to the Fossil Fuel Free Demonstration Program to become one of the first 10 communities in the Commonwealth to be allowed to restrict the use of fossil fuels in new construction and major renovation projects. The City of Somerville is submitting this proposal on behalf of the community, and we urge you to approve it.

The need for fossil fuel restrictions in new construction and major renovation projects is particularly urgent in densely populated Somerville. Residential and commercial buildings are mostly occupied by renters who have limited ability to influence decisions about a building's major systems. Landlords therefore have little incentive to make improvements that will reduce dependence on fossil fuels. A destructive cycle of higher energy burdens and declining public health is the result.

Poor air quality stemming from combustion of fossil fuels, such as oil and gas, often disproportionately impacts Somerville's most vulnerable residents and contributes to childhood asthma and adult chronic obstructive pulmonary disease (COPD). In fact, COPD is one of the leading causes of hospitalization and death for Somerville residents. Requiring new and renovated buildings to be fossil fuel-free will reduce the incidence of these illnesses and lead to a healthier environment for all residents.

To prevent the damaging downstream impacts of locked-in fossil fuel systems, it is critical that buildings built today are built fossil fuel-free. We believe that Somerville's participation in the Fossil Fuel Free Demonstration Program will improve public health and accelerate the city's efforts to become carbon net negative.

As an MBTA and Housing Choice community with a demonstrated commitment to equity and climate action, Somerville is uniquely positioned for success in this program. We are eager to lead the way in creating cleaner, more resilient residential and commercial properties that reduce indoor and outdoor air pollution and increase energy efficiency.

As a Somerville renter and small business owner, I believe creating more resilient residential and commercial properties is the first step in improving public health and accelerating the city's efforts to become carbon net negative.

Thank you for your consideration of this application.

Sincerely,

Catura. Man

Colin T Barr

barr.colin.t@gmail.com 617.312.4859

59 Vinal Ave, #7 Somerville, MA 02143

October 2023

RE: Letter of Support for Somerville's Fossil Fuel Free Demonstration Program Application

To Whom It May Concern:

My name is Kate Burgess, and I'm writing as a former Somerville Climate Ambassador in strong support of Somerville's application to the Fossil Fuel Free Demonstration Program to become one of the first 10 communities in the Commonwealth to be allowed to restrict the use of fossil fuels in new construction and major renovation projects. The City of Somerville is submitting this proposal on behalf of the community, and we urge you to approve it.

The need for fossil fuel restrictions in new construction and major renovation projects is particularly urgent in densely populated Somerville. Residential and commercial buildings are mostly occupied by renters who have limited ability to influence decisions about a building's major systems. Landlords therefore have little incentive to make improvements that will reduce dependence on fossil fuels. A destructive cycle of higher energy burdens and declining public health is the result.

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To prevent the damaging downstream impacts of locked-in fossil fuel systems, it is critical that buildings built today are built fossil fuel-free. We believe that Somerville's participation in the Fossil Fuel Free Demonstration Program will improve public health and accelerate the city's efforts to become carbon net negative.

As an MBTA and Housing Choice community with a demonstrated commitment to equity and climate action, Somerville is uniquely positioned for success in this program. We are eager to lead the way in creating cleaner, more resilient residential and commercial properties that reduce indoor and outdoor air pollution and increase energy efficiency.

Thank you for your consideration of this application.

Sincerely,

Kate Burgess

November 8, 2023

RE: Letter of Support for Somerville's Fossil Fuel Free Demonstration Program Application

To Whom It May Concern:

I am writing as a Somerville resident and Climate Ambassador in strong support of Somerville's application to the Fossil Fuel Free Demonstration Program to become one of the first 10 communities in the Commonwealth to be allowed to restrict the use of fossil fuels in new construction and major renovation projects. The City of Somerville is submitting this proposal on behalf of the community, and we urge you to approve it.

The need for fossil fuel restrictions in new construction and major renovation projects is particularly urgent in densely populated Somerville. Residential and commercial buildings are mostly occupied by renters who have limited ability to influence decisions about a building's major systems. Landlords therefore have little incentive to make improvements that will reduce dependence on fossil fuels. A destructive cycle of higher energy burdens and declining public health is the result.

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To prevent the damaging downstream impacts of locked-in fossil fuel systems, it is critical that buildings built today are built fossil fuel-free. We believe that Somerville's participation in the Fossil Fuel Free Demonstration Program will improve public health and accelerate the city's efforts to become carbon net negative.

As an MBTA and Housing Choice community with a demonstrated commitment to equity and climate action, Somerville is uniquely positioned for success in this program. We are eager to lead the way in creating cleaner, more resilient residential and commercial properties that reduce indoor and outdoor air pollution and increase energy efficiency.

As a member of Somerville's Climate Ambassador program, I learned a lot about the urgent need to combat climate change and the city's significant commitment to doing what it can. However, I also learned that there are limitations to what Somerville can do because of state rules. Being

part of the Fossil Fuel Demonstration Program would significantly help the city reduce its carbon emissions and reach its goal to be carbon net negative by 2050.

Thank you for your consideration of this application.

Sincerely,

Corey Donahue

October 2023

RE: Letter of Support for Somerville's Fossil Fuel Free Demonstration Program Application

To Whom It May Concern:

I am writing as a member of Somerville's 2023 Climate Forward Ambassador cohort in strong support of Somerville's application to the Fossil Fuel Free Demonstration Program to become one of the first 10 communities in the Commonwealth to be allowed to restrict the use of fossil fuels in new construction and major renovation projects. The City of Somerville is submitting this proposal on behalf of the community, and we urge you to approve it.

The need for fossil fuel restrictions in new construction and major renovation projects is particularly urgent in densely populated Somerville. Residential and commercial buildings are mostly occupied by renters who have limited ability to influence decisions about a building's major systems. Landlords therefore have little incentive to make improvements that will reduce dependence on fossil fuels. A destructive cycle of higher energy burdens and declining public health is the result.

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To prevent the damaging downstream impacts of locked-in fossil fuel systems, it is critical that buildings built today are built fossil fuel-free. We believe that Somerville's participation in the Fossil Fuel Free Demonstration Program will improve public health and accelerate the city's efforts to become carbon net negative.

As an MBTA and Housing Choice community with a demonstrated commitment to equity and climate action, Somerville is uniquely positioned for success in this program. We are eager to lead the way in creating cleaner, more resilient residential and commercial properties that reduce indoor and outdoor air pollution and increase energy efficiency.

Thank you for your consideration of this application.

Sincerely,

Michael Hendrix

2023 Class of Somerville Climate Forward Ambassadors

October 2023

RE: Letter of Support for Somerville's Fossil Fuel Free Demonstration Program Application

To Whom It May Concern:

I am in strong support of Somerville's application to the Fossil Fuel Free Demonstration Program to become one of the first 10 communities in the Commonwealth to be allowed to restrict the use of fossil fuels in new construction and major renovation projects. The City of Somerville is submitting this proposal on behalf of the community, and we urge you to approve it.

The need for fossil fuel restrictions in new construction and major renovation projects is particularly urgent in densely populated Somerville. Residential and commercial buildings are mostly occupied by renters who have limited ability to influence decisions about a building's major systems. Landlords therefore have little incentive to make improvements that will reduce dependence on fossil fuels. A destructive cycle of higher energy burdens and declining public health is the result.

Poor air quality stemming from combustion of fossil fuels, such as oil and gas, often disproportionately impacts Somerville's most vulnerable residents and contributes to childhood asthma and adult chronic obstructive pulmonary disease (COPD). In fact, COPD is one of the leading causes of hospitalization and death for Somerville residents. Requiring new and renovated buildings to be fossil fuel-free will reduce the incidence of these illnesses and lead to a healthier environment for all residents.

To prevent the damaging downstream impacts of locked-in fossil fuel systems, it is critical that buildings built today are built fossil fuel-free. We believe that Somerville's participation in the Fossil Fuel Free Demonstration Program will improve public health and accelerate the city's efforts to become carbon net negative.

As an MBTA and Housing Choice community with a demonstrated commitment to equity and climate action, Somerville is uniquely positioned for success in this program. We are eager to lead the way in creating cleaner, more resilient residential and commercial properties that reduce indoor and outdoor air pollution and increase energy efficiency.

Thank you for your consideration of this application.

Sincerely,

Anjana Sukumar

**From:** kanderson2k@gmail.com

**Sent:** Wednesday, November 1, 2023 1:53 PM

**To:** green.communities@mass.gov

Subject: RE: Letter of Support for Somerville's Fossil Fuel Free Demonstration Program Application

This email is from an external source. Use caution responding to it, opening attachments or clicking links.

Department of Energy Resources 100 Cambridge St #1020 Boston, MA 02114 Transmitted via email to green.communities@mass.gov

November 1, 2023

To Whom It May Concern:

I strongly endorse Somerville's application for the Fossil Fuel Free Demonstration Program, aiming to limit fossil fuel usage in new construction and major renovations. Somerville's proposal represents the community's collective initiative, and I urge its approval.

In a densely populated area like Somerville, the need to restrict fossil fuels in new construction is pressing. Most residential and commercial buildings are occupied by renters, leaving little influence on major system decisions to reduce fossil fuel dependence. Consequently, a detrimental cycle of increased energy costs and declining public health results.

The combustion of fossil fuels, notably oil and gas, significantly impacts Somerville's vulnerable residents, contributing to conditions like childhood asthma and adult COPD. To combat these health issues, promoting fossil fuel-free building practices in new constructions and renovations is crucial, fostering a healthier environment for all.

Preventing the long-term repercussions of fossil fuel systems in buildings built today is paramount. Somerville's involvement in the Fossil Fuel Free Demonstration Program will not only enhance public health but also expedite the city's journey towards a carbon-negative status.

As a community dedicated to equity and climate action, Somerville is well-suited to excel in this program. We are enthusiastic about spearheading the development of cleaner, more resilient properties that reduce air pollution and enhance energy efficiency.

Thank you for considering this application.

Regards, Keith Anderson Somerville, MA From: Rachel Schwarz <rachelagi@comcast.net>

**Sent:** Friday, October 27, 2023 9:30 AM

**To:** Office of Sustainability and Environment

**Subject:** FFF letter

This email is from an external source. Use caution responding to it, opening attachments or clicking links.

#### October 27, 2023

To Whom It May Concern:

I am writing in strong support of Somerville's application to the Fossil Fuel Free Demonstration Program to become one of the first 10 communities in the Commonwealth to be allowed to restrict the use of fossil fuels in new construction and major renovation projects. The City of Somerville is submitting this proposal on behalf of the community, and we urge you to approve it.

The need for fossil fuel restrictions in new construction and major renovation projects is particularly urgent in densely populated Somerville. Residential and commercial buildings are mostly occupied by renters who have limited ability to influence decisions about a building's major systems. Landlords therefore have little incentive to make improvements that will reduce dependence on fossil fuels. A destructive cycle of higher energy burdens and declining public health is the result.

Poor air quality stemming from combustion of fossil fuels, such as oil and gas, often disproportionately impacts Somerville's most vulnerable residents and contributes to childhood asthma and adult chronic obstructive pulmonary disease (COPD). In fact, COPD is one of the leading causes of hospitalization and death for Somerville residents. Requiring new and renovated buildings to be fossil fuel-free will reduce the incidence of these illnesses and lead to a healthier environment for all residents.

To prevent the damaging downstream impacts of locked-in fossil fuel systems, it is critical that buildings built today are built fossil fuel-free. We believe that Somerville's participation in the Fossil Fuel Free Demonstration Program will improve public health and accelerate the city's efforts to become carbon net negative.

As an MBTA and Housing Choice community with a demonstrated commitment to equity and climate action, Somerville is uniquely positioned for success in this program. We are eager to lead the way in creating cleaner, more resilient residential and commercial properties that reduce indoor and outdoor air pollution and increase energy efficiency.

Sincerely,

Rachel Schwarz

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