

Statewide Network **Thinks Globally** and **Acts Locally** to Battle Climate Change



By CAROL OLDHAM AND SARAH DOOLING

Municipal officials are on the front lines of climate change. No matter how dire the predictions, how complicated the solutions, mayors, town managers and other local officials are committed to keeping their communities safe and livable for future generations.

Cities and towns are preparing for and adapting to climate change impacts in their communities. They are also among the most active entities fighting the many causes of climate change. In Massachusetts, many cities and towns are leading the way to lower greenhouse gas emissions, taking steps that range from advocating for more energy-efficient building codes to passing bylaws that enable local residents to easily and affordably purchase much more renewable electricity than state law requires.

Through sixty-eight chapters representing 108 cities and towns statewide, the Massachusetts Climate Action Network partners with urban, suburban and rural communities, and facilitates municipal-level action and peer learning that helps replicate successful programs from one municipality to the next. Massachusetts cities and towns are showing what's possible—to their neighboring municipalities, the rest of Massachusetts, the nation and the world. The bonus is that efforts to mitigate climate change lead to other benefits, like cleaner air and water, more civically active communities, and better public health.

Local Action

Many municipalities across Massachusetts and the nation are taking bold action, such as committing to become a “net zero” (emissions) community by 2050 or sooner, or to obtain 100 percent of their electricity from renewable energy sources by a certain date. Some, like Worcester, have adopted resolutions declaring a climate emergency, thereby committing to making climate change a local priority.

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For communities looking for ways to make an impact, the enormity of climate change challenges can be daunting. The good news is that there are many local opportunities that both benefit the planet and improve communities. MCAN's [Local Clean Energy Toolkit](#) narrows the possibilities to a manageable set of choices, helping city and town leaders identify the best options for local actions that contribute to a global difference.

Before getting started, MCAN advises local leaders and citizens to envision what they'd like their communities to look like in 2040 or 2050. Doing this tends to conjure up many positive ideas, including communities that are greener, cleaner, safer, more affordable and walkable, and that support more good jobs and local businesses. With the Local Clean Energy Toolkit, municipalities figure out how to reach their goals, first assessing where they are on climate and sustainability so far. This exercise results in a municipal score of beginner, intermediate or advanced, and helps

guide communities toward next steps that are both meaningful and doable.

Online [fact sheets](#) help municipalities choose and implement various strategies—from local solar projects to writing a climate action plan that outlines a community-wide strategy to reduce greenhouse emissions.

Buying Clean Electricity

Community Choice Aggregation is among those strategies, and one that the city of Lowell recently embraced. CCA is essentially bulk buying for clean electricity. It is a process by which municipalities can “aggregate” and switch the electricity of households and small businesses from basic electric service provided by the public utility (in Lowell's case, National Grid) to cleaner energy provided by an independent electricity supplier the city selects through a competitive process.

Choosing CCA can significantly cut climate-change-causing pollution in a community because it involves virtually



Energy-efficient LED streetlights

every household and business and doesn't require convincing people by going door to door. Starting in 2014, an increasing number of communities across Massachusetts began opting for CCA (also known as "municipal aggregation") as a tool to express their values and align their electricity choices as a whole community with their climate commitments. CCA allows residents and small businesses to seamlessly switch to more renewable energy.

In 2018, the Lowell City Council made a commitment to transition the city to 100 percent renewable energy by 2050. When councilors looked at the state laws intended to wean Massachusetts off fossil fuel-fired electricity, they realized Lowell needed to do more to live up to this commitment. This is because the state Renewable Portfolio Standard law will increase the amount of renewable energy public utilities must supply to just 55 percent by 2050.

After a presentation by MCAN to introduce the idea of a CCA, Lowell Sustainability Council Chair Jay Mason and then-City Councillor John Leahy (now serving as mayor) did the math and realized that, to meet their 2050 commitment, Lowell's aggregation program would need to boost its clean energy by another 45 percent. In 2019, Leahy and the City Council approved this bold step, bringing Lowell to the front of the pack for this type of program in Massachusetts and providing leadership to other communities, including those with higher income demographics such



Electric vehicle charging stations

and implement programs that live up to their goals. MCAN recognized Lowell's leadership in March, presenting an Outstanding Activism Award to Mayor Leahy, the Lowell Sustainability Council, and 350MA of Greater Lowell, a group that is part of a statewide volunteer climate action network.

Suburban Efforts

Suburbs in Massachusetts are also taking important steps. In Lexington, local clean energy planning led the town to create a greenhouse gas inventory. The Sustainable Lexington Committee, a

consumption. They included data on natural gas leaks, which added 10 percent to the town's total emissions.

Lexington's inventory revealed that 66 percent of the town's emissions were coming from buildings (only 2 percent from municipal buildings), and almost a third were attributable to industry. After MCAN and Sustainable Lexington Committee Chair Mark Sandeen presented the findings, the town decided on targets and actions, including adopting a [Community Choice Aggregation](#) program as an alternative to Eversource for resident and business electricity. They also decided to write a plan for getting the town to net zero.

MCAN's fact sheet notes that becoming net zero means that a "community gets as much electricity from renewable sources as it uses." Cities and towns that adopt this strategy typically plan to reach the goal through a combination of energy efficiency improvements, local clean energy production, and purchasing of renewable energy. Among the state's net zero pioneers is Amherst, which adopted a zero-energy bylaw in 2017 and revised it in 2018. The bylaw requires that, with minor exceptions, all new town buildings must produce as much energy as they use.

"The Zero Energy Town Buildings

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as Brookline and Newton, both of which have also adopted a CCA.

Lowell's action, which implemented a plan to get 61 percent of electricity from New England renewable energy sources (16 percent currently required by state law, plus an additional 45 percent), has inspired other communities to think big

panel appointed by the Select Board, enlisted a seven-member team, including two volunteer interns, to conduct the inventory using 2012 as a base year. The committee collected emissions data related to the town's total electricity and heat consumption, transportation, waste disposal, and food production and

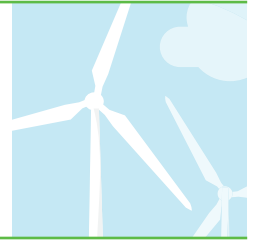
Bylaw, which will be implemented as part of Amherst's next capital project, is an essential part of meeting the town's ambitious emissions reduction goals for the town, residents, businesses and institutions," said Amherst District Five Councilor Darcy Dumont, adding that those goals, adopted by the Town Council in November 2019, were proposed by the town's "new and very energetic Energy and Climate Action Committee" and call for reducing town emissions (from 2017 levels) by 25 percent by 2025 and 50 percent by 2030, and to achieve carbon neutrality by 2050.

Building a Network

MCAN's support for actions such as Amherst's net zero commitment and Lexington's vote for municipal electricity aggregation, involves helping advocates with messaging, providing data and resources, and—perhaps most importantly—connecting them with like-minded officials in other communities to share ideas and best practices.

On a statewide basis, MCAN was instrumental in November 2019 in substantially increasing the number of

Americans spend 80 percent of their time indoors, so how we build buildings matters.



Massachusetts local officials who took part in updating the International Energy Conservation Code. The IECC is the model energy code for new buildings constructed in the United States and some parts of Europe and is typically adopted, with few changes, as the Massachusetts Energy Code.

Municipal officials across the country are eligible to vote on changes to the code every three years, but few have done so in the past (only about 400 nationwide in 2016). In 2019, MCAN made a concerted effort to "get out the vote"—making sure sustainability coordinators, energy committee members, town planners and others in Massachusetts' 351 cities and towns knew how to register and make their voices heard for the next IECC update. As a result, Massachusetts pro-

efficiency officials comprised the bulk of more than 530 additional local officials who voted during 2019, electing to make the 2021 IECC approximately 10 percent more energy efficient for both residential and commercial buildings that follow the code.

Americans spend 80 percent of their time indoors, so how we build buildings matters. Once again, the Commonwealth's cities and towns stepped up, showing leadership that will result in better schools, offices and other facilities for everyone.

Municipal leadership in Massachusetts is inspiring. It's the epitome of thinking globally and acting locally, and the latest and greatest example of Massachusetts cities and towns leading the way on climate for their peers around the country. 🌟