ROAD TO 100% RENEWABLES MASS POWER FORWARD CAMPAIGN HANDBOOK





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WHY IS LOCAL ACTION IMPORTANT?

Our dependence on dirty energy like oil and gas pollutes our air and water and harms the health of Massachusetts' communities. Pipelines threaten our safety and our green spaces. Pollution from fossil fuels are changing our climate, contributing to sea level rise and increasing the frequency of droughts, severe storms, and other damaging weather events.

This unprecedented threat is also an unprecedented opportunity to create clean energy jobs, develop sustainable neighborhoods, and clean up our air and water. With our state and federal governments considering multi-billion dollar investments in fossil fuels, now more than ever we need to lead a clean energy revolution from the ground up and show that we can get 100% of our energy from clean sources. We can live better lives while creating good jobs, making great neighborhoods, and saving our green space.

How does switching to clean energy help everyone?

A switch from dirty to clean energy helps communities in several ways:

- ✓ It puts the power and the solutions in the hands of our communities.
- ✓ It creates sustainable jobs clean energy solutions generate good safe iobs
- ✓ It protects green spaces investing in clean energy and energy efficiency will help prevent the expansion of fossil fuel infrastructure that threatens our natural landscapes
- ✓ It protects coastlines immediate major reduction of greenhouse emissions is necessary to stabilize sea levels
- ✓ it cleans up our air and water the more clean energy we put into place, the more dirty energy we can take offline

Is it possible?

Though a 100% clean energy future may sound daunting, it is possible! Studies from major universities and institutions — including Stanford University, the University of Delaware, the National Renewable Energy Laboratory, the U.S. Earth System Research Laboratory, and others — have shown that a 100% clean electric grid is within reach. Communities like San Diego CA, Burlington VT, Boulder CO, and Rochester MN have all committed to 100% renewable energy, along with major corporations such as Amazon, Google, and Johnson & Johnson.



As we transition to 100% clean energy, as much of that energy as possible should come from local sources, like wind and solar installations in New England. That way, we can maximize the economic and environmental benefits for our communities, while ensuring that the dollars we spend are resulting in more clean energy on the grid.

Why local action and local projects?

Local action and local projects are good for two reasons: they let your community make choices based on your values and priorities, and they prove that climate change solutions work. Your town gets to decide what our energy future looks like, and prove to state policy makers that communities can. We can set the example at the local level and show that it is possible to clean up our state and transition to a clean energy future!

Across Massachusetts, cities and towns are already leading the way towards 100 percent renewable energy. For example:

- ✓ New Bedford has installed 16 megawatts of solar to power its municipal facilities, and more than a third of the vehicles in its municipal fleet are electric vehicles.
- ✓ Cambridge has adopted a Net Zero Action Plan, laying out steps for the city to reduce carbon emissions from its buildings by 70 percent by 2040.
- ✓ Sutton has received \$440,000 in funding for energy efficiency upgrades for municipal buildings through the Green Communities program.



ABOUT THE CAMPAIGN

The 100% Renewables Town and Cities Campaign looks to empower and give resources to community members working to make their city less dependent on fossil fuels. Over 25 cities towns and cities in the United States and Canada have passed 100% Renewable Energy resolutions, and have been successful in decreasing their town's dependency on fossil fuel.



Here in Massachusetts, 100% renewable towns and cities campaign has two goals:

- 1. **GOAL ONE:** Persuade municipalities across Massachusetts to pass a nonbinding town or city resolution setting a goal of 100% renewable energy for all
- 2. **GOAL TWO**: Persuade each of these municipalities to undertake 1-2 concrete projects to promote clean energy, energy efficiency, etc.

Note that these goals can be pursued in either order. Some towns and cities will work first on passing a nonbinding resolutions, and from there, figure out how to bring specific clean energy projects to their town. In other towns and cities, there are already active efforts underway to reach Green Communities status, build a municipal solar project, pass a Net Zero resolution, etc, and so it makes more sense to support these concrete efforts first, using the language of 100% renewable energy, and pass a non-binding 100% renewable energy resolution later.

Mass Power Forward, which is a statewide coalition of more than 200 environmental, community and social justice groups, is the primary organization pushing this campaign forward. The primary groups working on this within Mass Power Forward are Massachusetts Climate Action Network (MCAN), Environment Massachusetts, Clean Water Action, 350 Mass, and Boston Climate Action Network. We encourage partnering with local organizations wherever possible!

This document includes

- A timeline for passing a resolution
- A sample of a municipal resolution
- Materials for implementing concrete projects, including the Mass Power Forward Checklist, suggested policies and projects, and a link to further information on each



GOAL ONE: HOW TO PASS A 100% RENEWABLE ENERGY RESOLUTION IN YOUR TOWN OR CITY

- 1) Read this handbook and educate yourself about the campaign!
- 2) Learn about how decisions are made in your town or city:
 - a) Do you have a town meeting style of government? If so, when does town meeting happen? Is it a representative town meeting, or an open town meeting? Learn more about town meeting here.
 - b) Do you have a city council? How many city councillors are there? Who are they? Are they generally supportive of clean energy? Where does your mayor stand?
- 3) Research your town's progress on clean energy to date
 - a) What has the city well? What can still be done?
 - b) The checklist at the end of this handbook may be helpful for assessing your town's progress
- 4) Have some kind of informational meeting for community members, and form a
- 5) Educate active people in town government (e.g. Board of Selectmen, city councillor, people on key committees) on the need to set a goal of reaching 100% renewable energy
- 6) Spread the word! Go on public access TV, put articles in the local paper, bring speaker to town, hold public events (e.g. at the elementary school)
- 7) For town meeting style of government:
 - a) Draft a town meeting warrant article using sample below
 - b) Get enough signatures to submit the warrant article to the town (you may need 10 or 20 - depends on the town)
 - c) Submit the warrant article to the town government
 - d) Meet with selectmen and encourage them to offer their support
 - e) Get the word out and encourage fellow citizens and/or town meeting members to vote yes!
- 8) For City Council style of government:
 - a) Meet with City Councillors to gauge submit
 - b) Work with a City Councillor to draft a resolution
 - c) Get the City Councillor to submit the resolution to the City Council
 - d) Participate in city council committee hearings as needed! Turn out supporters to give testimony in support of the resolution
 - e) Turn out big for the City Council vote!
 - f) If the City Council passes the resolution, push the mayor to vote yes!
- 9) Help follow through and implement next steps -- use momentum provided by the warrant article to push for clean energy projects in your town or city



SAMPLE RESOLUTION

Resolution of the City Council of the City of CITY NAME in support of 100 percent renewable energy

WHEREAS, too much of Massachusetts' energy comes from fossil fuels that pollute our air and water and alter our climate; and.

WHEREAS, Massachusetts communities are already feeling the impacts of climate change; and,

WHEREAS, the City of CITY NAME is already taking action to reduce its carbon emissions and promote clean energy, including LOCAL EXAMPLES (e.g., energy efficiency retrofits of all municipal buildings and the installation of solar panels on the city landfill); and

WHEREAS, clean energy has brought many benefits to Massachusetts, including reduced pollution, tens of thousands of clean energy jobs, and more of our energy dollars retained in the local economy; and

WHEREAS, Massachusetts has historically been a leader in the fight against global warming, and has a responsibility to continue to set a positive example for other states and countries to follow: and

WHEREAS, Massachusetts can get 100 percent of its energy from clean, renewable sources by harnessing its abundant solar and wind resources, and taking advantage of innovations in energy efficiency, green transportation, energy storage, and other technologies; and

WHEREAS, the transition to 100 percent renewable energy should promote employment opportunities and economic growth in our communities, facilitate local control and ownership over energy options, and bring tangible benefits to low-income residents and others who have historically been disadvantaged by our energy system;

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of CITY NAME, in the County of COUNTY NAME, Commonwealth of Massachusetts, that Massachusetts should commit to a goal of 100 percent clean, renewable energy, and move as quickly as possible to achieve that goal;

AND BE IT FURTHER RESOLVED that leaders in the Legislature and statewide elected and appointed officials are urged to do everything in their power to bring Massachusetts closer to 100 percent renewable energy, and ensure that the benefits of renewable energy are realized by Massachusetts residents from all walks of life:



AND BE IT FURTHER RESOLVED that the City of CITY NAME will commit to a goal of 100 percent renewable energy, and its officials and staff will consider all municipal decisions in light of whether they will bring the City and its residents, businesses, and institutions closer to 100 percent renewable energy;

AND BE IT FURTHER RESOLVED that the City of CITY NAME will avoid taking actions that could increase the use of fossil fuels or delay the transition to 100 percent renewable energy;

AND BE IT FURTHER RESOLVED that the City of CITY NAME will take actions to promote clean energy and reduce fossil fuel use, including:

- EXAMPLE
- EXAMPLE



GOAL TWO: HOW TO IMPLEMENT CONCRETE CLEAN ENERGY PROJECTS IN YOUR TOWN OR CITY

- 1) Educate yourself using materials provided - check out policy tiers below and policy fact sheets.
- 2) Assess your town's progress to date. Use the Mass Power Forward checklist below to assess your town's tier (link for identical printable checklist)
- 3) Have some kind of informational meeting
- 4) Form a team, and decide what concrete measures are appropriate for your municipality, based on the suggestions below



- 5) Educate active people in town government (e.g. Board of Selectmen, city councillor, people on key committees) and work with them to figure out next steps for moving the project forward
- 6) Spread the word! Go on public access TV, put articles in the local paper, bring speaker to town, hold public events (e.g. at the elementary school)
- 7) Help follow through and implement next steps



MASS POWER FORWARD CLEAN ENERGY CHECKLIST

This checklist is intended to help you understand how much your town has already done on clean energy and climate change, so you can target your next steps. Check a box if your town has done an action, or is well on its way to completing it.

You should be able to sit down with someone from your town/city government and fill this out.

Energ	ıy effici	<u>ency</u>
	Comp	eleted energy audits in municipal buildings to identify energy-saving
	oppor	tunities
	Imple	mented energy efficiency upgrades in municipal buildings:
		Installing LED or high-efficiency fluorescent interior lights
		Installing occupancy sensors to automatically turn lights on and off
		as needed
		Installing new, high-efficiency heating and cooling equipment
		Installing an energy management system
		Weatherizing the building (for example, by installing additional
		insulation or high-performance windows)
		Instituting a program to encourage building occupants to reduce
		energy use by modifying their behavior, such as turning off
_	Cany	equipment when not in use
		erted streetlights to LED fixtures
		ed a local outreach program to help connect residents and businesses
		nergy efficiency audits and upgrades Mass Save program outroach for homes
		Mass Save program outreach for homes Mass Save for businesses and institutions
	Ц	Mass Save for businesses and institutions
Town	Workir	ngs
		lished a committee to focus on energy, climate, and/or environmental
	issues	5
		Local, volunteer-led
		Municipal government-level committee
	Applie	ed for Green Communities status under the Mass. Dept. of Energy
	Resou	ırces
		ved Green Communities status
	Applie	ed for grants for energy upgrades from the Green Communities
	progr	
		ved Green Communities grants
		leted a greenhouse gas inventory
	Creat	ed a climate action plan
	🗆	If so, has it been updated in the last 5 years?
	Hired	an energy manager or sustainability manager
		If not, is there another staff person who is responsible for
		implementing clean energy and energy efficiency improvements?



 Community choice aggregation passed (also known as "municipal aggregation") With at least 5 percent additional Class I renewable energy? Community choice aggregation implemented Municipal operations' electricity from clean source Participated in MassCEC's Solarize Mass program If not: have you created a similar program to connect residents and businesses with solar installations? New buildings required to be "solar-ready" Solar installed on school buildings Solar installed on capped landfill Solar installed on town buildings Solar installed on town parking lots (e.g., solar canopies) Wind turbines installed or wind energy purchased Transportation Adopted a Complete Streets policy, requiring streets to be designed with the needs of all users in mind (including cyclists and pedestrians) Installed bike lanes
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□ Installed bike lanes
Are they being updated?
□ No idling by-law in place
☐ Street planning like traffic calming patterns and roundabouts being
implemented
□ Permeable paving for parking lots, etc
☐ Installed electric vehicle charging stations that are open for the public to use
□ Purchased electric vehicles for town fleet
□ Purchased electric transit buses or schoolbuses
Other Sustainable Actions
 Created a bulk purchasing and outreach program for renewable heating
technologies (e.g., solar hot water, air source heat pumps)
□ Composting programs
 Recycling for hard to recycle items such as styrofoam, lids, etc
□ Tree plantings
Adaptation
Adaptation Adaptation plan for increased heat waves, stronger storms
☐ Adaptation plan for increased heat waves, stronger storms ☐ If coastal, sea level rise adaptation plan
- It coastal, sea level rise adaptation plan

Next, count up the number of checkmarks on your sheet.

1-7) If you have checked 7 items or less, your town is just starting down the path to sustainability. We would put you in the category of a "beginner" town. This is exciting, because it means you have LOTS of things you can do to make things



better! However, it also means you will probably need to do some education of people in your town, including town staff. But don't worry, we have materials to help you do this.

8-15) If you checked 8-15 items, your town is on it's way to becoming a clean energy powerhouse. We would put you in the category of an "intermediate" town. The great news is that means you can still pick some low hanging fruit and do some fairly simple things that make a big difference. It also means there is a general level of knowledge about climate and clean energy issues, and it is probably a priority for people in town.

16-33) If you checked more than 10 items, you are a very active and sustainable community. We would put you in the category of an "advanced" town. This means you have done a lot, which is wonderful, but it also means the stuff that is left is harder to do. The great news is that being advanced means your town is pretty knowledgeable about climate change and committed to making the changes to become a truly sustainable town, and you get to be on the cutting edge of towns in MA making strong commitments to solutions.

So now what?

Now you are ready to get started! See our list of policy and project recommendations for each tier (beginner, intermediate, advanced). We have narrowed this down to the top things that you can do as a town to cut pollution and make your town into a clean energy powerhouse. Then, check out the fact sheets, which include information on each policy recommendation!



SPECIFIC POLICY RECOMMENDATIONS:

Beginner towns

- 1. Do a **greenhouse gas inventory** to identify the largest sources of global warming pollution in the community. Create a basic climate action plan for the town. (short-term)
- 2. Conduct an energy efficiency audit of all municipal buildings, including schools, and complete all energy efficiency upgrades with a payback period of 10 years or less. Additionally, convert streetlights to LED fixtures. (medium-term)
- 3. Join the Commonwealth's **Green Communities** Program, which provides funding for local clean energy and energy efficiency projects. (long-term)
- 4. Adopt a Complete Streets policy, requiring roads to be designed in a way that is safe and accessible for all users, including cyclists and pedestrians.

Intermediate towns

- 1. Pass community choice aggregation (which allows the municipality to choose a default source of electricity for residents and businesses), with at least 5 percent additional Class 1 Renewable Energy Credits beyond what the state requires.
- 2. Advance municipal policies that **promote solar power** in public and private development through "solar-ready" requirements on new construction, renewable energy development on public buildings and community-wide solar challenges such as the Solarize Massachusetts program.
- 3. Increase access for all to **electric vehicles** through town purchases of electric buses, increasing the percentage of electric vehicles in town fleets, and installing electric vehicle charging stations that are open for the public to use.

Advanced towns

- 1. Create an **energy efficiency program** with a strong emphasis on serving renters and low-income families.
- 2. Create a **net zero plan**, setting out a roadmap to achieve zero emissions for buildings and transportation.
- 3. For communities with existing climate action plans, update the local climate action plan to incorporate environmental justice and equity principles.
- 4. Create a community outreach and bulk purchasing program to increase the adoption of renewable heating technologies, such as solar thermal, geothermal, and air source heat pumps.

A reminder: it might be tempting to go for the big guns, even if you are in a beginner town. We don't recommend that - we want you to WIN in your first campaign (and second, and third).



OTHER RESOURCES:

Now that you've picked the policy to focus on, the next step is to advocate for your city or town officials to adopt that policy. We have prepared fact sheets about each of the above policy recommendations, with basic information about how to get started, stories of towns that have already taken action, and links to other online resources. You should share these fact



- sheets with your local officials, bring them to events, etc. You can access the fact sheets at http://mapowerforward.com/100re.
- Want to host a 100% Renewable Towns and Cities campaign kick-off event to raise community awareness and garner interest? Email Emily Kirkland, Emily@betterfutureproject.org, for our event planning guide!
- Questions? Concerns? Ideas? We'd love to hear from you and put you in touch with other local activists in your area! Contact info:

Ben Hellerstein, Environment Massachusetts, ben@environmentmassachusetts.org

Carol Oldham, MA Climate Action Network, carololdham@massclimateaction.net

Joel Wool, Clean Water Action, jwool@cleanwater.org

Emily Kirkland, 350 Mass, emily@betterfutureproject.org.

