Create a Local Energy Plan

A local energy plan comprehensively assesses a community's energy use and past activities, establishes future goals, and identifies projects that will be most effective in meeting those goals. Integrating energy concerns into a municipality's master planning process is important, but specific energy plans are valuable tools to identify opportunities for improvement, evaluate their relative effectiveness, and outline how they will be achieved. Energy plans can address both short- and long-term goals and will vary for each municipality depending on the extent to which a community has previously engaged in energy work, the resources available, and the amount of local interest. Energy plans generally include a broad vision, goals, energy consumption baseline, resource analysis, and recommended strategies for achieving energy goals. Depending on the depth of the plan, developing an energy plan can take anywhere from several months to a year. The Massachusetts Department of Energy Resources (DOER) and regional planning agencies, such as MAPC, are available to assist communities with energy planning process. For example, MAPC's Local Energy Action Program helps identify energy projects/issues most relevant to a given community and then provides the necessary technical assistance, including plan production and project management, to help communities complete clean energy projects**.** This strategy outlines how to create a local energy plan.

Benefits of Energy Planning

By working through an energy planning process, communities can lead by example to effectively implement energy projects that result in energy savings, cost savings, improved infrastructure, and higher levels of building occupant comfort. Benefits of energy planning include:

- **Common goals** – Create a set of organizing principles to bring the whole community together, rather than duplicating efforts. A clear and concise community vision will make it easier for residents to relate to the efforts that municipal leadership is pursing and will consequently help to garner support for projects at town meeting. See the City of Medford's GoGreen page for an example of this.

- **Greater impact** - Limited resources and time is always a problem, so identifying ways to combine energy and capital improvement projects together is advantageous. Energy planning will help prioritize the projects that are the most practical in advancing the community's energy goals.

- **Ambitious goals** – Set goals that lead the community to go beyond business-as-usual. Targets like receiving Green Communities grant funding can be an attractive incentive for residents to rally behind. (For more information, see the Receive Green Communities Designation strategy.)

- **Longer-term planning** – Think beyond the parameters of projects tied to the annual budget cycle. An energy planning process, particularly one that addresses goals like Green Communities Designation, can help a community create the momentum and continuity required to implement progressive and enduring programs that have a significant impact on the community's energy efforts.

- **Assessment** – By documenting progress and formalizing the process, it will be easier for the community to identify successful efforts that can be repeated and unsuccessful ones that should be discontinued. Assessing progress is crucial for a community, whether it needs to learn from the past or lead by example for constituents and neighboring communities.

- **Stakeholder buy-in** – A comprehensive energy planning process entails the involvement of all stakeholders in the decision-making process, so roadblocks will not surface during implementation. By building interest from new constituents in municipal work and expanding who participates in local meetings, the community can ensure greater buy-in for any long-term energy goals.

Implementation Steps

1. Identify/convene stakeholders.

- **Identify who will lead the planning process** – A staff member, either full-time or part-time, who is devoted to the task as part of their job is critical to the success of a plan. In some instances, a volunteer, such as the head of an energy committee, can take the leadership role in the planning process when there is not a clear municipal employee to assume the role. However, in these instances it can be challenging for municipal projects to get support and be pursued. Municipalities that are short on capacity may want to consider hiring a shared energy manager in conjunction with one or more other communities. (For more information, see the Hire a Shared Energy Manager strategy.)

- **Form leadership team** – Members of the leadership team should have the power to make decisions, direct funding, and promote the project within the community or government. The team should consist of representatives from multiple governmental departments, as well as diverse outside experts, community leaders, administrative staff, businesses, utilities, nonprofits, and private citizens. Members of are usually invited to be on the team because of their particular expertise or area of oversight. Participants from departments such as Procurement, Operations and Maintenance, Capital Improvements, Fire, Police, Public Works, and Finance can be very useful to have on the team.

- **Identify project champion** – Having the support of a mayor or other elected official can help encourage key municipal departments to participate and facilitate communication with the public.

- **Reach out to the public** – Stakeholders in a municipal energy plan include local residents and businesses, so a robust public outreach effort—early on in and throughout the process—can ensure broad support for the plan and ensure that it captures the goals that are of most importance to the community. Public meetings, surveys, and comment periods for draft documents can help elicit feedback. (For more information, see the Community Engagement Guide strategy.)

2. Develop common energy vision.

The visioning process can begin with the leadership team setting up a visioning meeting to identify the top priorities of local stakeholders. Discussing and synthesizing often disparate ideas can unite the community behind a common purpose and ensure that all stakeholders understand what is being agreed on. Unlike goals, the vision should be a broad statement of what is important to the community.

3. Measure baseline energy use.

A baseline of energy use is an important tool for understanding where a community is in terms of energy consumption. Regardless if the leadership team or an outside entity establishes the baseline, the leadership team should identify one local person to be responsible for using the baseline to benchmark future energy use. The baseline should be both a quantitative and qualitative assessment of energy use and/or greenhouse gas emissions for the past three years. It should note projects already undertaken, as well as potential projects.

While it is much easier to develop an accurate municipal energy baseline, because municipal energy data is readily available, if possible, it is helpful to estimate residential, commercial, and industrial energy use to get a clearer idea of a community's overall energy picture and to highlight the importance of outreach to specific sectors. The analysis should include a business-as-usual forecast, as well as a self-assessment of resources and opportunities.

The data gathered in the baseline will aid in setting and ranking specific, measurable energy goals and tracking progress. Free tools such as the EnergyStar Portfolio Manager or MassEnergyInsight are available to aid municipalities with baselining. (See the Report Monthly Energy Use, Track Municipal Energy use with MassEnergyInsight, and Estimate Local Energy Use Baseline strategies for more details.)

4. Set energy goals.

Energy goals should expand upon a municipality's current energy work and should be clear, relevant, and measurable. Developing criteria to evaluate the success in reaching such goals early on will make reviewing and updating the plan easier. Possible goal topics include greenhouse gas reduction, energy use reduction, renewable energy development, public

outreach, and long-term planning. A useful model for goals is: "By (target year), (municipality) will (reduce/increase) (measurable metric) by (#) percent (below/above) (baseline year) levels."

5. Develop strategies to achieve goals.

Identify potential energy projects and decide which will have the most impact. Include both short- and long-term strategies. Strategies can be ranked by taking into consideration total resource cost, greenhouse gas emissions/energy use reduction, political support, technical/economic feasibility, or any number of other factors relevant to the community. ACEEE's Local Energy Efficiency Policy Calculator can be a useful tool. A clear implementation plan for the most effective strategies will allow stakeholders to better achieve a community's goals. Therefore, each strategy should identify the responsible department/person and a timeline with key milestone.

6. Identify funding sources.

Find one or more potential funding sources for each strategy, in addition to overall program (planning and evaluation) funding. These may include grants for specific projects, bonds, utility incentives, performance contracts, or private partnerships.

7. Review and adopt plan.

Share the plan with the municipality's decision-making body, as well as the community. Formal approval by the mayor, city council, or board of selectmen legitimizes the plan and increases its momentum. Further, a public comment period, while time-consuming, will increase the likelihood that the plan will be supported, followed, and maintained.

8. Implement plan.

Once approval for the plan is received, the implementation process can begin in earnest. Coordinate with any stakeholders responsible for specific aspects of the plan to develop more specific timelines for project implementation.

For the implementation phase, the presence of a staff member who has been involved throughout the energy planning process is crucial to maintain the continuity and momentum of the effort.

9. Review energy plan annually.

Energy efforts should be systematically evaluated each year so that successful projects are expanded upon and the reasons that other projects were unsuccessful are understood and improved upon. Choosing measurable goals with evaluation criteria already identified in the plan should make this process easier. Release progress reports publicly, documenting the challenges and celebrating the successes. This keeps stakeholders engaged. Revise the plan for the next year based on this evaluation. (For more information, see the Review Energy Plan Annually strategy.)

References

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