

SEED PROJECT IDEA

Pursuing Resilient & Equitable Power

The following is a project idea for inspiration—ultimately, the Seed Project you choose should be based on your community's climate resilience priorities. Remember that you will have up to \$50,000 to spend on the Seed Project and about 9 to 10 months to accomplish it, so you may need to carve out a piece of the following action to fit those guidelines, and then work together on a plan for financing the next phase.

Project Description:

Frequent power outages are a current problem in many Massachusetts communities. Heat and extreme weather events are increasing damage and stress on electric transmission and utility distribution infrastructure, resulting in one of the most urgent climate impacts statewide ([MA Climate Change Assessment, 2022](#)). At the same time, converting energy generation and distribution systems to clean, renewable power is a core element of the Commonwealth's decarbonization efforts, which requires an increased reliance on continuous access to electricity. Energy resilience involves implementing efficient, renewable power solutions that can withstand and recover quickly from disruptions, and that provide needed power independent of the grid. For energy resilience to support community resilience, all residents, regardless of race, gender, ability, and socio-economic status must be able to access the social, environmental, and economic benefits of resilient energy systems. Solar power coupled with battery storage is a commonly used resilient power solution.

A resilient and equitable power plan should focus on distributed energy generation systems that use renewable energy (diesel generators are not funded by MVP) and directly benefit Environmental Justice (EJ) and/or other priority populations. Equitable power planning requires centering the needs of population groups that have historically been [marginalized in this sector](#), and designing policies that both offer equal footing and address existing inequities in accessing the benefits of a resilient power system.

This example Seed Project is an assessment-based project that evaluates energy infrastructure vulnerabilities; identifies critical facilities, sites, or neighborhoods that support EJ and/or other priority populations and that could benefit most from resilient power systems; and identifies at a high-level what improvements and partners are needed to build energy resilience. [What Cities Should Do: A Guide to Resilient Power Planning](#) offers planning steps and case studies of clean, resilient power planning in communities across the country.

High-level List of Potential Project Tasks:

1. **Form a project team:** For an assessment-based project, the project team should include many of the following representatives, or should consult with these individuals as part of completing the assessment.
 - Municipal staff (particularly those in charge of energy programming)
 - Representatives from local utility companies
 - Representatives from local [light plants](#)
 - Community organizations that work on energy resilience
 - Both municipal staff and community-based organizations that focus on affordable housing and public housing
 - Vendor team with expertise in electrical engineering, community processes, and equity
 - Those that have experience with high power demands and those that have experience with cooling shelters also provide invaluable expertise –
 - Hospital facility directors
 - Emergency shelter staff
 - Skilled Nursing Facility (SNF) staff
 - Visiting Nurse Association (VNA) staff
 - Licensed group home and group care facility staff
 - Local Red Cross Staff
 - Educational institution representatives (colleges, high schools, etc.)
 - Large employers (industrial, institutional, military, etc.)
 - Regional transit hubs (airports, train terminals, etc.)
 - Library staff (as libraries are often used as cooling shelters)
 - Local unions that represent affected individuals (teachers, nurses, municipal staff, etc.)

Individuals not being compensated for participation through their job (or municipal volunteer role) should be compensated through the project. For an implementation project, the project team can be focused on representatives from the identified location and people the location serves.
2. **Identify opportunities for resilient power:** Utilize the GEAR tool and community mapping process to identify energy infrastructure at highest risk of damage or failure as well as high priority locations and systems (for example, environmental justice block groups, healthcare facilities, schools/emergency shelters, [affordable housing](#), or public transportation systems).
3. **Engage the community:** Engage the community to weigh in on their biggest areas of concern, priority locations and systems, and potential solutions. Meet people where they are by conducting engagement at facilities the community uses. Discuss the potential for energy investments (with financing support) with staff and facility managers at those facilities. Work with community members to develop a prioritization system that should consider, at a minimum, need, feasibility, equity, and co-benefits such as contributions toward net-zero targets, increasing resilience of essential community services—such as schools—and maximizing eligibility for funding mechanisms. Broad community input, including from EJ and other priority populations, should be incorporated into the prioritization effort.
4. **Conduct an engineering assessment:** Assess power loads of priority locations and systems and how well different resilient power options could meet the critical loads for each. Incorporate

nature-based solutions into project design to manage stormwater, moderate temperature, and provide other benefits to the resilient power solution and the broader community.

5. **Identify potential sources of financing:** Consider grants (including the [MA Community Clean Energy Resiliency Initiative](#) and Community Development Block Grants), bond financing (including [Green Bonds](#)), and other mechanisms.
6. **Develop the plan:** The resilient power plan should include community priorities, alternatives assessed, and concepts for the highest priority projects.