



Renewable Communities

Massachusetts cities and towns leading the way to 100% renewable energy

Pittsfield: Microgrid feasibility study

In 2018, Pittsfield became one of 14 Massachusetts communities – including Boston’s Chinatown, the Charlestown Navy Yard, and the town of Melrose – to receive funding from the Massachusetts Clean Energy Center to conduct a feasibility study for a community microgrid.¹

A microgrid is a localized energy grid which can be connected or disconnected from the traditional grid. Because it contains a source of electricity generation, a microgrid can keep communities powered during a grid outage. Some microgrids use a combination of energy storage and renewable energy resources, like solar panels, to provide a pollution-free, reliable supply of electricity.²

The city received \$75,000 to explore the implementation of a microgrid in the downtown business district.³ The microgrid would connect key buildings, including the fire department, Berkshire Medical Center, and city hall, keeping them online in the event of a prolonged power outage. The microgrid would also connect to the city’s senior center and public housing units, protecting the most vulnerable populations during periods of extreme weather or other emergencies.⁴

In addition to ensuring a reliable supply of power to critical facilities during natural disasters, the construction of a downtown microgrid would also provide an opportunity to install more clean energy technologies. Solar arrays could be installed on a downtown parking garage to form one component of the microgrid.⁵ The study will consider the potential to combine solar

installations with battery storage units and energy management systems.⁶

Pittsfield is taking other steps to reduce fossil fuel consumption and increase the generation of renewable electricity. In 2017, the city opened a 2.9-megawatt solar installation on a capped landfill. The system is projected to save Pittsfield \$140,000 annually.⁷ Additionally, energy management systems installed at City Hall have reduced energy consumption, saving the city around \$13,000 each year.⁸

1. “Details on the 14 Massachusetts Community Microgrid Projects that Won Funding,” Sarah Rubenoff, Microgrid Knowledge, 23 February 2018, <<https://microgridknowledge.com/community-microgrid-projects-massachusetts/>>.
2. “How Microgrids Work,” Allison Lantero, U.S. Department of Energy, 17 June 2014, <<https://www.energy.gov/articles/how-microgrids-work>>.
3. “Details on the 14 Massachusetts Community Microgrid Projects that Won Funding,” Sarah Rubenoff, Microgrid Knowledge, 23 February 2018, <<https://microgridknowledge.com/community-microgrid-projects-massachusetts/>>.
4. “City of Pittsfield Downtown Microgrid Feasibility Study,” City of Pittsfield, <https://www.cityofpittsfield.org/city_hall/community_development/city_of_pittsfield_downton_microgrid.php>.
5. “Pittsfield Explores Green Solution For Emergency Energy System,” Josh Landes, WAMC Northeast Public Radio, 1 August 2018, <<https://www.wamc.org/post/pittsfield-explores-green-solution-emergency-energy-system>>.
6. “City of Pittsfield Downtown Microgrid Feasibility Study,” City of Pittsfield, <https://www.cityofpittsfield.org/city_hall/community_development/city_of_pittsfield_downton_microgrid.php>.
7. “Pittsfield, Massachusetts municipal solar array up and running,” Kelsey Misbrenner, Solar Power World, 24 March 2017, <<https://www.solarpowerworldonline.com/2017/03/pittsfield-landfill-solar-array/>>.
8. “City of Pittsfield Downtown Microgrid Feasibility Study,” City of Pittsfield, <https://www.cityofpittsfield.org/city_hall/community_development/city_of_pittsfield_downton_microgrid.php>.