



Renewable Communities 2020

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

Holyoke: Battery storage system

In September 2018, Holyoke Gas & Electric, the municipal utility for the city of Holyoke, and ENGIE North America unveiled the largest utility-scale energy storage system installed to date in Massachusetts.¹

The 3-megawatt battery system was installed at the former Mt. Tom coal plant, which closed in 2014 after years of campaigning by Neighbor to Neighbor and other groups.² In 2017, a 22-acre, 5.76-megawatt solar farm, the largest community solar installation in Massachusetts at the time, opened on the site of the coal plant.³ The battery system and the solar farm are integrated.⁴

The energy storage installation is expected to save money for Holyoke residents. By discharging energy at times of peak demand, the batteries will help reduce the need for Holyoke Gas & Electric to buy electricity when it is most expensive. The utility estimates it will save between \$500,000 to \$800,000 each year due to reduced peak demand.⁵

Other expected benefits of the project include increased grid stability, the ability to integrate more renewable energy generation, and a reduced peak load burden on the electric distribution system.⁶

The Massachusetts Department of Energy Resources awarded a \$475,000 grant for scientists from the University of Massachusetts Amherst to study the energy storage system and its effectiveness in reducing the peak burden on the distribution system. Findings from this study will help inform the installation of energy storage systems in other cities and towns.⁷

1. "ENGIE NA Unveils Largest Energy Storage System in Massachusetts in Cooperation with Holyoke Gas & Electric," ENGIE, 25 September 2018, <<https://www.engiestorage.com/engie-na-unveils-largest-energy-storage-system-in-massachusetts-in-cooperation-with-holyoke-gas-electric/>>.

2. Battery capacity: "State's largest utility-scale energy storage goes online in Holyoke," Daniel DeMaina, Massachusetts Municipal Association, 15 November 2018, <<https://www.mma.org/states-largest-utility-scale-energy-storage-goes-online-in-holyoke/>>. Coal plant closure: "Environmental Justice," Neighbor to Neighbor, <<https://www.n2nma.org/en/campaigns/transition-to-a-coal-free-massachusetts-2/>>.

3. Capacity and area: "State's largest utility-scale energy storage goes online in Holyoke," Daniel DeMaina, Massachusetts Municipal Association, 15 November 2018, <<https://www.mma.org/states-largest-utility-scale-energy-storage-goes-online-in-holyoke/>>. Largest in Massachusetts: "Holyoke solar plant gets battery storage," Greta Jochem, Daily Hampshire Gazette, 26 September 2018, <<https://www.gazettenet.com/MtTomEnergyStorage-hg-092618-20322909>>.

4. "ENGIE NA Unveils Largest Energy Storage System in Massachusetts in Cooperation with Holyoke Gas & Electric," ENGIE, 25 September 2018, <<https://www.engiestorage.com/engie-na-unveils-largest-energy-storage-system-in-massachusetts-in-cooperation-with-holyoke-gas-electric/>>.

5. "From coal plant to solar farm: Power storage site sees grand opening in Holyoke," Jim Kinney, MassLive, 25 September 2018, <https://www.masslive.com/business-news/2018/09/holyoke_opens_power_storage_unit_for_mt.html>.

6. "ENGIE NA Unveils Largest Energy Storage System in Massachusetts in Cooperation with Holyoke Gas & Electric," ENGIE, 25 September 2018, <<https://www.engiestorage.com/engie-na-unveils-largest-energy-storage-system-in-massachusetts-in-cooperation-with-holyoke-gas-electric/>>.

7. "State's largest utility-scale energy storage goes online in Holyoke," Daniel DeMaina, Massachusetts Municipal Association, 15 November 2018, <<https://www.mma.org/states-largest-utility-scale-energy-storage-goes-online-in-holyoke/>>.