ENVIRONMENT MASSACHUSETTS
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Renewable Communities 2020

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

Concord: 100% carbon-free electricity

In 2017, the Concord Energy Future Task Force recommended setting a goal of a 100% carbon-free electricity supply by 2030, as a step toward achieving an 80% reduction in the town's carbon emissions by 2050.[1] Later that year, at town meeting, voters overwhelmingly approved a resolution confirming those goals.[2]

Because Concord is served by a municipal electric utility or municipal light plant (MLP), local officials are empowered to determine the sources of the electricity provided to residents and businesses.[3] Many MLP communities lag behind the rest of the state in renewable energy adoption, but Concord Municipal Light Plant (CMLP) was ranked 2nd highest among MLPs for clean energy and climate performance in a report from the Massachusetts Climate Action Network.[4]

With funding from the Commonwealth's Municipal Vulnerability Preparedness program, Concord developed a plan, *Sustainable Concord*, to meet its climate goals. Released in July 2020, the plan lays out a range of actions to reduce greenhouse gas emissions from buildings, electricity, and transportation, while protecting the town from risks associated with climate change.[5]

Shifting Concord's electricity supply to 100% carbon-free sources will involve several strategies. The town will incentivize residents to install rooftop solar panels on 200 additional homes by 2030, bringing total residential renewable energy capacity to 5.44 megawatts by 2030. The town also aims to have more than 100 homes with battery storage systems.[6]

Concord will also expand solar energy generation and energy storage on municipal properties. Currently, the town has five large arrays with a capacity of 7.57 megawatts. The goal for 2030 is to bring the total municipal solar capacity up to 20 megawatts, while adding 60 megawatt-hours of battery storage. Reaching 100% carbon-free electricity generation also will require purchasing and retiring Class I renewable energy credits (RECs).[7]

In addition to increasing renewable energy generation, CMLP will incentivize customers to reduce their energy use through a redesign of electricity rates. CMLP will distribute smart meters to customers, and pilot time of use rates to encourage customers to shift their energy consumption to lower-demand times.[8]

1. *Energy Future Task Force Final Report*, Town of Concord, 16 March 2017, <https://concordma.gov/DocumentCenter/View/8474/EFTF-Final-Report>.
2. "Annual Town Meeting Minutes," Town of Concord, April 2017, <https://concordma.gov/DocumentCenter/View/17330/2017-Annual-Town-Meeting-Minutes>.
3. "Municipal Light Board," Town of Concord, <https://concordma.gov/1106/Municipal-Light-Board>.
4. *What's the Score?: A Comparative Analysis of Massachusetts Municipal Light Plants' Clean Energy and Climate Action Performance*, Massachusetts Climate Action Network, 29 January 2019, <https://www.massclimateaction.org/muni_report_card>.
5. *Sustainable Concord: Climate Action and Resilience Plan*, Town of Concord, June 2020, <https://concordma.gov/DocumentCenter/View/25318/Sustainable-Concord-Climate-Action-and-Resilience-Plan-2020>.
6. *Sustainable Concord: Climate Action and Resilience Plan*, Town of Concord, June 2020, <https://concordma.gov/DocumentCenter/View/25318/Sustainable-Concord-Climate-Action-and-Resilience-Plan-2020>.
7. *Sustainable Concord: Climate Action and Resilience Plan*, Town of Concord, June 2020, <https://concordma.gov/DocumentCenter/View/25318/Sustainable-Concord-Climate-Action-and-Resilience-Plan-2020>.
8. *Sustainable Concord: Climate Action and Resilience Plan*, Town of Concord, June 2020, <https://concordma.gov/DocumentCenter/View/25318/Sustainable-Concord-Climate-Action-and-Resilience-Plan-2020>.