



17th Annual Leading by Example Awards December 4th, 2023

Massachusetts Executive Office of Energy and Environmental Affairs
Massachusetts Department of Energy Resources
Massachusetts Division of Capital Asset Management and Maintenance



Recognizing outstanding decarbonization, clean energy and environmental efforts among agencies, public higher education institutions, municipalities, and individuals in the Commonwealth of Massachusetts.

DCR Net Zero Task Force

The Department of Conservation and Recreation (DCR) is the 11th largest emitter of Scope 1 (onsite fossil fuel) greenhouse gas emissions in the state portfolio. Comprised of hundreds of facilities, including visitor centers, maintenance garages, camp facilities, ice rinks, office spaces, and more, DCR's pathway to decarbonization requires close coordination across dozens of teams and departments. The Net Zero Task Force was established in 2022 to bring multiple teams under one roof, streamlining processes to maximize opportunities for onsite renewable resources, energy efficiency projects, elimination of fuel oil, and electrification of the fleet and landscaping equipment.



Net Zero Task Force Accomplishments



The Net Zero Task Force developed a strategy to deploy EV charging stations across its portfolio to ensure the agency is prepared for the electrification of its fleet. With support of a \$173,000 Leading by Example grant and internal funding, DCR is currently installing 36 EV charging ports across 11 locations.



The Net Zero Task Force led a portfolio-wide analysis of fossil fuel-based heating equipment at DCR sites and developed a strategy to replace this equipment with air-source heat pumps as it reached the end of life. Air source heat pumps and water heater systems were installed in 41 buildings in FY23, with another 40 sites planned for FY24.



In 2022, the team identified an innovative thin-film solar PV technology that could be cost-effectively installed on barreled ice rink rooftops. Solar PV has been installed on two rinks, effectively eliminating grid electricity use. The team plans to deploy this technology on three additional sites over the next year.



The Task Force supports net-zero goals in new construction projects. The Shannon Beach Bathhouse, completed in 2023, includes a 14kW solar array with a backup battery system to provide 100% of the facility's electricity needs.