

Seattle Community Centers: Rainier, Delridge, and Miller

Meeting community needs by improving energy efficiency and reducing emissions



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The City of Seattle's 25 community centers give our growing community a place for connection, learning, and fun. As our climate and environment change, the City of Seattle understands these centers must also adapt. Since 2024, the City has upgraded 12 community centers to increase the buildings' hot water energy efficiency and reduce greenhouse gas emissions. These buildings are prime examples of neighborhood-based solutions to expand climate resilience citywide.

Our energy audits found there was more hot water use in our community centers than we expected. The shower program locations highlight that you can take a building with high demand for hot water and make electrification technology work.

Jacob Daley, Sustainable Operations Manager

Steps towards climate resiliency for the community

The City of Seattle is committed to a net-zero carbon emissions future and has goals to decrease greenhouse gas emissions from its municipal buildings by 40% by 2030 by replacing fossil fuels with cleaner electric energy. To advance this goal, Seattle Parks and Recreation partnered with Ecotope to replace gas-fired water heaters with electric heat pump water heaters in 12 community centers.



Energy audit

Seattle Parks conducted energy and water audits to determine which community centers would be prioritized for retrofits and ensure centers with high water use received the right size heat pump system.



Hot water capacity

Seattle Parks installed larger storage tanks in facilities with high hot water demand to maximize the efficiency of the newly installed heat pumps. From there, they worked in community centers that didn't have electric heat pumps, focusing on switching out the bigger tanks first — most were 120 gallons and required more robust electric circuits.



Electric heat pumps

Gas-fired water heaters were removed and replaced with new electric heat pumps placed in mechanical rooms. This had a dual purpose of increasing heat pump accessibility for maintenance staff and improving energy efficiency, as the pumps transfer the process heat from surrounding electrical panels and mechanical equipment to heat water.



Lighting

In tandem with hot water upgrades, any remaining outdated light fixtures were switched to energy-efficient LEDs in all 12 community centers.



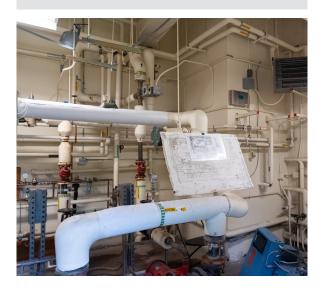
Air circulation

Large fans were installed in all community centers with gyms. These 14 to 18 feet diameter destratification fans mix air by pushing down hot air that rises, which increases air flow and cooling efficiency.





Replacing the gas-fired water heating systems with electric heat pumps resulted in significant energy savings for all community centers, as it takes roughly 2.5x less energy to heat water with electric heat pumps versus gas systems.



Community center upgrade highlights



Rainier Community Center

Switching to an electric heat pump was a priority for this building given the extensive use of its showers and commercial kitchen. After the upgrade, the building now meets the first Seattle Building Emissions Performance Standard (BEPS) targets for buildings greater than 20,000 square feet (required by 2035).

About

Address: 4600 38th Ave S, Seattle, WA 98118

Size: 28,384 SF

Original construction: 1976 with a 2007 expansion



Miller Community Center

More than 20 people a day use the shower program at Miller Community Center, making this center another priority for switching to an electric heat pump water heater. Seattle Parks also installed a **solar microgrid system** in the building in 2022. Both are helping reduce climate pollution and support the City's work towards climate justice.

About

Address: 330 19th Ave E, Seattle, WA 98112

Size: 19,273 SF

Original construction: 1997



Delridge Community Center

The Delridge Community Center offers many activities to community members, from Zumba to Capoeira, plus a free shower program, so having access to hot water at this center is important. Moving from gas to electric water heaters supported the community's active lifestyles, significantly improved efficiency, and contributed to Seattle's citywide decarbonization efforts.

About

Address: 4501 Delridge Way SW, Seattle, WA 98106

Size: 17,693 SF

Original construction: 1994



Building for climate resiliency

Seattle Parks tackled energy upgrades for multiple community centers all at once. This allowed teams to take the knowledge gained from one building and apply it to the next, maximizing productivity. Often, the upgrade was a one-day job with community centers only closing for a day without disrupting programs and classes.

Seattle Parks and Recreation aims for all 25 community centers — as well as support buildings such as crew and maintenance facilities — to have efficient electric heat pumps, even those with electric resistance heating. These first 12 buildings put the City on the path toward achieving that goal and a net-zero emissions future.

Why reduce building emissions?

In Seattle, buildings are one of the largest sources of climate pollution, responsible for more than a third of our City's greenhouse gas emissions. These emissions pollute our air, accelerate climate change, and harm people's health and the environment, disproportionately impacting communities of color and people with lower incomes. Seattle's new Building Emissions Performance Standard (BEPS) requirement is one of the most impactful climate actions Seattle is taking.

Get started today.

Addressing emissions from buildings is one of the most powerful levers for tackling climate change. Get started on your own path by talking with your facility staff and independent service providers to explore energy efficiency and options like heat pumps well before you need to replace equipment. Contact **cleanbuildings@seattle.gov** for more information about free City technical support.