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MANCHESTER**



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Attains First Net Zero Energy Verification**

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Manchester, CT - The Town of Manchester is proud to announce that **Buckley Elementary School** (<https://www.mpspride.org/Page/821>) is the State of Connecticut's first verified Net Zero Energy K-12 school and the first verified publicly funded net zero K-12 project in New England.



This recognition, certified by the New Building Institute, underscores the Town's unwavering commitment to advanced design practices, innovative technologies, and the decarbonization of the built environment. To achieve

Net-Zero certification, the renovated Buckley school includes advanced insulation systems, solar PV arrays, and geothermal energy from on-site wells.



Buckley Elementary was the first of three comprehensive renovate-as-new projects with similar goals. The Town of Manchester, thanks to funding approved by voters and construction grants from the State of CT, also incorporated Net Zero into the design for Keeney Elementary and Bowers Elementary School. These projects will not only reduce the Town's carbon footprint but will also save the district substantial amounts of money in operating costs.

“Over the last decade, Manchester has been a statewide leader in sustainability,” said Mayor Jay Moran. “Thanks to the unwavering commitment of our Sustainability Commission, Board of Directors, Board of Education, Town, and School staff we have reached the major milestone of net zero energy status. I want to thank the residents, community groups, and voters of Manchester who have supported these environmentally friendly investments.”

Chairman of the Board of Education, Chris Pattacini expressed pride in Buckley Elementary's accomplishment, highlighting the Town's ongoing dedication to sustainable and energy-efficient practices. “The Net Zero Energy Verification solidifies Manchester's commitment to sustainability.”

position as a leader in environmentally conscious school infrastructure.”



In June 2019, as part of the SMARTR2 school renovation referendum, town residents voted 2-1 in favor of the project, which also had bipartisan support from the Board of Directors and Board of Education. Approximately 2/3 of the project costs were covered by the State of Connecticut through its school Construction Grant Program.

“Energy efficiency work continues to be a win-win for the environment and the town of Manchester, and this Net Zero achievement is evidence of Manchester continuing to build a more efficient, thriving, and resilient community,” said Town Manager Stephen Stephanou.

The CT Green Building Council was the first to recognize the Buckley project with the Commercial Energy Award of Merit in 2022. Partner and Principal Architect, Rai Luther, received the 2023 Associated General Contractors of Connecticut (AGC) Industry Recognition Award for Designer of the Year for his work on the Buckley Elementary School renovation – New England's first verified Net Zero Energy public school.

The Buckley Elementary School project received a Merit Award at the 2023 AIA Awards Gala. In the same year, it received the **2023 Sustainable Architecture Award Excellence** (<https://aiact.org/the-sustainability-awardees/>) in the category for Renovations, Adaptive Re-Use, or Retro-Fit from AIA Connecticut. Furthermore, the renovation received commendations for the implementation of an All-Electric Commercial Kitchen and Interactive Learning Features.

Buckley Elementary School, designed by TSKP Studio, LLC, sets a precedent for sustainable schools with a projected Energy Use Intensity (EUI) of 18.1, marking Connecticut's pioneer Net Zero Energy public school.

The renovation of this 1940s school exemplifies a commitment to sustainability, saving an estimated 75% of embodied carbon compared to new construction, and operational carbon (zero fossil fuels). The design prioritizes passive strategies, complemented by active systems such as photovoltaics and geothermal.

TSKP Studio, along with Jess Farber, PE from CMTA, and the Town of Manchester Facilities Project Manager, Christopher Till presented the Buckley Elementary School at the New England Future Schools Summit in May 2023. Soon after, the project team presented at the 2023 Northeast Summit for a Sustainable Built Environment (NESSBE), a CTGBC flagship biennial regional summit to facilitate a conversation about sustainability in the built environment. This event was hosted by Yale University and themed “Place: Energy and Environmental Justice in the Built Environment.”

Superintendent of Schools, Matt Geary expressed his pride in Buckley Elementary's accomplishment, highlighting the Town's ongoing dedication to sustainable and efficient practices. “The recognition we’ve received for this project is a testament to the hard work that goes into cultivating a greener footprint and more sustainable future generations to come. In addition, our students now have a front row seat to learn about sustainable building design.”



Chris Till, Facilities Project Manager for the Town of Manchester, who helped on construction project. "This was a collective effort that could not have been accomplished without the Town, Board of Education, O&G Industries, CMTA, as well as the contractor and on-site workers, and residents of Manchester. This project brings to fruition the Town's sustainability and energy efficiency policies."

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