

SUSTAINABLE CPC: HIGH-PERFORMANCE, REAL SAVINGS

Affordable Senior Housing through Adaptive Reuse

This case study showcases one of the first projects to leverage CPC's high-performance housing loan products. Through its Climate Lending & Investment team, CPC advances innovative financing that delivers more energy-efficient, climate-resilient, and healthier housing—across both new construction and retrofit projects. Below, we examine how this adaptive reuse development is strengthening the Tarrytown, NY community and how the building is performing post-electrification.



PROJECT PROFILE:

Location: Tarrytown, New York 10591
Size: 2 Buildings, 109 Units, 96,718 Gross Square Feet
Construction Type: Adaptive Reuse & New Construction
Affordability: 100% Affordable between 30-70% Area Median Income (AMI)
Duration of Affordability: 99 years
Qualified as a Low Income/Disadvantaged Community (LIDAC)
Certifications: ENERGY STAR Multifamily New Construction v1.1

LOAN PROFILE:

Loan Type: Subordinate Permanent
Loan Amount: \$3.072 million

SCOPE OF WORK:

- Geothermal heating, cooling, and hot water (closed loop well system)
- Green roof courtyard with on-site storm water retention
- A 225 KW solar array estimated to generate 40% of building electricity
- Energy recovery ventilators to reduce heating and cooling demand
- Smart thermostats
- Optimized building envelope, including high R-Value insulation, air sealing, and high-performance windows
- Low-flow fixtures
- Electrical vehicle and electric bike charging

PROJECT PILLARS:

1. Affordable Senior Housing & Adaptive Reuse

This project encompasses the redevelopment of the former Tarrytown YMCA into a mixed-use development with affordable housing for seniors. The historic Main Street YMCA building, built in 1911, originally consisted of 48 Single Room Occupancy (SRO) units. Over the years, these units fell into disrepair and had to be vacated. Since 2020, the site has been redeveloped into 109 units of affordable housing. Now, the building features a mix of preserved, improved, and added affordable studio and 1-bedroom units, combining the restoration of an original 100-year-old facade with a new 4-story building.

In agreement with the Village of Tarrytown, the building will maintain the affordability of all 109 units for 99 years. This agreement will carry on the legacy of the Tarrytown YMCA, which for many decades housed men aged 55 and above at highly affordable rates. All previous SRO tenants were rehoused in new units, and their rents will remain capped at 30% of their income. The rest of the new development features units between 30% to 70% AMI, as well as Project-Based Voucher units.

2. Transit and Community Development-Oriented

Centrally located in downtown Tarrytown, this is a transit-oriented community development opportunity, connecting affordable senior housing to Metro-North's train line to New York City and Tarrytown's commercial corridors. In addition to resident parking with Electric Vehicle (EV) chargers, there is a municipal parking lot consisting of 68 new parking spaces with EV chargers. The revitalization of this space is a result of extensive stakeholder engagement with community organizations and local and county governments, carrying on the previous YMCA's mission to enrich communities, and provide quality, affordable homes.

3. High Performance and Energy Efficient

This building is ensuring long-term viability through its fully electric infrastructure and operations. The high-performance features will boost energy efficiency, help stabilize the grid, and create quality homes for seniors.

SAVINGS SNAPSHOT:

Before this decarbonization retrofit, this building was consuming 904,153 kWh of electricity and 33,831 therms of natural gas annually, emitting an estimated 543 tons of CO₂e. The table below summarizes the building's post-retrofit performance from March 2025 – February 2026

Utility	Whole-Building Annual Consumption	Consumption per Unit	Cost	Cost per Unit
Water & Sewer (Gal)	307,347	2,820	\$30,308	\$278
Natural Gas (therms)	120	1	\$840	\$8
Electricity (kWh)	823,216	7,553	\$190,147	\$1,744
Solar (kWh)	(307,624) *	(2,822) *	(\$29,546)	(\$271)
Total	-	-	\$191,749	\$1,759

* Solar generation values represent energy-equivalent estimates derived from Con Edison CDG bill credits using applicable supply energy rates rather than net-metered production.

TAKEAWAYS:

- **Significant emissions reduction achieved:** This decarbonization retrofit allowed the project to decrease its estimated annual GHG emissions by 435 MTCO₂e (80%), driven by electrification and onsite solar generation.
- **Meaningful energy and cost savings through solar:** Onsite solar offset approximately 37.4% of annual electricity usage, closely aligning with project projections, and provided a ~\$29,500 annual reduction in electricity costs through Con Edison CDG bill credits.
- **Peak summer performance exceeded expectations:** During high-production months, solar generation outperformed baseline demand. July solar production exceeded total building electricity consumption (~122%), with August achieving ~93% offset, highlighting strong seasonal resilience against rising energy costs.
- **Context for interpretation:** Though results do not represent a direct pre- and post-retrofit comparison due to the building's conversion from a YMCA to residential use, the project nonetheless demonstrates strong post-retrofit efficiency, cost control, and emissions performance.