

Bay Ridge Apartments

January 16, 2024

Bay Ridge is the creation of a new mixed income neighborhood with 68 affordable apartments and 26 shared equity homes located in Shelburne. The rental housing includes the renovation of two former motel buildings into 20 apartments, and two new construction buildings with 48 apartments.

Evernorth and Champlain Housing Trust are committed to reducing green house gas emissions in our buildings. By choosing to build high performance buildings using cold climate heat pumps, Bay Ridge Apartments addresses climate change reducing the use of fossil fuels, and therefore reducing carbon emissions by 189 tons per year.

However, the choice to electrify the building means that the operating costs for Bay Ridge will be higher than if the building was heated by natural gas. Higher operating costs make it more challenging for EN and CHT to keep rents affordable. Therefore adding solar to Bay Ridge Apartments is critical to the long-term sustainability of the building. Before solar, the estimated annual electric costs are \$108,000, which is equivalent to \$132 per unit, per month.

Bay Ridge Solar

If Bay Ridge only utilized roof top solar, the system would only offset 15% of the project’s electric load. There simply is not enough roof space on a multifamily building to accommodate the panels needed to offset the buildings electric load. This is a typical scenario for multifamily housing---where the electric load per sf is higher than a SF home—because we house more people per sf.

Off-site net metered community solar is needed to advance both the climate-related electrification goals and the affordable housing goals of the Bay Ridge project.

Bay Ridge Solar includes a 150kW PV system located on a parcel directly across the street, on parcel owned by CHT, behind the existing hotel building and where additional residential development is not currently possible. All of the solar credits from this system will be net metered to Bay Ridge Apartments. By doing so, the combined rooftop and offsite solar will offset 51% of the buildings’ electric loads.

	Rooftop	Offsite	Combined
kwh production	113,500	270,800	384,300
net-metered credits generated	\$17,971	\$32,875	\$50,846
% total usage offset	15%	36%	51%



Connecting LMI renters to the benefits of solar

The lowest-income Vermonters live in rental housing but historically, the benefits of solar PV have been concentrated among higher-income homeowners. Renters, and in particular, low-income renter households, have not had access to the benefits of solar power.

Community solar that is net metered to affordable rental housing is a meaningful way to address the past inequities the beneficiaries of solar power.

We are poised at a time when the Solar For All program under the IRA will deliver millions of dollars to Vermont, targeted to LMI households. Working with PSD and VHFA, we have an enormous opportunity to match the decarbonization of our buildings with solar. If community net metered solar is not an option, our decarbonization efforts will be greatly reduced.