CASE STUDY Maximizing Solar Potential for Nordblom Properties



OPPORTUNITY

Massachusetts has a rich history of promoting solar development, making it an attractive market for renewable energy initiatives. With over 5 GW of solar capacity installed, the state ranks among the top quartile nationally, incentivizing organizations to leverage its various programs. Recognizing this opportunity, Nordblom Company sought to harness the potential of on-site solar at two adjacent multifamily properties, totaling 297 apartment homes, in Burlington, MA.

The Nordblom properties faced several challenges to unlock the advantages of solar energy. A key consideration was, like many apartment communities, electricity for resident use is sub metered. This limits Nordblom's control over the sites' overall energy demands and results in restricted utilization of generated energy. Additionally, the roofs are populated with the building's HVAC equipment, complicating the physical installation of a traditional ballasted solar facility. Lastly, the stabilized property already had longterm financing. Capitalizing the new solar installation required creativity.

To navigate this landscape, Nordblom engaged Black Bear Energy as their owner's representative and Davis Hill Development (DHD) as the solar developer and long-term owner. Together, they set out to maximize the potential of onsite solar while addressing the inherent limitations of the properties.

"Our partnership with DHD allowed us to realize the solar vision we set forth during the development phase of the assets, and enabled us to embrace our sustainability goals."

> Laura Boulé Vice President of Property Management, Nordblom Company

*The <u>Solar Massachusetts Renewable Target</u> program incentivizes solar energy development by providing fixed payments for electricity generated by qualifying projects. It aims to boost solar adoption and support the state's renewable energy goals.

SOLUTION

Nordblom proactively designed one rooftop and one garage at two of their assets to support future solar installations. Black Bear and DHD were instrumental in determining the specific means and methods for ensuring a smooth design and installation.

The canopy system could significantly increase solar capacity. Unlike traditional ballasted systems, which are constrained by existing rooftop equipment, the canopy design yielded a remarkable 370% increase in solar capacity. The rooftop system supplied power for the site's common area load, while the parking canopy fed power directly into Eversource's grid. Both projects participated in Massachusetts's SMART* Program.

The outcome was a robust solar initiative, generating over 1,000 kW of capacity and more than 1,250 MWh of clean energy annually.

Over 370% increase in installed capacity Versus traditional ballasted solution

1,050 kW System size

1,250 MWh Clean energy generated annually

200 metric tons

Carbon emissions avoided annually

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