Committed to Clean Energy

The University at Buffalo (UB) is a model for integrated clean energy advancement, exhibiting the core characteristics of a leader in New York State Energy and Research Development Authority’s (NYSERDA) Clean Green Campuses initiative. UB demonstrates the value of comprehensive campus clean energy investments, embraces clean energy research and development and curricula integration, and continuously increases community engagement. Joining in November 2015, UB took their Clean Green Campuses First Mover status to the next level when the institution was awarded $1 million through the first round of the Energy to Lead competition for its “Localizing Buffalo’s Renewable Energy Future” project in 2016.

Spearheaded by UB, the project’s ambitious goal—a joint effort by UB, the City of Buffalo, Erie County, Buffalo State College and SUNY Erie—is to bring 100 MW of renewable energy, mostly in the form of solar power, to Western New York. The project design is centered around the following core initiatives.

Expanding Renewable Energy

This effort will capitalize on the power of collaboration and aggregation to keep energy prices down. The plan is for all five anchoring institutions to establish long term agreements, which lock in fixed energy prices for an extended period of time, providing stakeholders with budget stability regardless of fluctuations in energy prices.

This cost-effective power purchase method will enable all parties to accurately budget and plan by avoiding spikes in energy prices caused by peaks and valleys associated with fossil fuel commodities. Each party is committing to source at least 50% of their respective loads from renewable energy through this PPA. The amount of renewable energy generated would be equivalent to 50% of total electricity consumed by the partners and is expected to divert approximately 82,000 metric tons of GHG emissions.
Creating an Experiential Clean Energy Facility

As part of the awarded project, UB will also create a clean energy learning center, referred to as GRoW (Garden, Relax, or Work) home. The GRoW home will be permanently housed on the University’s North campus and serve as a central hub for experiential learning opportunities for students and activities designed to engage the surrounding community via educational events and tours.

Embedding Sustainability in Curriculum

The educational aspect of the project focuses on preparing current students to be the next generation of clean energy leaders. UB is making strides by incorporating sustainability into their curriculum and involving students in actual projects via experiential learning opportunities. For instance, initial work for this project involved enlisting students from UB’s School of Architecture and Planning to help identify 83 suitable solar installation sites, including grounds, rooftops, and parking lots across the region.

Overcoming Challenges

A project of this scale faces challenges. With five major stakeholders, issuing Requests for Proposals (RFPs) for this solar project was a monumental task that required creative thinking to comply with the current procurement processes. As a result, the initiative partners decided to issue nearly identical RFPs, which were released in February 2019. This was an important milestone for the project. Now, with onsite RFPs issued, installation is on the horizon for this large-scale energy project that will propel the Buffalo region toward a more sustainable future.

“While this initiative has played a key role in advancing UB’s clean energy work, it is really about greater impact through collaboration with our partners. Moving beyond the campus to lower carbon emissions and increase renewable energy is the heart of what it’s all about.”
– Ryan McPherson, Chief Sustainability Officer

Ready to join? Get started today.
Learn how at nyserda.ny.gov/clean-green-campuses.