

BROOKLYN HOME TO BIG APPLE'S FIRST COMMERCIAL WIND TURBINE

Wind to contribute up to 4 percent of electricity needed for NYC curbside recycling



New York City's first commercial-scale wind turbine was officially unveiled in January. The turbine, which is far and away the city's largest, was erected on the Brooklyn waterfront at the Sunset Park Material Recovery Facility (MRF) on the 30th Street Pier, where it now stands as an addition to the borough's skyline.

Sims Metal Management (Sims) and its Sims Municipal Recycling (SMR) division were joined by local officials, community leaders and members of the environmental community to welcome the wind turbine at a morning ribbon-cutting ceremony on January 14 at the MRF. After several weeks of testing, the turbine is fully operational, harnessing wind energy to help power the recycling processes at the facility.

The largest of its kind in the nation, the SMR Sunset Park MRF serves as the principal sorting and separation center for New York City's residential curbside metal, glass and plastic recyclables. A central element of PlaNYC 2030 for a "greener, greater New York," the recycling facility is part of a long-term contract between SMR and the New York City Department of Sanitation. The contract, which includes additional SMR facilities in the area, ensures sustainable and cost-effective recyclables management for New York City for up to 40 years.

The permitting process for the state-of-the-art wind turbine began four years ago. The 120-foot tower (nearly 160 feet including the blades) was installed last fall. The pier's naturally windy location is an ideal spot for the turbine, which overlooks the MRF and its Recycling Education Center. The capital cost was approximately \$750,000, and the turbine will pay for itself in about five years, depending on wind and electricity costs. The turbine, made by Vermont-based Northern Power Systems, is expected to generate up to 4 percent of the energy required to run the MRF, or the equivalent of powering the site's Administrative Building and Education Center. Combined with the photovoltaic (solar power) installation on the roof of the "tipping" building, where trucks and barges deliver material to be sorted and processed, up to 20 percent of the MRF's energy will be generated on site from renewable sources.

"Sims is incredibly proud of the innovative practices implemented at the Sunset Park MRF — and the new wind turbine is certainly a part of that," said Galdino Claro, CEO and Managing Director of Sims Metal Management. "We are the world's largest publicly listed metals and electronics recycler, and through our activities at hundreds of locations around the globe we are committed to being both a local and global leader in sustainability."

Modern wind turbines for energy production have been slow to come to NYC. Some small turbines have been mounted on rooftops of residential high-rises, while other notable examples of residential-scale turbines include those at the Brooklyn Navy Yard and the Gowanus Whole Foods. (Residential-scale turbines range up to 25kW; commercial-scale turbines range between 25kW and 500kW; and industrial-scale turbines, normally used in wind farms, range between 500kW and 3,000kW.)

"As a recycling company, sustainability is central to our mission, and in Brooklyn, we saw the opportunity to advance that agenda in new ways," said Tom Outerbridge, General Manager of Sims Municipal Recycling. "The wind turbine, combined with the solar array, enables the facility to decrease its non-renewable energy consumption substantially."

"Northern Power Systems would like to congratulate the entire Sims team for reaching this impressive energy sustainability milestone, paying dividends forward for decades," said Trevor Atkinson, Sales and Business Development Manager at Northern Power Systems. "We are delighted to have this new installation join our growing global fleet."

The 11-acre facility is located in the South Brooklyn Marine Terminal. The facility, designed by Selldorf Architects, was built to optimize environmental performance and opened in December 2013. The facility won the 2009 Award for Excellence in Design from the NYC Public Design Commission. The Recycling Education Center is open for school groups as well as tours for other organizations and visitors. ↵

— Source: Sims Metal Management