

## Fact Sheet Sims Municipal Recycling Sunset Park Material Recovery Facility (MRF)

Opened in December 2013, the Sunset Park MRF serves as the principal processing facility for all of New York City's curbside metal, glass and plastic recyclables as part of a long-term contract between Sims Municipal Recycling (SMR) and the New York City Department of Sanitation (DSNY). SMR is a division of Sims Metal Management Limited, a global scrap-metal and electronics recycling company.

#### **Key Facts**

- The Sunset Park MRF processes more than 15,000 tons a month of metal, glass and plastic collected by the Department of Sanitation.
- The Sunset Park MRF is a central element of PlaNYC 2030 to develop sustainable waste management in New York City.
- The contract between SMR and DSNY, which includes the Sunset Park MRF as well as SMR facilities in the Bronx, Queens and Jersey City, will ensure environmentally sound and cost-effective municipal recycling for New York City for up to 40 years.
- The Sunset Park MRF is a joint project between SMR, DSNY, the Department of Small Business Services (SBS) and the New York City Economic Development Corporation (EDC). The parties have invested more than \$110 million in the development of the facility.
- The facility represents major new industrial development on Brooklyn's working waterfront, creating jobs for approximately 85 full-time employees.
- The facility is situated on an 11-acre city-owned pier in the South Brooklyn Marine Terminal in Sunset Park, Brooklyn the former site of an NYPD impoundment lot.
- The Sunset Park MRF is accessible by barge, rail and truck. Most of the inbound material arrives by barge from SMR facilities in Queens and the Bronx, with material from Brooklyn arriving directly in DSNY collection trucks. Most of the material leaves by barge and rail.
- The Sunset Park MRF removes an estimated 240,000 DSNY collection truck miles per year from city roadways — reducing congestion, fuel consumption and vehicle emissions.
- New York City's first commercial-scale wind turbine was installed on site in fall 2014.
   The 100kW turbine will provide up to 4 percent of the energy consumed by the MRF.

- The facility is home to one of New York City's largest solar power installations (600kW).
- The on-site wind turbine and solar panel array enable the MRF to produce up to 20 percent of its electricity requirement from renewable sources.
- Stormwater is managed on site, with a gravity-fed stormwater system based on landscape features, bioswales and a retention pond.
- To mitigate the effects of dredging, the City constructed three artificial reefs at the end of the pier to create intertidal habitat for marine and bird life.
- SMR installed 190 linear feet of "fuzzy rope" nets on the back side of the barge mooring pier to cultivate mussels to filter harbor water and support marine life.
- Recycled glass and crushed rock from the Second Avenue subway construction were used to elevate portions of the site by four feet, including all buildings, high-voltage electrical gear, scales and recycling equipment. As a result, these structures remain above the new FEMA 100-year flood maps and all buildings and equipment remained dry during Hurricane Sandy.
- A heavily utilized Recycling Education Center features educational programming with classrooms, theater, interactive exhibits and viewing of recycling operations.
- Designed by Selldorf Architects, the facility won the 2009 Award for Excellence in Design from the NYC Public Design Commission and has been widely recognized in the design community (e.g., The New York Times, Architectural Record and the American Institute of Architects).
- In 2014, the Sunset Park MRF was awarded the first-ever "WEDG-certified" designation from the Metropolitan Waterfront Alliance's Waterfront Edge Design Guidelines (WEDG) Program.

# Fact Sheet Sims Municipal Recycling Sunset Park Material Recovery Facility (MRF) Solar Power Installation

The Sunset Park Material Recovery Facility (MRF) is home to one of New York City's largest photovoltaic (solar power) installations. At the time of its fall 2013 installation, the array was the largest in the City. The 600kW system is approximately 60,000 square feet and is located on the roof of the MRF's "tipping" building, which is where trucks and barges deliver the New York City municipal curbside recyclables to be sorted and processed.

#### **Key Facts**

- The solar array consists of 2,112 domestically manufactured 280W panels, spanning more than 60,000 square feet.
- The system was designed, installed and commissioned by Brooklyn-based Solar Energy Systems LLC.
- Since commissioning, the 600kW system has produced more than 732,000kWh of electricity.
- The solar array generates up to 17 percent of the energy needed to run the MRF. Combined with the new wind turbine, the MRF now produces up to 20 percent of its electricity requirements on site from renewable sources.
- The Brooklyn solar installation and wind turbine join the Sims Metal Management 750kW solar array installed at the company's Jersey City location. To date, Sims has installed more than 1,450kW of renewable energy capacity in the New York City/ Northern New Jersey area.

#### About Solar Energy Systems, LLC (SES)

Founded in 1998, the SES base for operations, management and design is headquartered in Brooklyn, New York. As one of the Northeast's leading full-service integrators of commercial solar power systems, SES specializes in delivering turnkey, cost-effective and reliable solar energy solutions to a diverse range of clients in government, private business, and the non-profit sector.

### Sims Metal Management Our Commitment to Sustainability

As the world's largest publicly listed metals and electronics recycler, Sims Metal Management Limited (Sims) is committed to the environment, sustainability and the health of the communities in which it operates. Sims works toward progressive recycling solutions and processes to reduce energy requirements, water usage and waste generation.

With its newly built 100kW wind turbine and its 600kW solar array, the Sunset Park Material Recovery Facility (MRF) is an impressive example of local organizations and community leaders coming together to support progressive urban infrastructure. The facility's green design and innovative features make it a strong example of Sims' sustainability efforts.

"Sims works to be a global leader in corporate sustainability, seeking to set industry standards for economic and environmental sustainability," said Galdino Claro, CEO and Managing Director of Sims Metal Management.

In Fiscal Year 2014, Sims recycled 11.9 million tons of metal-bearing material worldwide and, by replacing virgin materials as feedstock for steel mills, it resulted in the reduced need for 13.5 MWh of energy, translating into the reduced emission of 12.8 million tons of  $CO_{2}$ , in the production of steel mill feedstock. Across the group's global operations, Sims reduced energy usage by up to 6 percent and  $CO_{2}$  emissions by up to 4 percent compared with the prior fiscal year.

At Sims, transparency in its sustainability program is paramount. Energy use, CO<sub>2</sub> emissions, water consumption, waste generation and other metrics are publicly reported in accordance with the Global Reporting Initiative (GRI), one of the world's most widely used standard for sustainability reporting.

Recently built solar arrays at the Sunset Park MRF in Brooklyn (600kW) and the Claremont Terminal recycling facility in Jersey City (750kW) generated more than 500MWh and 200MWh of electricity, respectively, in Fiscal Year 2014. The Sunset Park MRF's arrays provide up to 17 percent of the facility's energy requirements. The new wind turbine is Sims' first foray into wind energy and is expected to generate up to 4 percent of the MRF's energy needs, helping lessen the facility's reliance on non-renewable energy sources.

Sims seeks to cultivate strong partnerships with government entities, local communities, NGOs and non-profits. Community engagement is encouraged and conducted through outreach programs and activities, such as Sims Recycling Solutions' Guinness World Record-breaking Earth Day take-back of more than 250,000 pounds of e-waste.

Sims is listed in the Dow Jones Sustainability Index and has participated in the Carbon Disclosure Project for nine consecutive years. Sims was named a Global 100 Most Sustainable Corporation at the World Economic Forum in Davos, Switzerland, for five years, with a top ranking of 11.

#### **About Sims Metal Management**

Sims Metal Management Limited is an Australian-domiciled publicly traded corporation with nearly 100 years of recycling experience. With more than 100 facilities across the United States alone, including those of its joint ventures, Sims Metal Management Limited is the world's largest publicly listed metals and electronics recycler. In addition to growing its business internationally, Sims Metal Management advocates for innovative recycling solutions and is committed to the environment, sustainability and health of the communities in which it does business.