



sanitation

FOR IMMEDIATE RELEASE

CONTACT: pressoffice@dsny.nyc.gov

Press Release #21-20

CLEAN STREETS, CLEAN AIR: New York City Department of Sanitation Unveils First-Of-Its-Kind All-Electric Street Sweeper

New green equipment sweeps blocks in North Brooklyn on first day out of the garage

NEW YORK, NY (May 6, 2021) – The New York City Department of Sanitation, the world's largest municipal sanitation department, today unveiled a first-of-its-kind all-electric street sweeper to lower carbon emissions and pollution as it protects the city's streets. Produced by Global Environmental Products and US Hybrid, supported by the New York State Energy Research and Development Authority (NYSERDA) with technical assistance from CALSTART, the demonstration of this new equipment will be tested in an effort to fundamentally improve the way the streets are cleaned on New York's 19,000 lane-miles of roadway.

Currently, DSNY has approximately 450 traditional street sweepers in use across the five boroughs, including 27 hybrid-electric units. This new all-electric broom will be based out of the BKN4 garage in Brooklyn's Bushwick neighborhood. A diesel-powered street sweeper travels 7,000 miles per year and is on the road 301 workdays per year. It is estimated that the all-electric street sweeper will save 89 metric tons of carbon emissions, or the equivalent of taking 19 cars off the road for one year, over the lifetime of the vehicle.

"It doesn't make sense to clean the streets while polluting the air," said **Edward Grayson, Commissioner of the New York City Department of Sanitation**. "New York City has an ambitious goal of reducing GHG emissions by 80 percent by the year 2035, and greening our fleet will be a key part of getting there. I want to congratulate both our Support Services team under Deputy Commissioner Rocco DiRico and our Bureau of Cleaning and Collection under Director Garrett O'Reilly on this great new development in street cleaning."

"As Chair of the Council's Sanitation Committee, I've spent a lot of time bugging DSNY to acquire electric vehicles and I couldn't be more excited for the debut of the Department's electric street sweeper," said **Council Member Antonio Reynoso**. "Climate change is the greatest crisis of our time and it is essential that government take steps to mitigate its impact on the environment. DSNY's work to begin electrifying its fleet is an excellent step to reduce emissions and continue the greening of New York City. I hope that all of DSNY's vehicles are able to transition to electric in the near future, and I look forward to working with the agency to make that vision a reality."

The new street sweeper features one 120-kW traction motor and NMC lithium-ion batteries (Lithium Nickel Manganese Cobalt Oxide) that are charged via an AC 20kW, SAE J1772-compliant charging system. It was produced in partnership between Global Environmental Products, who made the broom itself, and US Hybrid, who produced the electric vehicle

components and also manufactured the 27 hybrid-electric brooms that are already a part of DSNY's fleet. The City of Tokyo, Japan currently also has one electric street sweeper, but it is a significantly smaller three-wheeled vehicle, making this the first of its kind in the world.

"DSNY is excited about the opportunity to be the first municipal fleet in the nation to pilot-test a heavy-duty battery electric zero-emissions street sweeper. Introducing and testing Battery Electric Vehicles (BEV) in heavy-duty applications is a major milestone for our nation and a GIANT step forward for NYC and DSNY. DSNY hopes in the very near future, heavy-duty BEVs will play a bigger role in reducing our fleet's carbon footprint and Greenhouse Gas Emissions," said **Rocco DiRico, Deputy Commissioner of Support Services**, which oversees the Department of Sanitation's vehicle fleet.

This street sweeper project shows that clean vehicles are expanding into more corners of the transportation system. NYSEERDA's support of this project helps reduce carbon emissions in communities to meet New York State's nation-leading climate and clean energy goals under the Climate Leadership and Community Protection Act. CALSTART is providing technical support and collecting and analyzing data from the vehicle to ensure this project's benefits can be measured and its successes can be replicated broadly.

"Zero-emission technologies are ready for specialized uses and demanding environments," said **Benjamin Mandel, Northeast Regional Director for CALSTART**, North America's leading clean transportation technologies and solutions consortium. "We are proud to support DSNY in extending its legacy of clean fuels leadership and its commitment to improving air quality in New York's most impacted communities."

Adam Ruder, Assistant Director of Clean Transportation, NYSEERDA said, "We are pleased to partner with the New York City Department of Sanitation and CALSTART on this new electric street sweeper. Demonstrating innovative technologies is critical to bringing electric vehicles to scale, which will help New York State reduce harmful emissions across the state and create greener, more sustainable communities."

"Global Environmental Products is the world's leading manufacturer of street sweeping equipment, and Global has been a leader in developing environmentally friendly street sweepers. In collaboration with U.S. Hybrid, New York City Department of Sanitation, CALSTART and NYSEERDA, we developed the world's first all-electric street sweeper for the City of New York. Without the commitment from the New York City Department of Sanitation to clean air, this project would not have been achievable," said **Walter Pusic, President of Global Environmental Products**.

As part of this unveiling, the electric sweeper completed a route around the BKN4 garage. Photos and video are available upon request.

About DSNY

The Department of Sanitation (DSNY) keeps New York City healthy, safe and clean by collecting, recycling and disposing of waste, cleaning streets and vacant lots, and clearing snow and ice. The Department operates 59 district garages and manages a fleet of more than 2,000 rear-loading collection trucks, 450 mechanical brooms and 705 salt spreaders. The Department clears litter, snow and ice from approximately 6,500 miles of City streets and removes debris from vacant lots as well as abandoned vehicles from City streets.

About CALSTART

A national nonprofit consortium with offices in New York, Michigan, Colorado and California and partners world-wide, CALSTART works with 280+ member company and agency innovators to build a prosperous, efficient and clean high-tech transportation industry. We overcome barriers to modernization and the adoption of clean vehicles. CALSTART is changing transportation for good.

About NYSERDA

NYSERDA, a public benefit corporation, offers objective information and analysis, innovative programs, technical expertise, and funding to help New Yorkers increase energy efficiency, save money, use renewable energy, and reduce reliance on fossil fuels. NYSERDA professionals work to protect the environment and create clean-energy jobs. NYSERDA has been developing partnerships to advance innovative energy solutions in New York State since 1975.

About US Hybrid

US Hybrid specializes in the design and manufacturing of zero emission electric powertrain components including traction motors, controllers, auxiliary drives, energy storage and fuel cell engines for electric, hybrid, and fuel cell medium and heavy-duty municipality vehicles, commercial trucks, buses, and specialty vehicles throughout the world. US Hybrid takes pride in being a team member and supplier to GEP and DSNY for zero emission powertrains for New York street sweepers.