

10.1 NYCT, ISO 14001, AND NEW YORK STATE E.O. 88

MTA NYCT's Department of Capital Program Management is the first public agency in the United States and the first transit entity in the world to have an Environmental Management System (EMS) certified to the International Organization for Standardization (ISO) 14001. The primary objective of an EMS is to reduce the impact of an organization's activities, products, and services on the environment; an ISO 14001 EMS provides a structured approach to achieve the organization's environmental objectives. This is achieved by considering environmental aspects and impacts of the operations and activities at all stages of the projects, setting objectives and targets for continuous improvement in environmental performance, minimizing and eliminating adverse impacts on the employees, contractors, passengers and communities, and establishing environmental programs and procedures that prevent pollution and ensure adherence to all applicable environmental laws and regulations.

New York State Executive Order (E.O.) 88 "Directing State Agencies and Authorities to Improve the Energy Efficiency of State Buildings" was issued in 2012 to address issues such as energy efficiency and green building practices. MTA produces an annual report to the state on its activities to implement Executive Order 88.

MTA NYCT strives to apply the latest in energy efficient technologies, building materials, and design and management techniques to:

- Reduce smog, greenhouse gas and polluting emissions – By using clean, alternative energy sources such as photovoltaic panels, reducing dependence on electricity generated from fossil fuels. MTA NYCT is reducing emissions and improving the City's air quality by using ultra low sulfur diesel in construction equipment used on its projects.
- Conserve water – Water conservation measures are being built into new facilities. MTA NYCT has designed bus and subway car washing systems that would use rain and storm water and recycle 50-80 percent of wash water.
- Reduce Stormwater runoff – MTA NYCT uses green infrastructure strategies like planters, vegetated roofs, rainwater collection etc. for capture and detention of rainwater to protect surface waters of America, to decrease flooding and to minimize burden on the city sewer system.
- Protect Natural Resources and Lower embedded energy – MTA NYCT specifies use of materials with high recycled content and extracted, manufactured and assembled regionally.
- Recycle materials and reduce landfill needs – Waste management and material recovery are required standard practice for MTA NYCT contractors. Diversion goals are established for all materials from demolition, renovation and construction projects.
- Reduce energy consumption and lower operating costs – New facilities and systems are designed to exceed New York State Energy Code in accordance with New York State Executive Order 88.
- Provide cleaner and safer terminals, depots, facilities and offices – Both passengers and employees benefit from designs that use fresh air ventilation systems and bring natural light to platforms, foyers and workplaces.

The ISO 14001 EMS is used to monitor implementation of Sustainable Design into MTA NYCT's projects.

10.2 EXISTING CONDITIONS

Electric service to the existing 68th Street/Hunter College Station is provided and maintained by the Consolidated Edison Company of New York (Con Ed).

10.3 NO-BUILD ALTERNATIVE

Under the No-Build Alternative, the proposed subway station improvements would not be constructed and operated. It is anticipated that the energy used by the existing 68th Street/Hunter College Station would remain similar to the existing condition. No adverse impacts to energy use would be anticipated under the No-Build Alternative.

10.4 PROPOSED PROJECT

10.4.1 CONSTRUCTION

Contractors at the project site will comply with the Diesel Emissions Reduction Act of 2006 (DERA). DERA requires that construction equipment used for the project, including on and off-road vehicles having a gross vehicle weight greater than 8,500 pounds, will use ultra-low sulfur diesel fuel (ULSD) and use Best Available Retrofit Technology (BART) to reduce emissions of nitrous oxide and particulate matter.

10.4.2 OPERATION

MTA NYCT has an overall energy efficiency target of 20% Average Source Energy Use Intensity reduction by the year of 2020, in accordance with EO88. Proposed measures for maximizing energy efficiency include increased energy performance, operating cost reductions, reductions in the environmental impacts associated with energy consumption, and improvements in the overall quality of the indoor workplace environment. The following energy-saving measures would be considered: natural lighting, energy efficient long-lasting light fixtures, premium-efficiency motors, energy-efficient escalator and elevator equipment, small-scale photovoltaic devices for local use.

The use of non-polluting and renewable technologies on-site would be considered in an effort to reduce atmospheric pollutants, operating costs, and the environmental impacts associated with energy consumption.

MTA NYCT's intention is that the station improvements would be highly energy efficient relative to the existing station and it is considered unlikely that the station's energy provisions would be negatively affected by the proposed facility. The Proposed Project and the Proposed Project *with Option E1* would not significantly affect the generation or transmission of energy, nor would it consume large quantities of fuel. Therefore no adverse impacts to energy are anticipated.

Street Stair Options

The Proposed Project and the Proposed Project *with Option E1* would have similar energy requirements.