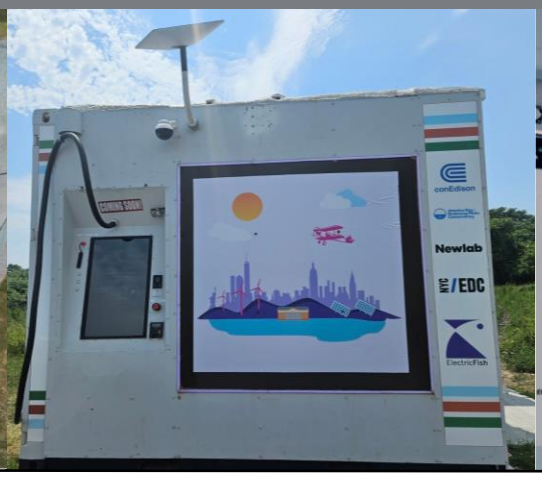
Energy Storage in New York City

Building an Equitable and Reliable Clean Energy Future



Energy storage is an investment in local communities

What Are Energy Storage Systems (ESS)?

Like the batteries in your cellphones and laptops, ESS store energy and provide it when needed – but on a larger scale. Energy storage systems are heavily regulated at the federal, state, and local level and New York City has some of the strictest ESS safety rules in the world. Every ESS site must meet rigorous standards and is reviewed for safety by both the NYC Fire Department (FDNY) and the Department of Buildings (DOB).

Since ESS can store clean energy like solar, wind, and hydro power, they are essential to creating a cleaner, more efficient, and resilient energy grid. ESS can also reduce energy costs for New Yorkers by providing the grid with cheaper power during periods of high energy demand. ESS and renewable energy can help improve local air quality and promote environmental justice because they can replace the polluting power plants often located in communities of color and low-income communities.

Energy storage systems can:

- Advance better health and **community wellbeing** by helping replace fossil fuel-burning power plants
- Create local jobs and workforce training opportunities for **good-paying jobs** in clean energy
- Foster equity by boosting economic outcomes in **environmental justice communities**
- Provide **back-up energy** for homes, businesses, and communities during power outages
- Enable our clean energy transition to a **zero-carbon electricity** system

PUBLIC HEALTH

Storing clean energy in ESS will reduce the need to burn fossil fuels for electricity - improving local air quality and public health

JOBS

ESS installation will create local jobs and training opportunities in the storage, solar, offshore wind, construction, and trade industries

ENERGY GRID

ESS allow us to continue using clean energy like solar power even when the sun is not shining. By storing renewable electricity, they enable us to green our grid without compromising on reliability

Energy Storage in PlaNYC: Getting Sustainability Done

Resilient Solar and Storage Installations at NYC Firehouses

The City installed resilient rooftop solar panels with critical battery backup at six FDNY firehouses in Queens and Brooklyn. The installations advance the City's goal of reducing emissions from city government operations and help ensure that critical infrastructure remains operable during emergencies.

Maximize Climate Infrastructure on City-owned Property

The City is leading by example in the transition to clean energy by taking advantage of its physical assets and retrofitting its buildings. Installing solar arrays, battery storage, systems for building electrification, and other renewable energy infrastructure on City-owned properties will reduce energy costs, create new employment opportunities, and improve citywide resilience.

Build Ten Resilience Hubs

Resilience Hubs are existing community spaces protected from climate-induced hazards such as flooding, extreme heat, and power outages. They are outfitted with resources such as solar and energy storage for backup power, reliable heating and cooling, charging stations, and medical refrigeration to serve communities before, during, and after emergencies. Resilience Hubs can also serve as accessible spaces for socializing, hosting community programming, and building social equity in historically marginalized communities.

Differences Between Energy Storage and E-bike Batteries

In recent years, there have been fires in New York caused by batteries that power electric bikes, scooters, and mopeds. While some of these batteries passed rigorous, standards-based safety testing (e.g., UL certification), others have not. It is these untested lithium-ion batteries that are believed to be primarily responsible for the recent fires in New York City.

In contrast, all energy storage systems authorized for installation in New York must have undergone many stages of rigorous safety testing (e.g., UL certification), have required project design and equipment reviews and inspections by permitting authorities (e.g., FDNY), and are equipped with built-in safety precautions. NYC has some of the strictest battery storage regulations in the country.

About the NYC Mayor's Office of Climate & Environmental Justice (MOCEJ)

MOCEJ collaborates with public, private, and community partners to ensure New York City energy storage development meets our equity and clean energy goals and safety standards. MOCEJ communicates across agencies the importance of community engagement and public education to these goals. The city's recent *PlaNYC: Getting Sustainability Done* report outlines innovative ways that energy storage can support climate resiliency, and community wellbeing, and health as we transition away from polluting fossil fuels.

For more information, see our energy storage technical fact sheet

NYC Mayor's Office of Climate & Environmental Justice