



# A Sustainable Future



## A look at the sustainability highlights of the Javits Center's expansion project

The Javits Center operates one of the most robust sustainability programs of any building in New York State, and with the completion of a 1.2 million square-foot expansion project, the program has been expanded to include several innovative concepts designed to push the boundaries of sustainability and create a path for future initiatives.

Since 2014, the Javits Center has reduced the building's energy consumption by 26%, created a rooftop wildlife habitat and installed energy-efficient equipment throughout the structure on Manhattan's West Side. As a result, the convention center has earned LEED Gold certification from the U.S. Green Building Council.

Led by the New York Convention Center Development Corporation, contractors Lendlease and Turner and architectural firm, tvsdesign, the historic expansion project completed in May 2021. As a part of the project, 75% or more of all construction waste was diverted from landfills for reuse, and all construction materials were chosen with sustainable characteristics including high recycled content, locally sourced (within 500 miles) and sustainably harvested wood.

Among the sustainable highlights of the expansion are:

**The Farm.** A one-acre rooftop farm, including a greenhouse, that is expected to produce up to 40,000 pounds of produce a year; these crops are directed to the convention center's kitchens where the produce is incorporated into customer meals served throughout the year;

**The Rooftop.** In addition to the farm, the rooftop event space also features a meadow, a shade garden, an orchard and several ornamental planters with a focus on pollinator friendly and native plants.

**Solar Energy.** More than 3,000 solar panels will be installed on the rooftops of the Javits Center, making it the largest rooftop solar farm in Manhattan; It will generate 1.61 MWs of solar energy, which includes 3.5 MWs of battery storage, providing the convention center with more than 2 gigawatt hours per year of clean generated electricity;

**Water Efficiency.** Two underground cisterns capture and treat rainwater for irrigating all the plants on the level 4 roof, reducing the need for potable water for irrigation by at least 50%. Low-flow fixtures reduce potable water use by at least 35%;

**Indoor Environmental Quality.** The HVAC system includes CO2 sensors in all common spaces to adjust ventilation rates based on occupancy. All multi-occupancy spaces that are regularly occupied have shared lighting controls that occupants can adjust, and at least 90% of individual regularly occupied spaces have lighting controls. Materials and finishes selected are low in volatile organic compounds for healthy indoor air; and

**Energy Conservation.** The implementation of high-performance glazing systems, demand control ventilation, high efficiency DX units, air-side economizer, reduced lighting power densities and low flow fixtures has helped to reduce the energy use from a baseline of 111 kBtu/ft<sup>2</sup>/yr to 95 kBtu/ft<sup>2</sup>/yr, resulting in an energy cost savings of 12%.

### Other highlights include:

- Stormwater design reduces runoff by 25% and removes 80% of total suspended solids from water;
- Roof and site hardscapes have light-colored materials that comply with the Solar Reflectance Index to reduce urban heat-island effect;
- Waste management includes sorting and collection of paper, cardboard, glass, plastic and metal recyclables;
- Signage is provided at all entrances to indicate smoking is prohibited within 25 feet of entryway;
- Interior lighting complies with the light trespass requirements to reduce nighttime light pollution and spill-over effects; and
- Exterior lights meet backlight, upright and glare requirements.