

## Solar PV System Brings Much More Than Renewable Energy

*Prestigious school achieves financial benefits and showcases green technology to students*



Educational

### Property Profile

- Location: Bronx, NY
- Campus Size: 18 acres
- Buildings: 9
- Dates of Construction: 1924-1999

### Services

- Renewable Energy: Solar PV
- Energy Auditing (ASHRAE Level II)
- Project Construction Management
- Rebates & Financing

### Project Achievements

- Equipment Size: 60-kW
- Project Cost: \$198,000
- Annual Energy Cost Savings: \$14,000
- Annual Generation: 75,000 kWh of electricity
- Annual Carbon Emission Reduction: 100,000 lbs of CO<sub>2</sub>
- Rebates: NYSERDA NY-Sun Program: \$39,000

### Additional Feature

Real-time energy monitoring provides immediate system data to students and faculty for use in the school's sustainability curriculum

Horace Mann School, an Ivy Preparatory School League, is committed to instilling notions of environmental responsibility to its students by conserving energy and mitigating its carbon footprint. The school's Middle/Upper Division Campus, located in the Bronx, New York, partnered with EN-POWER GROUP to implement a series of energy conservation measures, including the installation of a rooftop solar photovoltaic (PV) system to generate green power and showcase renewable technology to students.

In order to lead by example and provide an outstanding education to its students, Horace Mann School engaged EN-POWER GROUP to identify and implement energy conservation measures and reduce the school's overall carbon emissions. To meet these goals, EN-POWER GROUP completed an ASHRAE Level II energy audit for the Middle/Upper Division Campus and developed a campus-wide energy master plan. This master plan outlined the energy consumption pattern of the

campus's buildings and energy study's recommended energy conservation measures. School management was particularly interested in installing a solar photovoltaic (PV) system and hired EN-POWER GROUP to spearhead its implementation.

EN-POWER GROUP engineers managed all phases of the project from design and permitting to construction and implementation. We coordinated procurement and installation of the 60-kW solar PV system, which consisted of 200 Hyundai m-300W modules, 100 p700 Solar Edge optimizers, two (2) Solar Edge 33 kW Inverters, and a Unirac Mounting system. Additionally, EN-POWER GROUP identified and successfully secured the school a \$39,000 rebate from NYSERDA's NY-Sun Program. To further support the school's goals of providing a green education, EN-POWER GROUP installed equipment for the real time monitoring of the solar PV system, thereby allowing students and faculty to access electricity production and carbon reductions data.