

Clean Energy

Supports campus energy reliability, efficiency, and sustainability through on-site generation, renewable energy, and advanced infrastructure.

Energy Infrastructure

Co-Generation Plant (CHCP)

Montclair State University operates a combined heat and power / co-generation plant that produces electricity while also supplying steam for heating and chilled water for cooling across campus.

Central Plant Function

The plant supports campus operations through an integrated energy system designed to improve reliability, long-term sustainability, and efficiency.

Campus Distribution

Steam, condensate, and chilled water are distributed through a centralized system to campus buildings.

Electric Generation

The on-site plant produces approximately 5.4 megawatts of power and operates continuously.

Plant Operations

System Component	Details
Electrical Generation	Approximately 5.4 megawatts
Operational Status	Continuous operation
Utility Support	Reduces reliance on external utilities
Location	Adjacent to CarParc Diem parking garage



Majority of Electricity generated on-site



100% of purchased electricity matched with renewable energy credits



~25% of campus electricity supplied by external utility providers



~75% of campus electricity supplied by our co-generation plant

Energy Coverage

A majority of campus electricity is generated on-site, reducing reliance on external utilities.

Renewable Energy & Sustainability

Montclair State University purchases Green-e™ certified Renewable Energy Credits (RECs) generated from:

- wind energy
- solar energy
- hydroelectric energy

These renewable energy initiatives:

- offset campus electricity usage
- reduce environmental impact
- support renewable energy markets
- strengthen campus sustainability efforts

Renewable Energy Impact

Sustainability Metric	Impact
<i>Renewable Electricity Matching</i>	100%
<i>Annual CO2 Emissions Offset</i>	7,600+ metric tons
<i>REC Sources</i>	Wind, Solar, Hydro

Solar Energy

The University's solar field is located in Parking Lot 60 and supports campus renewable energy production.

The installation:

- was funded through a New Jersey Board of Public Utilities grant
- became operational in 2011
- contributes power to campus operations
- supports Alice Paul Hall in The Village

Solar energy supplements:

- on-site generation
- purchased electricity
- renewable energy initiatives

Montclair’s MicroGrid

Following a major campus power outage in 2016, Montclair State University developed a campus MicroGrid as part of its long-term energy resiliency strategy.

A microgrid is:

“A local energy grid with control capability that can disconnect from the traditional grid and operate autonomously.” — [energy.gov](https://www.energy.gov/eere/energy-efficiency/microgrids)

Why the MicroGrid Matters

The MicroGrid:

- improves campus resiliency
- increases operational flexibility
- provides energy redundancy
- supports climate adaptation efforts
- strengthens emergency preparedness

Montclair State University is one of the few university campuses in the country to operate its own MicroGrid system.

The generators are located adjacent to the CHCP facility near the CarParc Diem parking garage.

Campus Energy Timeline

Year	Milestone
1940s	Original steam generation plant began operation
1993	Campus co-generation electricity production expanded
2010	Solar grant awarded through NJ Board of Public Utilities
2011	Solar field became operational
2013	New CHCP co-generation facility launched
2016	Campus MicroGrid initiative developed
2023	Renewable Energy Credit agreement established