



CASE STUDY

Morgan Stanley
750 7th Avenue
New York, NY

OBJECTIVES

Morgan Stanley has 500 tons of cooling to keep their data center operating efficiently. When running during peak hours, demand charges from the utility spike, and the HVAC units are overworked. Peak shaving and increased efficiency of the HVAC units are what makes the project valuable.

SOLUTIONS

Thermal Energy Storage Solution (TESS) was installed, capturing the waste heat from the HVAC units and data center. By utilizing the waste heat from both, the energy needed by all the units decreased by 11.3%, and they did not have to operate at full capacity.

With the energy storage, the peak load was reduced by 405kw. In the case of a power outage, TESS serves as a black start battery backup.

BENEFITS

Producing Energy

RenewableNRGY turned all the waste heat into producing 770,000kwh per year

Equipment Efficiency

The HVAC and data center units now have a longer shelf life and use less energy to operate.

Battery Backup

TESS serves as a generator backup turning on in 2.3 seconds if the building was to lose power.

AT A GLANCE

TESS Numbers

- 400 sqft installation
- Producing 770MWh/year
- CO2 Reduced by 428 tons/year
- PEAK Shaving 405KW
- \$245,000 decrease in utility bill/year
- Payback: 3.8 years



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