



NYSERDA

Building Decarbonization and Grid Modernization

Starts with better tenant energy
management

Efficiency and Flexibility Enable Building Decarbonization

To achieve New York State and New York City's goals of >80% reduction in greenhouse gas emissions by 2050, over the next 30 years we will:

1. Increase the efficiency and flexibility of building energy consumption
2. Decarbonize our electric system
3. Decarbonize heating loads

#1 enables #2 & #3 to happen quicker and more cost-effectively

Offices can become reliable resources that shift loads to match supply of variable renewable energy. But tenant-controlled loads stand in the way.

Tenant Loads are a Growing Problem

Plug and process loads accounted for 33% of electrical load in commercial offices in 2010; expected to increase to >50% by 2030*

Many NYC CRE owners say that tenant-controlled loads account for > 70% of whole building energy consumption;

Many CRE buildings need to reduce building energy consumption ghg emissions by >20% by 2030 to avoid fines

*Lobato, et. al. "Selecting a Control Strategy for Plug and Process Loads"; NREL 2012

Disconnect between occupancy and energy

Covid-19 Impact on NYC Office Building Electric Consumption



Source: <https://www.prescriptivedata.io/reports/covid-nyc-march-2020>

**Regarding buildings & grid
modernization to enable a carbon free
NY, we first must first address
improving tenant energy management**