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Work with an expert and choose combined heat and power (CHP) for your property

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Combined heat and power (CHP) is an integrated energy system that can generate electricity and heat on-site from a single fuel source. It is a solution that can help building owners and operators achieve their economic and/or energy-efficiency objectives, with resiliency and environmental benefits.

Facilities benefitting from CHP - from the 400-bed extended health care facility that provides around-the-clock care, to the 38-story residential condominium complex that provides residents with every comfort - include industrial, commercial, institutional, and multifamily residential buildings. They can be multifamily residences, hospitals, hotels, universities, industrial buildings, health clubs, laundries, and other similar types of buildings.

A first step toward CHP is to determine if a building is CHP-capable. CHP-capable facilities have the following characteristics:

* Use both electricity and thermal energy (water or steam) year-round.

* Operate a centralized hot water distribution system.

* Use more than 6,000 hours of electricity and heat in a year.

* Have access to natural gas service.

Beyond ensuring the delivery of critical services in the event of a grid outage, CHP systems can reliably generate electricity every day of the year, help facility owners and operators reap major savings on energy costs and protect the environment by reducing energy usage.

However, knowing if a given facility is CHP-capable is only part of the decision process. The next step for owners and operators considering adopting CHP technology is to determine the right CHP system for a specific building or complex of buildings.

That process can be made easier in New York State with resources and support provided by New York State Energy Research and Development Authority (NYSERDA). Promoting energy efficiency and the use of renewable energy sources, NYSERDA works to reduce greenhouse gas emissions, accelerate economic growth, and increase energy efficiency and renewable energy in New York State.

If you don't have access to a consultant with expertise in CHP, NYSERDA can help analyze site operation schedules (hours of operation) and estimate heating and electrical loads. The analysis includes conducting detailed interviews with site facility managers; reviewing gas and electric utility bills; and examining other factors that impact energy usage, including seasonal changes, site-specific considerations and type of equipment already installed. If deciding to pursue a CHP system, NYSERDA's expert team can provide support to property owners as they learn about, shop for and select appropriate systems for their facilities.

Savvy owners and operators of large facilities in the United States are incorporating proven

technologies and systems into their building designs to improve energy efficiency and reduce operating costs.

NYSERDA's Combined Heat and Power program offers support to building owners and facility managers of commercial, industrial, and multifamily buildings interested in CHP systems 50kW and larger. Visit nyserda.ny.gov/chp-acceleration for more information about pre-approved equipment vendors and other organizations offering support for CHP.

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