

# Get to know energy-saving CHP systems

Combined heat and power (CHP), also known as cogeneration, is an efficient, clean and reliable approach to generating both electric power and thermal energy from a single fuel source. CHP systems are composed of a combination of individual components, including a prime mover (like a combustion turbine, reciprocating engine, microturbine or fuel cell), an electric generator and a heat recovery component. These systems take the energy that would typically be wasted during power generation and use it for heating and cooling purposes. According to the United States Environmental Protection Agency, CHP systems consistently achieve total system efficiencies of 60 to 80 percent compared to less than 40 percent for utility-scale power generation.

## CHP SYSTEMS OFFER FACILITIES FOUR IMPORTANT BENEFITS:

- 1. Decreased energy costs** – Thanks to affordable natural gas prices, CHP systems are a smart way to reduce your energy costs now and in the future. That means powering your facility will be easier on your bottom line.
- 2. Increased power reliability and assured business continuity** – When storms or unexpected issues arise, power outages can happen. But with CHP systems, your business' power is independent from the grid, removing the vulnerability to power disruptions and allowing you to keep your facility running.
- 3. Greater energy pricing confidence** – Electricity prices often vary. With CHP systems, the risk of pricing fluctuations or variances is significantly reduced.
- 4. Lowered emissions** – CHP systems help reduce emissions of carbon dioxide and air pollutants such as nitrogen oxide, sulfur dioxide and volatile organic compounds.

## IS CHP RIGHT FOR YOU?

Larger commercial and industrial facilities can benefit from CHP systems, especially if they have certain characteristics, including long operating hours, consistent high thermal load, high peak-load ratio and large spark spread (the difference between the cost of purchasing electricity and the cost of generating electricity on site with natural gas).

The best way to determine if your facility is a good candidate for CHP technology is to contact National Grid. We'll talk with you about your facility and connect you with a company that conducts scoping studies to see if CHP systems make sense for you. We also have incentives and resources to help qualified facilities install CHP systems.

**Ready to talk about CHP at your facility?**

**Contact your account manager, call 1-800-787-1706, or email [efficiency@nationalgrid.com](mailto:efficiency@nationalgrid.com).**