

Why CHP Reduces Energy Bills

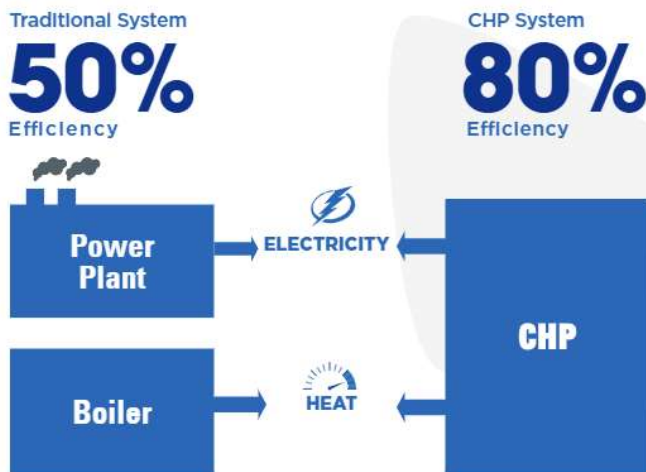
Typically, 2/3 of energy used to generate electricity is wasted in the form of heat discharged to the atmosphere. It's also lost as transmission lines distribute electricity to end users.

Combined Heat & Power (CHP) systems generate on-site electricity and also capture heat energy that otherwise is wasted. CHP provides useful thermal energy to produce steam, hot water, or chilled water that can be used for space heating, cooling, domestic hot water, and industrial processes.

High Efficiency CHP

By avoiding distribution losses, CHP can achieve efficiencies over 80%, compared to 50% for conventional technologies like utility power that's combined with an on-site boiler, heater, or chiller.

CHP's greater efficiency = lower energy bills.



Benefits of CHP Over Conventional Grid Technology

Lower Energy Bills

CHP can save facilities considerable money on energy bills due to its high efficiency. It also can provide a hedge against electricity cost increases, help avoid capital costs, and protect revenue streams.

Less Fuel

CHP requires less fuel to produce energy than a utility. Utilities use more fuel to produce the same amount of energy since electricity is lost during its transmission and distribution over power lines.

Environmental Bonus

CHP reduces greenhouse gas emissions and other air pollutants because it burns less fuel to produce each unit of energy.

High Reliability

Unreliable electricity is a quantifiable business, safety, and health risk for companies. An onsite CHP microturbine system averages 99% availability and can support continued operations during a disaster or grid disruption.

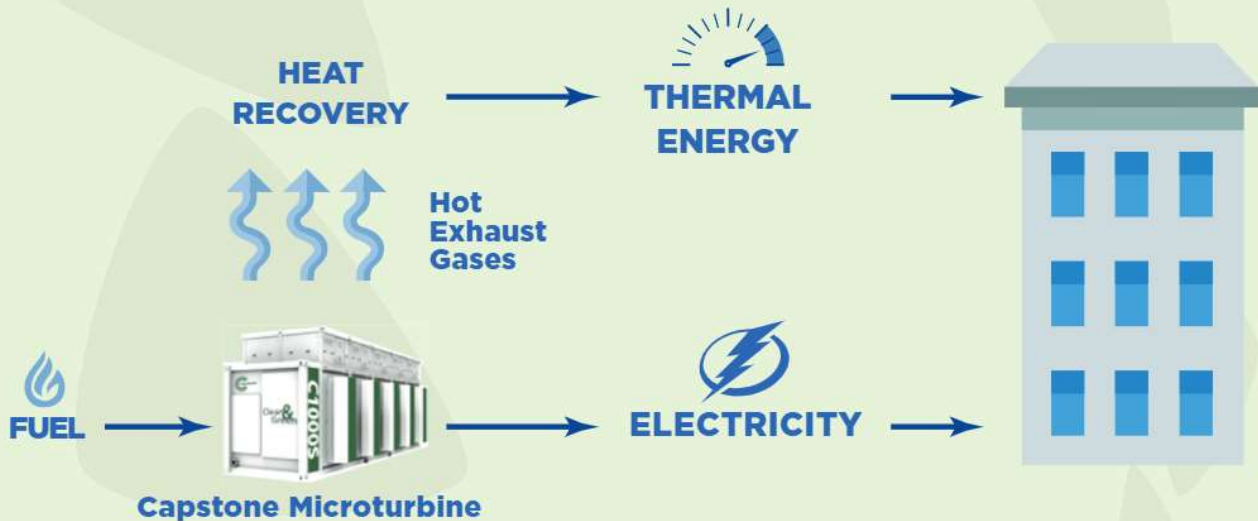


How CHP Works

At the heart of a CHP installation is a 'prime mover', such as a Capstone Microturbine. The microturbine generates power that produces electricity and heat.

CHP microturbines can use a variety of fuels and meet building energy demands — either in the form of hot water, chilled water, or steam. CHP is very flexible and can be tailored to the requirements of large and small power users to provide cost-effective and reliable energy.

Typical CHP System



Energy Users With Electric & Thermal Energy Demands



Commercial Buildings. Office buildings, hotels, health clubs, nursing homes.



Multi-Family. Condos, co-ops, apartments, planned communities.



Institutions. Hospitals, universities, prisons, military bases.



Municipal. District energy systems, wastewater treatment plants, schools.



Manufacturers. Chemical, refining, pulp & paper, food processing.

