

The Advantages of Propane Cooling

PROPANE COOLING PROVIDES EXCEPTIONAL BENEFITS WITHOUT COMPROMISING FACILITY PERFORMANCE

Rising energy demands put an enormous strain on aging grid infrastructure. This creates economic, operational, and environmental challenges for commercial and industrial businesses to cool their facilities. Switching to propane-powered cooling systems offers lasting relief and a significant reduction of electricity requirements while providing cost savings, environmental benefits, and grid relief.

Propane cooling is a proven technology that has been used for decades. It operates like traditional cooling systems but uses propane to power the compressor or ignite the gas burner. Propane cooling systems serve diverse needs, including comfort conditioning, process cooling, dehumidification, medium-temperature refrigeration, and extreme ambient operation. Available in sizes from 5 to 400 tons, these cooling systems provide efficient, reliable, and economical performance.

Grid Relief

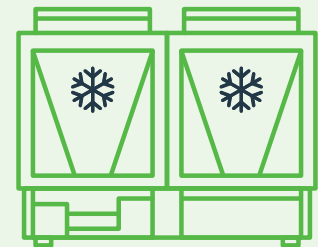
Propane cooling reduces a facility's electricity use, freeing capacity for other loads such as EV charging stations. The reliability of the electric grid is also improved, particularly during peak summer demand.

Resiliency

Propane systems continue operating during power outages, ensuring resiliency in mission-critical applications. Many units feature built-in modularity and redundancy, maintaining performance even during service disruptions.

Cost Savings

By eliminating excessive demand rates and backup generator expenses, propane cooling lowers operating costs. Its seamless integration with existing infrastructure also avoids costly upgrades.



PROPANE COOLING
reduces a facility's HVAC
electricity consumption by
80%-90%



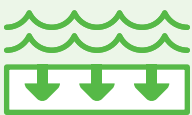
How Propane Cooling Systems Work

Air conditioning is a critical element in most businesses. It is increasingly becoming a necessity for many commercial buildings in regions that have not historically had large cooling loads. Propane cooling systems, available as engine-driven or absorption types, require minimal electricity, enhancing grid relief, energy independence, and resiliency.



Engine-driven Propane Cooling

Much like standard vapor compression systems, engine-driven cooling systems are mechanical and use propane engines to power the compressor, replacing the electric motor in traditional air conditioning systems.



Absorption Propane Cooling

Similar to a thermal compressor, absorption cooling is a thermal process that relies on a propane burner to heat a water-ammonia mix, turning it into a vapor that starts the refrigeration process, ultimately creating a cooling effect with chilled water.



Performance Across Industries

With today's energy outlook and demands, propane cooling is a viable solution for many commercial applications. Because propane cooling systems significantly reduce electricity requirements, they are ideal in areas with high electric rates and limited infrastructure. The most common building types for propane cooling include:

Multifamily Housing	Indoor Agriculture
Healthcare Facilities	Commercial Properties
Education	Office Buildings
Higher Education	Server Rooms
Hospitality	Historic Buildings
Restaurants	Assisted Living
Retail	Mission-Critical
Limited Electrical Capacity	Satellite Buildings
Data Centers	Grocery

An Environmentally Friendly Cooling Solution

Propane produces lower carbon emissions than the U.S. electric grid on average. It was designated as a clean fuel by the EPA in the Clean Air Act. It is non-toxic and will not contaminate soil or groundwater. And, because propane energy is generated on-site, propane cooling reduces the reliance on the electric grid, offering a clean, safe fuel with low carbon emissions.

► Learn more about how propane cooling is a practical solution for today's energy challenges and can bring advantages to your business today, at propane.com/cooling.