# COMMERCIAL PROPANE APPLICATIONS:

## FACT SHEET

With an array of options, propane outdoor amenities can distinguish a business by creating inviting environments for entertaining, dining, and relaxing.

Whether it's a fire pit, decorative flame lighting, outdoor kitchen, or any other application, propane amenities help to extend the daily and seasonal use, enjoyment, and ambiance of outdoor spaces — all while being powered by clean, American-made propane.

# PERFORMANCE

Unlike other fuel types such as natural gas or electricity, propane offers unrivaled portability and flexibility to allow businesses to quickly adapt their outdoor spaces to changing needs. Small, five to 20 pound propane tanks can be placed discretely inside a fire pit housing or within lighting or heating equipment and easily moved by staff to where people gather. And compared with highly polluting and labor-intensive wood-burning alternatives, propane outdoor amenities are clean-burning, on-demand, and can be controlled with switches, remote controls, thermostats, timers, or photosensors as needed. Many systems also include controls to ensure safe and reliable operation. Whether looking to increase the usable footprint of a restaurant, maximize the curb appeal of a building entrance, or turn a patio into a year-round amenity, propane outdoor amenities have a solution.

# OUTDOOR APPLICATIONS

#### Cooking

- Cooking outdoors in the summer helps to reduce indoor heat gain and associated energy use for ventilation and cooling.
  Propane facilitates flexible outdoor kitchen design due to its portability, allowing for equipment reconfiguration and additions with changes in menu and capacity.
- Propane gas grills can offer more precise temperature control over wood and charcoal — two alternative fuel choices that restaurants may employ for outdoor cooking.
- · Addition of an outdoor kitchen can expand a restaurant's appeal and seating capacity.

## Fireplaces/Fire Pits

- Propane fireplaces and fire pits add warmth and decorative ambiance to an outdoor seating area, and can provide cozy, efficient, localized heating to any space.
- A two-sided or see-through propane fireplace provides a unique viewing experience from inside or outside a building.
- Realistic logs and flame patterns provide the feel and comfort of a traditional fire without the smoke, ashes, and maintenance. Sleek



# APPLICATIONS FOR USE

- Restaurants
- Retail
- Education
- Hospitality
- Multifamily Buildings
- Hotels

# AT A GLANCE

- Extend the daily and seasonal use, enjoyment, and ambiance of outdoor spaces.
- Unrivaled portability and flexibility compared with other energy sources.
- Both functional and decorative applications.

and modern designs are also available that feature flames in glass crystals.

 Propane heating is responsive and steady with instant-on and off capability.

#### **Patio Heaters**

- Propane patio heaters extend the outdoor living season by allowing diners and guests to enjoy outdoor areas even when the temperature drops.
- Typically mushroom or umbrella-shaped, propane patio heaters radiate heat downward to warm a 12- to 20-foot area.
- They are most effective when the outdoor temperatures are 50-70 degrees Fahrenheit.
- With portable propane tanks of 20 pounds or less capacity, patio heaters can be located almost anywhere.

#### Lighting

- Propane-powered lighting can give an outdoor entertainment area or entryway a classic or even contemporary look.
- Controls can be configured to vary light intensity to suit the mood as well as a designer's objectives for a space.
- Mounting options include posts, walls, and suspension from ceilings.
- · Photo-sensors or timers can be used to

automatically turn on lights when the sun goes down or at a preset time.

#### Pool and Spa Heaters

- Propane pool heaters can be used to extend the swimming season well after other locations have closed their pools.
- Water temperature can be maintained at the optimum set-point regardless of outdoor conditions.
- Heaters are easily integrated with the pool's pump and filtration system and can be sized to fit any pool or spa.
- Propane models are up to 95 percent energy efficient and can provide over twice the heating rate as electric heat pump water heaters at a lower first cost.

## ENVIRONMENTAL

As a clean-burning, low-emission fuel, propane is a superior choice for fueling outdoor amenities. It is a low-carbon alternative fuel that emits roughly 70 percent less CO<sub>2</sub> than typical grid-supplied electricity per unit of energy consumed.<sup>1</sup> Propane is even listed as a "low-polluting" fuel in the Clean Air Act of 2008.<sup>2</sup>

Wood burning outdoor fireplaces create smoke, particulate pollution, and volatile organic compounds (VOC). Using propane instead of wood will reduce smoke exposure to clientele and staff and will produce heat more efficiently. Propane amenities carry a much lighter environmental footprint than traditional wood burning units, which have been associated with asthma attacks, elevated cancer risks, heart attacks, and premature death. In fact, jurisdictions in some parts of the country restrict the use of traditional wood-burning during certain times of the year due to its detrimental impact on air quality.<sup>3</sup>

1. Based on U.S. EPA eGRID 9th edition U.S. average electricity CO<sub>2</sub> output emission rate of 1745 lb/MWh and U.S. DOE EIA's Voluntary Reporting of Greenhouse Gases Program propane emission factor of 63 kg/MMBtu.

2. Clean Air Act of 2008, 42 U.S.C. § 7554.

3. Strategies for Reducing Residential Wood Smoke. U.S. EPA. epa.gov/burnwise/pdfs/strategies.pdf [October 2015]

#### FOR MORE INFORMATION

To learn more about commercial outdoor amenities and the Propane Education & Research Council, visit **buildwithpropane.com**.

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The Propane Education & Research Council was authorized by the U.S. Congress with the passage of Public Law 104–284, the Propane Education and Research Act (PERA), signed into law on October 11, 1996. The mission of the Propane Education & Research Council is to promate the safe, efficient use of odorized propane gas as a preferred energy source.

PROPANE EDUCATION & RESEARCH COUNCIL