



## PROPANE: ENERGY FOR OUR PAST, PRESENT, AND FUTURE

### WHY PEOPLE CHOOSE PROPANE

Propane, an important part of America's energy mix for more than a century, is a byproduct of natural gas processing and oil refining. What makes propane popular with users, however, is what separates it from conventional fuels like gasoline and diesel:

#### CLEAN

Propane is an approved clean fuel listed in the 1990 Clean Air Act. Substituting propane for other fuels such as gasoline and fuel oil is an economical and viable step toward cleaner air. Using propane reduces the greenhouse gas carbon dioxide and air pollutants like carbon monoxide and nitrogen oxide.<sup>1</sup>

#### AMERICAN-MADE

Propane production keeps quality jobs in our country. Nearly 50,000 workers across the U.S. are employed in propane production, transportation, and distribution.<sup>2</sup>

#### ABUNDANT

America produces more than enough propane to meet demand. In fact, the U.S. is propane's leading producer. Propane is an abundant bridge fuel, making it a clean-burning alternative to gasoline and diesel that can address energy challenges while long-term renewable technologies are developed.<sup>3</sup>

#### AFFORDABLE

Propane prices are typically lower than those associated with gasoline, diesel fuel, and home heating oil due to the growing supply.<sup>4</sup>

### FREQUENTLY ASKED QUESTIONS

#### WHAT IS PROPANE?

Propane — sometimes known as liquefied petroleum gas, or LPG — is a gas normally compressed and stored as a liquid. It is nontoxic, colorless, and virtually odorless; an identifying odor is added so it can be detected. Propane is most commonly used for space and water heating, for cooking, and as fuel for engine applications such as forklifts; however, its applications are rapidly growing due to new technology developments. When used as vehicle fuel, propane is known as propane autogas.

#### WHERE DOES PROPANE COME FROM?

Propane is primarily a byproduct of domestic natural gas processing, though some propane is produced from crude oil refinement. U.S. propane supplies are becoming increasingly abundant due in large part to increased supplies of natural gas.

- As shale gas extraction has increased, the production of propane from crude oil refinement has dropped dramatically. In 2011, 69 percent of the total U.S. supply of propane came from natural gas liquids produced in the U.S. and Canada.<sup>5</sup>
- Strong growth in propane supply is expected to come from the Marcellus shale play in the northeastern U.S. Industry observers estimate the Marcellus shale alone can supply more than 2 billion gallons of propane per year.<sup>4</sup>
- Because of the drastic increase in U.S. sources of propane, the U.S. produces more than enough propane to meet current demand and became a net exporter of propane in 2011.<sup>5</sup>

## WHO USES PROPANE?

Propane is used in 48 million households<sup>6</sup> as well as many businesses for water and space heating, indoor and outdoor cooking, clothes drying, and backup power. Additionally, many industries increasingly choose propane to cost effectively fuel vehicles and equipment while lowering emissions.



### ON-ROAD VEHICLES

Propane autogas is an approved clean alternative fuel under the Clean Air Act of 1990<sup>7</sup> and the third most popular vehicle fuel worldwide behind gasoline and diesel.<sup>8</sup> Propane is commonly used to fuel buses, light- and medium-duty trucks, vans, shuttles, taxicabs, and police and government vehicles.

### PROFESSIONAL LANDSCAPE EQUIPMENT

More than 130 models of propane-powered commercial lawn mowers are available today from 18 industry-leading brands, including walk-behind, stand-on, and zero-turn-rider options. Some landscape contractors choose to convert existing equipment to propane using EPA- and CARB-certified conversion kits.

### AGRICULTURAL EQUIPMENT

Propane isn't limited to the field. It influences all aspects of farming operations. More than 1.2 billion gallons of propane were sold for agricultural use in 2009.<sup>9</sup> This includes propane that is used to run pumps and engines, heat buildings, and dry and process crops.

## HOW IS PROPANE DISTRIBUTED?

With up to 56,000 miles of pipeline and nearly 6,000 retail dealer locations nationwide, propane is widely available and easily portable.<sup>10</sup>

For on-road use, there are more fueling stations in the U.S. for propane autogas vehicles than there are for vehicles of any other alternative fuel except electricity.<sup>11</sup> Propane is the only alternative fuel with fueling stations in every state.<sup>11</sup>

## HOW DOES THE PROPANE INDUSTRY CONTRIBUTE TO THE ECONOMY?

The propane industry generated nearly \$15 billion in direct domestic value in 2009.<sup>12</sup>

### CITATIONS

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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 promote the safe, efficient use of odorized propane gas as a preferred energy source.