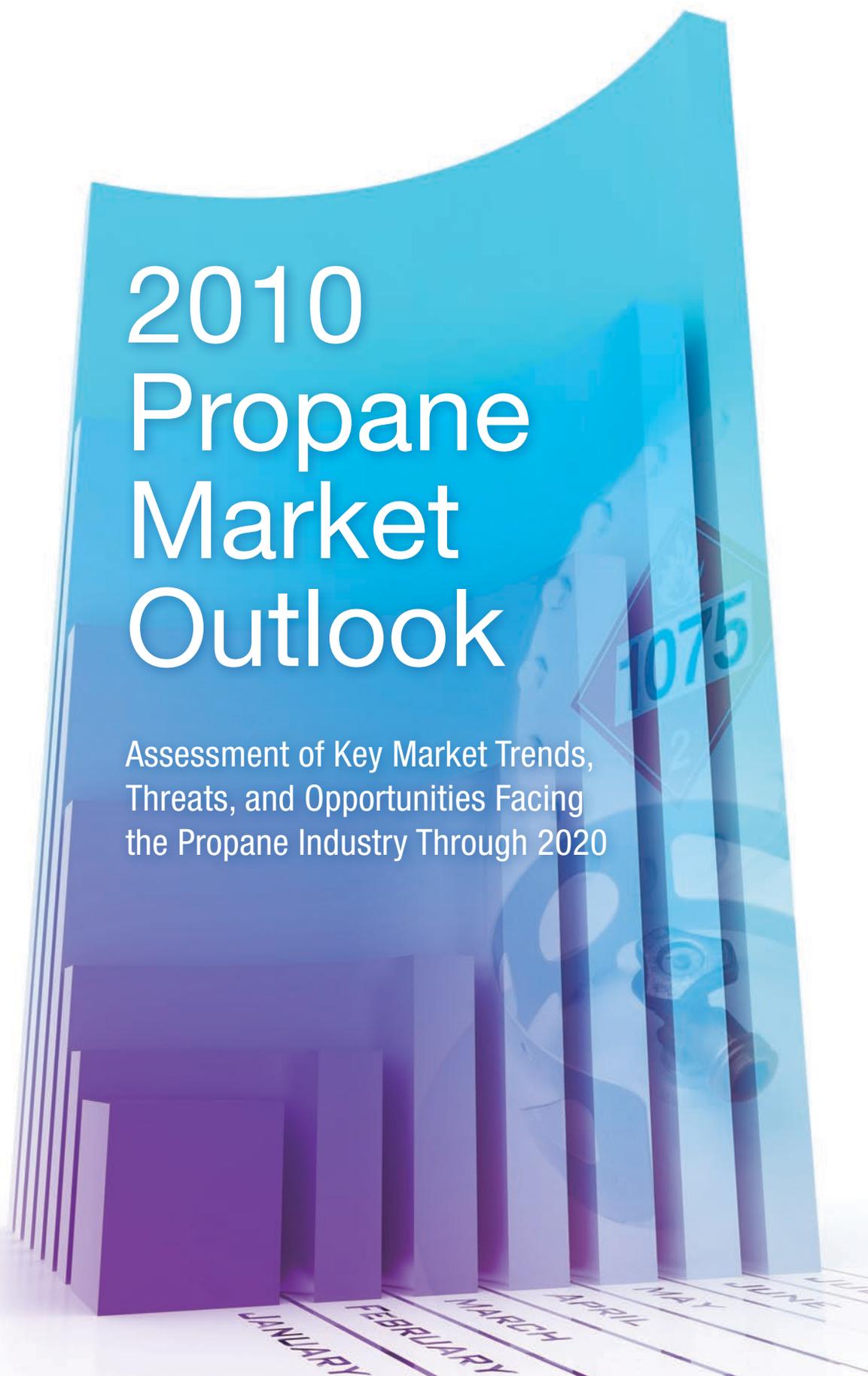




2010 Propane Market Outlook

Assessment of Key Market Trends,
Threats, and Opportunities Facing
the Propane Industry Through 2020

PRESENTED BY:





1 Introduction

Energy markets are changing at an unprecedented pace. These changes have had dramatic impacts on propane markets, which have been transformed by the combined effects of volatile energy prices, evolving environmental and energy policies, swings in economic outlook, advancements in propane and competitive technologies, and improvements in energy efficiency.

This report updates the 2009 *Propane Market Outlook*, available on the PERC website at www.propanecouncil.org/mmi. While the key drivers of propane demand remain unchanged, the outlook for propane demand growth is less positive today than when the *Propane Market Outlook* was first released in July 2009. Oil and propane prices have increased, the impact of the economic downturn has been more severe than anticipated, and the projected impacts of energy conservation and efficiency trends on propane markets have become more pronounced.

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Declining Sales in the Recent Past and Near-Term Future

After peaking in 2003, nationwide propane consumption fell by more than 10 percent through 2006. Although propane demand rebounded somewhat in 2007 and 2008 due to colder weather, propane demand appears to have declined again in 2009. The collapse of the new housing market, combined with decreases in fuel use per customer resulting from efficiency upgrades in homes and equipment, resulted in a decline in residential propane sales. The recession also reduced demand in the industrial and commercial sectors. Colder weather in the last half of 2009 and in January 2010 partially offset these declines in the residential and commercial heating markets.

Gallon sales during 2010 are projected to remain flat, or decline slowly if 2010 weather is warmer than 2009. Growth in the industrial and vehicle sectors driven by general economic growth is likely to be offset by continuing declines in residential sales.

Slow Growth Ahead

Looking forward, the outlook is more optimistic. Starting in 2011, overall demand growth is likely to resume as

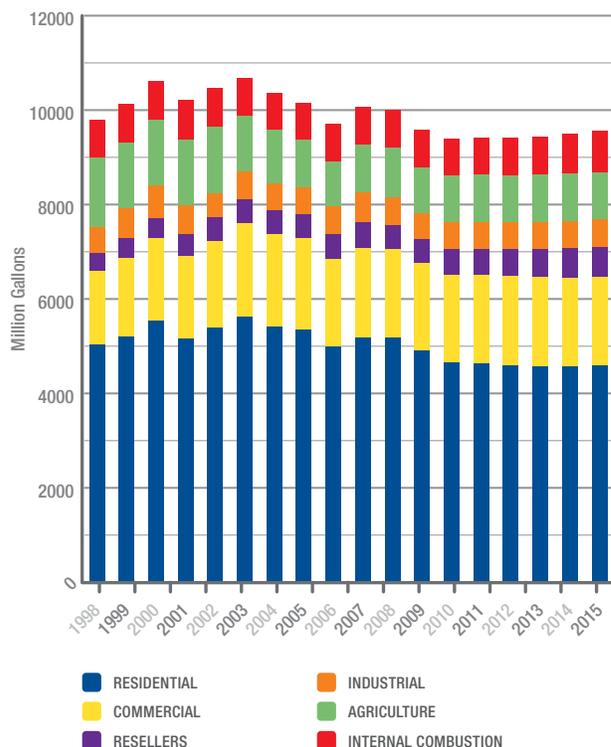
Propane Market Outlook at a Glance

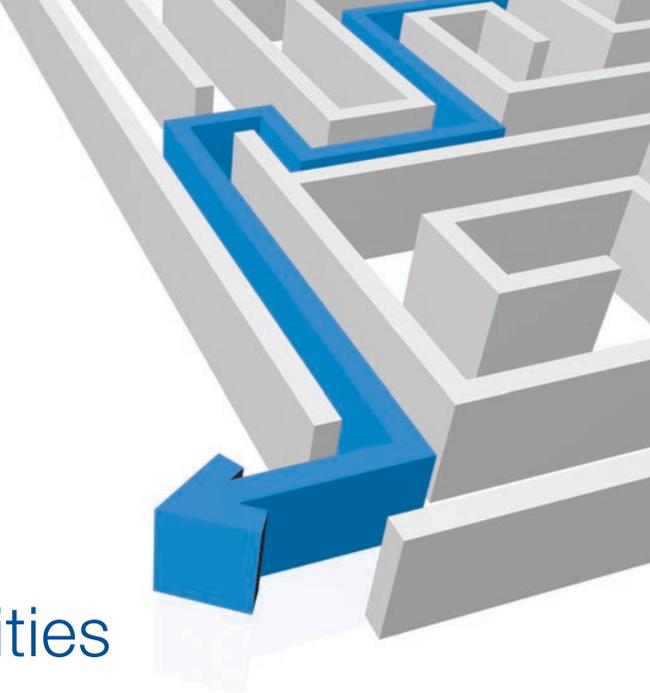
- Total propane sales are projected to decline through 2010, then begin slow annual growth from 2011 to 2020 due to a rebound in the economy and introduction of new propane applications.
- Propane has become a premium fuel in the largest and most expensive new homes that are not on the natural gas main.
- Propane marketing strategies must be tailored to specific regional opportunities and challenges.
- Fuel oil conversions in the Northeast may offer the highest growth potential in the residential and commercial sectors.
- Targeting existing propane customers to maximize household propane applications may be the easiest way to offset continuing declines in fuel use per customer.
- Propane is expected to become more competitive with diesel and distillate fuels.
- Markets for internal combustion engines offer long-term potential for large growth in propane sales, especially as clean propane applications such as commercial lawn mowers, irrigation pumps, and propane vehicles become more widely available.
- Greenhouse gas emission regulations may substantially increase electricity prices. Changes in cost relationship to propane should not be expected before 2016.
- Energy tax credits and subsidies help propane applications while simultaneously promoting other technologies over propane, like geothermal heat pumps, which challenge propane's market position.
- Taking advantage of the opportunities and minimizing the challenges that lie ahead will require concerted action by the industry as a whole, including investments in new technologies and participation in the national energy conversation.

the economy picks up speed again. Propane sales are projected to grow — albeit slowly — through 2020. But this growth is dependent on an economic rebound, a turnaround in the national housing market, and the development of new targeted market segments. In the longer term (through 2020), aggressive growth in certain markets can offset declines in other markets, and even grow overall gallon sales. However, achieving even moderate growth depends on concerted action by the propane industry to take advantage of market opportunities and to mitigate the impact of potential market threats.

To that end, the Propane Education and Research Council commissioned the Propane Market Outlook to provide a comprehensive look at current energy market trends influencing U.S. propane markets, identify key market opportunities and threats facing the industry in the next few years, and offer a road map to help the industry navigate through the period ahead. This 2010 Update highlights and updates the market outlook and key conclusions found in the 2009 report. The full 2009 report is available online at www.propanecouncil.org/mmi.

Fig. A Near-Term Odorized Propane Demand Forecast





2 Key Propane Industry Challenges and Opportunities

Key to achieving future sustained growth of propane sales will be the industry's success in responding to the leading market challenges and opportunities likely to be faced in the next few years:

- Understanding and taking advantage of regional market segmentation.
- Capitalizing on the changing relationship of propane and distillate prices.
- Participating in the national energy and environmental policy and regulatory process.
- Maintaining current markets.

2.1

Understanding and Taking Advantage of Regional Market Segmentation

Market threats and opportunities facing the propane industry differ by region and location. So an approach to propane marketing that can be tailored to specific regional conditions and requirements will be more successful than a one-size-fits-all national approach.

Even within specific geographic regions, there can be widely varying differences in weather patterns, customer lifestyles, electricity prices, and competition from other technologies and fuels. While many of the regional differences are concentrated in the residential and commercial sectors, differences in state regulations and electricity prices also affect propane in other demand sectors.

Among the several important regional opportunities for the industry to pursue, the highest growth potential may come from residential and commercial conversions from fuel oil to propane in the Northeast.

2.2

Changes in the Relationship Between Propane and Distillate Prices

When multiple forms of energy are available for the same function, price becomes a prime consideration in users' energy choices. Given projected long term shifts in world energy markets, propane prices are expected to become more competitive relative to diesel and fuel oil prices over time. This change is expected to create unique opportunities in the residential and commercial heating markets in the Northeast, as well as in the full range of diesel engine markets.

However, it is not clear that potential customers will widely recognize propane's operating cost advantage in heating and engine fuel applications. Encouraging current oil heating customers to invest in new, more efficient propane furnaces will require the propane industry to make a compelling case for long-term consumer savings. Communicating the benefits of propane is vital, but inducing customers to switch fuels may also require facilitating equipment conversions with

up-front financing, as well as other steps to simplify the process. Likewise, in the internal combustion engine market, consumers may not be familiar with the new, more efficient generation of propane engines in off-road applications, and may have had only limited exposure to propane on-road vehicles. A major consumer education campaign can help to significantly increase consumer awareness and eventual sales of propane-powered vehicles.

Another challenge in the competition of propane with other engine fuels is that the number of propane applications for on- and off-road vehicles is currently very limited. The cost of developing and introducing new propane vehicles is very high and PERC funded applications that have been under development for several years are only now starting to reach the market. The necessary capital for new vehicle development is unlikely to come from the motor vehicle industry until manufacturers believe the market will support a high volume of new vehicle sales. Consequently, this market may require significant long-term financial support by the propane industry before it can become self-sustaining.

2.3

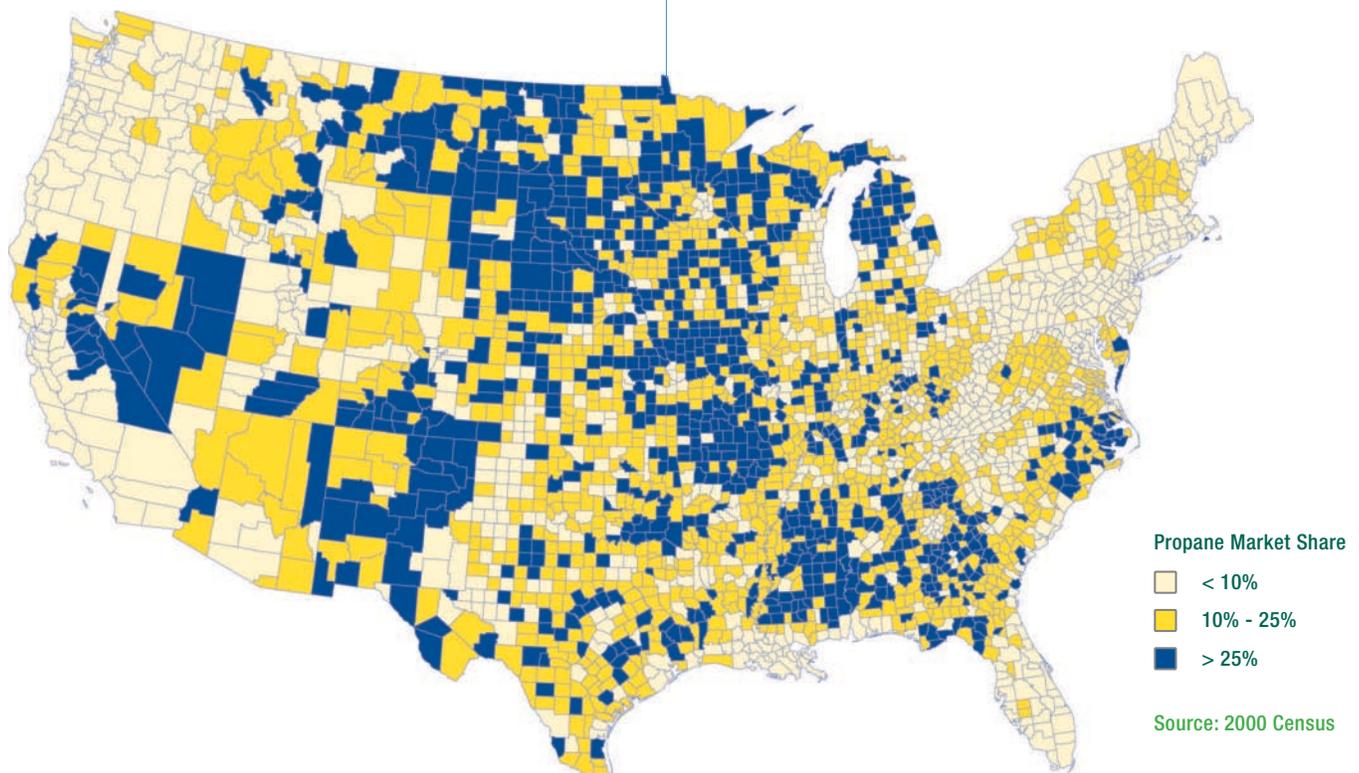
Participating in the National Energy and Environmental Policy and Regulatory Process

Propane is a cleaner-burning, lower-carbon fossil fuel than other petroleum-based products such as fuel oils, kerosene, and gasoline. In contrast to natural gas, propane has a near-zero direct global warming potential, making it a preferred fuel over natural gas in some applications. PERC and its members are developing technologies and products that build on propane's emissions and supply benefits in applications such as distributed generation, agriculture, and transportation.

But these benefits and applications are not widely recognized by decision makers in the current national energy and environmental policy debate. The challenge this creates for the industry is that federal and state energy and environmental policy decisions, along with the resulting regulations on energy use, are going to play a significant role in either promoting or inhibiting use of propane in a variety of markets. If the benefits of

Fig.

B Location of Propane Heated Households



propane are recognized and considered during energy and environmental policy discussions, propane is likely to benefit from the resulting policies and initiatives. But if these benefits are not effectively communicated and recognized, propane is likely to be regulated the same as gasoline and distillate fuel oil, which could considerably limit its potential growth.

As a result, the propane industry – through the appropriate national and state trade associations and companies – needs to be actively involved in the federal and state energy and environmental policy and regulatory process. The industry’s companies and appropriate trade associations must engage policymakers in regulatory discussions of specific priority market development targets, such as alternative transportation fuels and distributed generation, to ensure that propane is adequately considered when new energy policies are drafted. This makes it essential for the propane industry to understand the relevant issues and policy options, know the critical stakeholders and their positions, and be seen as an important stakeholder and resource by the organizations and agencies drafting new policies and regulations.

2.4 Maintaining Current Markets

The biggest challenge facing the propane industry during the next 10 years may be maintaining current market share in the residential and commercial sectors. These sectors offer a variety of growth opportunities, both in increasing market share for existing applications and in commercialization of new technologies such as residential tankless water heaters, dehumidifiers, and

commercial propane-fired heat pumps. However, the threats to these markets remain formidable:

- Propane use per customer has fallen substantially and is expected to continue declining in response to higher prices and improvements in building and equipment efficiency.
- Electric heat pump technology is becoming more efficient and economical and is likely to continue to erode propane heating market share in many regions.
- Propane prices have substantially increased relative to electricity in most regions, and this price disparity is projected to continue.
- Propane sales in the manufactured housing sector can be expected to continue their decline.

Given the expected improvements in electric heating technology, and the expected promotion of electricity as a “green” energy source by the electric power industry, maintaining existing propane customers is likely to become even more difficult. Preserving the current customer base will require an aggressive and coordinated effort by the propane industry. The major propane applications in these sectors have significant non-cost advantages over competing fuels and technologies — advantages like warmer heat and the convenience of gas that add value for customers. The propane industry should emphasize this value proposition to capture high-opportunity markets and offset the inevitable losses in markets that are driven entirely by cost rather than value.



3 Critical Energy Market Trends

The U.S. propane industry is facing several fundamental changes in energy markets over the next few years. Volatile energy prices, evolving energy and environmental policy and regulation, new climate change legislation, and increased competition with electricity will all have major impacts on propane's competitive position.

3.1 Energy Prices

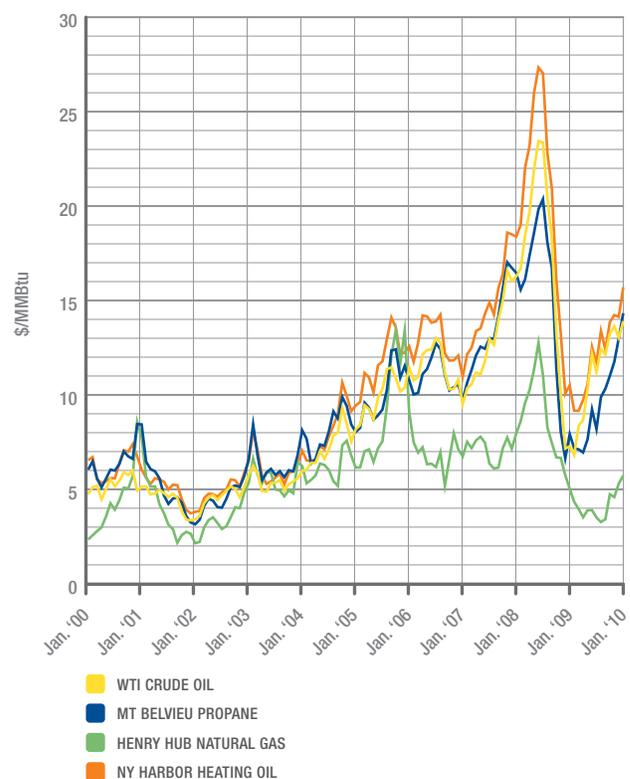
World Oil Prices

Future oil prices represent one of the greatest areas of uncertainty affecting the outlook for propane. Oil prices increased rapidly from 2001 to 2008, driving up propane prices and reducing propane's competitiveness in many markets. Although negative economic conditions reduced oil demand and caused prices to fall back to 2005 levels during 2009, long term demand for oil is expected to continue to increase, renewing upward pressure on oil pricing. World oil prices are also expected to remain highly volatile. The propane industry needs to take advantage of periods with relatively low world oil prices to solidify existing markets and develop new markets, while preparing to deal with the consequences of higher prices.

Petroleum Product Prices

The volatility in oil prices has carried over to petroleum product prices. While the monthly price relationship between propane and crude has been extremely volatile, average 2009 propane spot prices at Mt. Belvieu were 43 percent below the cost of the West Texas Intermediate (WTI) marker crude oil price when measured in dollars per barrel, and 15 percent below

Fig. C
Historical Spot Prices
January 2010



when measured in dollars per Btu, continuing a long-term downward trend. The change in the relative fuel prices of both propane and distillate is a major shift away from the historic norms for both fuels.

This market shift is expected to continue. While regional differences in prices exist, the underlying trends in distillate fuel oil prices are determined by the international market. While the economic slowdown has substantially reduced distillate demand and prices in the short term, international distillate demand is likely to be pushed higher by policies and taxes promoting use of diesel. At the same time, the cost of distillate production is expected to increase due to tightening international environmental standards on sulfur content and changes in the international crude oil supply mix. In addition, growth in worldwide propane supply is expected to exceed growth in non-petrochemical propane demand. These shifts in supply and demand indicate that distillate prices are likely to increase relative to propane

prices over the next few years. As a result, propane is expected to become more competitive with both diesel fuel and distillate fuel oil in U.S. markets.

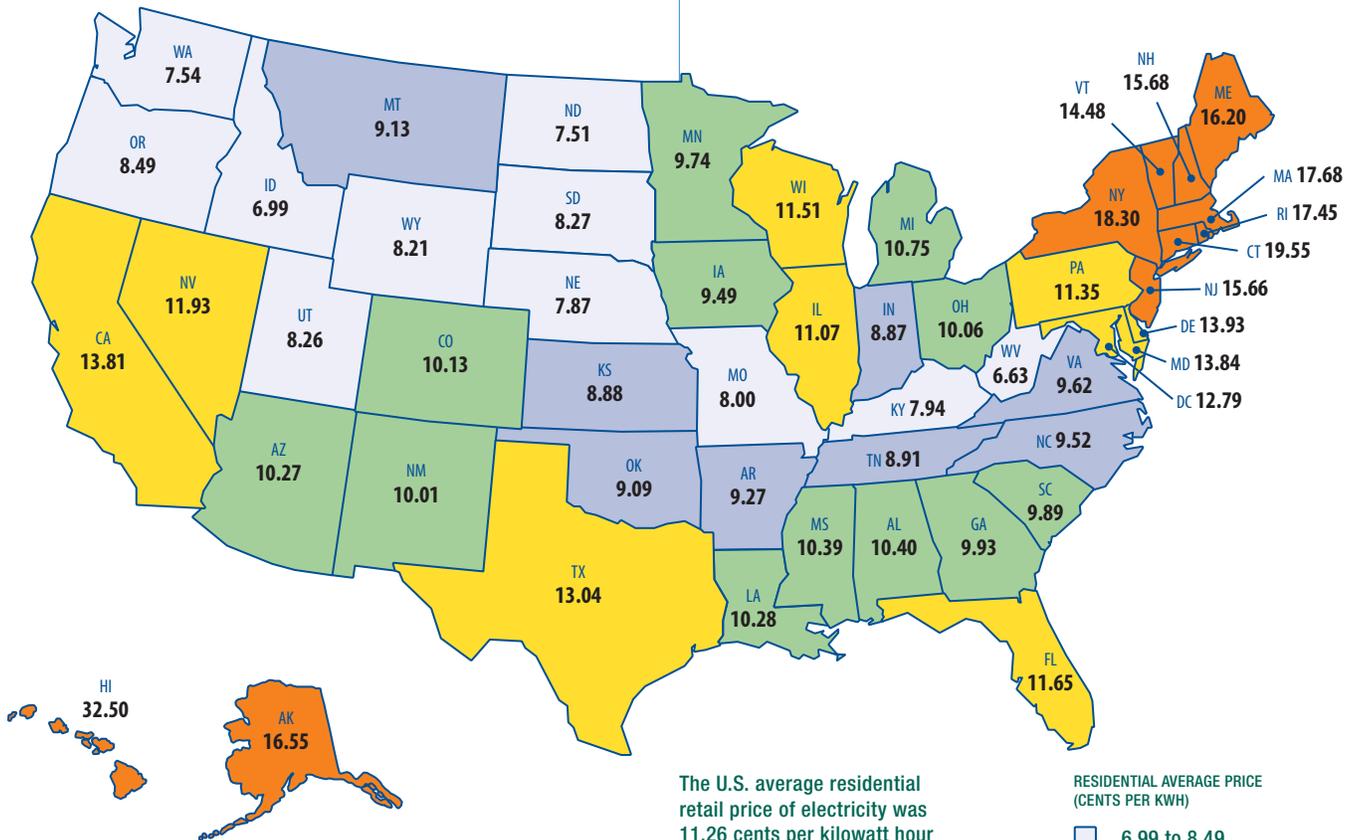
Electricity Prices

In most residential and commercial markets, competition with electricity will be a major challenge to growth in propane sales. Over the past 10 years, propane prices have increased relative to electricity prices in most geographic markets. However, electricity prices have also increased, dramatically in some areas.

Electricity prices vary widely by region depending on market structure, generation types, and capacity constraints. The characteristics of electricity production lead to retail electricity prices that are generally more stable than those of other fuels. Hence, when energy prices are increasing, prices of other fuels can be expected to increase faster than electricity prices.

Fig.

D U.S. Average Residential Electricity Prices



The U.S. average residential retail price of electricity was 11.26 cents per kilowatt hour in 2008

RESIDENTIAL AVERAGE PRICE (CENTS PER KWH)

- 6.99 to 8.49
- 8.87 to 9.74
- 9.89 to 10.75
- 11.07 to 13.93
- 14.48 to 32.50

Source: Energy Information Administration, Form EIA-826, "Monthly Electric Sales and Revenue with State Distributions Report."

Electricity prices are expected to grow slowly from their current levels in most states, while a few states may see significant electricity price increases due to continued market deregulation. However, no near-term improvement in the relationship between propane and electricity prices is expected in any major market, and the softness in natural gas market prices may result in lower electricity prices in certain higher cost markets such as New England and the Northeastern U.S. In the longer term, the highly likely implementation of new greenhouse gas emissions regulations will substantially increase electricity prices, but no fundamental impact on the competitive cost relationship between propane and electricity should be expected before 2020.

Propane Price Volatility

While end-use energy prices for all energy sources have been changing rapidly, prices for propane have been changing more rapidly than for electricity and natural gas. Rapid changes in end-use propane prices influence consumer perceptions about propane, and increase the level of uncertainty and risk associated with choosing propane. Propane hedging programs that allow consumers to lock in propane prices can minimize this volatility and reduce the negative impact of price volatility on consumers.

Near Term Residential Energy Price Outlook

The Energy Information Administration short-term residential energy price forecast, from January 2010, projects a steady increase in residential propane prices, totaling about a 10 percent increase over the next two years. Also during this period, distillate fuel oil prices are projected to increase by 13 percent while natural gas prices move upwards by 20 percent from January 2010 levels. Electricity prices are projected to increase about 3 percent total, overall slower growth compared to other fuels resulting in additional competitive pressure on the propane market from electricity.

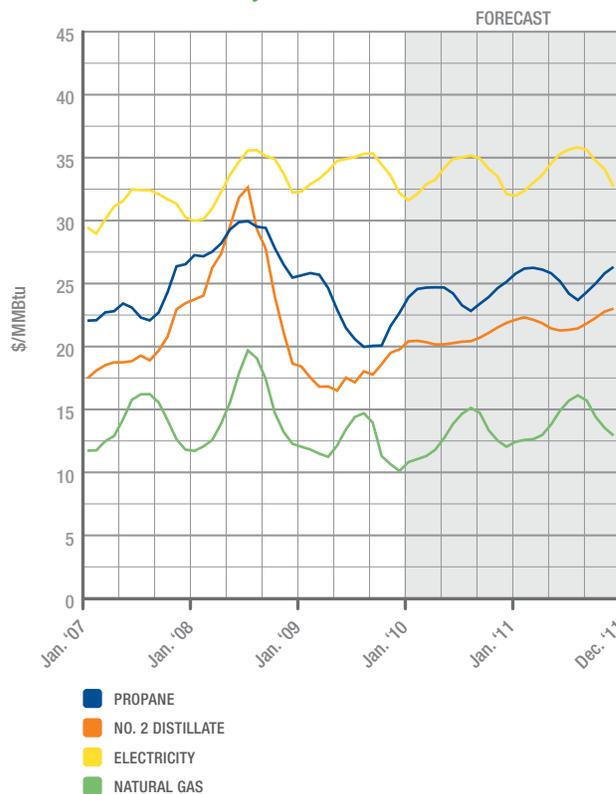
3.2

Energy and Environmental Policy and Regulations

National energy policies and regulations can have both positive and negative impacts on the propane market. Certain policies, such as alternative fuel tax credits and energy efficiency tax credits, make propane applications

Fig.

E Monthly Residential Energy Price Forecast
Source: EIA January 2010



more attractive in the marketplace. However, these policies are also likely to increase the energy efficiency of propane applications, accelerating a long-term trend that is reducing propane sales per application relative to existing equipment. New energy policies and regulations also have the potential to tilt the playing field in favor of electricity or other fuels in certain applications.

Building and Equipment Efficiency Standards

Equipment efficiency standards and building codes directly affect propane sales to both new and existing propane customers. They also promote technological improvements in competing technologies, such as heat pumps. Even at current levels, these standards result in a continuing decline in average propane use per residential customer of around 1 percent per year. Tightening of energy efficiency standards and building codes has a significant impact on the economics and energy use in these applications.

Energy Efficiency Tax Credits

The American Recovery and Reinvestment Act of 2009 established a 30 percent tax credit for investments in improvements in residential energy efficiency. The credit applies to the purchase and installation of high efficiency residential appliances (including propane furnaces) between January 1, 2009, and December 31, 2010, and is capped at \$1,500 for the two-year period. The law also established a 30 percent tax credit for property expenditures for homeowners who install geothermal heat pumps and solar power systems in their homes. The credit is available through 2016 and is not capped.

This legislation has created a more competitive landscape for propane. As the national dialogue on energy issues continues, it is very possible these tax credits could be extended and new credits and subsidies added. While some of these credits will help propane applications, credits and subsidies that favor other technologies over propane, particularly the geothermal heat pump, are likely to challenge propane's residential and commercial market share.

Alternative Motor Fuel Vehicle Tax Credits

The Qualified Alternative Motor Fuel Vehicle tax credit provides significant financial incentives for owners of propane-powered vehicles and providers of propane fuel, creating a tremendous opportunity to expand propane use as a motor vehicle fuel. However, the biofuel, electric, and natural gas industries are also aggressively pursuing these markets, and can be expected to substantially outspend the propane industry on both vehicle development and marketing. Only with

the propane industry's aggressive promotion of propane vehicles can the full potential of this market be realized.

3.3

Climate Change Regulation

Even with the recent loss of the Democratic supermajority in the U.S. Senate, climate change regulation is expected to have a significant impact on the propane industry. While the probability of comprehensive federal climate change legislation has declined, climate change regulation is likely to be adopted at the state, regional and federal levels if not preempted by federal legislation. The magnitude of this impact is currently unclear, but there will be both new opportunities and challenges.

On the one hand, the propane industry should benefit from new opportunities provided by climate change regulation. New regulations are expected to increase the attractiveness of cleaner fuels and technologies. Since propane burns cleaner than gasoline and diesel fuels, propane is likely to become more competitive against these fuels in key markets. In the long term, new regulations may also lead to substantial increases in electricity prices.

However, new environmental regulations also present new risks. Any legislation is likely to include new programs and incentives designed to improve overall energy efficiency in new and existing applications, including more stringent building codes and appliance efficiency standards. Propane use per customer is already declining from improvements in efficiency. New regulations could accelerate the trend. Electric utilities are likely to use energy-efficiency programs to aggressively promote switching from propane and other heating fuels to electric alternatives, particularly high efficiency conventional and geothermal heat pumps.



The net impact of these regulations on the propane industry will likely depend on how effectively the industry promotes propane as a clean, low-greenhouse-gas alternative to traditional energy sources in the face of well funded efforts by the electricity, coal, natural gas, and renewable energy industries to promote their own interests.

3.4 Competition with Electricity

Much of the loss in propane market share in recent years is attributable to competition with conventional electric heat pumps. This competition is expected to intensify over time. Technology improvements are reducing heat pumps' traditional shortcomings. New generation heat pumps are much more efficient than older units. In addition to improved operating characteristics at low temperatures, the heat output from new heat pumps has been increasing, improving the comfort they deliver. Equipment reliability and lifetime also have been improved. As heat pump technology continues to advance, it will remain a growing threat to the propane heating market.

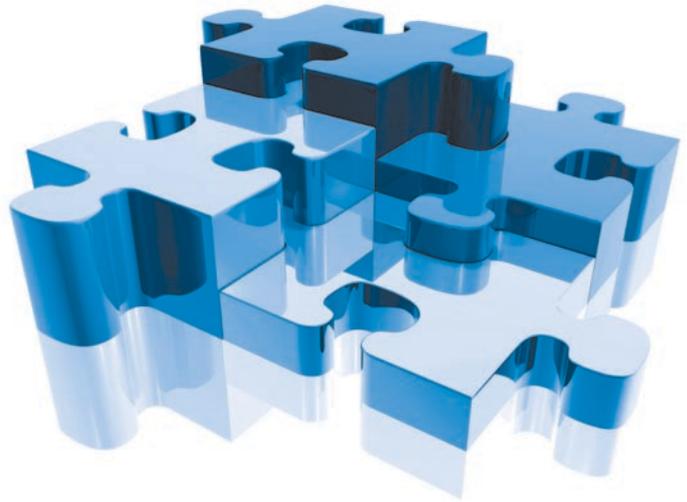
Geothermal heat pumps (GHPs) represent a growing competitive threat to propane in some key regional heating markets where conventional heat pumps

traditionally have not been a threat. GHPs maintain high operating efficiency even when outside temperatures drop below 20 degrees, which allows the technology to be competitive in colder environments where the conventional heat pump is unable to operate economically.

Until recently, market adoption of GHP technology was limited by the very high cost of installation. However, GHPs are now being aggressively marketed as a green technology and are currently eligible for a 30 percent tax credit on the full installation cost. The U.S. Department of Agriculture also provides funding for rural electric cooperatives to install ground loops for GHP systems, with the costs recovered through a utility rate surcharge to the customer. These incentives are likely to provide a significant boost to GHP installations in the next few years.

The increasing national policy focus on energy issues, including energy security, energy efficiency, and global climate change, is likely to result in greater promotion of high-efficiency electric appliances. The propane industry can expect to see significant expansion in the number of utility-sponsored programs that provide incentives for high-efficiency conventional heat pumps and GHPs, and high-efficiency 100 percent electric homes in many regions of the country.





4 Overview of Key Propane Markets

The full 2009 Propane Market Outlook, available at www.propanecouncil.org/mmi, addresses a broad range of propane markets and applications in significant detail. This 2010 update offers a brief look at some of the most critical markets and issues.

4.1

Residential Markets

The largest market for odorized propane in the United States, the residential sector is highly regional and market specific. For example, growth in the Northeast is offset by losses in the South, while growth in site-built housing is offset by losses in manufactured housing. And even though the total number of residential customers is growing, residential propane demand has been declining due to improvements in energy efficiency and conservation.

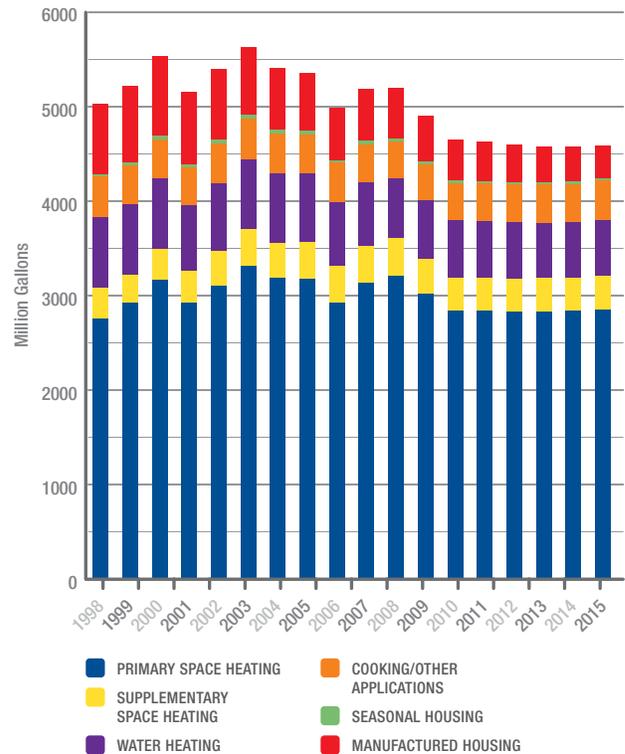
Residential Demand Outlook

The addition of new residential propane customers has slowed substantially due to the downturn in the new housing construction market. The decline in the number of new customers and the continuing collapse of the existing manufactured housing market has resulted in a recent decline in the total number of propane customers.

Part of the downturn in housing starts has been offset by an increase in market share. Propane's share of the residential new construction heating market generally has been increasing since 2002. The propane cooking and water heating markets have also shown modest growth. While economic and housing forecasts suggest that a robust rebound in housing starts is unlikely prior

Fig.

F Residential Propane Demand Forecast by End-Use United States



to 2012, maintaining and growing share in the new construction markets will help position propane to capitalize on the eventual rebound in new construction.

Opportunities in the Residential Sector

Propane has become a premium fuel in the largest and most expensive new homes that are not on the natural gas main. Propane share in the high-end housing market has increased much more quickly than in any other price class. In the top 20 percent of the most expensive homes, propane market share steadily increased after 2000, from 2.6 percent to 7.4 percent in both 2006 and 2007.

Owners of custom and upscale homes built off the gas main still want the convenience of gas for cooking, heating, and other needs. These customers base their heating and appliance decisions on value rather than cost, and the propane industry has effectively promoted the value of propane throughout the range of residential applications.

Capturing new applications and appliances in the homes of existing propane customers is a priority, since existing customers represent a significant potential market for new propane applications. For example, many customers use propane for cooking, water heating, or clothes drying, but not for space heating. Other customers use propane for space heating, but not for water heating or cooking. More than 2.5 million existing propane customers could convert to propane heat, including more than 1 million customers in the Northeast who are likely heating with fuel oil. Almost 4 million existing propane customers do not heat water with propane, and almost 4 million existing propane customers do not cook with propane. Increasing the number of propane applications used by existing propane customers may be the easiest way to offset declines in use per customer from improvements in energy efficiency.

4.2 Commercial Sector Outlook

The commercial sector accounts for almost 20 percent of the overall propane market. The near-term forecast for propane demand shows stable consumption in the commercial sector in 2010 with the impact of modest

Fig. G Propane Market Share in New Residential Construction by Price of Household

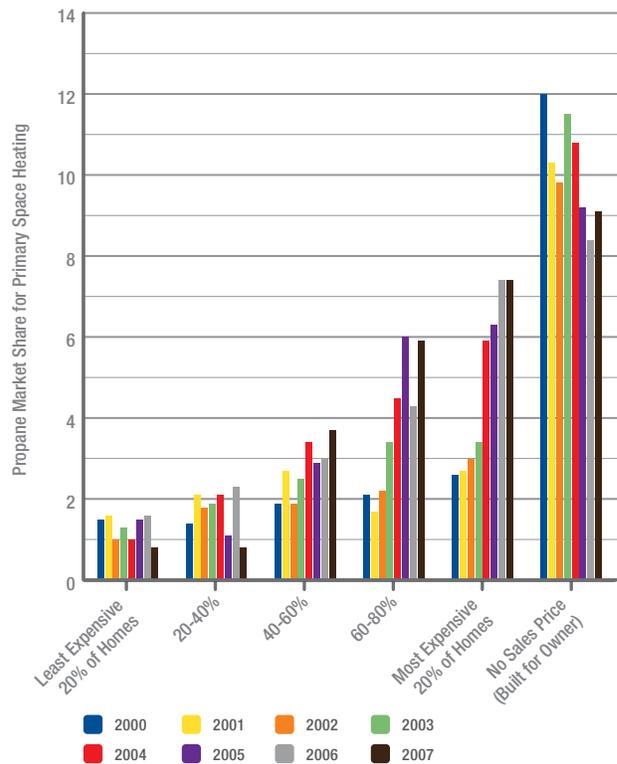
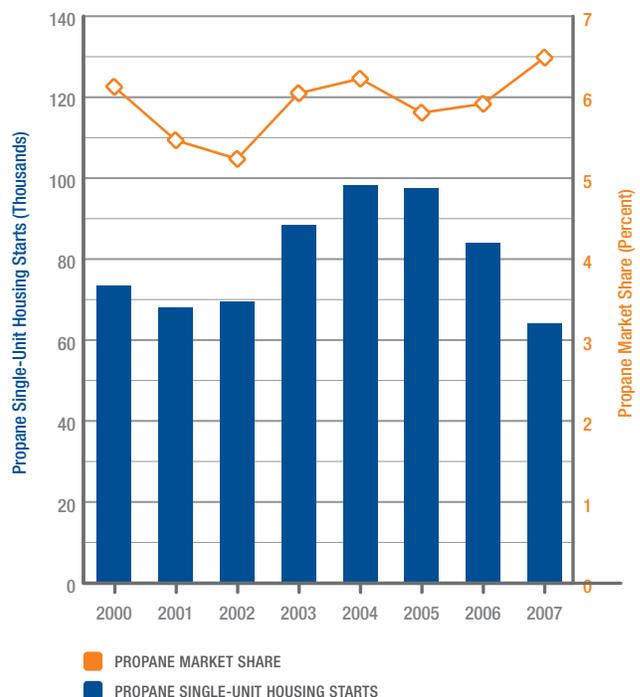


Fig. H Site-Built Single-Unit Propane Construction Starts versus Site-Built Propane Market Share



economic growth offset by the long-term impacts of higher propane prices. This is followed by growth in 2011 through 2015 linked to a rebounding economy. In the longer term, projected growth in commercial propane sales will be driven by growth in commercial activity.

The commercial sector is a very diverse market, with a much wider range of customer types and end-uses than other sectors. The market also differs widely by region in a manner similar to the residential sector. Understanding the regional differences in fuel use and the variety of commercial propane market segments—for example, schools, fast food restaurants, and houses of worship—can lead to new opportunities.

One of the key application- and region-specific opportunities in the commercial sector will be conversion of fuel oil heating customers in the Northeast. Fuel oil currently dominates the region's commercial heating market. However, many potential propane heating customers already use propane for cooking and other purposes, presenting the propane industry with near-term conversion opportunities with existing propane customers. The market share for fuel oil in new commercial construction has already declined substantially because of permitting issues with fuel oil storage tanks, leading to additional market opportunities for propane in new commercial construction.

4.3 Internal Combustion Engine Outlook

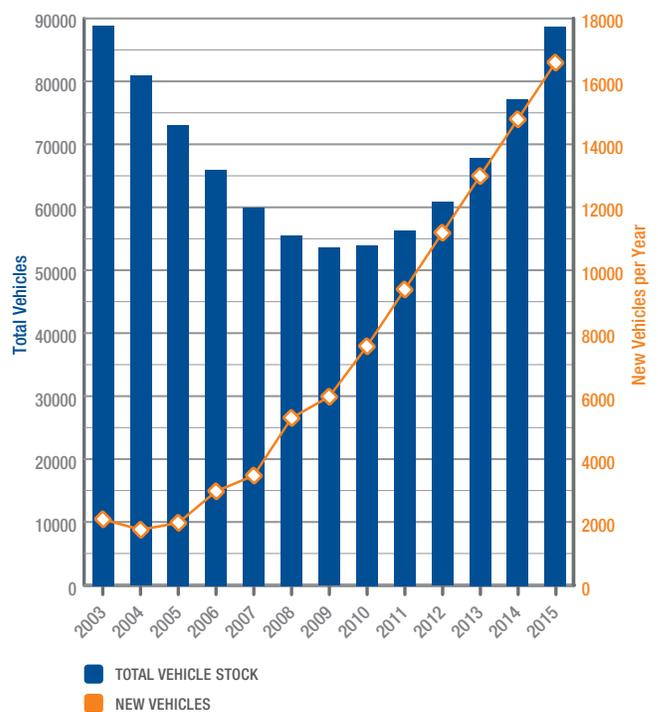
The internal combustion engine market offers long-term potential for large growth in propane sales. In the short term, a steep recession-driven decline in propane use in the forklift market could be partially offset by modest growth in demand for on-road vehicles and stationary engines. The combination of new vehicles and applications available to the market, combined with an economic recovery should lead to modest demand growth in 2010 through 2012. After 2012, growth in new applications has the potential to significantly expand propane sales.

On-Road Vehicles

Propane provides a viable alternative to gasoline and diesel fuel in the on-road vehicle market, and has significant environmental advantages relative to both

Fig.

On-Road Internal Combustion Engines Using Propane



gasoline and diesel fuel. In addition, the expected change in the long-term relationship between propane and distillate fuel prices will position propane as a potential lower cost alternative to diesel.

Introduction of new propane-powered vehicles is expected to generate a near-term increase in propane sales in this market. However, the propane industry will need to overcome significant market hurdles to maximize sales in this sector. While a number of advances have been made in the last few years, near- and long-term market growth are constrained by the current regulatory, policy, and promotional focus on other engine fuels as well as the limited number of new propane vehicles and vehicle conversion kits available to the market.

To accelerate penetration of propane into the on-road vehicle market, the industry needs to help increase the number of vehicles available and encourage extension of tax credits on equipment capital and fuel costs currently scheduled to expire by 2011. Additional efforts should focus on reducing the regulatory burden for small, low-volume manufacturers and converters, strengthening warranties on converted vehicles, and ensuring

recognition of propane's environmental benefits in the national environmental policy debate.

Non-Road Engines

The non-road engine market provides large growth opportunities for the propane industry, although cost and regulatory issues must be resolved to reach this market's full potential. Two applications are especially promising:

Propane-powered commercial lawn mowers: The commercial propane mower market has the potential to generate significant growth in propane demand, possibly rivaling propane forklifts as the largest market for propane engines. Propane mowers burn cleaner

and result in fewer emissions over competing gasoline-fired equipment, but propane mowers currently on the market cost considerably more to buy than competitive equipment, and their operating cost advantage is uncertain.

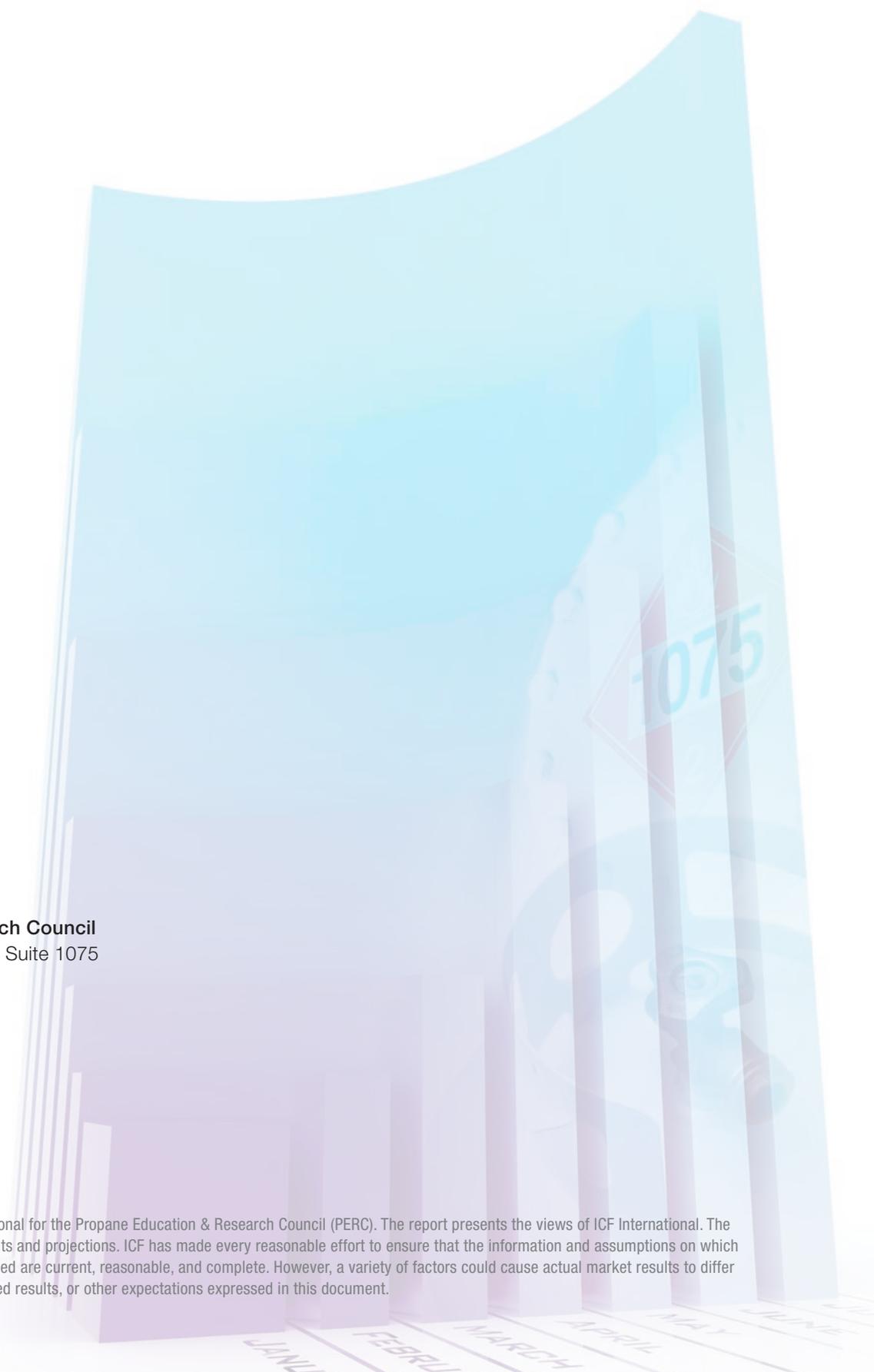
Propane irrigation pumps: Irrigation pumps provide a high-volume, high-load factor market for propane. While the number of propane pumps in use has been declining over the last decade, improvements in engine efficiency, combined with propane's price and environmental advantages over diesel, provide an opportunity for propane to retake a larger share of the market.

Final Thoughts

The next few years will be a time of rapid change in energy markets. What happens during this period will have a profound impact on the future of the propane industry.

The propane industry should expect major challenges in existing propane markets from electricity, natural gas, and renewable fuels. However, the propane industry will also have unprecedented opportunities to develop new markets. Taking advantage of the opportunities and minimizing the challenges will require concerted action by the industry as a whole, including investments in new technologies and significant participation in the national energy policy debate.

The full Propane Market Outlook report completed in 2009 provides a more detailed discussion of the key issues and trends likely to drive propane markets in the next few years. It serves as a roadmap to help the industry take advantage of the opportunities and confront the challenges that lie ahead. The full report is available online at www.propanecouncil.org/mmi.



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