

**ADDRESS BY AGL MANAGING DIRECTOR  
ALPGA CONFERENCE & EXHIBITION  
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LPG: ITS ROLE IN AUSTRALIAN ENERGY**

OPENING SLIDE 1

**WELCOME**

Minister Wilson Tuckey

Alan Beale

Distinguished Guests

Ladies and Gentlemen

It is a great pleasure to be here today amongst industry leaders many of whom I have known for some time – and have been good friends to AGL.

It is a testament to the organisers of this conference that so many people are in attendance, many having travelled from overseas and around Australia. The program is highly innovative and addresses the key challenges facing the Australian LPG industry moving forward.

**INTRODUCTION**

My presentation today is about the demand for LPG in Australia over the next decade.

We all know that the industry has performed extremely well to date, particularly in light of the fluctuating Saudi contract price. The issue is how to continue and grow Australian business and household acceptance and use of LPG.

Firstly some key facts about the LPG industry to put demand into context:

- The LPG market is comprised of production, wholesale and retail. LPG markets are highly competitive. International pricing, domestic demand and product availability all affect LPG prices and therefore competitiveness. I will say more about this a little later on.
- In 2001 Australia produced approximately 3 million tonnes of LPG. Around 70% of this is naturally occurring, associated with crude oil and natural gas production. Around 2 million tonnes of total output was consumed domestically making the LPG industry in Australia a net exporter. This leaves Australia's supply/demand balance well positioned over the next decade.
- Because the LPG industry is based around efficient logistics, both transport and storage costs impact on the end price. This means that the more efficiently we manage the logistics of the business, the better our overall management of retail price.
- Having said that, as you all appreciate only too well the main determinant of local LPG prices is the international LPG price, which is volatile at the best of times. The Saudi contract price in March of \$385 US per tonne has set a new record high. Just to reinforce the notion of price volatility, the April Saudi price is \$325 US.

SLIDE 2 – SAUDI CONTRACT PRICE MOVEMENT

## DEMAND FOR ENERGY

Let's now consider energy demand generally to put LPG into a broader context:

- Firstly, in 1998-99 Australia produced around 9,500 PJ of energy (excluding uranium). The largest fuel sources were black coal at 65%, natural gas at 14% and crude oil at 11%. These figures are from ABARE and assume that the production of energy commodities not traded internationally, by definition, equals consumption.

### SLIDE 3 – AUSTRALIAN ENERGY PRODUCTION BY FUEL IN 1998-99 AND 2019-20

- By 2019-20 energy production is expected to increase to almost 14,700 PJ per annum. In that time natural gas is expected to increase its share of total energy production to 22% whilst black coal is forecast to fall to 61%.
- Another way of showing the growth over time in energy production is to consider the following graph. It demonstrates that the relative growth in natural gas is significant. Much of the increased demand for natural gas will come from the electricity generation sector where the share of natural gas is forecast to increase from 10.7% in 1998/99 to 18.3% in 2019-2020.

### SLIDE 4 – AUSTRALIAN ENERGY PRODUCTION BY FUEL (GROWTH PATTERN)

### SLIDE 5 – ANNUAL GROWTH IN ENERGY CONSUMPTION

- By comparison, Australian energy consumption was over 5000 PJ per annum in 2000/2001. Although growth in energy consumption closely follows Gross Domestic Product trends, overall growth rates have declined from 3% per annum in the 1990s to around 1.6%. This is generally due to a reduction in energy intensity of GDP.
- In terms of Energy Consumption by Sector, three sectors accounted for almost 80% of the total. These are electricity generation (30%), transport (25%) and manufacturing (24%). The next largest consuming sector was residential, accounting for only 8% of total energy consumption.

#### SLIDE 6 – ENERGY CONSUMPTION BY SECTOR

- The growth in electricity generation is a shared opportunity for natural gas (growing at 3.3% pa) and LPG. The growth in the transport sector is a great opportunity for LPG.

#### **DEMAND FOR LPG**

Let's turn to LPG in the context of the energy mix:

- The most recently available figures show that in terms of share of final energy consumption LPG accounted for 100PJ. This includes autogas at around 60PJ per annum.
- According to a newly released study by ABARE, Australian LPG demand is forecast to grow by around 1.5% per annum over the next 20 years. This means that by 2020 ABARE predicts that naturally occurring LPG will account for around 125 PJ of total energy consumption. Over the same time horizon supply is forecast to increase to 240 PJ per annum.

The message is that although black coal and natural gas as energy sources are more dominant in the market, LPG is an important part of the energy mix.

Growing recognition of the benefits of LPG will also, in my view, see it recognised in the emerging energy policy framework for Australia.

## **COMPETITIVE POSITION OF LPG IN THE MARKET**

As we all know LPG has some clear competitive advantages over other fuels. These advantages underscore LPG's ability to compete for demand even with fluctuating retail prices caused by fluctuating wholesale prices.

First, and fundamentally, LPG is transportable. It can be stored and transported in containers which means it can reach markets all over Australia, well beyond the reach of any gas network. At the same time LPG is a business which, unlike reticulated gas, does not involve enormous up front capital costs.

It is convenient and competitive in price to electricity for heating and cooking purposes. It burns with virtually no odour or smoke and is highly efficient making it a clean choice for customers, ranging from households through to large holiday resorts on the Queensland coast.

### **SLIDE 7 – TRANSPORTABILITY (DAY DREAM ISLAND)**

By way of example of the benefits of convenience and transportability of LPG, some of the commercial and industrial applications include bakeries, forklifts, bore pumps, irrigation pumps, weed control, power generation, grain drying, drying ovens and boilers (for steam and hot water production).

## SLIDE 8 – INDUSTRIAL PROCESSING

Another key competitive advantage is that LPG is a clean fuel. It is environmentally friendly and it is the leading alternative fuel for cars.

## SLIDE 9 – VEHICLES

In particular autogas has low cold start emissions and has lower peak pressure during combustion than diesel. In addition it contains negligible toxic components.

According to the new CO2 calculator devised by motor car company Ford (I'm sure other companies have an equivalent as well) it has up to:

- 20% lower global warming potential;
- 15% lower carbon dioxide emissions;
- 20% lower ozone (smog) forming potential; and
- 80% less harmful air toxic emissions compared to petrol.

The CO2 calculator indicates to customers that switching their vehicle from petrol to LPG can reduce global warming potential gases (CO2 equivalent) by 9.6 tonnes. This is equivalent to planting to 38 trees, in terms of CO2 reduction.

As the world around us changes in terms of environmental requirements and priorities, this benefit of LPG will make it an increasingly attractive fuel for residences, businesses and car owners.

Another advantage of LPG, is the fact that end price can be influenced by how well the transport and storage side of the business is managed.

Elgas' recently constructed 65,000 underground cavern storage facility at Port Botany in Sydney will provide supply security to NSW, Victoria and Queensland.

#### SLIDE 10 – ELGAS CAVERN STORAGE

LPG is a customer service product – that is people in the LPG industry can have a personal relationship with customers. Depots, tankers, computers, cylinders and tanks for customers, combined with dedicated distributors, provide personal local service Australia wide.

#### SLIDE 11 - DEPOTS

Finally and contrary to some opinion, the extension of natural gas does not necessarily result in displacement of LPG. The advantages of LPG, off the back of raised customer awareness through natural gas, has seen markets continue to grow in areas where the natural gas distribution network has expanded, such as the Blue Mountains.

#### SLIDE 12 – NATURAL GAS EXTENSION

In these circumstances as well as natural gas increasing its market, so has LPG. There are natural synergies between both products as both offer customer advantages of instantaneous response and function.

## **FUTURE CHALLENGE**

However whilst demand for both natural gas and electricity continues to grow, the reality is that growth in demand for LPG has slowed. In particular since 1999 Autogas sales have fallen from 1.4 million tonnes to 1.2 million tonnes.

And that's where the challenge lies for us all with business interests in this industry.

So what is the size of the challenge?

### **SLIDE 13 – ANNUAL GROWTH IN ENERGY CONSUMPTION**

Let's have a go.

There are 7.2 million residences in Australia.

Of these, around 3 million are natural gas customers

In addition, there are 1 million households who are LPG customers (including 7 million BBQ cylinders – now that's a lot of sausages!)

By my numbers that means 4 million out of 7.2 million residences are either users of LPG or natural gas.

Putting these figures together that translates into 45% or 3.2 million residences that do not have LPG or natural gas. This is about 3 times the total number of current LPG customers.

We should think about this as a serious opportunity.

Those 3.2 million households represent the size of the LPG domestic use opportunity. It is enormous and limited only by the size of our collective imagination. Natural gas systems will expand over time, but will never reach the majority of these homes.

Let's have a quick look at motor vehicles.

There are approximately 12 million cars and light commercial vehicles on the road. Of those, only 5% have LPG.

Like household penetration, the fact that many fleet vehicles are still fuelled by diesel or petrol, means that autogas sales have huge potential to grow.

A sustained increase in demand will of course take more than that.

It will involve a keener and hungrier appreciation of markets than we have exhibited before.

It will involve ensuring consumers understand the environmental benefits of LPG compared to other forms of energy – because we know this is valued by a growing number of people in the community.

And importantly, it will involve growing customer loyalty to LPG as an alternative transport fuel in the face of ongoing price volatility in the market.

## FUTURE FOR LPG

So let's look to the future opportunities for LPG growth.

The LPG base of 1 million households, 7 million BBQ cylinders and 550,000 cars is very strong. It is a solid platform from which to build, particularly in areas where natural gas will not be provided in the foreseeable future.

- In these areas LPG has a competitive advantage over electricity for both cooking and heating purposes. It also has a competitive advantage over natural gas which is restricted to supply through gas transmission and distribution networks.
- The very large reduction in greenhouse gas emissions (>50%) by using LPG in the home for hot water or heating instead of coal generated electricity provides a strong rationale for regulatory support of LPG use, and a new opportunity for LPG marketers
- The growth in the leisure industry and outdoor entertainment offers good prospects for growth. Outdoor patio heaters are growing in popularity and number as outdoor eating opportunities grow at a rapid rate.
- Small scale power generation in regional areas, as well as cogeneration plants, offer good potential and are more environmentally friendly than diesel fired plants. My earlier comments about industrial and commercial applications indicate the breadth of opportunities.
- Fuel cells and airconditioning may be a long way off but as natural gas has a shared interest in their development they may be closer than we think. In the case of fuel cells, a fully integrated fuel cell system operating on Propane has

been delivered to the Propane Education and Research Council in the United States, as part of a project funded by the Council's grant program which supports the research and development of clean and efficient propane utilization equipment.

- Turning to transport, vehicle fleets offer the most significant potential for demand growth for autogas. In particular the focus of the industry has to change from retrofitting vehicles to a focus on both corporate and government fleets.

#### SLIDE 14 – ENVIRONMENTAL BENEFITS OF AUTOGAS

Convincing fleet managers of the environmental and cost benefits of running LPG fleets will take time and provision of appropriate information. But the gains are enormous.

- In addition growth in road trucking transport and urban buses will provide additional future upside as heavy duty engines designed for LPG become more widely available.
- Finally LPG can spring off the back of natural gas extensions. Where customer awareness of the benefits of gas is raised, there are market growth opportunities for both natural gas and LPG. AGL, through our investment in Gas Valpo in Chile, has demonstrated that phenomenon.

#### SLIDE 15 – CLOSING SLIDE

## CONCLUSION

So should we have confidence in the future of the industry?

To answer this we must be grounded in reality. LPG demand will continue to grow but at a rate which will see its overall share of energy consumption decline unless the industry undertakes action.

That's the real challenge. How do you grow the industry at a faster rate and turn the opportunities into business realities?

The fundamentals are there:

- Growth potential
- A flexible and customer oriented fuel delivered through an ethos of personal service.
- Broad ranging commercial, industrial and residential applications.
- Undeniable environmental credentials

However, innovation and marketing will be vital, as well as capturing the imagination of customers. The autogas strategy will be an important start in that sector and the industry must seize the opportunity being launched at this conference and move forward.

But above all, industry leadership, focus and dedication is what will ultimately make the difference.

I commend you for your hard work and vision for a thriving LPG business. I look forward to participating with you as we achieve that vision.

Thank you.