Liquefied Petroleum Gas Market and Regulatory Pricing

Introduction

Liquefied Petroleum Gas (LPG) is a generic term applied to propane, butane, and mixtures of these two hydrocarbons often used interchangeably. These compounds naturally occur in crude oil and natural gas from where they are recovered directly from the producing field or produced in oil refineries and then sold. LPG is highly flammable and has a boiling point significantly less than 0°C making it a gas at room temperature. It is stored in pressurised containers as a liquid for ease of handling.

LPG burns cleanly without soot (black carbon), thereby reducing carbon emissions. It is safe and easy to use and can assist in improving ambient air quality which has attendant benefits in the reduction of non-communicable chronic diseases such as bronchitis and asthma.

LPG Market in RSA

The LPG market in SA is estimated to be about 402 000 t/year (6.8 kg/capita) but considered significantly under-developed, well behind countries of similar economic development and income levels. Internationally LPG growth over the last ten years has been strong driven both by demand and supply but SA LPG growth has been muted (+2.9% on average per annum since 2010). By comparison, sub-Saharan Africa LPG growth in 2018 was 9%, with Nigeria leading the way.

LPG local production was estimated at 265 000 t/year in 2018 with imports estimated at 197 000t satisfying 43% of local demand but growing year on year. The recent developments of import terminals in Saldanha Bay and the soon to be commissioned Richards Bay terminal (22kt in 2020) should alleviate supply constraints that have plagued the development of this market, especially during winter - the season of peak demand.

Safety concerns regarding the handling and use of LPG has often been seen as a deterrent to its growth in the domestic sector but the Department of Labour together with the LPG Safety Association (LPGSASA) are actively involved in addressing these concerns.

LPG Price Regulations

The price of LPG is regulated by the Department of Mineral Resources and Energy (DMRE) at wholesale (maximum refinery gate price - MRGP) and at retail level (maximum retail price – MRP). Since the inception of LPG price regulation in 2008, the MRGP has been calculated based on petrol (RON 93) which has been the historical price benchmark for sales of LPG from refiners.

While pricing off petrol has historically been satisfactory¹, this has become less so in recent times as the market for LPG has grown independently to that of petrol². As a consequence, new pricing benchmarks for LPG have also developed - the Saudi Aramco Contract Price (Saudi CP), US propane export prices (as a consequence of shale gas / oil developments) and the Far East Index (FEI), amongst others.

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¹ LPG can be imported into refineries and used to manufacture petrol components – hence its traditional correlation to petrol pricing

² LPG has found significant markets as an alternative to natural gas or as a feedstock in petrochemical plants
The growing disconnect between pricing off petrol and international benchmark pricing has constrained local market development as local importers / marketers were resistant to import and sell the product at a loss leading to supply shortages in the country. These motivated the government to create an environment for the growth of LPG industry and initiated a review of the MRGP methodology to reflect market realities. In 2019, the Department published, for public comment, new draft regulations for the determination of the MRGP. This review proposed aligning the MRGP pricing to Saudi Contract Pricing (Saudi CP) with associated costs related to freight, insurance, storage costs and so on included in a new determination of the MRGP.

The Department considered stakeholder comments and after further discussion new regulations were gazetted on the 29th May 2020. After stakeholder engagement, the Working Rules for the MRGP were finalised during June 2020. Effective from the 1st of July 2020 the new regulations on MRGP were implemented.
Frequently asked Questions

1. Is the price of LPG Regulated in South Africa?
   - YES, the price of LPG is regulated at wholesale and retail level. The DMRE publishes the regulated retail prices of LPG on the 1st Wednesday of the month. The prices vary by magisterial districts zones.

2. Will the new pricing methodology increase the price of LPG?
   - Based on the current international LPG market dynamics, YES, the price of LPG will increase.

3. If the price of LPG increases, by how much can we expect this to be?
   - We cannot predict the absolute increase since this is dependent on market dynamics both for petrol and LPG. What we can say is that the price should now reflect real market realities of importing the product into South Africa. Because South Africa does not produce enough LPG to satisfy local demand, the change to pricing should reasonably ensure that local market supply is maintained as importers should be able to recover their costs.

4. ...and if demand still exceeds supply?
   - Then the response will be to increase imports and import capacity to meet the demand. The important thing is that the change to the pricing structure should encourage these actions by importers and marketers

5. Does the retail price of LPG include VAT?
   - YES, the Maximum retail price of LPG, published by the DMRE includes VAT.

6. Why did DMRE change the pricing methodology?
   - The methodology for MRGP was for a longtime referencing petrol (RON 93) prices and with RSA reliance on imports of LPG to satisfy demand, importers had to sometime face losses for importing just to satisfy demand. This was an unsustainable situation and would have led marketers to leave the South African market.

7. Is the government trying to promote the use of LPG?
   - Yes is it – LPG can fulfill a number of functions which include changing the energy mix in the country, reducing the load on Eskom during peak times by cooking and heating with LPG and promoting a product that is safe, easy to use and can contribute to cleaner air.

8. How safe is LPG compared to other energy products?
   - Like all petroleum products if LPG is handled in the correct manner, using the correct equipment and installed by an accredited technician it is perfectly safe to use. It burns cleanly, provides instant controllable heat and results in a significant reduction in emissions which is beneficial to the user and the environment
   - More information on safely operating a LPG cylinder, please visit the LPGSASA website – www.lpgsa.co.za
References: