

# Impact of Global LPG Demand and Supply on the Development of LPG Market in Nigeria and Africa

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# Preamble

- LPG is one of the cleanest forms of energy available, both in terms of handling and combustion.
- The properties of LPG, especially its portability, hot flame, low emissions, low carbon footprint and high energy value, makes it an outstanding choice for cooking.
- As a result, nearly half the world's demand for LPG is in the residential sector for cooking, hot water and space heating.

# Global LPG Market Segments

The LPG market is sub-segmented into Source and Application.

- Based on the Source, the market is sub-segmented into Refineries, Associated Gas, and Non-Associated Gas.
- In 2019, the Non-Associated Gas segment was dominant and held the largest market share of 54%. For example, natural gas processing units make for the majority of gas production in North America, whereas refineries make for the majority of gas production in Asia-Pacific. Refineries are one of the most important sources of different gases production on a global platform. In the future years, rising refining capacity, particularly in Saudi Arabia, Brazil, India, and China, is expected to increase the supply of the product.

- Based on Application, the market is sub-segmented into Automobile Fuel, Residential/Commercial, Industrial, and Others.
- In 2019, the Residential/Commercial segment was dominant and held the largest market share of 51.20%. The segment's growth has been driven by promising government subsidies and initiatives to promote the product as a feasible alternative to traditional fuels like wood and coal.
- Thanks to a little impact on ozone depletion, liquefied petroleum gas is also replacing chlorofluorocarbon and hydrofluorocarbon as a refrigerant. This has resulted in increased application opportunities in the residential/commercial segment, particularly in the areas of ventilation and heating, in addition to cooking.
- The industry is expected to grow during the forecast period, with a net global industry of more than US \$ 0.00681 billion by 2027

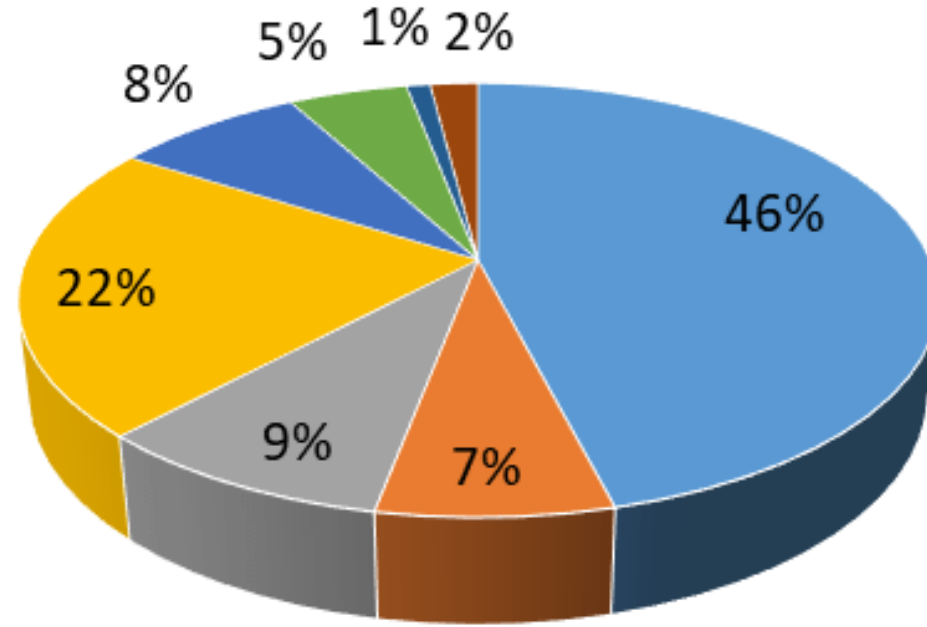
# Global LPG Market Dynamics

- LPG world trade in 2019 was US\$ 300 Bn
- The top importers were China (US \$ 47.8 Bn), Japan (US \$ 42.3 Bn), and India (the US \$ 16.4 Bn).
- The top exporters were Qatar (US \$ 44.2 Bn), Australia (US \$ 34.1 Bn), and the United States (the US \$ 32.3 Bn).
- In 2020, the Asia Pacific region dominated the Global LPG Market. The primary aspects driving regional market expansion have been:
  - Population increase with high energy needs
  - Affordability - thanks to government's discounts on LPG cylinders for places where LPG cannot be piped to homes
  - Increasing car gas usage
  - Increased petrochemical capacities in India, China, India, Thailand, and South Korea

- In 2021 the total LPG consumption growth recorded was 7.7%
- Furthermore, from 2021 to 2030, the implementation of strict government environmental rules will be a major driver of the market growth. LPG is of course very environment-friendly. Government measures to promote the use of LPG over traditional fuels and the increased usage of gas in automobiles are expected to create lucrative growth prospects for key companies to maintain their market positions in the future years.
- Increasing car gas usage, as well as huge semi-urban and rural populations in Africa, Latin America, and Asia-Pacific, is some of the factors driving LPG demand. This product is used as cooking fuel by the indigenous population in these areas.

- In India, for example, LPG is used as cooking fuel by over 80% of all home households. Government schemes (such as the Pradhan Mantri Ujjwala Yojna) and initiatives such as streamlining subscription processes and payments, cylinder delivery, and cylinder subsidies to wean people off of hazardous cooking fuels like firewood and coal have resulted in increased adoption of the gas mix as a dome.
- In 2019, Asia Pacific accounted for a major portion of the market. The primary aspects driving regional market expansion have been population increase, abundant resource availability, and high energy needs, as well as easy affordability thanks to government discounts on LPG cylinders. Increased petrochemical capacity in India, China, India, Thailand, and South Korea helps to maintain this trend.

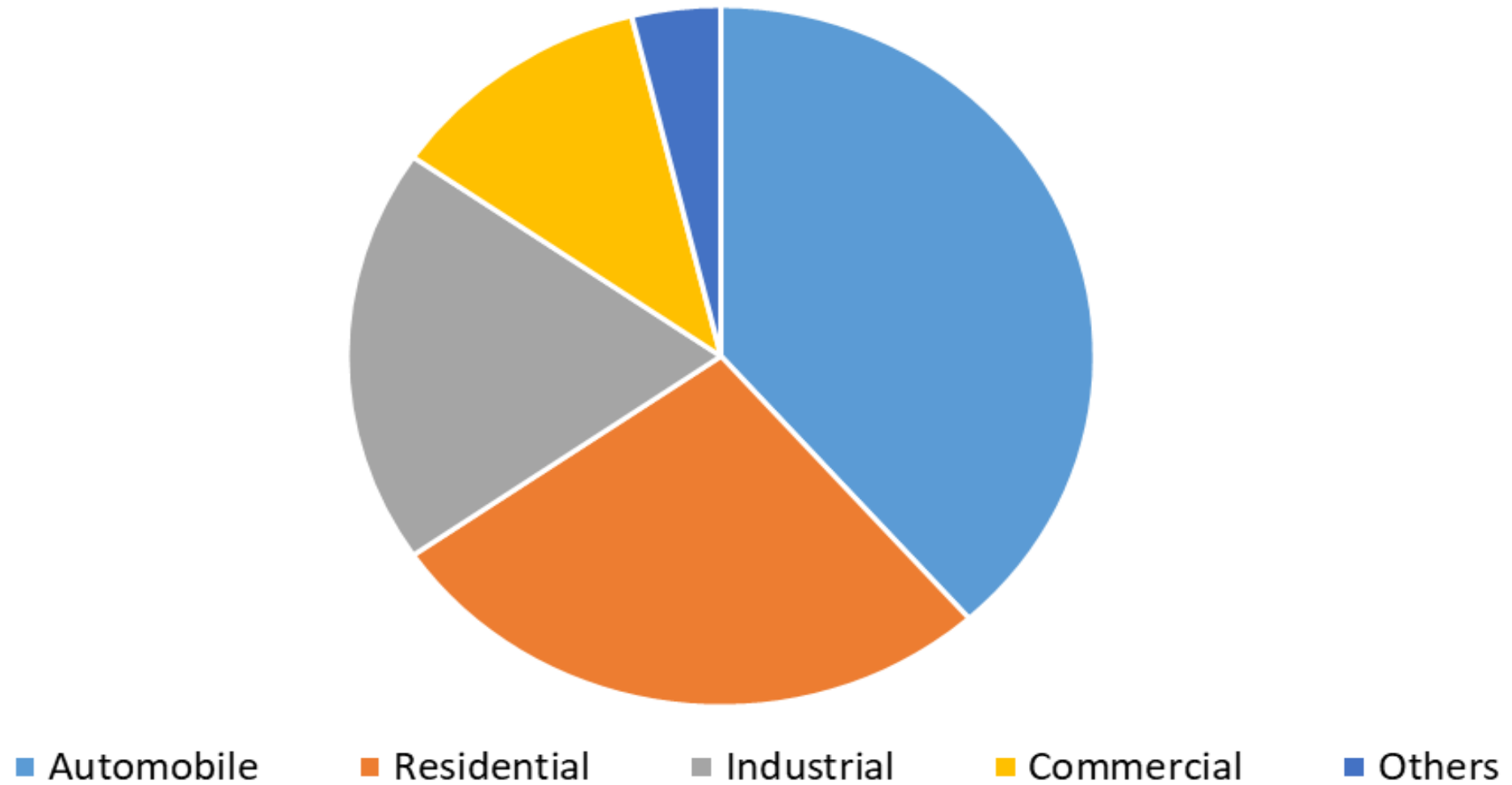
# World LPG Demand by Market Sector



- Res/Commercial
- Industrial
- Autogas
- Chemical
- PSD
- Refining
- Town gas
- others

Source: [maximizemarketresearch.com](https://www.maximizemarketresearch.com)

## Global LPG Market, by Application (%) in 2020



Source: [maximizemarketresearch.com](https://www.maximizemarketresearch.com)

# West Africa LPG Market Dynamics

- Utilization of LPG as household fuel has been expanding in several countries in West Africa since the early 1990s, but average per capita consumption in the region remains low by international standards.
- The most common household fuels in West Africa are wood and charcoal. Heavy use of these fuels is contributing to the rapid rate of deforestation that is occurring in the region. Deforestation is seen as a long-term environmental threat that can probably only be effectively combated by substitution of wood and charcoal fuels with alternate fuels such as LPG, natural gas, or petroleum products (such as kerosene).

- LPG is a particularly attractive alternative to wood and charcoal, since it is a clean, efficient fuel that is relatively easy to transport, store, and distribute. It produces no toxic fumes and is considered by most consumers, the domestic fuel of choice. LPG is more cost-effective than other traditional fuels since most of its energy is converted to heat, and it can be transported, stored, and utilised in a variety of applications, including cooking, heating, air conditioning, and transportation, as well as cigarette lighters and the Olympic torch.
- The recent expansion of the LPG industry in several countries has demonstrated the long-term potential for the region. LPG has already made important contributions to the environment and quality of life for the people in West Africa that are using this fuel in their households.

# Nigeria LPG Market Dynamics

- The Nigerian annual consumption of LPG has grown from 130,000 Metric Tonnes in 2011; 145,000 Metric Tonnes in 2012; 250,000 Metric Tonnes in 2013; 500,000 Metric Tonnes in 2016; 635,452.061 Metric Tonnes recorded in 2018; 840,594.37 Metric Tonnes in 2019 to more than 1,000,000 Metric Tonnes in 2020 (PPPRA) and now 1,300,000 Metric Tonnes with a growth rate of 25% and over 10m cylinders in circulation
- This consumption milestone in 2020 placed the country 1st in West Africa and one of the leading LPG consuming nations on the continent.
- Are we on track to meet the five million MT by 2022 target, set in the Nigeria Gas Policy (NGP) of 2017?

- The declaration of the Decade of Gas will it help? The culmination of the Decade of Gas with the National Gas Expansion Programme (NGEP) Autogas rollout, is expected to foster exponential growth within the industry as more and more Nigerians begin to embrace the utilisation of LPG/CNG as fuel for their automobiles
- Will the LPG market's growth be hampered by the rapid development of the renewable energy sector? LPG is a by-product of natural gas production and crude oil refining and so technically it is a fossil fuel. This, unfortunately, frequently puts LPG into the same category as other traditional fossil fuels such as diesel, kerosene and fuel oil

- Is the inconsistency of domestic LPG supplies an issue? April 2022, the Nigerian states with the highest average refilling prices for cooking gas (LPG) were Gombe, Bayelsa, and Adamawa. In Gombe, 5 kilograms of refilling reached 10.35 U.S. dollars (4.34 thousand Naira). On the other hand, states that reflected the lowest refilling prices for the same amount of refilling were Zamfara, Sokoto, and Yobe
- Is the combustible nature of LPG a key stumbling block for the market? it is kept in enormous pressurized cylindrical or spherical tanks. LPG's flammability adds to the expenses of storage, transportation, and distribution to end-users. Another aspect that has a negative impact on the market is the price volatility of crude oil feedstock, which has hampered market growth
- The summit should peruse these issues and proffer solutions