REVAMPING LPG UTILISATION IN NIGERIA

(A Strategy Paper by Ministerial Sub-Committee of LPG Producers)

1.0 Background

The Honourable Minister of Petroleum Resources had on 20th August 2009 inaugurated a Sub-Committee with a mandate to proffer solutions on how to revamp the utilization of LPG in Nigeria, identify means and ways of reducing LPG price and evaluate possible use of LPG in power generation and transportation in the long-run. The Sub-Committee consisted of Chief Executive Officers of the key producers of LPG in Nigeria, namely Nigeria LNG Limited (NLNG), Chevron Texaco, ExxonMobil and the GGM, LNG Division of NNPC (refinery producer).

At that meeting, the Minister charged the sub-committee with the following immediate tasks:

- Identify why LPG consumption remains low in Nigeria;
- Identify why LPG still remains expensive; and
- Proffer suggestions on what can be done to change this by relevant stakeholders

The Sub-Committee met and focused on the following matters:

2.0 What are the LPG Supply Bottlenecks in Nigeria?

The Committee identified the following bottlenecks as hindering growth in consumption of LPG in Nigeria:

- Unstable LPG supply until NLNG's intervention scheme commenced in December 2007.
- Inadequate and decaying (single jetty/storage in Apapa trucks, decaying Gas Plants and not enough Cylinders) downstream infrastructure with no new investments being made by stakeholders.
- Lack of Safety Awareness campaign (psychological barrier-fear of explosion) which had discouraged LPG utilization in most homes.
- Pricing, expensive relative to the cheap alternative to the cheap alternatives, subsidized Kerosene or firewood from the forest.

3.0 Why has LPG remained relatively expensive?

The committee identified the following as responsible for the high price of LPG in Nigeria:

- **Reliance on imports** - With no LPG production from local refineries which were planned to produce far more than the domestic consumption requirement, the market had to fall back on imports with volatile international prices and high freight cost which translated to high downstream retail price.
- **Single Jetty &Demurrage cost** - LPG vessels have to queue at the bottom of the pecking order behind white products at the only operational LPG jetty, the NOJ Jetty/PPMC storage at Apapa, Lagos incurring huge demurrage charges which are translated into high downstream retail price.
- **LPG is sold at international price** - Even when LPG is purchased from domestic producers; it is at the international market price of the product. Without a subsidy or a price moderating mechanism, domestic market price therefore fluctuates with movement in international prices.
- **Use of Floating Storage and Shuttle Vessels** - The current supply scheme implemented by NLNG relies on a Mother Vessel which loads from NLNG's Bonny plant and sails to Lagos waters from where Off-takers lift with a shuttle vessel. The reason for this is that only refrigerated vessels can load from the Bonny plant and these are normally large vessels which carry volumes larger than existing storage facilities. The Mother Vessel therefore acts as a floating storage facility for the scheme.

4.0 What has been done so far?

In December 2007, NLNG commenced a Supply Scheme (150,000mtpa), which effectively guaranteed the availability of the product in the domestic market. This has encouraged much interest and investment in the development of the needed downstream infrastructure.

In addition, MPN commenced sales of LPG (7000mtpm) to NIPCO for distribution into the domestic market, thus diversifying the domestic sources of the product. The committee has noted the following investments in downstream infrastructure worthy of mention:

- NIPCO storage facility of 4,000MT in Apapa which still rely on the NOJ facility in Apapa for discharge of LPG vessels.

- NAVGas facility (JV between Nidogas and Algasco) of 8000 MT storage capacity with an independent Jetty due for completion in Q4 2009);
- Cylinder imports by LeGlobal,Chimons and a host of other stakeholders. However, these cylinders remain expensive and out of reach of prospective LPG users.

The stability in supply created by the availability of supply from NLNG and MPN, the reactivation of some Gas Plants and the inflow of some Gas Plants and the inflow of some Cylinders has significantly reduced the retail price of the standard 12.5kg cylinder from where it was in December 2007 (=N=7,000/12.5Kg) to know about = N=2,000. However, there is still room for improvement once the associated freight and floating storage costs associated with the current scheme is eventually reduced or eliminated.

5.0 What can be done next?

To achieve sustained market growth/product penetration, the committee identified the following actions which will have to be implemented by relevant stakeholders:

Action Party	**Short Term**	**Long Term**
LPG Producers	• Dedication of specific volume of current LPG spec products by each producer for the domestic market to stimulate investment in downstream infrastructure. • Additional Contracts with Offtakers	Agree to make additional volumes available as market appetite grows subject to existing contractual commitments.

	(wholesale buyers) including PPMC by NLNG, MPN and Chevron to increase competition and market penetration.	
Downstream Players/Marketers	• Engage interested power producers who might want to use LPG as fuel for generation. • Use common and compatible shuttle vessel to lift products from all producers and share cost to reduce freight cost and improve retail pricing. • Buy trucks to move product downstream. • Import Cylinders and Burners for sale at flexible payment schemes. • Increase number of retail outlets for ease of product accessibility. • Safety Campaign through adverts in the media and educating the	• Privately funded Jetties, Storage Facilities and Gas Plants across the Country • Invest and take over from Government the Cylinder Revolving Scheme. • Establish Cylinder and other accessories Manufacturing Plants locally

	Retailers/end users on same.	
NNPC & Government	• Appoint an entity, to manage on a project basis, the effort to achieve a major increase in utilization of LPG in Nigeria. This should be a 2-3 year project with clear performance metrics. • Make Waziri Jetty in Lagos available for use by domestic LPG Lifters. • Waive V.A.T. on LPG sales by the domestic Producers, as V.A.T. is already waived by Government on imported LPG. • Establish a Revolving Cylinder Scheme using part of the Ecological Funds/subsidy on kerosene thus providing gas stoves/cylinders to the low income public at affordable price.	• Govt to fund the construction of an alternative Jetty/Storage Facility between Calabar and Warri as a matter of National Security/ Priority under Public Private Partnership Arrangement. • Improve Transport Infrastructure (Roads and Railways) nationwide for easy flow of products. • Sponsor/ Initiate appropriate Legislation to guide the LPG industry to enforce compliance with regulatory provisions and create standardization. • Financing Scheme for Retailers under the NAPRP programme with Cylinders as warranty to be offset by their

	• DPR and SON to fast track licensing/permitting processes for downstream players. • Deregulate Kerosene sale by gradual withdrawal of subsidy on Kerosene and Re-allocate part of the subsidy to LPG (a model currently being successfully implemented in Indonesia) • Public Safety Awareness campaign by Federal Ministry of Environment in conjunction with NTA and other media outlets. • Reactivate Jetties/Storages at the Warri and Port Harcourt Refineries for direct trucking.	margin. • Privatize through BPE all the PPMC inland LPG Storages facilities.

Sub-Committee Members:

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- Mohammed Buhari,**GGM LNGDiv**, **NNPC**---

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