

**FSDH MERCHANT BANK LIMITED (FSDH)
&
MAJOR OIL MARKETERS ASSOCIATION OF NIGERIA (MOMAN)**

**Nigerian Downstream Petroleum Industry Report: Opportunities in Crisis
May 2020**



Table of Contents

Executive Summary	5
1.0 Global Economic Developments: Impacts on Crude Oil Market	6
2.1 Real Gross Domestic Product (GDP)	8
2.2 FX, Inflation, Interest Rates and Public Debt	9
2.3 The FGN Medium-Term Expenditure 2020 - 2022	11
3.0 Market Size	12
4.0 Opportunities in Regional Markets	13
5.0 Downstream Oil and Gas Regulators	14
5.1 Regulatory Framework	14
5.1.1 The Ministry of Petroleum Resources (MoPR)	14
5.1.2 The Department of Petroleum Resources (DPR)	14
5.1.3 Nigerian National Petroleum Corporation (NNPC)	15
5.1.4 Petroleum Products Pricing and Regulatory Agency (PPPRA)	17
5.1.5 Other Government Agencies and Funds in the Downstream Oil and Gas Sector	18
5.2 Pricing System	18
5.3 Standards and Controls	20
5.3.1 Guidelines for the Importation of Petroleum Products into Nigeria	20
5.3.2 Guidelines for Approval to Construct and Operate Petroleum Products Filling Station	22
5.3.3 Procedure Guide for the Determination of the Quantity and Quality of Petroleum and Petroleum Products in Nigeria (Addendum)	22
5.3.4 General Requirements and Guidance Information for the Establishment of Modular Refineries/Hydrocarbon Processing Plants (Petroleum Refinery and Petrochemicals) in Nigeria	26
5.3.5 Safety Guidelines	26
5.4 Barriers to Entry/Exit	27
6.0 Corporate Governance	28
6.1 Petroleum Industry Governance Bill (PIGB) as Passed By the 8 th Assembly	29
6.1.1 The Ministry of Petroleum Resources (MoPR)	30
6.1.2 The National Petroleum Regulatory Commission (NPRC)	30
6.1.3 The Nigeria Petroleum Assets Management Company (NAPAMC)	30
6.1.4 The Nigerian Petroleum Company (NPC)	31
6.1.5 Ministry of Petroleum Incorporated (MOPI)	31
6.1.6 The Petroleum Equalisation Fund (PEF)	31
7.0 Global Demand and Supply Analysis, Market Size in Nigeria	32

7.1 Global Oil Demand Trend.....	32
7.2 Demand for Oil in Nigeria	33
7.4 Demand Forecast (2020 – 2024)	35
7.4 Supply of Petroleum Products	43
8.1 Filling Stations (Outlets)	50
9.0 Jetties, Depots and Transportation	53
9.1 Jetty Operations in Nigeria.....	53
9.1.1 Challenges and Risks Facing Jetties.....	54
9.1.2 Future Outlook for Jetties	55
9.2 Depots.....	57
9.2.1 Depot Network Nationwide.....	57
9.2.3 Storage Distribution by Region	58
9.3 Transportation.....	59
9.3.1 Transportation of Petroleum Products.....	59
9.3.2 Pipelines	61
9.3.3 Some Major Stakeholders	64
10.0 Refineries	67
10.1 Port Harcourt Refinery	68
10.2 Kaduna Refinery	69
10.3 Warri Refinery	70
10.4 Niger Delta Petroleum Resources (NDPR)	70
10.5 Modular Refineries.....	72
11.0 Dangote Refinery.....	74
9.1 Benefits of the Dangote Refinery.....	75
12.0 Recent Changes in the Industry.....	76
12.1 Selected Oil Marketers	78
12.1.1 A.A. Rano Nigeria Limited.....	78
12.1.2 NIPCO Plc	78
12.1.3 A.Y.M Shafa.....	79
12.1.4 Prudent Energy & Services Limited	80
12.1.5 Heyden Petroleum Limited (HPL).....	80
12.1.6 Matrix Energy Limited	81
12.1.7 Masters Energy Oil and Gas Limited	82
12.1.8 Bovas & Company Limited.....	82

12.1.9 Acorn Petroleum Plc	83
12.1.10 NorthWest Petroleum & Gas Co. Limited:	83
12.1.11 Techno Oil Limited:	84
12.1.12 ENYO Retail and Supply Limited:.....	85
12.1.13 Petrocam Gas Trading Ltd:	86
12.1.14 Sahara Energy Resource Limited:	86
12.2 Increase in MOMAN Membership	88
13.0 Financial Analysis	89
14.0 Recommendations.....	92
Appendix	94

Executive Summary

The COVID-19 pandemic has caused major structural disruption in the global economy and affected all aspects of human life. The worldwide lockdowns to contain the spread of the disease and the accompanying weak global economic outlook have resulted in a massive drop in the demand for crude oil. This has triggered a collapse in the crude oil price from the 2020 year high of about US\$72 per barrel to less than US\$25. Despite the measures put in place by OPEC to cut production, it does not appear that the excess supply in the market will disappear soon. The implication of this is that low prices may remain longer than expected and Nigeria, which depends heavily on crude oil as a major source of revenue and foreign exchange, will have to live with the attendant consequences. Already, the FGN has reviewed its 2020 approved revenue budget downward – increasing the fiscal deficit to over N5trillion from about N2trillion initially signed to law.

In spite of the challenges ahead for Nigeria, there are unique opportunities for the government to implement structural policies and enact enabling laws that will reset the course of the economy. If the country is to overcome the challenges ahead, it is clear that there must be a fundamental shift from policies applicable before the COVID-19 outbreak to more appropriately responsive measures. There are huge long-term private capital opportunities, both within and outside Nigeria, looking for an enabling environment with stable and clear policies to inject the capital. Nigeria can be that destination. All stakeholders in Project Nigeria must therefore work together to unlock capital that will accelerate investments in the Nigerian economy to reduce imports of goods that can be produced locally; increase exports of goods that Nigeria is naturally endowed with, after adding value to them; create jobs to reduce the high unemployment rate in the country; increase tax revenue for government; and quickly tap into the potential growth in trade within the African continent.

Our analysis shows that private sector investments, local and international, can transform the downstream Oil and Gas industry from a consumer of foreign exchange to a supplier of foreign exchange. A strategic goal is to position the sector as a net exporter of refined petroleum products, establishing Nigeria as the refining hub of West and Central Africa. We believe the sector can be a supplier of at least 20% of the total foreign exchange earnings of the country in the next five years. It can also be tasked with the responsibility to generate at least 15%-20% of the total new jobs in Nigeria within the next five years. By these, the industry will help change the narrative of a nation with a high proportion of its citizens living in extreme poverty.

This executive summary contains a few of the recommendations made in this report. It encourages the urgent passage into law of the PIB and the PIGB and recommends that special measures that will encourage investments in refining business in Nigeria be implemented. It also encourages the FGN to sell the government owned refineries at their current states and take the bold decision to adopt a price deregulation instead of the current price modulation for PMS, and allow competition, which will drive efficiency in the industry to set in. Finally, it advises that prices be monitored against anticompetitive and antitrust abuses.

1.0 Global Economic Developments: Impacts on Crude Oil Market

The COVID-19 Pandemic has caused major structural disruption in the global economy and has affected all aspects of human lives.

The COVID-19 Pandemic has caused major structural disruption in the global economy and affected all aspects of human life. Businesses have been adversely impacted as the widespread lockdowns to contain the spread of the disease have crippled business activity, both in advanced and developing countries. One of the early implications of this is a slump in the demand for crude oil which has caused a massive inventory build-up, the type of which has not been seen in several decades. Global storage facilities are filled up and many buyers have rejected crude oil delivery for lack of space to store the product. This has led to a plunge in the price of crude oil below even the levels seen in the global financial meltdown of 2007-2008. The recent global developments and the short-term outlook of the global economy have substantial economic and financial implications for all the economic agents (government, firms and individuals) in the country.

IMF added that the global economy will lose about US\$9trillion between 2020 and 2021 on account of the COVID-19.

The International Monetary Fund (IMF) declared in its April 2020 World Economic Outlook (WEO) that all the major economies in the world except China and India will contract in 2020 in a magnitude last seen during the Great Depression of the 1930s. It added that the global economy will lose about US\$9trillion between 2020 and 2021 on account of the COVID-19, and projects a global economic contraction of 3% in 2020, down from a growth of 2.9% recorded in 2019.

Weak demand for crude oil has led to a plunge in the price below the levels seen in the global financial meltdown of 2007-2008.

The short-term economic outlook and its associated weak crude oil demand have a lot of revenue and foreign exchange implications for all crude oil exporting countries, like Nigeria. In the short-term, we expect a massive drop in government revenue as well as significant drop in the foreign exchange inflows into Nigeria, both from crude oil and non-crude oil. Historically, the developments in the crude oil market have direct impacts on the non-oil related inflows. This is because crude oil exports account for over 91% of the total exports in Nigeria. Therefore a drop in crude oil price usually signals a potential currency devaluation, which is a major risk for foreign investors, particularly, Foreign Portfolio Investors (FPI).

The short-term economic outlook and its associated weak crude oil demand has a lot of revenue and foreign exchange implications for all crude oil exporting countries, like Nigeria.

The current crisis presents unique opportunity for Nigeria to implement policies that will unlock funds for the FGN, and encourage private sector operators to take the lead in running critical businesses in the country.

The gloomy outlook of the global economy and its implications for the Nigerian economy present a unique opportunity for Nigeria to implement policies that will unlock funds for the Federal Government of Nigeria (FGN), and encourage private sector operators to take the lead in running critical businesses in the country. It is a crucial time to deregulate the downstream sector, sign all the pending Bills in the upstream that will catalyse investments and support operators to grow and expand. The government cannot afford to continue to deploy its limited resources on projects that the private sector can execute efficiently. **The role of the government going forward should therefore be to provide an enabling environment to encourage private businesses while the government earns tax revenue from profit of the said businesses. This is the fastest and most efficient way to overcome the challenges that are ahead.**

Table 1: Global Economic Growth Rate (Actual vs. Forecast)					
	2019	2020F	2021F	Difference from January 2020 WEO Update	
				2020F	2021F
World	2.9%	-3.0%	5.8%	-6.3%	2.4%
Advanced Economies	1.7%	-6.1%	4.5%	-7.7%	2.9%
USA	2.3%	-5.9%	4.7%	-7.9%	3.0%
Japan	0.7%	-5.2%	3.0%	-5.9%	2.5%
Euro-Area	1.2%	-7.5%	4.7%	-8.8%	3.3%
Emerging Market and Developing Economies	3.7%	-1.0%	6.6%	-5.4%	2.0%
China	6.1%	1.2%	9.2%	-4.8%	3.4%
India	4.2%	1.9%	7.4%	-3.9%	0.9%
United Kingdom	1.4%	-6.5%	4.0%	-7.9%	2.5%
Nigeria	2.2%	-3.4%	2.4%	-5.9%	-0.1%
South Africa	0.2%	-5.8%	4.0%	-6.6%	3.0%

Source: IMF, World Economic Outlook (WEO) April 2020

It is a crucial time to deregulate the downstream sector, sign all the pending Bills in the upstream that that will catalyse investments and support operators to grow and expand.

2.0 The Nigerian Economy

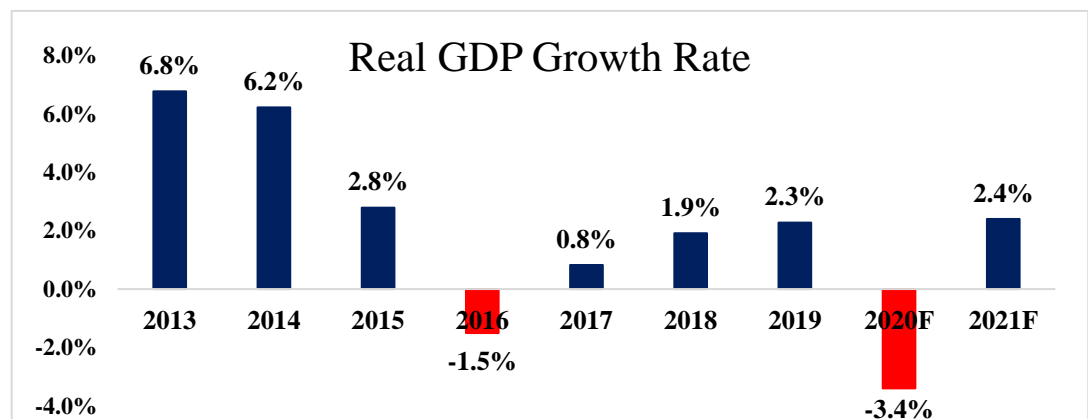
2.1 Real Gross Domestic Product (GDP)

In the last five years, the economy has not expanded up to the population growth rate – resulting in high level of poverty in the country.

The global pandemic met the Nigerian economy while it was still struggling to recover from the recession that hit the economy in 2016. In the last five years, the economy has not expanded up to the population growth rate, resulting in the high level of poverty in the country. Although successive administrations had implemented several measures to lift the citizens out of poverty, in 2019, the World Bank estimated that about 50.1% of the Nigerians were still living in extreme poverty (anyone living below US\$1.90 per day is said to be living in extreme poverty). This is a slight improvement over the 53.5% recorded in 2009.

The World Bank also stated that the projected poverty trend has loosely followed macroeconomic developments in recent years. It added that since the sharp decline in oil prices in late 2014 and the subsequent slowdown of the economy, Nigeria has struggled to reinvigorate broad-based growth. Hence, there is a need for the FGN to partner with the private sector to drive investments in the growth enhancing and labour intensive sectors of the Nigerian economy. Building physical and human capital will increase the productivity of the country and will reduce extreme poverty. Additionally, government investments are required in transport network, education, health and security. These measures will increase revenue for the government in the long run, create jobs for Nigerians, as well as reduce poverty and social unrest. We therefore believe the FGN should take advantage of the current situation to implement policies that will reset the Nigerian economy on a sustainable inclusive growth path.

The FGN should take advantage of the current situation to implement policies that will reset the Nigerian economy on a sustainable inclusive growth path.



We expect a further depreciation in the value of the Naira towards N420/US\$ in 2020, on account of a drop in the price of crude oil and the expected slowdown in the foreign exchange inflows into the country.

2.2 FX, Inflation, Interest Rates and Public Debt

We expect a further depreciation in the value of the Naira towards N420/US\$ in 2020, on account of a drop in the price of crude oil and the expected slowdown in the foreign exchange inflows into the country. Although the CBN desires to maintain stability in the exchange, it may be constrained by the continued decline in the value of the external reserves. A combination of supply shock, adjustment in the value of the currency and increase in the Value Added Tax (VAT) will put upward pressure on the inflation rate in the year 2020. Interest rate in the market may also increase in response to rising inflation, increase in demand for loanable funds and the rising risk in the market caused by the COVID-19 pandemic. The aforementioned means that both the landing cost of Premium Motor Spirit (PMS) and trading may increase in the short-term. Therefore, operations will seek an avenue to drive efficiency in the market in order to be ahead of the pack.

Interest rate in the market may increase also increase in response to rising inflation, increase in demand for loanable fund and the rising risk in the market caused by the COVID-19 pandemic.

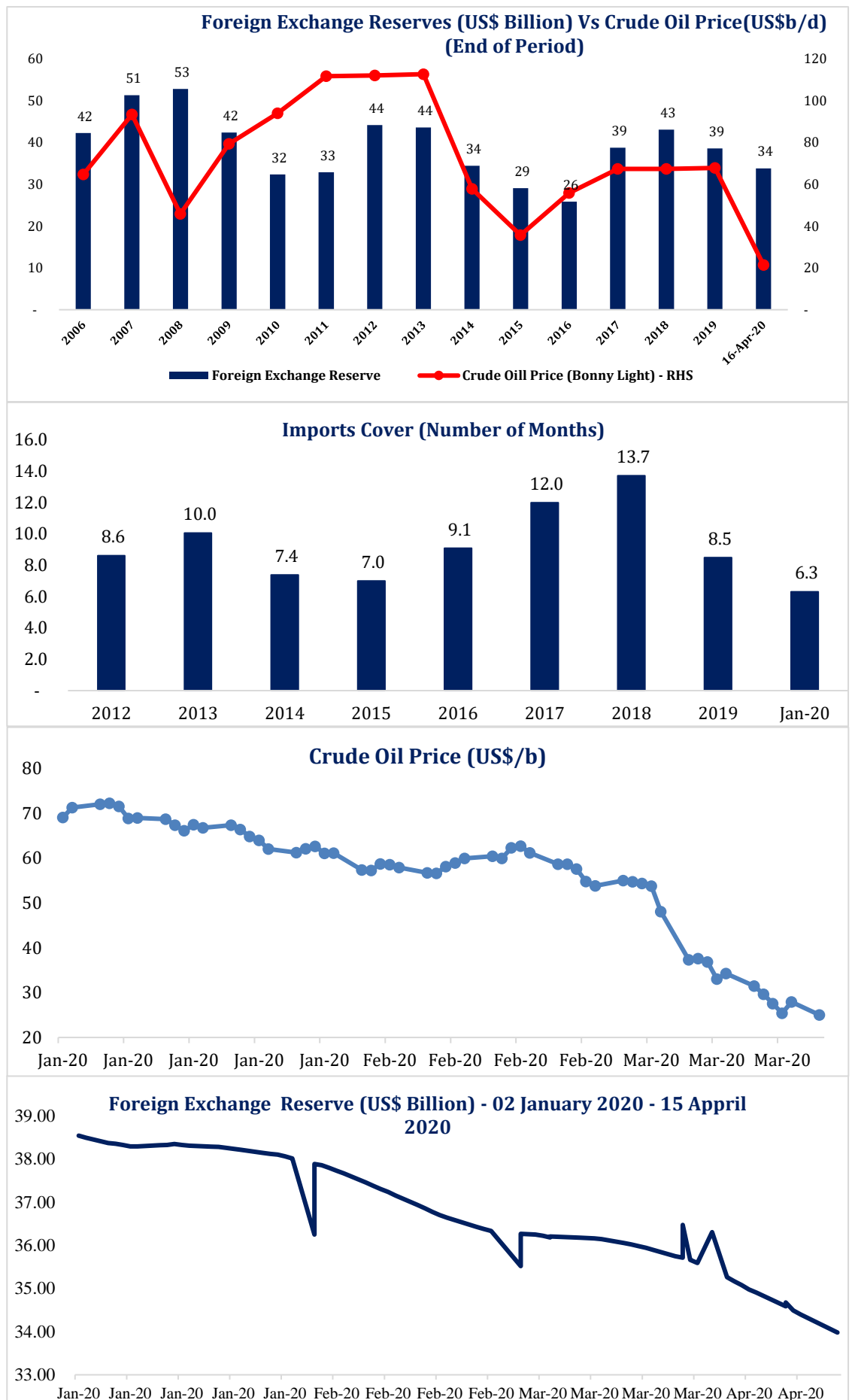
We also expect the Nigerian public debt to increase substantially in the next three years as a result of the cost of fighting COVID-19, the drop in revenue, and the need to borrow to build infrastructure in the country. The interest expenses may also increase because of the anticipated rise in debt and interest rate. It was therefore smart thinking by the FGN to remove the subsidy on the PMS and allow the oil marketers to import products, while operators continue to build local refining capacity to reduce products importation. It is also imperative for the government to sell the FGN-owned refineries at the current state, rather than expending further on them by way of turnaround maintenance.

It is also very imperative for the FGN to sell the FGN owned refineries at the current state rather than spending money on them by a way of turnaround maintenance.

Table 2: Nigerian Public Debt - N'bn

	Total Debt	Domestic Debt	Foreign Debt	Foreign/Total Debt	Debt to GDP
2016A	17,360	13,881	3,479	20.04%	16.92%
2017A	21,726	15,938	5,788	26.64%	18.91%
2018A	24,387	16,628	7,759	31.82%	18.89%
2019A	27,401	18,379	9,022	32.93%	18.81%
2020F	33,601	22,379	11,222	33.40%	22.29%
2021F	37,860	24,393	13,467	35.57%	22.33%
2022F	41,158	26,345	14,813.60	35.99%	21.87%

Sources: DMO and FSDH Merchant Bank Ltd Analysis A: Actual, E: Estimate and F: Forecast.



2.3 The FGN Medium-Term Expenditure 2020 - 2022

As at the time this report was written, the FGN had revised the crude oil price for 2020 Budget down to US\$30/b from US\$57/b, and crude oil production to 1.87bmbp from 2.18mbp. These adjustments are in line with the recent developments in the crude oil market. Consequently, the expected fiscal deficit that the FGN will run in 2020 has increased from N2.18trillion to over N5trillion. Meanwhile, the current crude oil price is lower than the benchmarked US\$30b. This also underscores the need for the FGN to implement policies that will reset the economy on a path of sustainable growth and encourage the private sector to take the lead. This is not the time for the FGN to risk funds on projects that may not yield positive outcomes, but it must instead carefully select those that will improve the welfare of Nigerians. Education, security, efficient transport systems, healthcare, and collaboration between regulators and private operators, are therefore important under the current situation.

This is not the time for the FGN to risk funds on projects that may not yield positive outcomes, but it must instead carefully select those that will improve the welfare of Nigerians.

Table 3: FGN Medium-Term Expenditure Framework 2020 - 2022					
Indicators	2018A	2019B	2020P	2021P	2022P
Crude Oil Production (mb/d)	1.93	2.3	2.18	2.22	2.36
Crude Oil Price Benchmark (US\$/pb)	71.3	60	57	55	55
Exchange Rate (N/US\$)	305.95	305	305	305	305
Average Inflation Rate	11.44%	9.98%	10.81%	10.52%	10.79%
GDP Growth Rate	1.93%	3.01%	2.93%	3.35%	3.85%
FGN Revenue (N' trn)	3.96	7.59	8.42	7.94	8.74
FGN Expenditure (N'trn)	7.46	10.07	10.59	10.20	10.51
Fiscal Deficit (N'trn)	3.50	2.47	2.18	2.25	1.76
Fiscal Deficit to GDP	2.73%	1.77%	1.52%	1.41%	0.98%
Debt Service to Revenue	51%	28%	29%	34%	34%
Ratio of Deficit to FGN Revenue	88%	33%	26%	28%	20%

Source: Budget Office of the Federation (BOF) A: Actual, B: Budget, P: Projected

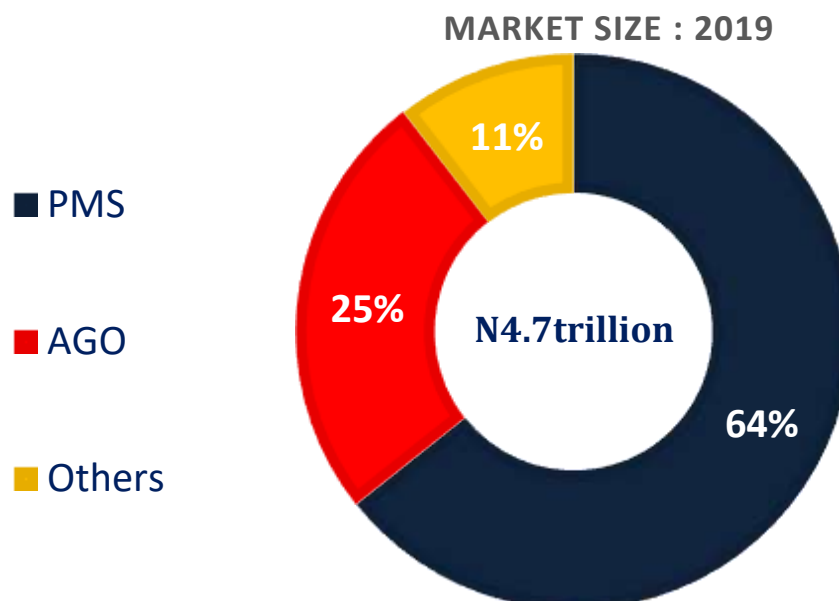
The market size of the major petroleum marketing products in Nigeria is estimated at N4.7trillion.

3.0 Market Size

Our analysis shows that, based on the total products consumed in 2019 and their average prices for the period, the market size of the major petroleum marketing products in Nigeria is estimated at N4.7trillion. The major products traded and consumed include: Premium Motor Spirit (PMS), popularly known as petrol; Automotive Gas Oil (AGO), also known as (Diesel); Low Pour Fuel Oil (LPFO); Aviation Turbine Kerosene (ATK); Household Kerosene (HHK) and Base Oil (Lubricating Greases, Motor Oil). PMS accounts for 64% of the total market size, AGO accounts for 25%, while others account for 11%.

Although this market size may shrink slightly in 2020 because of low prices and weak demand occasioned by unfavourable economic development, it is expected that with appropriate policies to stimulate investments in the different Oil and Gas value chains in Nigeria, operators may explore other markets outside the country. In particular, operators could explore trade opportunities in the neighbouring countries and that which the Economic Community of West African States (ECOWAS) and African Continental Free Trade Agreement (AfCFTA) present. These opportunities will position the industry to expand job creation, increase tax revenue for the Government and increase return on equity (ROE).

Operators could explore trade opportunities in the neighbouring countries and that which the ECOWAS and AfCFTA) present.



Petrol price in Nigeria is the cheapest among some neighbouring African countries, and that enables cross-border product diversion.

The FGN must quickly develop policies that will position the private sector operators to take full advantage of the potential benefits of the economic integration.

4.0 Opportunities in Regional Markets

Petrol price in Nigeria is the cheapest among some neighbouring African countries, and that enables cross-border product diversion. But under a deregulated regime, oil-marketing companies can leverage on this price differentiation to legitimately expand local market to these West African and other African neighbouring countries. Most of these countries do not have crude oil and refineries; therefore, they would continue to depend on external markets for the supply of petroleum products. With the abundant crude oil deposits in Nigeria, there is a need to pass appropriate legislations that will encourage the growth of refinery businesses in Nigeria to explore these markets.

The implementation of the African Continental Free Trade Area (AfCFTA) treaty will start soon. One of the major benefits of the AfCFTA, just like the Economic Community of West African States (ECOWAS), is an opportunity for member countries to tap into the opportunities in these regional markets. Countries that have comparative advantage in the production of certain goods or service that are needed in other countries will benefit immensely from the trade agreement. Therefore, the FGN must quickly develop policies that will position the private sector operators to take full advantage of the potential benefits of the economic integration. Table 4 below shows the economic potentials of some the selected African countries.

	Petrol Price Naira Equivalent/Litre	Petrol Price (US\$) - Litre	Population (Million)	GDP (US\$' Billion)	Per Capita Income (US\$)
Nigeria	124	0.34	200.00	410.00	2,050
Sierra Leone	262	0.72	7.80	4.00	513
Liberia	272	0.75	4.96	3.00	605
Benin	301	0.83	11.88	11.00	926
Togo	305	0.84	8.19	5.00	611
Chad	312	0.86	15.69	12.00	765
Ghana	327	0.90	30.28	66.00	2,180
Cape Verde	334	0.92	0.55	2.00	3,636
Guinea	341	0.94	12.22	11.00	900
Ivory Coast	356	0.98	25.80	43.00	1,667
Gabon	363	1.00	2.13	16.00	7,512
Cameroon	378	1.04	24.35	38.00	1,561
Burkina Faso	385	1.06	20.87	14.00	671
Mali	429	1.18	19.68	17.00	864
Senegal	465	1.28	16.20	24.00	1,481

Source: Countryeconomy.com

5.0 Downstream Oil and Gas Regulators

5.1 Regulatory Framework

The Nigerian downstream Oil and Gas industry is highly controlled and tightly regulated by three key agencies. These organisations fulfil a number of functions on behalf of the country. At the moment, the main regulators in the industry are: The Ministry of Petroleum Resources (MoPR), Petroleum Products Pricing and Regulatory Agency (PPPRA) and the Department of Petroleum Resources (DPR). The Nigerian National Petroleum Corporation (NNPC) is a government agency acting as an operator. Table 5 below shows the current regulatory framework in the industry.

The NNPC is a government agency acting as an operator.

Table 5: Current Regulatory Framework	
Function	Organisation Responsible
Policy	The Ministry of Petroleum Resources (MoPR)
Licensing /Permits	The Department of Petroleum Resources (DPR)
Technical Regulator	The Department of Petroleum Resources (DPR)
Sourcing /Distribution of Petroleum Products	Nigerian National Petroleum Corporation (NNPC) Via Petroleum Products Marketing Company
Regulation of the supply and distribution of petroleum products (commercial regulator)	Petroleum Products Pricing and Regulatory Agency (PPPRA)
Pricing	Petroleum Products Pricing and Regulatory Agency (PPPRA)
Sources: Various websites and FSDH Merchant Bank Analysis	

Details of the roles of each regulatory body are discussed below:

5.1.1 The Ministry of Petroleum Resources (MoPR)

MoPR is responsible for the articulation, implementation and regulation of policies in the Oil and Gas sector. Additionally, it performs a supervisory role over the operators and stakeholders in the industry to ensure compliance with all laws and regulations in the Oil and Gas sector.

5.1.2 The Department of Petroleum Resources (DPR)

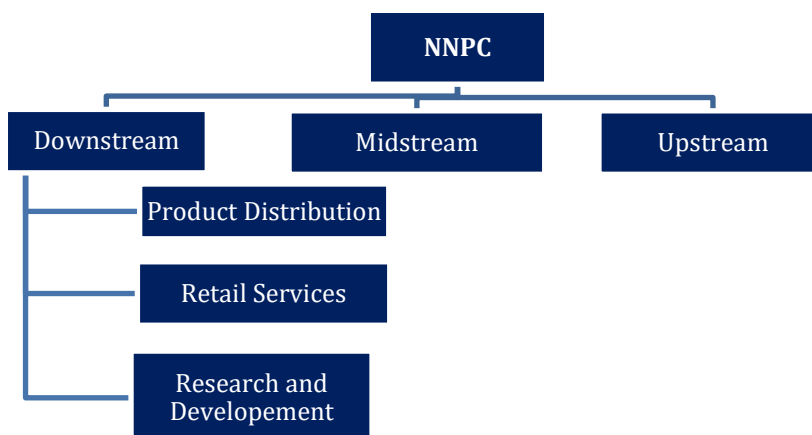
The DPR focuses on the supervision, monitoring and enforcing of Oil and Gas operations within the country. The role of the DPR in the downstream industry includes:

- Issuing approvals and licences for Refineries, Petrochemicals, Fertiliser Plants, Jetties, Depots, Lube Blending and Retail Outlets
- Ensuring prompt nomination of crude, condensate & NGL export vessels and ensuring integrity of downstream Oil and Gas facilities and pipeline systems
- Ensuring measurement integrity at custody transfer points
- Issuing import permits and clearance for petroleum products
- Issuing export permits for crude oil and petroleum products
- Determining the quality of imported petroleum products to ensure they meet established standards and implementing government policies on Downstream Oil and Gas matters.

5.1.3 Nigerian National Petroleum Corporation (NNPC)

The NNPC is a government agency that acts as an operator involved in exploration and operational activities of oil minerals, including refining, petrochemicals and products transportation, as well as the marketing of petroleum products. It is regulated by the Department of Petroleum Resources (DPR), a department within the Ministry of Petroleum Resources (MoPR). The agency pioneered the construction of four oil refineries each located in Warri and Kaduna, with two being in Port Harcourt. It operates on three fronts, namely: Upstream Activities, Midstream Activities and Downstream Activities. For the purpose of this report, we shall limit ourselves to the Downstream Activities. The NNPC Downstream activities are further broken down into a number of focused departments, which deal with Retail Services, Product Distribution, and Research and Development.

The NNPC pioneered the construction of four oil refineries each located in Warri and Kaduna, with two being in Port Harcourt.



5.1.3.1 Retail Services Unit

NNPC Retail operations commenced in August 2002 when the first retail outlet was commissioned in Lagos to market petroleum products to the public. NNPC's entry into products retailing was initially a strategic move intended to provide the corporation with:

- A vehicle for intervention in the market during periods of emergency and avoidable supply disruptions;
- A benchmark for key players in the distribution chain to ensure safe, orderly and profitable retailing of products in the country;
- A vehicle to achieve NNPC's world-class vision by integrating its upstream and downstream businesses in a similar manner to other national and international oil companies.

NNPC's entry into products retailing was a strategic move to intervene in the market and provide benchmark for key players in the industry.

5.1.3.2 Product Distribution Unit

The Petroleum Products Marketing Company (PPMC) is the product distribution arm of NNPC. PPMC is directly responsible for the sourcing and distribution of petroleum products to all parts of the country, at a uniform price.

Mode of Operation

- PPMC receives crude oil from the NNPC unit called the National Petroleum Investments Management Services (NAPIMS)
- PPMC then supplies the crude oil to NNPC local refineries. However, petroleum products are imported to supplement local production when the local refineries are unable to process enough for the country's needs.

PPMC receives petroleum products that are either imported or refined locally through import jetties and pipelines. It distributes the products through pipelines to strategically located depots for onward transportation to the retail outlets. There is also provision for using Nigeria's rail system to move petroleum products from some of the PPMC depots, though this is hindered by infrastructural challenges.

There is provision for using Nigeria's rail system to move petroleum products from some of the PPMC depots, but this is hindered because of lack of infrastructure.

5.1.3.2.1: The Nigerian Pipelines and Storage Company Limited

The Nigerian Pipelines and Storage Company Limited (NPSC) ensures the effective and efficient delivery of petroleum products across Nigeria. Refer to section 9.3.2 on page 61 for details.

5.1.3.3 Research and Development Unit

Established to solve the operational and technical problems of the Oil and Gas industry through Research and Development.

5.1.4 Petroleum Products Pricing and Regulatory Agency (PPPRA)

The PPPRA is responsible for setting the benchmark prices of petroleum products, as well as regulating their supply and distribution. Its other roles and functions include:

- Creating an information databank through liaison with all relevant agencies to facilitate informed and realistic decision-making on pricing policies
- Overseeing the implementation of the relevant recommendations and programmes of the Federal Government, as contained in the White Paper of the Special Committee on the Review of the Petroleum Products Supply and Distribution, with emphasis on the phasing of specific proposals
- Moderating volatility in petroleum products prices, while ensuring reasonable returns to operators
- Establishing parameters and codes of conduct for all operators in the downstream petroleum sector
- Maintaining constant surveillance over all key indices relevant to pricing policy, and periodically approving benchmark prices for all petroleum products
- Identifying macroeconomic factors with relation to prices of petroleum products, and advising the Federal Government on appropriate strategies for dealing with them
- Preventing collusion and restrictive trade practices harmful to the sector

With the removal of subsidy and under the deregulated regime, PEF may no longer be relevant, and there will be a need to merge it with other agencies for efficiency.

It is our hope that going forward, crude oil prices will be determined by two important variables: crude oil price at the international market and the exchange rate.

As local refining capacity improves prices will be less responsive to the movements in the exchange rate.

- Creating firm linkages with key segments of the Nigerian society, and ensuring that its decisions enjoy the widest possible understanding and support
- Exercising a mediatory role as necessary for all stakeholders in the sector.

5.1.5 Other Government Agencies and Funds in the Downstream Oil and Gas Sector

5.1.5.1 Petroleum Equalization Fund (PEF)

The PEF oversees petrol price-bridging activities and ensures that the Uniform Pricing Mechanism works effectively throughout the country. It applies the laws of the Federal Republic of Nigeria (FGN) as they affect the Uniform Pricing System. With the removal of subsidy and under the deregulated regime, this agency may no longer be relevant, and there will be a need to merge it with other agencies for efficiency.

5.1.5.2 National Petroleum Investment Management Services (NAPIMS)

NAPIMS manages the Federal Government's interests in the Oil and Gas industry. It is neither a regulator nor an operator, but aids the management of Nigerian Government assets, spearheading new technology application and project management activities in the Oil and Gas industry.

5.2 Pricing System

Prior to April 2020, the downstream sector was partially deregulated and had no price controls on most products, with the exception of PMS. However following a drop in the crude oil revenue and the associated drop in government revenue, the NNPC Group Managing Director announced the permanent removal of the subsidy on PMS. Honourable Minister of State, Petroleum Resources also announced the deregulation of the downstream petroleum sector on the 19th March 2020. However, there will still be some level of price controls for PMS as the government will still determine PMS prices. It is our hope that going forward product prices will be determined by two important variables: crude oil price at the international market and the exchange rate. However, as local refining capacity improves, prices will be less responsive to the movements in the exchange rate. One of the roles of the PPPRA then, must be to ensure that there is no price exploitation in the market.

One of the roles of the PPPRA then, must be to ensure that there is no price exploitation in the market.

As the importation of products is now open to oil marketing companies and the monopoly of NNPC regarding the importation of PMS has been removed, we expect operators would take advantage of this. Under the current regime, efficient companies will benefit and the companies that will win will be companies that can handle their logistics, source foreign exchange and products cheap, have financial capabilities and have a large storage distribution network to benefit from economies of scale. The competition that will result may force some companies to adopt different strategies for their operations or concentrate in some regions or segments of the market. Ultimately, petroleum consumers will benefit, deriving the advantages of competition among marketers and enjoy product availability.

Under a price-deregulated regime, petroleum consumers will benefit, deriving the advantages of competition among marketers and enjoy product availability.

Table 6: Regulated Pricing System for Major Products	
Products	Present
Premium Motor Spirit (PMS)	Partly
Automotive Gas Oil (AGO/Diesel)	No
Low Pour Fuel Oil (LPFO)	No
Aviation Turbine Kerosene (ATK)	No
Dual-Purpose Kerosene (DPK)/ Household Kerosene (HHK)	No
Base Oil (Lubricating Greases, Motor Oil)	No

We envisage a situation where operators will engage in some forms of strategic campaigns, informing the members of the public about their compliance with health and safety standards in the industry as a way to gain competitive advantage.

5.3 Standards and Controls

The downstream sector is governed by several guidelines and acts for the relevant parts of it. However, several stakeholders have called for more measures to ensure complete compliance, especially regarding health and safety regulations. Under a deregulated regime, government agencies will need to focus on enforcing the standards and controls in the industry and operators would invest more resources to fully comply with the various standards and controls. We are of the view that the competition that will be associated with the deregulated regime will also force operators to comply with some standards and regulations in order to win and retain customers. We envisage a situation where operators will engage in some forms of strategic campaigns, informing the members of the public about their compliance with health and safety standards in the industry as a way to gain competitive advantage. As COVID-19 is forcing businesses to adopt more technology than before, it is also imperative for regulators and operators to invest in appropriate technology to monitor and enforce industry controls and safety measures.

5.3.1 Guidelines for the Importation of Petroleum Products into Nigeria

We have outlined here some of the key guidelines that provide the standards and controls that govern the industry:

- All companies must be duly registered under the Corporate Affairs Commission (CAC) as providers of goods and services in the downstream sector of the Nigerian Oil and Gas Industry.
- Such companies are eligible to apply for Import Permit of Petroleum Products, subject to having access to appropriate storage facilities, which could be owned or leased from third parties.
- Import Permit is valid for 90 days and each import requires a permit.
- All imported Petroleum Products must meet the National Quality Standard specifications as approved by the DPR.

5.3.1.1 Vessel Arrival

Prior to arrival, the vessel for discharge is expected to have secured berthing clearance from the Nigerian Navy (Naval clearance), otherwise the vessel will be impounded and its owner sanctioned. Clearance of vessels at receiving

As COVID-19 is forcing businesses to adopt more technology than before, it is also imperative for regulators and operators to invest in appropriate technology to monitor and enforce industry controls and safety measures.

facilities shall be implemented upon the importer notifying the DPR at least 7 days prior to the arrival of the vessel at a Nigerian Port and providing the relevant documents. The importer pays DPR a Vessel Notification processing fee of N220,000.

5.3.1.2 Conditions for Cargo Discharge at the Jetties

A vessel with imported Petroleum Products will only be allowed to discharge at the indicated jetty if the following conditions are met:

- I. There is evidence of Import Permit for the product
- II. The imported product has been fiscalised in the presence of a DPR official
- III. A re-certification composite analysis of the product sample is conducted in the presence of a DPR official and the result certified. A vessel shall therefore not discharge until the Laboratory Re-certification of a Product is conducted
- IV. Documents received from the vessel are not in conflict with those earlier uploaded by the importer of the product.

PPRA clearance is also required at the jetty prior to discharge.

The DPR representative that witnesses the discharge of the product based on the Shore Tank receipt from the vessel issues a Certificate of Quantity. PPRA clearance is also required at the jetty prior to discharge. All cargoes are subject to PPRA Administrative charge (PMS – 30kobo/litre; and Others – 10kobo/litre). Clearance to discharge may be put on hold if payment for prior receipt has not been made. **It is important to note that some of these charges may change from time to time.**

Table 7: Fees Under the Import Permit Act

Description	Value
Issuance of Petroleum Products Import Permit	N75,000 (per 30MT)- Application Fee N210,000 (per application) – Processing Fee
Vessel Notification	N220,000- Processing Fee
Expeditionary fee upon any variation of Vessel arrival from the approved Vessel Arrival Date Scheduled	N165,000
Breach of Provisions of Guidelines	The DPR will propose an appropriate administrative fee for payment
<i>Source: Department of Petroleum Resources</i>	

5.3.2 Guidelines for Approval to Construct and Operate Petroleum Products Filling Station

The DPR under these guidelines outlines the procedures and conditions for granting approval for the construction and operation of a filling station. The key steps in the guidelines are outlined below:

- The intending marketer will submit an application to DPR for a site suitability inspection to ensure that the intended site meets specifications.
- If the suitability report is favourable, an Approval to Construct (ATC) will be granted. Once the ATC is granted, it is mandatory that some meaningful development be made on site within three months from the date of approval. The approval expires if no development commences within three months.
- Companies involved in building of filling stations, construction and fabrication of underground storage tanks and canopies shall have DPR Permit to operate as an Oil Industry Service Company.
- After ATC and during the construction of the station, it is mandatory to invite officer(s) of DPR to witness the burial and pressure/leak test of the underground tanks. A storage and sales licence to operate the station will then be given.
- There are four licence categories:
 - Industrial Consumer (Storage Only) – Category I
 - Petrol Station, Petroleum Products Depot - Category II
 - Kerosene (House-Hold) – Category III
 - Liquefied Petroleum Gas (Cooking Gas) – Category IV

5.3.3 Procedure Guide for the Determination of the Quantity and Quality of Petroleum and Petroleum Products in Nigeria (Addendum)

This procedure guide applies to the measurement of quantities and qualities of petroleum and petroleum products, at all approved facilities, which include but are not limited to the following:

- All Export Terminal (Onshore and Offshore)

- Special Purpose Vessel Storage (SPVs)
- Third Party Injection and Supply Points
- Loading and Discharging Jetties
- Refinery Tank Farms/Product Depots
- Production Facilities and Flow-Stations

Table 8 highlights some of the fees applicable, as per the guidelines, while Tables 9 and 10 highlight the fines:

Table 8: Fees For Permits and Licences in the Procedure Guide for the Determination of the Quantity and Quality of Petroleum and Petroleum Products in Nigeria		
Description	Unit	Value
Processing fee for Export Permit Application	Per application and Export form/ Permit	\$1,000
Processing Fee for LACT System Calibration/ Recertification at Export Terminal / Injection Points	Per LACT Unit	\$1,000
Processing Fee for Calibration / Recertification of Storage Tank Land / Offshore Terminal	Per Tank	\$1,000 (Land Tanks) \$500 (Offshore FPSO or FSO)
Processing Fee for Approvals of Barging and Trucking of Crude Oil	Per Approval	\$1,000 (Barging) \$500 (Trucking)
Processing fee for Approval of Terminals Establishment Order	Per Terminal (Land/FPSO/FSO)	\$50,000
Annual License Fee to operate a crude oil Terminal /Renewal to operate an export Terminal	Per Terminal (Land/FPSO/FSO)	\$100,000
<p><i>Source: Department of Petroleum Resources</i></p> <p><i>All fees in USD shall be paid to DPR in Naira equivalent based on the CBN prevailing rate at the time of application.</i></p> <p><i>LACT- Lease Automatic Custody Transfer, FSO –Floating Storage and Offloading and FPSO-Floating Production Storage and Offloading Vessels</i></p>		

Table 9: Fines for Contravening the Directives in the Procedure Guide for the Determination of the Quantity and Quality of Petroleum and Petroleum Products in Nigeria

Description	Unit	Value
Employment / engagement of non-accredited DPR Contractors for fabrication, construction, calibration, testing etc. of any critical equipment or facility	Per each facility	\$5,000. In addition to suspension of not less than 3 months
Using unapproved tank for storage or changing tank product/ pipeline product service without approval	Per tank/per pipe line 10-meter length	\$5,000
Measuring Petroleum or Petroleum Products with faulty (kinked) measuring equipment or Ullage Transmitting Instrument (UTI) – static measurement method	Per tape or steel measure or UTI	Outright confiscation of faulty measuring instrument and payment of fine of \$10,000
Conducting inspection FAT/SAT of any critical equipment without approval and without witnessing by Representative of the Department	Per equipment	\$50,000
Modification, Alteration, upgrade, etc. of LACT Metering System (Export) without approval	Per LACT System	\$250,000
Modification, Alteration, upgrade, etc. of LACT Metering System at operator/Third Party Custody Transfer Point (TPCTP)/ Third-Party Injection Points (TPIs)	Per LACT System	\$150,000
Modification, Repair, Alteration of surface or underground storage tanks without approval. Introduction of dead woods, capillary Tube or false-bottom, etc. attract the same fine	Per storage greater than or equal to 500 barrels	\$25,000 for crude oil tanks
Non-compliance in ensuring DPR Representatives witness out turn verification at the port of discharge	Per loaded Vessel or shipment	\$50,000
Tampering or Breaking of Export sea line valve key, Bye-pass pipeline, back-loading line (depots), lines for export at terminal or discharge at Jetties/Depots, etc. without approval	Per loading or shipment	\$200,000
Exporting/Importing Petroleum or Petroleum Products without approval	Per loading or shipment	Outright forfeiture and payment of total
For any Petroleum or Petroleum Product handling facility, the set-back shall not be less than 25km from any border country and lack of adherence or the construction of the facility by operator or owner without approval by DPR	Per facility	Forfeiture of petroleum product and DPR shall report to Security Agency, Town Planning Authority for outright demolition
Late submission of export permits application. Deadline Definition: Tenth (10th) day of the second month of the previous quarter of the same year	Per quarter	\$1,000
Non-compliance to five (5) yearly inspection and calibration of storage tanks at export terminals	Per year For Crude Oil	\$150,000

Source: Department of Petroleum Resources

All fees in USD shall be paid to DPR in Naira equivalent based on the CBN prevailing rate at the time of application

FAT:- Factory Acceptance Test, SAT:- Site Acceptance Test

Table 10: Fines for Contravening the Directives in the Procedure Guide for the Determination of the Quantity and Quality of Petroleum and Petroleum Products in Nigeria (cont.)

Description	Unit	Value
Evacuation and discharging of petroleum or petroleum product or gas without approval from Director, DPR.	Per operation	Payment of monetary equivalent of the total cargo at the prevailing market price in USD to the DPR in addition to sanction as may be approved by Director, DPR.
Misleading report submission by any company on quantity and/or quality of petroleum or petroleum products	Per operation	Payment of monetary equivalent of the total cargo at the prevailing market price in USD to the DPR.
Lack of proper accounting, reporting, intentional/wrongful allocation of losses to any injector, equity holder or stakeholder	Per barrel	Refund of allocated volume to rightful owner and payment of equivalent of 30% of total volume involved to DPR at prevailing prices in USD.
Source: Department of Petroleum Resources		

5.3.4 General Requirements and Guidance Information for the Establishment of Modular Refineries/Hydrocarbon Processing Plants (Petroleum Refinery and Petrochemicals) in Nigeria

Establishment of modular refinery plants shall be with design capacity not more than thirty thousand barrels per day (30,000bpd).

The guidelines cover all refinery establishment. However, establishment of modular refinery plants shall be with design capacity not more than thirty thousand barrels per day (30,000bpd). When the plant capacity exceeds 30,000bpd, the plant shall be upgraded to a full conventional refinery.

The approval process is designed to ensure that the applicant understands the industry, the technical and economic implications of the project, the sociological and environmental impact of the plant, as well as maintenance provisions required to protect the health of the operating staff and the safety of the plant. It is designed to prevent avoidable waste of resources by ensuring at each stage that the applicant understands the statutory requirements of each phase of the project. Consequently, the approval is given in three sequential stages: Licence to Establish (LTE), Approval to Construct (ATC), and Licence to Operate (LTO). To qualify and move between phases, applicants must meet certain conditions.

The approval is given in three sequential stages: Licence to Establish (LTE), Approval to Construct (ATC), and Licence to Operate (LTO).

5.3.5 Safety Guidelines

The DPR has the following guidelines to ensure compliance with safety controls:

1. Guidelines for Compliance with the Technical Safety Control (TSC) Requirements
2. Guidelines Concerning Implementation and Use of Risk-Based Inspections in The Nigerian Petroleum Industry

Table 11: Applicable Fees for Application for Refineries	
Description	Fees
Licence to Establish (LTE)	\$50,000 (Statutory) N500,000 (DPR Processing Fee).
Authority to Construct (ATC)	N500,000 (DPR Processing Fee).
Licence to Operate (LTO)	\$1,000 (Statutory for 1,000 bpd up to 30,000 bpd) \$100,000 (Statutory for 30,000 bpd and Above) N500,000 (DPR Processing Fee).
Source: Department of Petroleum Resources	

5.4 Barriers to Entry/Exit

The barriers to entry and exit in the downstream sector vary across sub-sectors. In the marketing sub-sector, a review of the guidelines governing the importation of petroleum products and the operation of a filling station shows that the barriers to entry/exit are medium. The factors that act as a barrier to entry include significant investments in both land and equipment, as well as the fact that marketers must also meet certain specifications in the location of the retail outlets. However, compared to other sub-sectors, the regulation on who can invest in and run a retail outlet is not as strict and the licensing fees are not as high.

The barriers to entry for terminal, refinery and jetty sub-sectors are high, considering the stringent rules regarding types of investors and the high application and processing fees. There is also the requirement of significant investment in infrastructure and equipment.

Table 12: Classification of Barrier to Entry/Exit

Subsector	Degree of Barrier	The Main Factor
Retail Outlets/ Filling Stations	Medium	Significant investment, strict retail outlet specification
Terminals	High	Stringent rules, processing fees, investment in infrastructure and equipment
Refineries	High	
Jetties	High	

Source: FSDH Merchant Bank Analysis

Several industry stakeholders believe that the industry lacks the required corporate governance structure and transparency to attract investments.

6.0 Corporate Governance

Several industry stakeholders believe that the industry lacks the required corporate governance structure and transparency to attract investments. Stakeholders had called for improved governance of the sector, transparency of regulations and operations, and improved accountability of institutions. Some stakeholders had also noted the overwhelming presence of the Government in the sector. The governance of the Nigerian Oil and Gas Industry was rated “Poor” (score of 42 out of 100) by The Natural Resource Governance Institute (NRGI) in its 2017 Resource Governance Index Report. The NRGI also indicated that improving the governance of the state-owned enterprises (SOE), specifically NNPC, is crucial. Furthermore, the NRGI indicates that Nigeria is failing (scoring less than 30) on government effectiveness, regulatory quality, rule of law and control of corruption.

In a brief titled, “The Case for Publishing Petroleum Contracts in Nigeria”, published in March 2018, the NRGI highlighted the importance of publishing Nigerian petroleum contracts. Particularly, the NRGI emphasised the need for the NNPC and its affiliates to publish publicly the contract terms under which the NNPC and its affiliates sell the petroleum products they receive as a result of their participation in the upstream sector of the industry.

We gathered that the PIGB, which was to strengthen the poor governance structure in the industry, among other things, was not signed into law after it had been passed by the 8th National Assembly.

We gathered that the Petroleum Industry Governance Bill (PIGB), which was to strengthen the poor governance structure in the industry, among other things, was not signed into law after it had been passed by the 8th National Assembly. The current global development in the crude oil market and the impacts of the COVID-19 on businesses globally however make it expedient for countries to achieve self-sufficiency in the production of petroleum products that are critical to lubricate the economy. This will encourage investment growth and job creation, reduce the country’s vulnerabilities from external shocks, and generate revenue both for the business and the country. In order to achieve this, there must be an enabling law that will take into consideration the current global trends and address the concerns and needs of investors. Specifically, the PIGB seeks to realize these by improving government effectiveness and

The current global development in the crude oil market and the impacts of the COVID-19 on businesses globally however make it expedient for countries to achieve self-sufficiency in the production of petroleum products that are critical to lubricate the economy.

regulatory control. The Government must therefore work to pass this bill and sign it into law quickly.

We review the latest version of the PIGB in this report and have highlighted below its key features/ reforms.

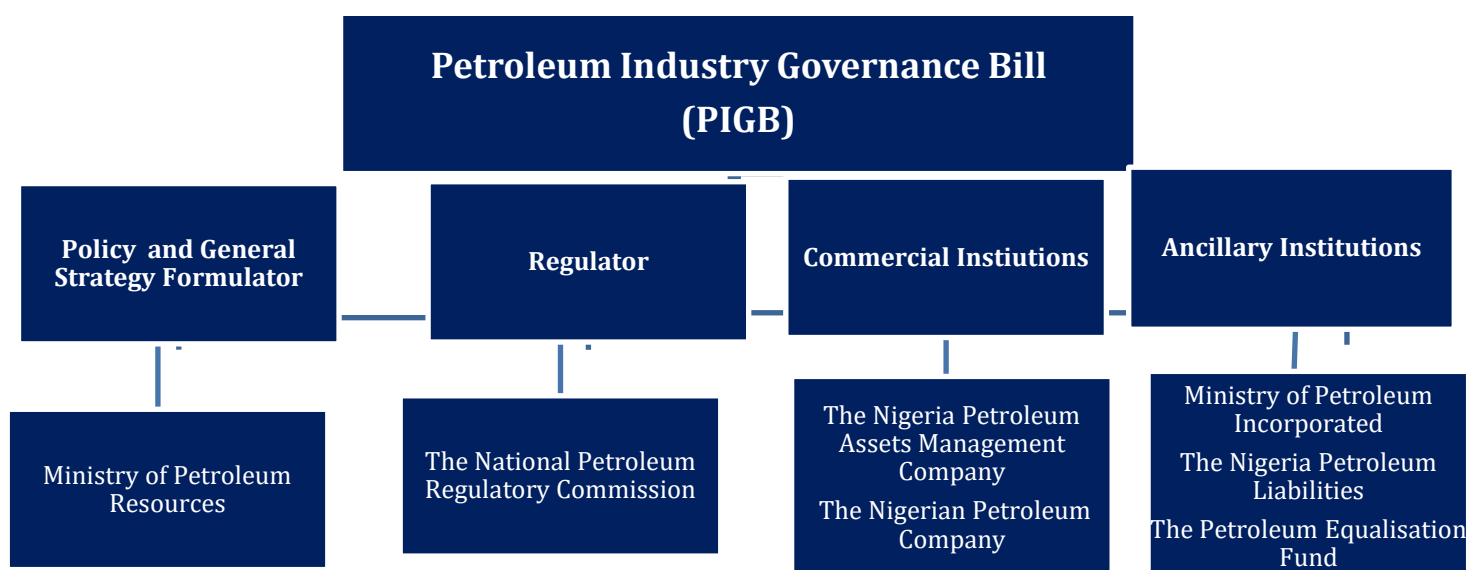
6.1 Petroleum Industry Governance Bill (PIGB) as Passed By the 8th Assembly

The PIGB aims to resolve the issues of poor governance in the industry and highlight the role that the law could play in presenting a more effective governance and institutional model for the management of Nigeria's petroleum resources, and in the regulation of activities within the sector. The Bill is one of the four components of the Petroleum Industry Bill (PIB).

The PIGB aims to resolve the issues of poor governance in the industry. It is one of the four components of the PIB.

The main objectives of the PIGB are:

- To create the governing institutions with clear and separate roles
- To establish a framework for the creation of commercially viable petroleum entities
- To promote transparency and accountability
- To foster a conducive business environment for petroleum industry operations.



The Bill establishes/confirms a number of new/existing organisations as highlighted below:

6.1.1 The Ministry of Petroleum Resources (MoPR)

The MoPR will continue to be responsible for setting the overall policy and strategy in the sector. Additionally, in the event of a national emergency the Bill grants the Minister pre-emptive rights to all petroleum products in the country. However, the minister will no longer have the power to grant, renew, amend, extend or revoke any lease or licence. The minister cannot also create any new entities.

6.1.2 The National Petroleum Regulatory Commission (NPRC)

The NPRC will replace DPR and PPPRA and shall be responsible for regulating the industry. The commission shall be wholly independent from the Minister of Petroleum. It shall be run by a Governing Board whose members, other than those representing the Ministries of Petroleum, Finance and Environment, shall be appointed by the President subject to the approval of the Senate. The NPRC shall be vested with all assets, funds, resources and other movable and immovable properties currently held by the DPR and the PPPRA. The Commission shall have the prerogative to hold public hearings on matters which the Commission determines to be of significant interest to the general public.

6.1.3 The Nigeria Petroleum Assets Management Company (NAPAMC)

The NAPAMC shall be incorporated as a limited company within six months of the effective date of the bill. The shares of the NAPAMC shall be held by the Ministry of Petroleum Incorporated (40%), The Ministry of Finance Incorporated (40%) and the Bureau of Public Enterprises (20%). The NAPAMC shall be responsible for managing all assets currently held by the NNPC under the Production Sharing Contracts (PSCs) and Back-in-right provisions of the Petroleum Act of 1969 as amended. The company will be governed and managed based on the provisions of the Companies and Allied Matters Act (CAMA) and the Code of Corporate Governance issued by the Securities and Exchange Commission (SEC). The government is to provide the initial capitalisation of NAPAMC.

The NPRC will replace DPR and PPPRA and shall be responsible for regulating the industry.

The NAPAMC shall be responsible for managing all assets currently held by the NNPC under the Production Sharing Contracts (PSCs) and Back-in-right provisions of the Petroleum Act of 1969 as amended.

The NPC shall be responsible for all assets currently being managed by the NNPC other than those under PSCs and the Back-in-right (already ceded to the NAPAMC).

6.1.4 The Nigerian Petroleum Company (NPC)

The NPC shall be incorporated as a limited company within six months of the effective date of the passage of the Bill into an Act. The NPC shall be responsible for all assets currently being managed by the NNPC other than those under PSCs and the Back-in-right (already ceded to the NAPAMC). The company will be governed and managed based on the provisions of CAMA and the Code of Corporate Governance issued by SEC. NPC shall be run by a Board of Directors nominated by an “independent committee” constituted by the shareholders. However, the appointment and the removal of the initial directors shall be subject to the approval of the President up until the divestment. The government is to provide the initial capitalisation of NPC.

Some agencies may have to be merged under a deregulated regime.

6.1.5 Ministry of Petroleum Incorporated (MOPI)

The MOPI shall be incorporated as the sole concern which shall hold shares on behalf of the Federal Government in the successor commercial institutions provided for in the Bill. The Permanent Secretary of the Ministry of Petroleum shall be responsible for signing any document that requires the signature of the MOPI.

6.1.6 The Petroleum Equalisation Fund (PEF)

PEF will continue to ensure uniform price of petroleum products across the country. The equalisation fund shall be administered by a Governing Board headed by the Minister. As noted earlier, some of these agencies may have to be merged under a deregulated regime, when there is no fuel subsidy.

The PIGB may need to be modified to take into consideration the recent developments in the wake of the pandemic to enable Nigeria attract investments in all the segments of the petroleum industry.

We note that the bill addresses some of the highlighted poor corporate governance issues in the industry. It provides a significant framework for improved transparency, accountability and corporate governance structure in the Oil and Gas sector. It may however need to be modified to take into consideration the recent developments in the wake of the pandemic to enable it attract investments in all the segments of the petroleum industry in Nigeria.

EIA projects that the global petroleum and liquid fuels demand will decrease by 5.2 million b/d in 2020 from an average of 100.7 million b/d last year before increasing by 6.4 million b/d in 2021.

Many analysts have indicated that the crude oil production cut announced by OPEC will not be sufficient to combat the sharp decline in demand.

The landscape is changing, not only in Nigeria but globally. Nigeria must therefore move swiftly to take advantage of the unique opportunities that the current crisis presents to transform the Oil and Gas industry.

7.0 Global Demand and Supply Analysis, Market Size in Nigeria

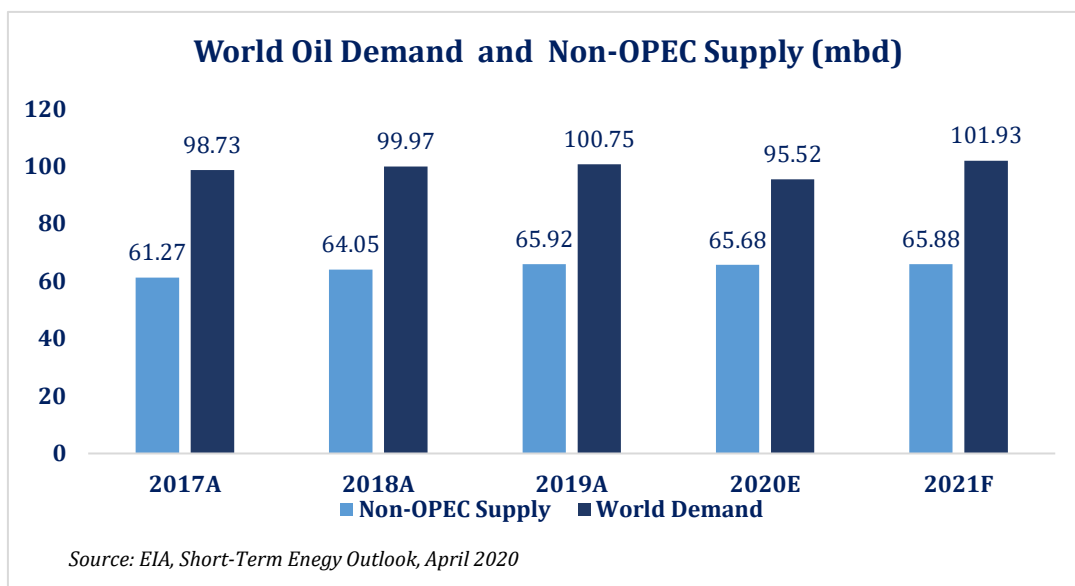
7.1 Global Oil Demand Trend

Global world oil demand in 2020 has continued to take a sharp downward trend due to the outbreak of the COVID-19 pandemic and its effects on global economies. Crude oil prices in particular have fallen significantly since the beginning of 2020. The drop in crude oil price has largely been driven by the economic contraction caused by the pandemic and a sudden increase in crude oil supply, following the temporary suspension of previously agreed upon production cuts among the Organization of the Petroleum Exporting Countries (OPEC) and Russia.

According to the US Energy Information Administration (EIA), global petroleum and liquid fuels consumption averaged 94.4 million b/d in the first quarter of 2020, a decline of 5.6 million b/d from the same period in 2019. EIA projects that the global petroleum and liquid fuels demand will decrease by 5.2 million b/d in 2020 from an average of 100.7 million b/d last year before increasing by 6.4 million b/d in 2021.

OPEC has adopted several measures to eliminate the glut in the market caused by global lockdown of economic activity. In April 2020, OPEC agreed to a historic production cut of 10 million b/d starting on the 01 May 2020, for an initial period of two months ending 30 June 2020. For the subsequent 6 months starting from 01 July 2020 to December 31 2020, the production cut will be 8 million b/d. However, the market and many analysts have indicated that this will not be enough to combat the sharp decline in demand for crude oil.

The landscape is changing, not only in Nigeria but globally. Current global economic developments mean that the short-medium term demand for crude oil will remain weak. Although the current development has great economic consequences for Nigeria, it however also presents opportunities for the industry regulators and operators to resolve quickly the hindrances to investment in various growth areas within the Oil and Gas, to take advantage of the unique opportunities that the current crisis presents and transform the Oil and Gas industry.



7.2 Demand for Oil in Nigeria

The demand for PMS in Nigeria grew from 17,382 million in 2016 to 20,585 million in 2019. PMS accounted for about 75% of total demand in 2019, down marginally from 76% the previous year, and is primarily used for road transportation of goods and people. FSDH observes that the demand for PMS, AGO and ATK continues to move in line with the general economic activities in the country. However, we noticed a drop in demand/consumption of DPK, which may be a reflection of some households shifting towards Liquefied Petroleum Gas (LPG) as a cooking fuel and other poorer homes switching to coal or firewood. It is also used for generating power in some households.

AGO, mainly used in industries and some households, is the second most-consumed fuel in Nigeria, representing about 19% of total usage up from 17% in the previous year.

ATK is the third most-consumed fuel, replacing DPK and representing about 4% of national consumption. Consumption of ATK increased by 36% between 2018 and 2019.

Note: The petroleum products consumption forecast in this report is based on the nominal GDP forecast. FSDH Merchant Bank projects that the demand for petroleum products will continue to move in line with the performance of the economy.

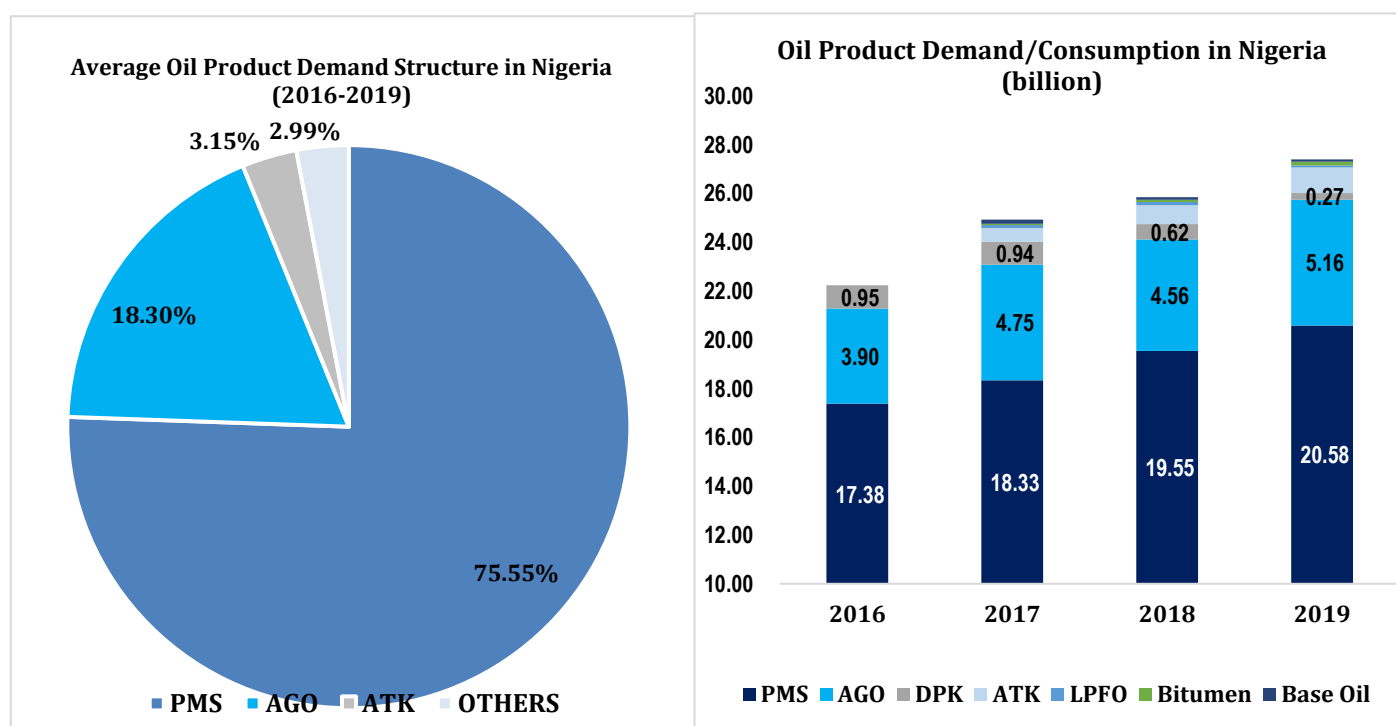
PMS accounted for about 75% of total demand in 2019, down marginally from 76% the previous year, and is primarily used for road transportation of goods and people.

AGO, mainly used in industries and some households, is the second most-consumed fuel in Nigeria, representing about 19% of total usage up from 17% in the previous year.

Table 13: Demand/Consumption of Petroleum Products (Million Litres) –Total Yearly

	2016	2017	2018	2019	Change '19/'18	Growth '19/'18	CAGR '19/'16	Average '19/'16
PMS	17,382	18,334	19,550	20,585	1,035	5.29%	5.80%	18,963
AGO	3,897	4,748	4,564	5,159	595	13.03%	9.80%	4,592
DPK	952	944	623	270	(353)	(56.63%)	(34.28%)	697
ATK	-	554	773	1,048	275	35.61%	n/a	792
LPFO	-	127	143	85	(58)	(40.89%)	n/a	118
Bitumen	-	44	80	149	69	86.43%	n/a	91
Base Oil	-	170	109	102	(7)	(6.61%)	n/a	127
Total Petroleum Products	22,230	24,922	25,842	27,398	1,556	6.02%	7.22%	25,098
Consumption Per Capital	121	132	133	140	7	5.17%	4.95%	131

Sources: PPPRA and FSDH Merchant Bank Analyses; N/A- Not Applicable



7.3 Petroleum Product Demand by Region in Nigeria (2019)

Lagos state recorded the highest demand for petroleum products and it is the only state where demand is up to 20% of total demand in Nigeria. As Lagos is the commercial capital of Nigeria, it is expected that it will continue to attract the largest consumption, though other states where significant commercial and economic activities take place will record high consumption rates also.

FSDH Merchant Bank Limited does not anticipate a major growth in the demand for petroleum products until 2023.

There are growth potentials to explore in the opportunities created by existing and potential regional economic integration in West Africa and Africa.

Nigeria is strategically positioned to supply neighbouring countries with petroleum products, as the prices in most of those countries are higher than the prices in Nigeria.

Total consumption of the major petroleum products should grow to 29billion litres by 2024 from 27 billion litres in 2019.

7.4 Demand Forecast (2020 – 2024)

Looking at the current economic developments in Nigeria and the impacts of COVID-19 on businesses, FSDH Merchant Bank Limited does not anticipate a major growth in the demand for petroleum products until 2023. However, a significant shift in macroeconomic policies and sectoral policies that will reset the direction of the sector and economy is likely to stimulate growth. As noted earlier, there are growth potentials to explore in the opportunities created by existing and potential regional economic integration in West Africa and Africa. In addition, Nigeria is strategically positioned to supply neighbouring countries with petroleum products, as the prices in most of those countries are higher than the prices in Nigeria. The Nigerian government and operators should vigorously explore these opportunities to expand markets.

Road transportation will remain a critical means of transportation in the country. As such, the use of PMS to power cars will remain relevant in the next five years, growing the average daily consumption to 61 million litres by 2024, from 56 million litres in 2018. In addition, all the other products are expected to record some modest growth, except for kerosene, of which usage will continue to drop as households adopt cleaner sources of energy: AGO is projected to reach about 15 million litres; while others would likely increase to 4.45 million litres in 2024. Total consumption of the major petroleum products should therefore grow to 29billion litres by 2024 from 27 billion litres in 2019.

We also expect the historical consumption pattern per state of the federation in 2019 to continue into the forecast period. Lagos State will continue to account for the largest consumption by total products, followed by FCT and Kano.

See the tables 14-20 on the next pages for the detailed forecast.

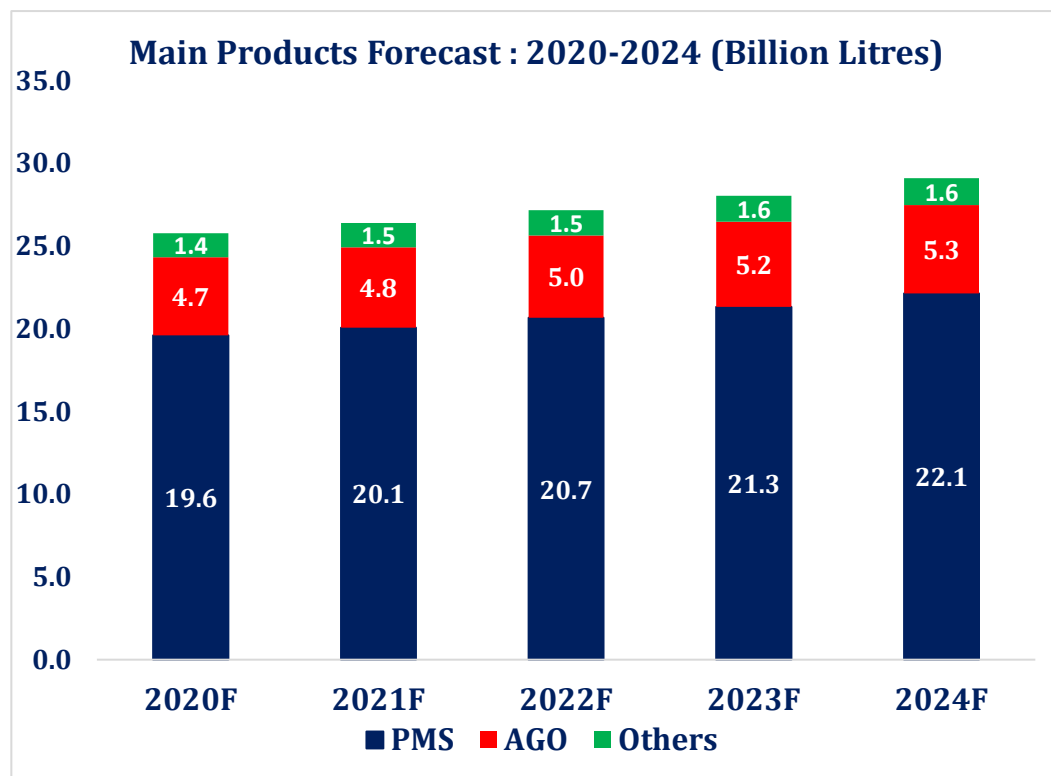


Table 14: Total PMS Consumption Per State of the Federation (Million Litres)

	Actual	Forecast				
States	2019	2020	2021	2022	2023	2024
Abia	472	449	460	474	489	507
Adamawa	630	599	614	632	652	677
Akwa Ibom	487	463	475	489	504	523
Anambra	527	502	514	529	546	567
Bauchi	56	53	54	56	58	60
Bayelsa	115	109	112	115	119	124
Benue	478	455	466	480	495	514
Borno	267	254	260	268	277	287
Cross River	291	277	284	292	301	313
Delta	930	885	906	933	963	1000
Ebonyi	115	110	112	115	119	124
Edo	640	609	624	642	663	688
Enugu	717	683	699	720	743	771
Ekiti	110	104	107	110	113	118
Gombe	330	314	321	331	342	354
Imo	473	450	461	475	490	508
Jigawa	43	41	42	43	44	46
Kaduna	727	693	709	730	753	782
Kano	1,895	1804	1847	1902	1962	2037
Katsina	83	79	81	84	86	90
Kebbi	93	88	90	93	96	100
Kogi	130	124	127	131	135	140
Kwara	533	508	520	535	552	573
Lagos	3,119	2969	3040	3130	3230	3353
Nasarawa	140	133	137	141	145	151
Niger	1,089	1037	1062	1093	1128	1171
Ogun	1,108	1055	1080	1112	1147	1191
Ondo	540	514	526	542	559	580
Osun	365	348	356	366	378	392
Oyo	1,007	959	982	1011	1043	1083
Plateau	449	427	437	450	465	482
Rivers	833	793	812	836	863	895
Sokoto	72	68	70	72	74	77
Taraba	80	76	78	80	83	86
Yobe	39	37	38	39	40	42
Zamfara	745	709	726	747	771	800
F.C.T.	860	819	838	863	891	924
Total	20,585	19,596	20,066	20,658	21,319	22,129
Daily Average Consumption	56	54	55	57	58	61

Sources: Petroleum Products Pricing and Regulatory Agency and FSDH Merchant Bank Analysis.

Table 15: Total AGO Consumption Per State of the Federation (Millions of Litres)

	Actual	Forecast				
States	2019	2020	2021	2022	2023	2024
Abia	64	59	60	62	64	66
Adamawa	55	31	52	53	55	57
Akwa Ibom	102	74	95	98	101	105
Anambra	99	69	93	96	99	103
Bauchi	38	21	36	37	38	40
Bayelsa	13	24	12	13	13	14
Benue	49	33	46	48	49	51
Borno	54	26	51	53	54	56
Cross River	57	59	54	55	57	59
Delta	248	171	233	240	248	257
Ebonyi	30	18	28	29	30	31
Edo	199	163	187	193	199	206
Enugu	94	69	89	91	94	98
Ekiti	14	42	13	14	14	15
Gombe	50	25	47	48	50	52
Imo	55	52	52	53	55	57
Jigawa	6	4	6	6	6	6
Kaduna	151	87	142	146	150	156
Kano	323	157	304	313	323	335
Katsina	39	22	36	38	39	40
Kebbi	46	23	44	45	46	48
Kogi	149	74	140	144	148	154
Kwara	126	110	118	122	126	131
Lagos	1,352	1681	1270	1308	1350	1401
Nasarawa	34	18	32	33	34	35
Niger	168	88	158	163	168	174
Ogun	441	403	414	426	440	457
Ondo	55	62	52	54	55	57
Osun	50	73	47	48	50	52
Oyo	201	245	189	194	200	208
Plateau	68	36	64	66	68	70
Rivers	369	521	347	357	368	382
Sokoto	79	38	75	77	79	82
Taraba	17	10	16	17	17	18
Yobe	8	5	8	8	8	8
Zamfara	59	29	55	57	59	61
F.C.T.	195	112	184	189	195	202
Total	5,159	4,734	4,848	4,991	5,151	5,347
Daily Average Consumption	14	13	13	14	14	15

Sources: Petroleum Products Pricing and Regulatory Agency and FSDH Merchant Bank Analysis.

Table 16: Others (HHK, ATK, LPFO, Base Oil & Bitumen) Consumption Per State of the Federation (Million of Litres)

States	2019A	2020F	2021F	2022F	2023F	2024F
Abia	46	40	41	42	43	45
Adamawa	4	2	2	2	3	3
Akwa Ibom	21	15	16	16	17	17
Anambra	34	30	31	32	33	34
Bauchi	5	3	4	4	4	4
Bayelsa	0	0	0	0	0	0
Benue	5	4	4	5	5	5
Borno	6	6	6	6	6	7
Cross River	13	9	9	9	10	10
Delta	63	48	49	50	52	54
Ebonyi	4	3	3	3	3	4
Edo	16	10	10	10	10	11
Enugu	19	14	14	14	15	15
Ekiti	2	2	2	2	2	2
Gombe	5	4	5	5	5	5
Imo	17	12	13	13	14	14
Jigawa	0	0	0	0	0	0
Kaduna	33	23	24	24	25	26
Kano	111	90	92	95	98	102
Katsina	2	2	2	2	2	2
Kebbi	1	1	1	1	1	1
Kogi	4	3	3	3	3	3
Kwara	7	6	6	7	7	7
Lagos	897	829	849	874	902	936
Nasarawa	1	1	1	1	1	1
Niger	16	9	9	10	10	10
Ogun	31	25	25	26	27	28
Ondo	9	6	6	6	6	7
Osun	6	5	5	6	6	6
Oyo	22	14	14	15	15	16
Plateau	12	10	10	10	10	11
Rivers	62	50	51	52	54	56
Sokoto	28	26	27	28	28	29
Taraba	1	1	1	1	1	1
Yobe	2	0	0	0	0	0
Zamfara	1	1	1	1	1	1
F.C.T.	146	134	137	142	146	152
Total	1,654	1,438	1,472	1,516	1,564	1,624
Daily Average Consumption	4.53	3.94	4.03	4.15	4.29	4.45

Sources: Petroleum Products Pricing and Regulatory Agency and FSDH Merchant Bank Analysis. A: Actual, F: Forecast

Table 17: Total Petroleum Products Consumption Per State of the Federation (Million Litres)

	Actual	Forecast				
States	2019	2020	2021	2022	2023	2024
Abia	582	548	561	578	596	618
Adamawa	688	632	668	687	710	737
Akwa Ibom	610	552	586	603	622	645
Anambra	660	601	638	657	678	704
Bauchi	98	77	94	97	100	104
Bayelsa	129	133	124	128	132	138
Benue	532	492	516	533	549	570
Borno	328	286	317	327	337	350
Cross River	361	345	347	356	368	382
Delta	1241	1104	1188	1223	1263	1311
Ebonyi	149	131	143	147	152	159
Edo	855	782	821	845	872	905
Enugu	830	766	802	825	852	884
Ekiti	126	148	122	126	129	135
Gombe	385	343	373	384	397	411
Imo	545	514	526	541	559	579
Jigawa	49	45	48	49	50	52
Kaduna	912	803	875	900	928	964
Kano	2330	2051	2243	2310	2383	2474
Katsina	124	103	119	124	127	132
Kebbi	140	112	135	139	143	149
Kogi	282	201	270	278	286	297
Kwara	667	624	644	664	685	711
Lagos	5368	5479	5159	5312	5482	5690
Nasarawa	176	152	170	175	180	187
Niger	1273	1134	1229	1266	1306	1355
Ogun	1579	1483	1519	1564	1614	1676
Ondo	604	582	584	602	620	644
Osun	421	426	408	420	434	450
Oyo	1230	1218	1185	1220	1258	1307
Plateau	529	473	511	526	543	563
Rivers	1264	1364	1210	1245	1285	1333
Sokoto	179	132	172	177	181	188
Taraba	99	87	95	98	101	105
Yobe	50	42	46	47	48	50
Zamfara	804	739	782	805	831	862
F.C.T.	1201	1065	1159	1194	1232	1278
Total	27,398	25,769	26,389	27,172	28,033	29,099
Daily Average Consumption	75	71	72	74	77	80

Sources: Petroleum Products Pricing and Regulatory Agency and FSDH Merchant Bank Analysis.

Table 18: State Consumption Contribution in the Forecast Period 2020-2024

Total Product Consumption		PMS		AGO		DPK	
States	Contribution	States	Contribution	States	Contribution	States	Contribution
Lagos	19.9%	Lagos	15.2%	Lagos	28.0%	Lagos	57.7%
Kano	8.4%	Kano	9.2%	Ogun	8.5%	F.C.T.	9.3%
Ogun	5.8%	Ogun	5.4%	Rivers	7.9%	Kano	6.3%
Rivers	4.7%	Niger	5.3%	Kano	5.7%	Rivers	3.5%
Niger	4.6%	Oyo	4.9%	Delta	4.6%	Delta	3.3%
Oyo	4.5%	Delta	4.5%	Oyo	4.1%	Abia	2.8%
Delta	4.5%	F.C.T.	4.2%	Edo	3.8%	Anambra	2.1%
F.C.T.	4.3%	Rivers	4.0%	F.C.T.	3.5%	Sokoto	1.8%
Kaduna	3.3%	Zamfara	3.6%	Niger	3.0%	Ogun	1.7%
Edo	3.1%	Kaduna	3.5%	Kaduna	2.7%	Kaduna	1.6%
Enugu	3.0%	Enugu	3.5%	Kogi	2.6%	Akwa- Ibom	1.1%
Zamfara	2.9%	Edo	3.1%	Kwara	2.4%	Oyo	1.0%
Adamawa	2.5%	Adamawa	3.1%	Akwa- Ibom	1.9%	Enugu	0.9%
Kwara	2.4%	Ondo	2.6%	Anambra	1.8%	Imo	0.9%
Anambra	2.4%	Kwara	2.6%	Enugu	1.8%	Edo	0.7%
Ondo	2.2%	Anambra	2.6%	Sokoto	1.4%	Plateau	0.7%
Akwa Ibom	2.2%	Akwa- Ibom	2.4%	Abia	1.2%	Niger	0.6%
Abia	2.1%	Benue	2.3%	Plateau	1.2%	Cross- River	0.6%
Imo	2.0%	Imo	2.3%	Cross- River	1.1%	Kwara	0.4%
Benue	1.9%	Abia	2.3%	Ondo	1.1%	Borno	0.4%
Plateau	1.9%	Plateau	2.2%	Osun	1.1%	Ondo	0.4%
Osun	1.6%	Osun	1.8%	Imo	1.1%	Osun	0.4%
Gombe	1.4%	Gombe	1.6%	Zamfara	1.0%	Gombe	0.3%
Cross River	1.3%	Cross- River	1.4%	Adamawa	1.0%	Benue	0.3%
Borno	1.2%	Borno	1.3%	Borno	1.0%	Bauchi	0.2%
Kogi	1.0%	Nasarawa	0.7%	Benue	0.9%	Ebonyi	0.2%
Nasarawa	0.6%	Kogi	0.6%	Gombe	0.9%	Kogi	0.2%
Sokoto	0.6%	Ebonyi	0.6%	Kebbi	0.8%	Adamawa	0.2%
Ebonyi	0.5%	Bayelsa	0.6%	Katsina	0.7%	Ekiti	0.1%
Kebbi	0.5%	Ekiti	0.5%	Bauchi	0.7%	Katsina	0.1%
Ekiti	0.5%	Kebbi	0.5%	Nasarawa	0.6%	Kebbi	0.1%
Bayelsa	0.5%	Katsina	0.4%	Ebonyi	0.5%	Nasarawa	0.1%
Katsina	0.4%	Taraba	0.4%	Ekiti	0.4%	Taraba	0.1%
Taraba	0.4%	Sokoto	0.3%	Taraba	0.3%	Zamfara	0.1%
Bauchi	0.3%	Bauchi	0.3%	Bayelsa	0.3%	Bayelsa	0.0%
Jigawa	0.2%	Jigawa	0.2%	Yobe	0.1%	Jigawa	0.0%
Yobe	0.2%	Yobe	0.2%	Jigawa	0.1%	Yobe	0.0%

Source: FSDH Merchant Bank Analysis.

The table below shows the average consumption per person in Nigeria for the main petroleum products.

The current difficult economic situation presents a unique opportunity to turn Nigeria from a net importer of petroleum products

Table 19: Consumption Per Capita for Products (Million Litres) - Actual vs Forecast

Year	PMS	AGO	Others	Total Products
2016A	93.47	20.96	5.10	119.52
2017A	96.05	24.88	7.85	128.76
2018A	99.81	23.30	7.14	130.25
2019A	102.43	25.67	7.72	135.43
2020F	95.06	22.97	6.98	125.01
2021F	94.89	22.93	6.96	124.80
2022F	95.24	23.01	6.99	125.27
2023F	95.81	23.15	7.03	125.99
2024F	96.95	23.43	7.11	127.49

Sources: Petroleum Products Pricing and Regulatory Agency and FSDH Merchant Bank Analysis

Table 20: Total Average Daily Consumption Per Product (Million Litres) - Actual vs Forecast

Year	PMS	AGO	Others	Total Products
2016A	48	11	2.6	61.6
2017A	50	13	4.11	67.11
2018A	54	13	3.83	70.83
2019A	56	14	3.84	74.37
2020F	54	13	3.94	70.94
2021F	55	13	4.03	72.03
2022F	57	14	4.15	75.15
2023F	58	14	4.29	76.29
2024F	61	15	4.45	80.45

Sources: Petroleum Products Pricing and Regulatory Agency and FSDH Merchant Bank

Table 21: Consumption vs Imports (Billion Litres)

Year	PMS		AGO		Others	
	Consumption	Imports	Consumption	Imports	Consumption	Imports
2016A	17.38	18.81	3.897	4.9	0.948	0.71
2017A	18.33	17.31	4.748	4.28	1.499	0.93
2018A	19.55	20.00	4.564	4.15	1.398	1.14
2019E	20.59	20.92	5.159	5.28	1.552	1.13
2020F	19.60	19.92	4.734	4.84	1.438	1.05
2021F	20.07	20.40	4.848	4.96	1.472	1.07
2022F	20.66	21.00	4.991	5.10	1.516	1.10
2023F	21.32	21.67	5.151	5.27	1.564	1.14
2024F	22.13	22.49	5.347	5.47	1.624	1.18

Sources: PPPRA, NBS and FSDH Merchant Bank Analysis A: Actual; F:Forecast

7.4 Supply of Petroleum Products

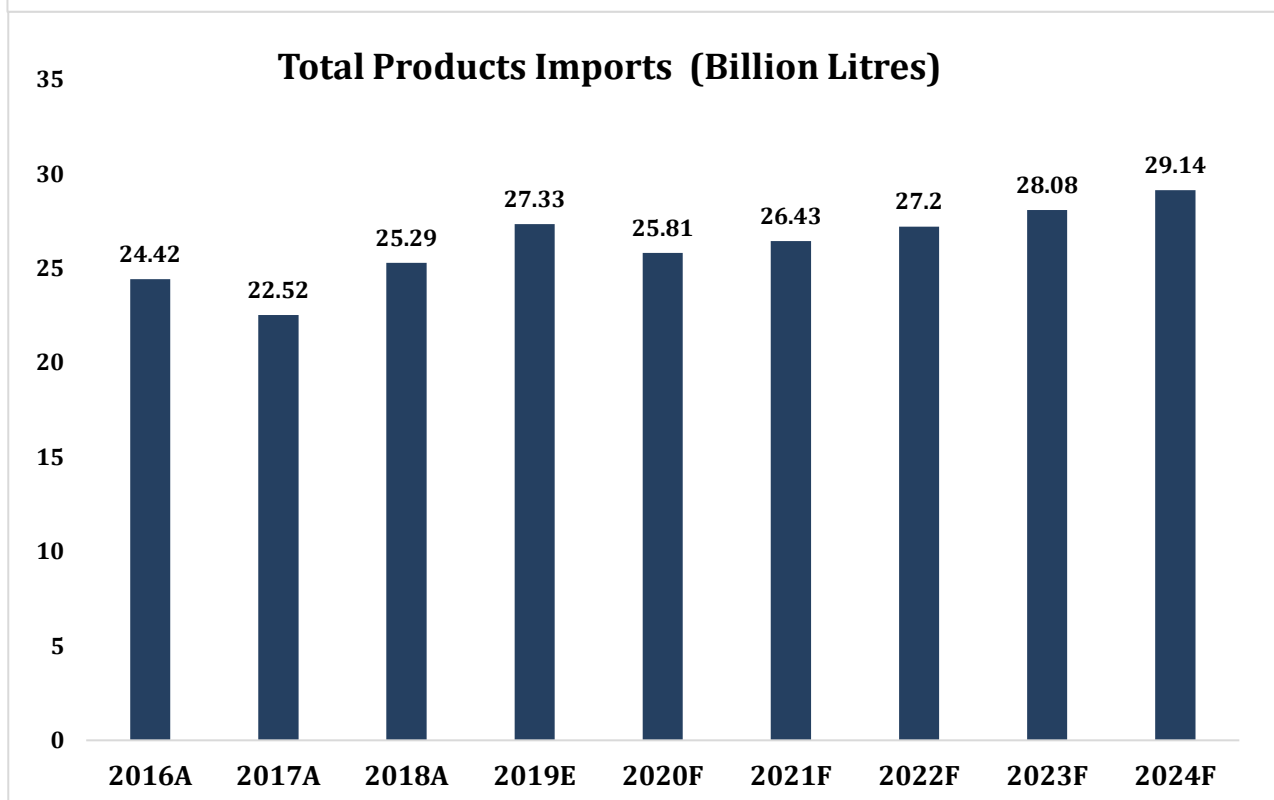
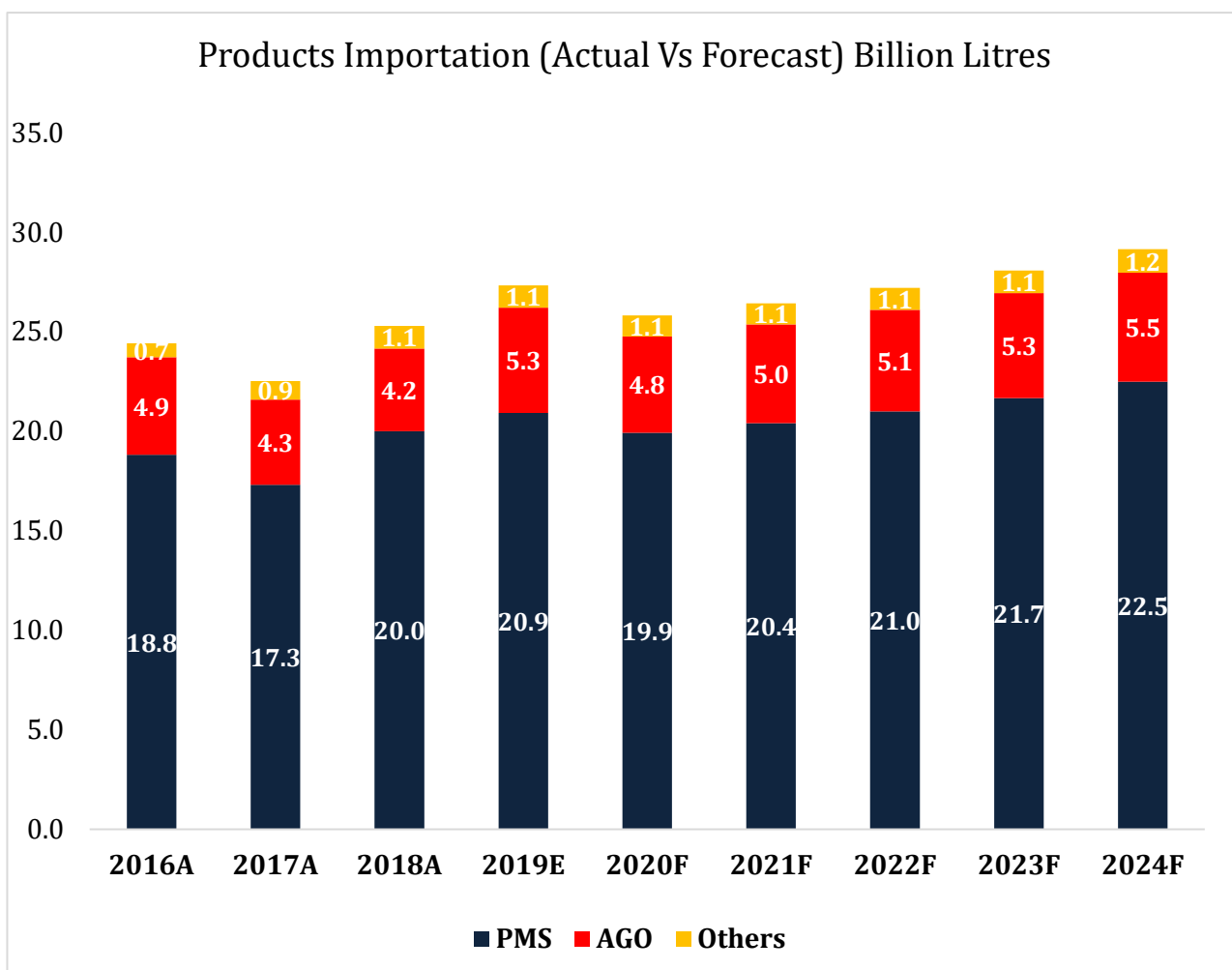
The current difficult economic situation presents a unique opportunity to turn Nigeria from a net importer of petroleum products to a net exporter. Given the current low crude oil price, it may be very difficult to source foreign exchange to fund the importation of finished petroleum products. It is good that there is an opportunity for the private sector to import products, but the most effective system is for Nigeria to meet total local demand for petroleum products from local refineries (both modular and convectional refineries). Nigeria can also increase its stock of foreign exchange through exportation of the refined products. It is only the private sector operators that can make this happen, while the Government provides a supervisory role that encourages the orderly development of the market. There is also a strong business case for new players to enter the modular refinery business, while the government sells off the existing non-functional government-owned refineries to private investors, so that they could turn them around and bridge the impending supply gap. When large players like Dangote Refinery come on-stream within the next two years, they can complement local supply and also export the excess to the international market to earn foreign exchange for the country.

Given the current low crude oil price, it may be very difficult to source foreign exchange to fund the importation of finished petroleum products.

Nigeria can also increase its stock of foreign exchange through exportation of refined products.

There is a strong business case for new players to enter the modular refinery business, while the government sells off the existing non-functional government-owned refineries to private investors.

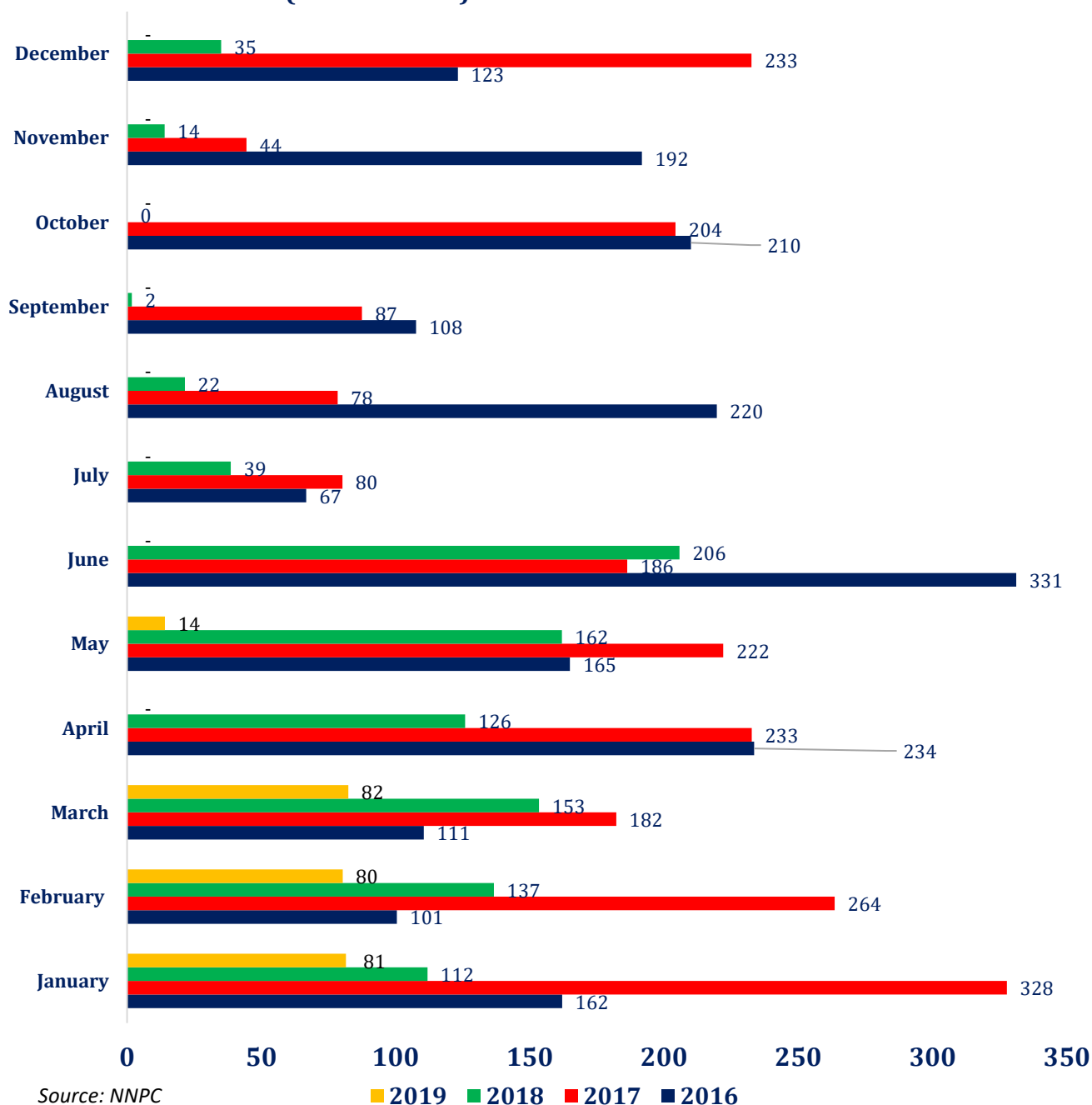
NBS data shows massive drop in kerosene imports, a significant increase in diesel import, while PMS importation rose marginally. Industry analysts believe that more consumers of kerosene are now moving to gas while more consumers are moving to diesel from petrol. The NBS's Petroleum Products Imports and Consumption (Truck out) Statistics Report shows that the volume of kerosene imported in the year 2019 dropped 76% to 128.11million litres. On the other hand diesel import rose by 21.7% to 5.15billion litres in 2019. However, PMS recorded a marginal rise in import at 3.7% to 20.89 billion litres in 2019. The importation data shows that 20.89 billion litres of PMS, 5.15 billion litres of AGO, 128.11 million litres of HHK, 1.07 billion litres of ATK, 45.98 million litres of LPFO and 526.06 million litres of LPG were imported into the country in 2019. The NBS report further stated: "Zonal distribution of truck-out volume for Full Year 2019 showed that 20.58 billion of PMS, 5.16 billion litres of AGO, 270.22 million litres of HHK, 1.05 billion litres of ATK, 84.53m litres of LPFO and 734.21million of LPG were distributed nationwide during the period under review.



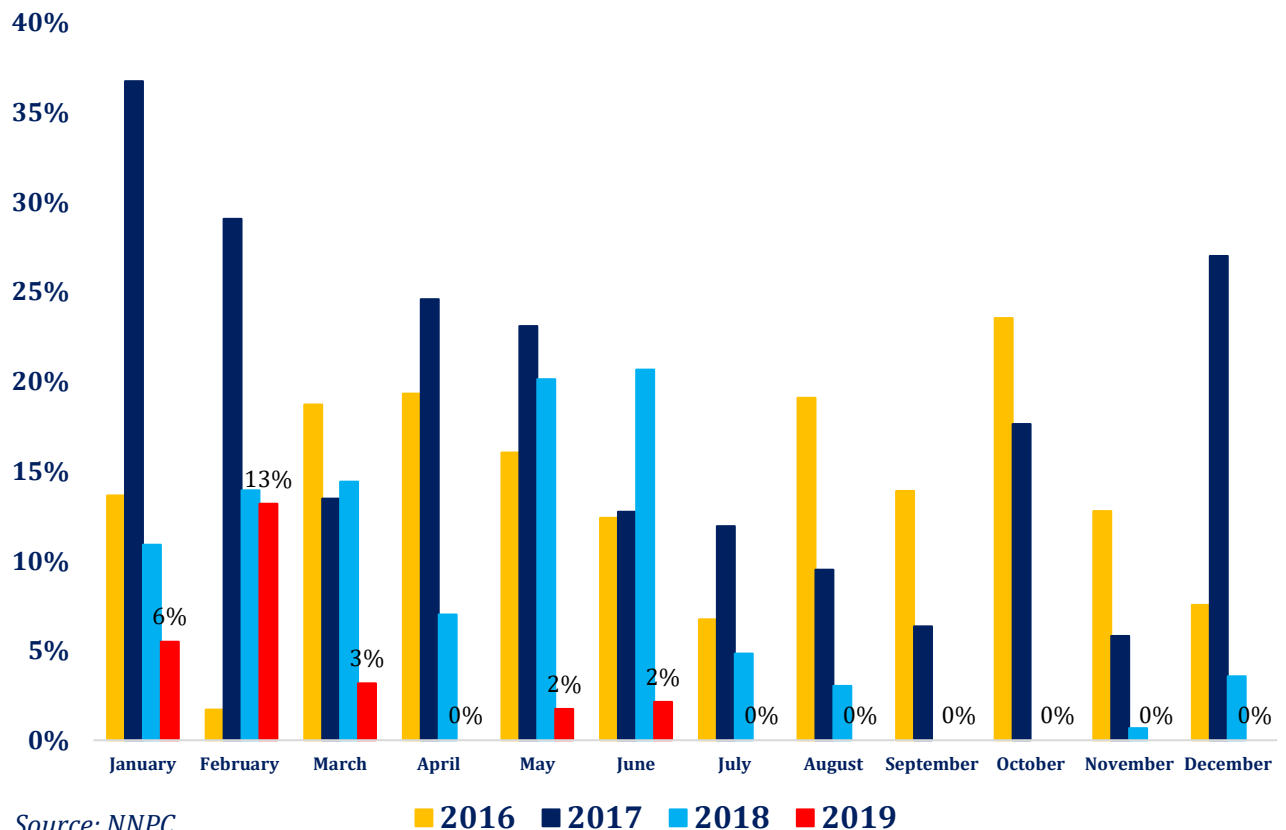
Sources: Petroleum Products Pricing and Regulatory Agency, National Bureau of Statistics and FSDH Merchant Bank Analysis

Between June and December 2019, the refineries did not refine any products (PMS and DPK) because of the rehabilitation of the refineries. Data from the NNPC shows that the average total capacity utilization in 2019 for the local refineries was 2%. The highest utilization in the last four years was 37%. **The country depends heavily on importation to meet local demand. This is not a sustainable going forward.**

Monthly Refined White Petroleum Products from Local Refineries (PMS and DPK) : Million Litres - 2016-2019



Monthly Refineries Consolidated Capacity Utilization



Market Share Distribution of Product Sales by Key Players

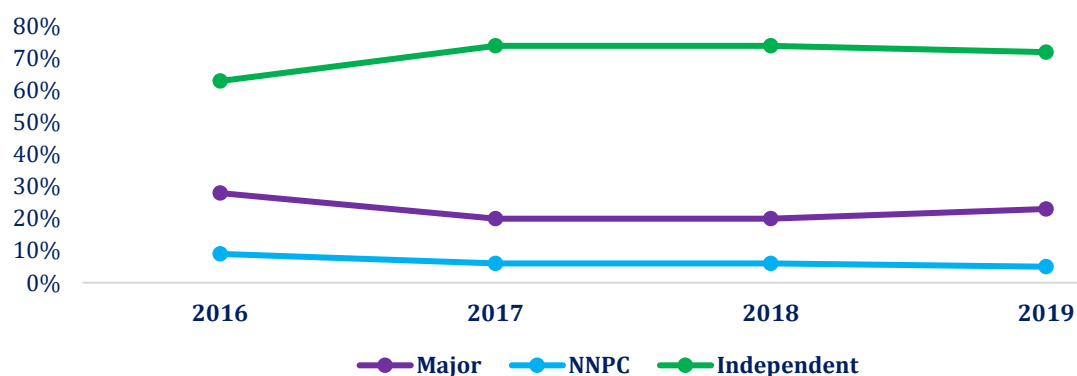
Independent marketers accounted for over 60% of the market share of all the main petroleum products from 2016 through 2018. The contribution of other marketing groups is shown in the charts below. The charts show that the independent marketers are gaining more market share at the expense of both NNPC and major marketers. The major marketers only gained market share in the HHK market segment.

Table 22: Share of Product by Players - Sales

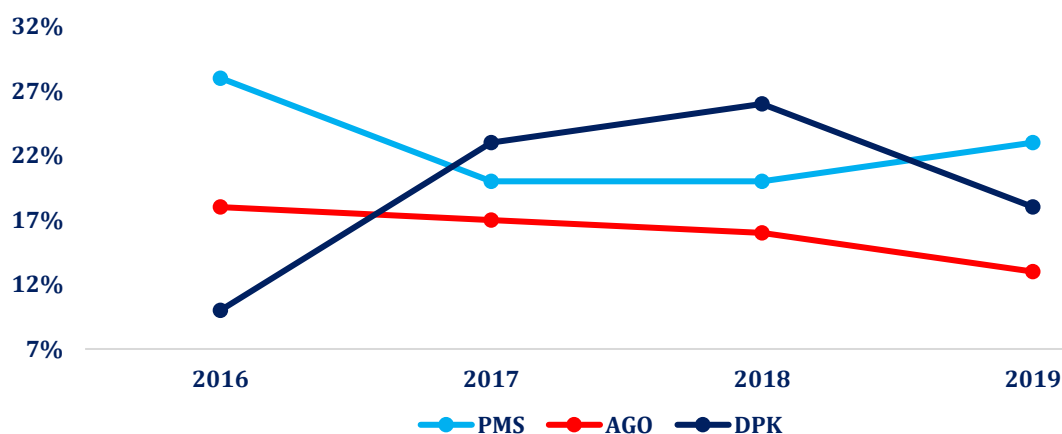
		Major	NNPC	Independent
PMS	2016	28%	9%	63%
	2017	20%	6%	74%
	2018	20%	6%	74%
	2019	23%	5%	72%
AGO	2016	18%	2%	80%
	2017	17%	5%	79%
	2018	16%	4%	79%
	2019	13%	2%	84%
DPK	2016	10%	5%	85%
	2017	23%	7%	70%
	2018	26%	1%	73%
	2019	18%	0%	82%

Sources: NNPC, NBS Marketers and FSDH Merchant Bank Analysis

Market Share in PMS Amongst Players

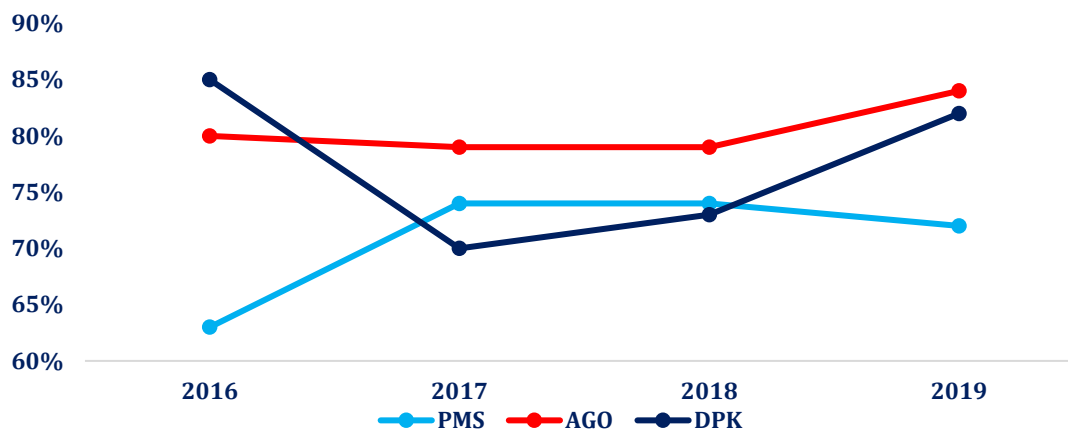


Major Marketers' Share in Main Petroleum Products

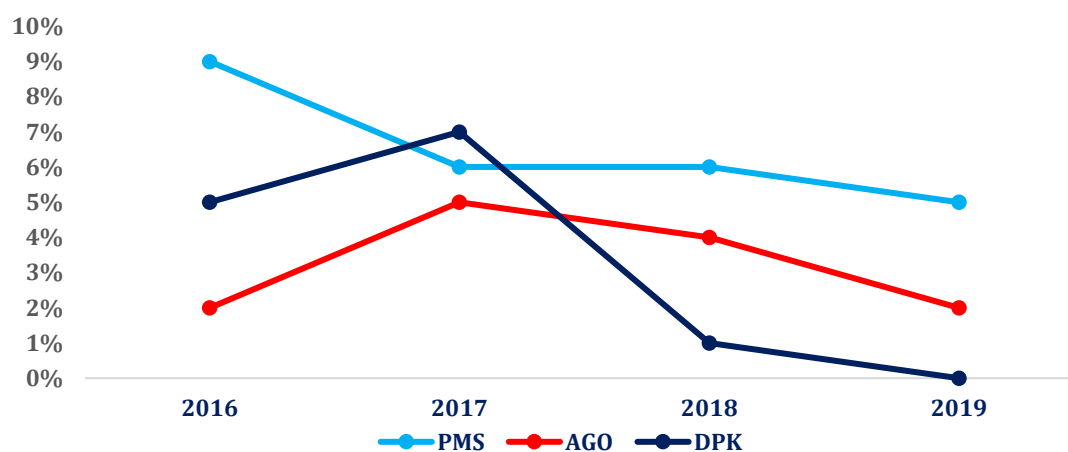


Sources: NNPC, NBS, Marketers and FSDH Merchant Bank

Independent Marketers' Share in Main Petroleum Products



NNPC's Share in Main Petroleum Products



Sources: NNPC, NBS, Marketers and FSDH Merchant Bank

Table 23: Share of PMS Sales by Players

	2016	2017	2018	2019
Major Marketers	28%	20%	20%	23%
NNPC	9%	6%	6%	5%
Independent Marketers	63%	74%	74%	72%
<i>Sources: NNPC, NBS, Marketers and FSDH Merchant Bank Analysis</i>				

Table 24: Share of AGO Sales by Players

	2016	2017	2018	2019
Major Marketers	18%	17%	16%	13%
NNPC	2%	5%	4%	2%
Independent Marketers	80%	79%	79%	84%
<i>Sources: NNPC, NBS, Marketers and FSDH Merchant Bank Analysis</i>				

Table 25: Share of DPK Sales by Players

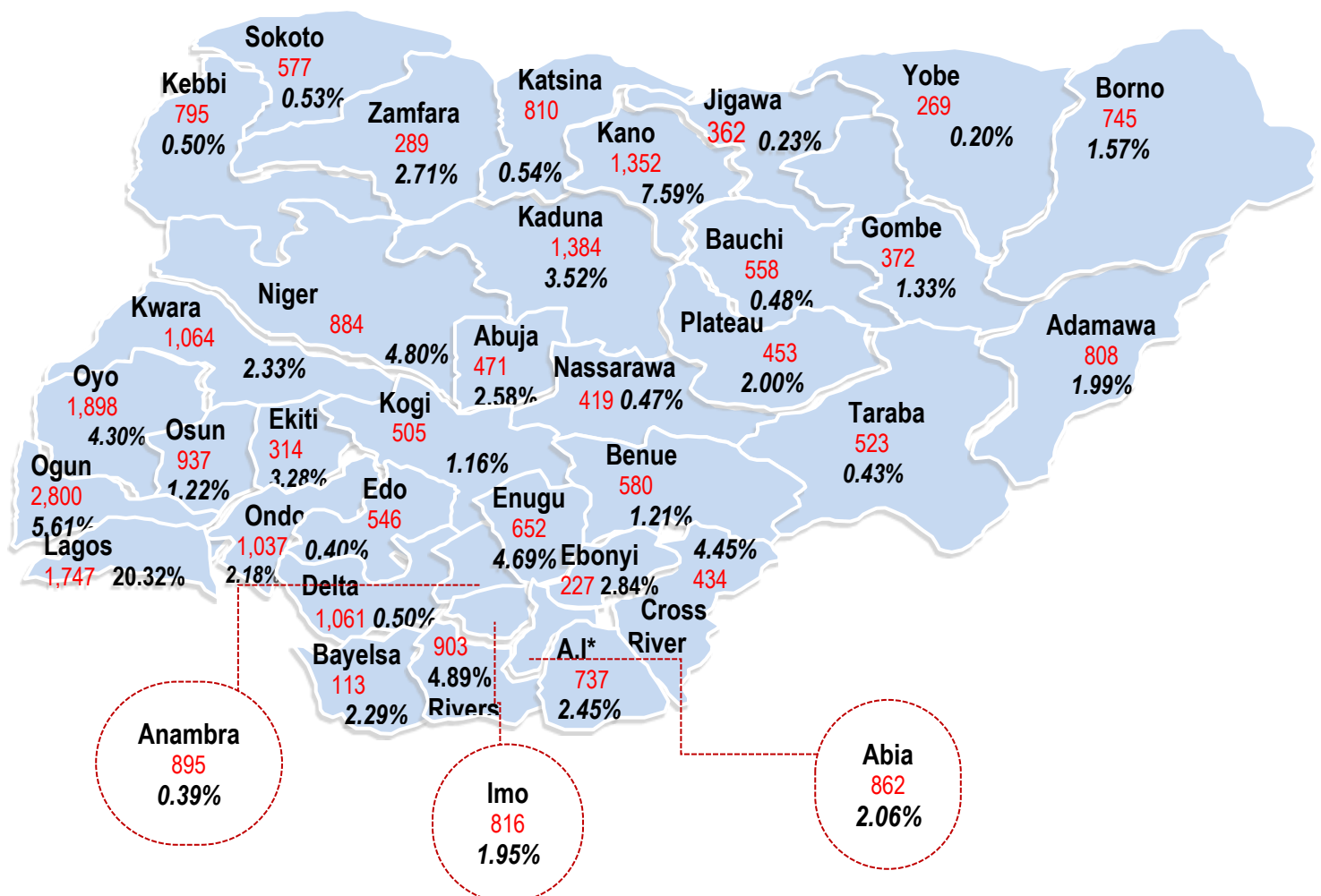
	2016	2017	2018	2019
Major Marketers	10%	23%	26%	18%
NNPC	5%	7%	1%	0%
Independent Marketers	85%	70%	73%	82%
<i>Sources: NNPC, NBS, Marketers and FSDH Merchant Bank Analysis</i>				

8.0 Retail and Marketing

8.1 Filling Stations (Outlets)

According to data from DPR as at 2018, Ogun State had the largest concentration of filling stations in Nigeria, followed by Oyo, Kaduna and Kano. A further analysis indicated that independent marketers had the widest retail network across Nigeria; they accounted for about 82% of all filling stations. They held the largest number of retail outlets in Akwa Ibom State, whereas major marketers had the largest number of the outlets in Lagos state. We note that the DPR data appears to exclude NNPC retail outlets in some states. However, additional sources show that retail outlets for major marketers (excluding MRS Oil) totalled about 1,948 in 2018, a number significantly lower than the DPR estimate of 3,266 in 2017.

Filling Stations and Throughput in Nigeria by State (2018)



*A.I – Akwa Ibom

Sources: DPR and FSDH Merchant Bank Analysis

MOMAN's Share of Filling Stations in Nigeria by State (2018)

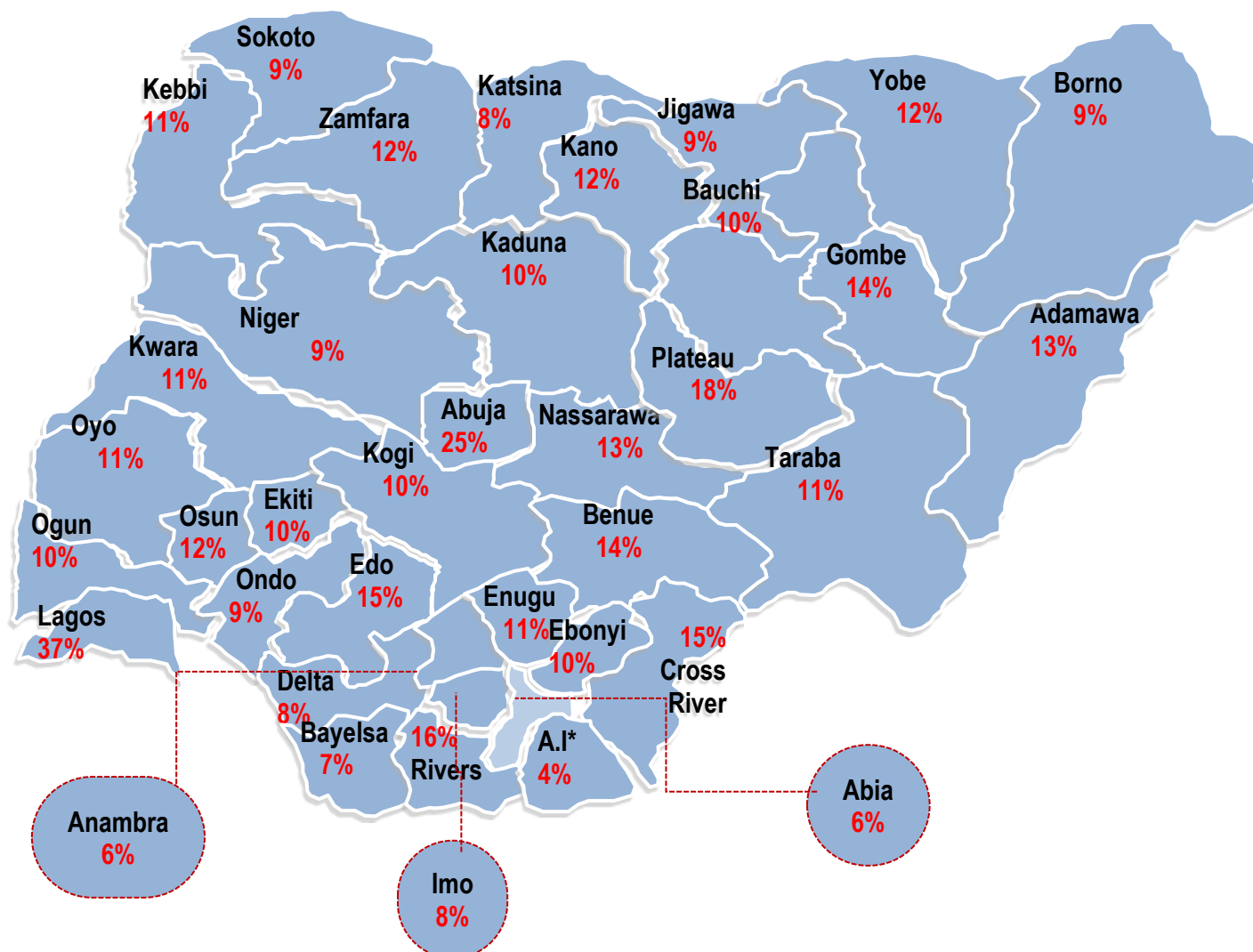


Table 26: Filling Stations By States and Players - 2018

States	Independent	Major	NNPC	Total	Contribution	Throughput**
Abia	803	55	4	862	2.95%	2.06%
Abuja	340	119	12	471	1.61%	2.58%
Adamawa	684	104	20	808	2.77%	1.99%
Akwa Ibom	704	31	2	737	2.52%	2.45%
Anambra	841	53	1	895	3.07%	0.39%
Bauchi	497	56	5	558	1.91%	0.48%
Bayelsa	104	8	1	113	0.39%	2.29%
Benue	491	80	9	580	1.99%	1.21%
Borno	673	65	7	745	2.55%	1.57%
Cross River	363	65	6	434	1.49%	4.45%
Delta	950	90	21	1,061	3.63%	0.50%
Ebonyi	205	22	-	227	0.78%	2.84%
Edo	459	81	6	546	1.87%	0.40%
Ekiti	278	31	5	314	1.08%	3.28%
Enugu	581	69	2	652	2.23%	4.69%
Gombe	301	52	19	372	1.27%	1.33%
Imo	751	63	2	816	2.79%	1.95%
Jigawa	328	34	-	362	1.24%	0.23%
Kaduna	1,204	141	39	1,384	4.74%	3.52%
Kano	1,185	164	1	1,350	4.62%	7.59%
Katsina	738	65	7	810	2.77%	0.54%
Kebbi	682	87	26	795	2.72%	0.50%
Kogi	445	49	11	505	1.71%	1.16%
Kwara	947	113	4	1,064	3.64%	2.33%
Lagos	1,069	649	29	1,747	5.98%	20.32%
Nassarawa	353	55	11	419	1.44%	0.47%
Niger	802	81	1	884	3.03%	4.80%
Ogun	2,509	267	24	2,800	9.59%	5.61%
Ondo	941	89	7	1,037	3.55%	2.18%
Osun	812	113	12	937	3.21%	1.22%
Oyo	1,674	216	8	1,898	6.50%	4.30%
Plateau	354	83	16	453	1.55%	2.00%
Rivers	757	140	6	903	3.09%	4.89%
Sokoto	510	53	14	577	1.98%	0.53%
Taraba	454	57	12	523	1.79%	0.43%
Yobe	236	31	2	269	0.92%	0.20%
Zamfara	245	34	10	289	0.99%	2.71%
Total	25,270	3,565	362	29,197	100.0%	100.0%

Sources: DPR and FSDH Merchant Bank Analysis;

*Information from other sources ** Based on 2018 Actual Consumption

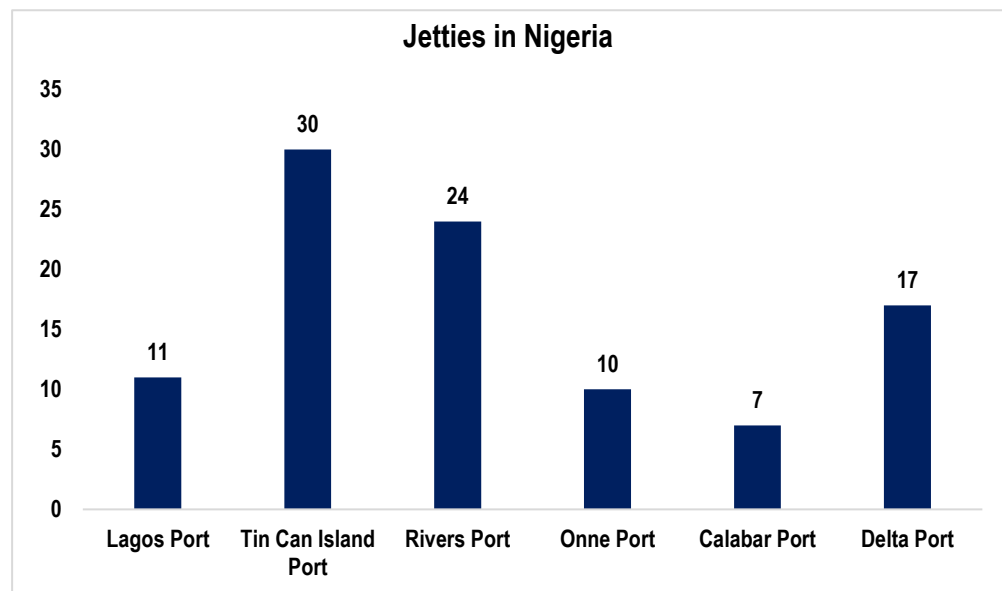
9.0 Jetties, Depots and Transportation

9.1 Jetty Operations in Nigeria

Information from the Nigerian Ports Authority (NPA) reveals that there are 99 private jetties in Nigeria. Major marketers own about 4% of all jetties in Nigeria.

In Nigeria, the jetties are concentrated around the ports, which are spread across major coastal regions in the country. The ports are: the Lagos Port, the Tin Can Port, the Rivers Port, the Warri Port, the Calabar Port, and the Onne Port. Information from the Nigerian Ports Authority (NPA) reveals that there are 99 private jetties in Nigeria and major marketers own about 4% of them.

Jetties in Nigeria vary widely in size, with the largest one being the Dantata Jetty in Lagos State, owned and operated by MRS Oil Nigeria Plc. It has the capacity to berth vessels of 80,000-120,000 metric tonnes. Across the different regions in the country, the cost of berthing varies from as low as \$20,000 to as high as \$200,000, subject to vessel size and Length Over All (LOA), and berthing usually holds over a 72-84 hour discharge laytime. A demurrage fee between \$15,000-\$20,000 is charged daily when a vessel exceeds the period it ought to spend in the jetty, as stipulated in the contract. On the average, marketers spent N0.80 per litre for the jetty-depot throughput charge in 2015. In subsequent years, this charge declined by 25% to settle at 0.60 per litre.



Source: Nigerian Ports Authority



9.1.1 Challenges and Risks Facing Jetties

Jetties in Nigeria have not been operating at optimal levels as a result of a number of challenges they face. Some of these are discussed below:

Draught limits the capacity of vessels that are able to berth in the jetties.

The current inability to berth larger vessels in the country has led to the potential loss of revenue and waste of scarce resources incurred on Ship-to-Ship (STS).

- **Draught:** Poor maintenance and climate change have affected waterways and led to a reduction in the depth of water at Nigerian ports and jetties. This limits the capacity of vessels that are able to berth in the jetties. Consequently, larger vessels, which could be as sizeable as 150,000 tonnes, are unable to berth in the country. We gather that Dangote is building a large jetty in the Lekki Free Trade Zone area that will enable it transport refined products from its refinery. The current inability to berth larger vessels in the country has led to the potential loss of revenue and waste of scarce resources incurred on Ship-to-Ship (STS). A jetty's Length Over All (LOA) is another constraint that limits the type of vessel that can berth. Typically, Medium Range (MRs) vessels have LOA of 175 – 185m, while Long Range (LRs) vessels can have LOA in excess of 220m.
- **Inadequate Security:** The numerous jetties in the country do not have sufficient levels of security. This has led to an increase in piracy and militancy activities. The pipelines are also damaged because of inadequate security, which increases the cost of doing business in Nigeria. Due to poor security levels around the coast of the country

The inadequate jetties infrastructure provides investment opportunity for investors to fix.

(especially in the South-South/East regions), vessel owners include War Risk cost as part of their freight risk cost, which further increases the landing cost of cargoes. For instance, it is cheaper to hire a vessel to deliver cargo from Lome to Cameroon than from Lome to Rivers State in Nigeria, even though the distance between the former is greater

- **High Taxes:** The taxes charged on cargoes that berth in the jetties are high. This makes the country's jetties uncompetitive relative to other countries. The high taxes have also discouraged berthing of vessels through appropriate legal channels.
- **Polluted Waterways:** The increasing level of pollution of the Nigerian waterways has led to an increase of debris in the sea. This has made it difficult for vessels to easily navigate the waterways.
- **Inadequate Shoreside infrastructure:** Most terminals in Nigeria have small diameter single-header manifolds, which underutilise the multiple pumps installed on vessels.

9.1.2 Future Outlook for Jetties

There is a need for a port reform in Nigeria to enable the gateway support businesses, particularly in the area of international trade. Operating inefficient port structures and infrastructure that raise cost leads to diversion of businesses to neighbouring countries that have more efficient port operations. Eventually, the government will lose revenue as a result. The government can concession obsolete facilities at the ports to private companies, and streamline the inspection agencies to remove all administrative bottlenecks that delay free flow of goods.

The efficient operations of the nation's ports are very important so that both refined oil products and non-oil finished products can be competitive in the international market. When the cost of exporting goods from Nigeria is high because of administrative delays and poor infrastructure that hinders free movement, the price of those goods would be higher than the international prices, thus making Nigerian products uncompetitive. This issue is one of the reasons goods produced in Asian countries and brought into the Nigerian

There is a need for a ports reform in Nigeria to enable the gateway support businesses, particularly in the area of international trade.

market are still cheaper than the goods produced within Nigeria.

The average turnaround time for vessels in the Nigerian ports is 107 hours according to the Nigerian Port Authority (NPA). Industry sources say the global standard turnaround time is about 36 hours. Industry data also shows that the discharge of a vessel can actually take 25 days, between when the Notice of Readiness (NOR) is issued and when the vessel sails following full discharge of the product. Investments in multi-header oil reception facility projects and connections to larger diameter jetty-to-tank pipelines would help to reduce the local turnaround time.

Additionally, the use of modern digital technology for discharging from and loading cargoes onto the vessels would help to significantly reduce the turnaround time in the jetties, increase the number of vessels that can berth and subsequently increase revenue. Technologies such as drones, smart machines, and Global Positioning Systems (GPS) could be used to collect data, monitor operations and improve jetty efficiency. From a holistic national perspective, with a shorter turnaround time, the ease of doing business would also improve; thereby increasing the competitiveness of Nigerian jetties relative to other countries and commanding more tax revenue for the Government.

The average turnaround time for vessels at the Nigerian ports is 107 hours according to the Nigerian Ports Authority (NPA). Industry sources say the global standard turnaround time is about 36 hours.

We gather that some of the depots owned by the major marketers are non-functional. Investments in making those depots functional could position one at a better advantage for the industry opportunities.

Table 27: Vessels and Gross Registered Tonnage			
Year	Number of Vessels	Gross Registered Tonnage	Average Ton per Vessel
2007	4,849	84,806,792	17,490
2008	4,623	89,505,702	19,361
2009	4,721	90,603,611	19,192
2010	4,881	106,689,553	21,858
2011	5,232	122,614,716	23,436
2012	4,837	120,818,683	24,978
2013	5,369	130,628,057	24,330
2014	5,333	148,323,065	27,812
2015	5,014	141,250,703	28,171
2016	4,373	134,066,547	30,656
2017	4,292	130,357,357	30,372
2018	4,009	128,671,805	32,096
2019 (May-March)	1,045	32,974,368	31,554
Source: Nigerian Ports Authority (NPA)			

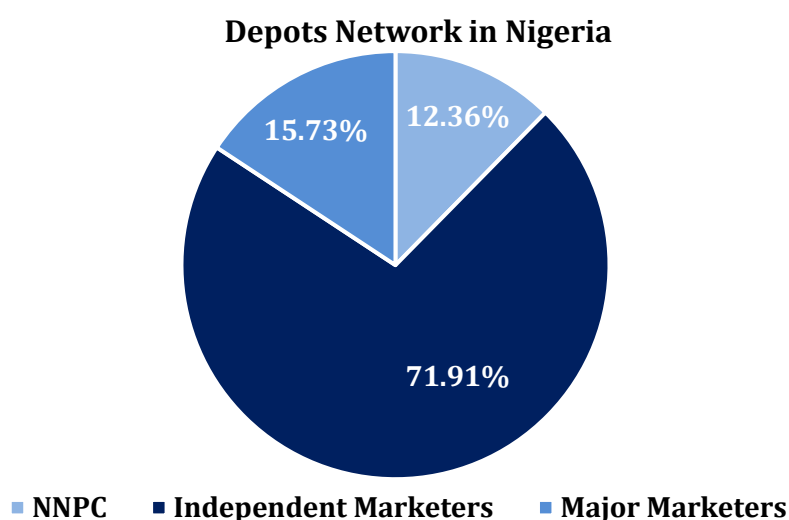
9.2 Depots

9.2.1 Depot Network Nationwide

According to DPR, Nigeria has 178 functional depots nationwide with a total capacity of 17,953,892.63m³, ownership of which is shared amongst the NNPC (22), the major marketers (28) and the independent marketers (128). Although the major marketers own more depots than the NNPC, the depots of the NNPC have considerably more capacity than those of the major marketers. As a result, these major marketers may be at a strategic disadvantage if storage capacities confer any competitive advantage to operators in the industry. Investments to increase storage capacities could position the major marketers to take advantage of the opportunities in the industry.

Table 28: Ownership Share of Depots for all Petroleum Products in Nigeria				
Operators	Number of Depots	Depots Share	Capacity (m ³)	Capacity Share
NNPC	22	12.36%	6,865,522.63	38.24%
Major Marketers	28	15.73%	1,692,120.00	9.42%
Independent Marketers	128	71.91%	9,396,250.00	52.34%
Total	178	100.00%	17,953,892.63	100.00%

Source: Department of Petroleum Resources (DPR)



Sources: DPR and FSDH Merchant Bank Analysis

9.2.2 Storage by Product

The total storage capacity of 17,953,892.63m³ is used to stock seven different petroleum products, namely Household Kerosene (HHK), Premium Motor Spirit (PMS), Aviation Turbine Kerosene (ATK), Automotive Gas Oil (AGO), Base, Bitumen, and Low Pour Fuel Oil (LPFO). HHK and PMS account for nearly 80% of all the petroleum products that are stored, which is not surprising since Nigerians rely heavily on these two products for household and commercial use.

Major marketers have nearly 77% of their storage capacity for PMS, AGO and HHK in the North, with none in the East.

While major marketers account for low storage shares for PMS and AGO (the two most consumed petroleum products in Nigeria), these operators hold a significant portion of the total storage for Base Oil (36.58%). Increasing storage capacity for PMS and AGO would therefore help to maximise profits.

9.2.3 Storage Distribution by Region

The three major petroleum products in Nigeria– PMS, AGO and HHK - are stocked in depots located at different parts of the country. With a total storage capacity of 13,901,960.00m³, analysis by regions in Nigeria shows that the West has the largest product storage capacity with over 55% of this figure. We also see that major marketers have nearly 77% of their storage capacity in the North, while none is based in the East.

Table 29: Storage Distribution of Selected Petroleum Products by Regions in Nigeria				
	NNPC	Major Marketers	Independent Marketers	Total (m ³)
North	1,820,654	1,139,133	10,700	2,970,487
South	426,627	93,900	2,153,685	2,674,212
West	892,364	249,199	6,797,808	7,939,371
East	278,927	-	38,963	317,890
Total (m³)	3,418,572	1,482,232	9,001,156	13,901,960

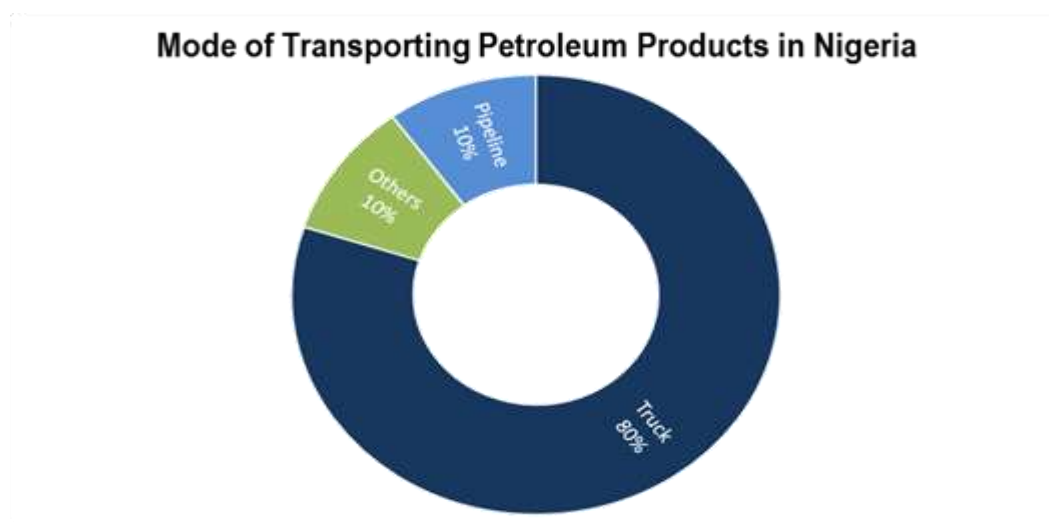
Source: Department of Petroleum Resources (DPR)

9.3 Transportation

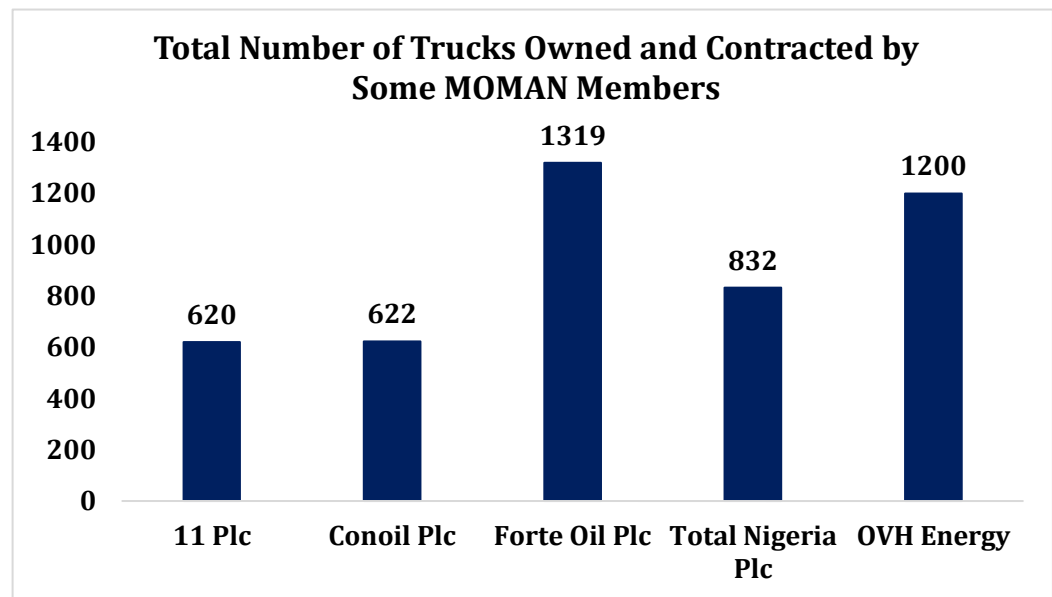
9.3.1 Transportation of Petroleum Products

Trucking remains the most popular mode of transportation as 80% of the petroleum products are conveyed by trucks. Pipelines and barges each account for only 10% of the total volume being transported.

There are three major modes of transportation of petroleum products in the Nigerian downstream sector, namely pipeline or back loading, trucking, and barges or small ships. Of the three, trucking remains the most popular mode of transportation as 80% of the petroleum products are conveyed by trucks. Pipelines and barges each account for only 10% of the total volume being transported.



80% of the Major Oil Marketers Association of Nigeria (MOMAN) members have over 4,500 vehicles within their control.



9.3.2 Pipelines

9.3.2.1 Pipeline Infrastructure in Nigeria

In the global Oil and Gas industry, pipelines are commonly used to transport crude oil and white petroleum products. The pipeline infrastructure in Nigeria is built in a manner that links the wellheads at the source location to the refineries that are also linked to the various depots located in different regions of the country. The essence of this is to ensure a steady supply of petroleum products to the retail consumers.

The body in charge of the pipelines in Nigeria is the Nigerian Pipelines and Storage Company Limited (NPSC), an offshoot of the Petroleum Products Marketing Company (PPMC) that is a subsidiary of the Nigerian National Petroleum Corporation (NNPC). NPSC oversees the transportation of crude oil from the source locations to the refineries, where they are refined into the different petroleum products and moved to the depots across the country. It is from the depots that the petroleum products are moved into the market.

9.3.2.2 Challenges and Risks of Pipeline Infrastructure in Nigeria

The transportation of crude oil and white petroleum products via pipelines has numerous advantages around safety, reliability and cost relative to other means of transportation. However, despite the fact that Nigeria has over 5,000 kilometres of pipelines, the utilisation rate is very low, as only 10% of petroleum products are moved through them. The low usage of pipeline infrastructure for the transportation of crude oil and petroleum products is partly as a result of the challenges and risks associated with it. Some of the challenges are highlighted below:

- **Low level of local refining of crude oil that takes place in Nigeria** The capacity utilisation rate of all the 446,000 bpd-capacity refineries in Nigeria was 2% in 2019, a drop from 8% recorded in 2018, according to data from the NNPC. This utilisation rate is considerably low, and means that too little products are available from refineries for pipeline

The capacity utilisation rate of pipelines in Nigeria is very low, as only 10% of petroleum products are moved through them.

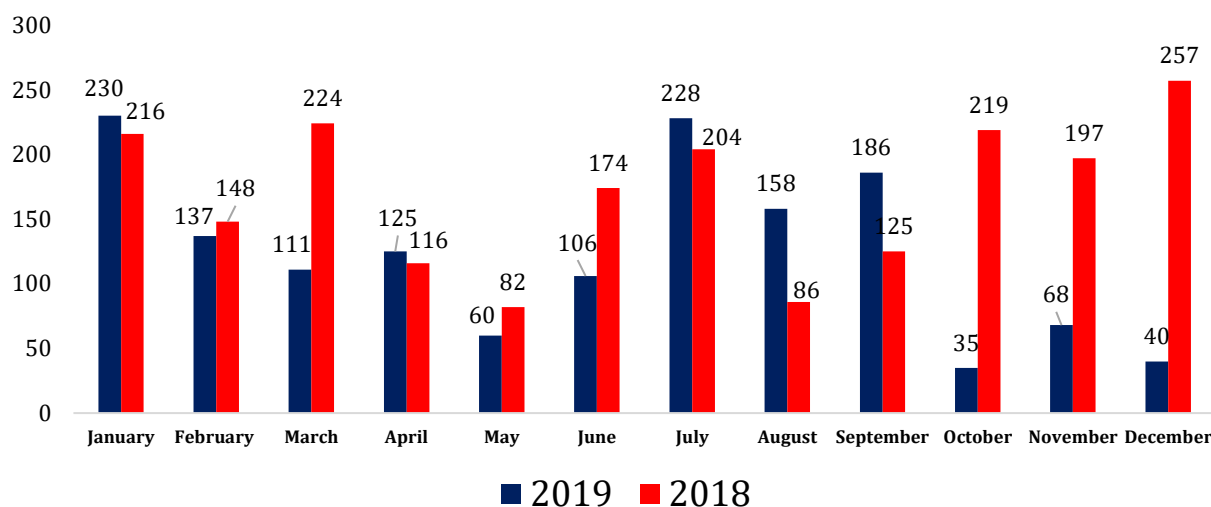
The capacity utilisation rate of all the 446,000 bpd-capacity refineries in Nigeria was 2% in 2019, a drop from 8% recorded in 2018.

Their low utilisation rate means that too little products are available from refineries for pipeline transportation to depots. As a result, petroleum products are heavily imported to meet demand.

transportation to depots. As a result, petroleum products are heavily imported to meet demand.

- **Ageing Pipelines:** Data from the NNPC shows that over the years, there have been cases of pipeline ruptures, and some of these have been as a result of the ageing of the pipelines. Without proper routine checks and maintenance, the pipelines go moribund due to corrosion, and rupture is a result.
- **Inadequate security measures:** There are inadequate security measures in place to safeguard the Oil and Gas pipelines in Nigeria. Both physical and technological security measures for pipelines are lacking in Nigeria. Old pipelines should be replaced, and there should be deployment of modern technologies such as sensors and drones to secure the pipelines.
- **High level of Pipeline Vandalism:** The level of insecurity associated with the use of pipelines in Nigeria is high as a result of vandalism. In 2019 there were a total of 1,484 cases of vandalised pipelines in Nigeria, though a reduction from 2,048 cases recorded in 2018. This high rate of pipeline vandalism in Nigeria discourages adequate investment in the refineries and also increases the refining cost in the country. The NNPC has however assured all the stakeholders that it is implementing appropriate technologies to curb pipeline vandalism in Nigeria.

PPMC Pipeline Breaks: 2018-2019



Source: NNPC

When there are cases of pipeline leakages, the crude oil and petroleum products spill into the lands and waters, which negatively affect the environment, health and economy of the residents in the vicinity of the leak.

- **Environmental Risks:** Due to the manner in which Oil and Gas pipelines are laid, they pose major threats to the environment. Pipelines in Nigeria are laid underground and passed through lands and seas. When there are cases of pipeline leakages, the crude oil and petroleum products spill into the lands and waters, which negatively affect the environment, health and economy of the residents in the vicinity of the leak. In addition, the government and oil companies expend a lot of resources to clean up these spillages that could have been used for other productive purposes.

The major purpose for establishing PENGASSAN was to protect the interests of its members.

9.3.3 Some Major Stakeholders

The Petroleum & Natural Gas Senior Staff Association of Nigeria (PENGASSAN)

The Petroleum & Natural Gas Senior Staff Association of Nigeria (PENGASSAN) is a trade union of oil and gas workers established for the main purpose of protecting the interests of its members. Formally registered on 15 August 1978, it has its head office in Lagos and other offices in locations around the country, such as in Delta State, Rivers, Kaduna, and the Federal Capital Territory (FCT) Abuja.

PENGASSAN is saddled with the following responsibilities:

- To safeguard and protect the jobs of its members;
- To ensure a safe and healthy working environment for its members;
- To improve the terms and conditions of employment of its members;
- To support and promote legislation in the interest of its members in particular, and Nigeria in general; and
- To render assistance to other trade union organisations in the spirit of cooperation and solidarity.

The Association has over 10,000 members that range from senior to middle level management employees in various Oil and Gas companies in Nigeria. The members' composition of PENGASSAN differs from that of NUPENG, which comprises of junior staff members. The National Secretariat registers the group of workers in a company and they constitute a branch. Presently, PENGASSAN has 127 member branches.

Nigeria Union of Petroleum and Natural Gas Workers (NUPENG)

The Nigeria Union of Petroleum and Natural Gas Workers (NUPENG) is also a trade union in the Oil and Gas industry. It is one of the major stakeholders in the downstream sector, in that it acts as the umbrella union body of all oil and gas workers. The union was birthed as a result of the need to organise, protect, promote and defend the socio-economic and political interests of the Oil and Gas workers in Nigeria. In order to promote the industry as a whole, NUPENG is essential since they are the voice of the industry workers.

Initially registered as a Trade Union on 15 August 1978, the union is divided into the Lagos, Warri, Port Harcourt and Kaduna Zones, and has offices in Lagos (its secretariat), Delta, Port Harcourt, Kaduna, Akwa Ibom, and Oyo States, as well as a liaison office in Abuja. The members of the union consist of junior staff or production workers in the Oil and Gas industry, unlike PENGASSAN whose members comprise of senior to middle level management employees.

NUPENG seeks to:

- Ensure the complete unionisation of all workers employed in the petroleum and gas industry;
- Regulate the relations and settle disputes between members and employers and between a member and another;
- Obtain and maintain just and equitable general conditions of service
- Advance the education and training of members;
- Provide benefits and other assistance as provided in the Constitution;
- Encourage the participation of members in decision-making in the undertaking both at industrial and national levels;
- Protect and advance the socio-economic and cultural interests of the community, and such other objectives as are lawful and are not inconsistent with the spirit and practice of trade unionism;
- Promote and encourage international fraternal relations with bodies having the interest of petroleum and gas workers; and
- Establish and carry on or participate (financially and otherwise) in the business of the printing or publishing of a general newspaper, or of any other undertaking, industrial or otherwise, in the interest of or with the main purpose of furthering the interest of the union or trade unionism generally.

Due to the huge reliance on tankers for the movement of petroleum products in the industry, another union, PTD, is also a key stakeholder in the downstream oil and gas industry. PTD stands for the Petroleum Tanker Drivers (PTD) and is an arm of the Nigeria Union of Petroleum and Natural Gas Workers (NUPENG).

The Nigerian Association of Road Transport Owners (NARTO)

The Nigerian Association of Road Transport Owners (NARTO) is the umbrella organisation for all investors in the road transport business in Nigeria, which include commercial vehicles owners engaged in haulage of petroleum products, general cargoes, and movement of passengers within the country and the entire West-Africa sub region.

Its objectives are:

- To promote and protect the interest of NARTO members in the Road Haulage industry in Nigeria and the interest of Nigerian Road Haulage and Commercial Transport Operations;
- To consider all questions connected with the carrying on of road haulage and general transportation business in Nigeria;
- To present, express and give effect to the views and options of road haulage operations and transporters generally;
- To collect and circulate statistics and general information in connection with or relevant to road haulage and transportation business in Nigeria; and
- To enter into agreement with other associations and/or bodies for the advancement of the road haulage and transportation business in Nigeria.

NARTO is one of the major stakeholders in the downstream Oil and Gas industry because they handle the major means of transportation of white products in Nigeria. Due to their strategic position, closer collaboration is needed with them in order to drive and maintain the HSEQ standards, and improve the efficiency of operational and logistics processes.

NARTO is one of the major stakeholders in the downstream Oil and Gas industry because they control the major means of transportation of white products in Nigeria.

10.0 Refineries

One of the next big things that must happen in the Oil and Gas industry is drastic reforms in the refinery business in Nigeria.

One of the next things that needs to happen in the Oil and Gas industry in Nigeria is a drastic reform in the refinery business. The objectives of the reform must be to see that Nigeria is self-sufficient in refining all the petroleum products that are consumed locally, and to generate up to 20% of the total foreign exchange earnings in the country from the exportation of refined petroleum products. Three major strategies to achieving these goals are highlighted below:

- i. Setting up of policies that will encourage investment in new modular refineries to cover regional markets in Nigeria.
- ii. Urgent privatisation of government-owned refineries: The privatisation process must be transparent and asset sold to core investors with requisite technical partners that will ensure the turnaround of the refineries. It is important that the government ceases expenditure on the refineries, as they continue to drain the scarce resources of the country. New core investors can assess the states of the refineries with a view to bringing them to life.
- iii. Completion of the Dangote Refinery, and the encouragement of other conventional refineries in strategic locations across Nigeria, for the service of both local and international markets.

There is a need for the urgent privatisation of government-owned refineries.

There are five refineries in Nigeria at the moment. The Nigerian government through the Nigerian National Petroleum Corporation (NNPC) owns four of them, while the fifth refinery is owned and operated by Niger Delta Petroleum Resources (NDPR). Out of the four NNPC-owned refineries, there are two in Port Harcourt (PHRC), and one each in Kaduna (KRPC) and Warri (WRPC). The refineries have a combined installed capacity of 446,000 barrels per stream day (bpsd), and a comprehensive network of pipelines and depots strategically located throughout Nigeria links them.

Two of the refining plants, KRPC and WRPC, have petrochemical complexes that

utilise their refinery intermediates to produce petrochemical precursors, and we gather from industry sources that a modular refinery owned by Waltersmith is ready for commissioning. The installed capacities of KRPC and WRPC are 110,000 bpsd and 125,000 bpsd respectively, while NDPR has an installed capacity of 1,000 bpsd.

The PHRC is made up of two refineries located at Alesa-Eleme near Port Harcourt, Rivers state. The old refinery with a capacity of 60,000 bpsd was commissioned in 1965 and acquired by NNPC from Shell in 1983. Subsequently, a new capacity of 150,000 bpsd was built in 1988 and commissioned in 1989, making the current combined installed capacity of PHRC 210,000 bpsd.

PHRC is capable of producing the following products: LPG; PMS; HHK; ATK; AGO; LPFO; and HPFO

Table 30: Local Refining Capacities		
Companies	Designed Capacity (bpsd)	Ownership
Kaduna Refining & Petrochemical Company	110,000	NNPC
Port Harcourt Refining Company (New)	150,000	NNPC
Port Harcourt Refining Company (Old)	60,000	NNPC
Warri Refining & Petrochemical Company	125,000	NNPC
Niger Delta Petroleum Resources	1,000	NDEP
	446,000	
Source: Department of Petroleum Resources; barrels per stream day (bpsd)		

10.1 Port Harcourt Refinery

The Port Harcourt Refinery, a 210,000 bpsd complex conversion plant, is operated by the Port Harcourt Refining Company (PHRC) Limited, a subsidiary of the Nigerian National Petroleum Corporation (NNPC). The plant utilises Bonny Light crude oil to produce Liquefied Petroleum Gas (LPG), Premium Motor Spirit (PMS), Dual Purpose Kerosene (DPK), Automotive Gas Oil (AGO), Low Pour Fuel Oil (LPFO) and High Pour Fuel Oil (HPFO).



10.2 Kaduna Refinery

The Kaduna refinery has a refining capacity of 110,000 bpsd and is located in Kaduna, Kaduna State. The plant is run by the Kaduna Refining and Petrochemicals (KRPC) Limited, a subsidiary of NNPC. In December 1986, the design capacity of the fuels plants of the refinery was successfully increased from 50,000 bpsd to 60,000 bpsd, bringing the total refinery installed capacity to 110,000 bpsd. The KRPC possesses a fuel plant commissioned in 1983, and a 30,000 MT per year Petrochemical Plant commissioned five years later in 1988.

Products obtained from KRPC include: LPG; PMS; HHK; ATK; AGO and Fuel Oil. The petrochemical plant produces LAB.

The refining plant has two (2) distillation units that utilise Escravos and Ughelli crude oils for fuel production and imported heavy crude oil for lube base oil, asphalt and waxes. Products obtained from KRPC include Liquefied Petroleum Gas (LPG), Premium Motor Spirit (PMS), House Hold Kerosene (HHK), Aviation Turbine Kerosene (ATK), Automotive Gas Oil (AGO), and Fuel Oil. The petrochemical plant produces Linear Alkyl Benzene (LAB).



10.3 Warri Refinery

The Warri refinery was established in 1978 with a refining capacity of 100,000 bpsd, which was increased to 125,000 barrels per stream day in 1987. The refinery is located at Ekpan, Warri, Delta State and the Warri Refining & Petrochemicals Company (WRPC), a subsidiary of NNPC, operates it.

The refinery was installed as a complex conversion plant capable of producing Liquefied Petroleum Gas (LPG), Premium Motor Spirit (PMS), Dual Purpose Kerosene (DPK), Automotive Gas Oil (AGO), and Fuel Oil from a blend of Escravos and Ughelli crude oils. WRPC has a petrochemical plant complex that produces Polypropylene, carbon black from the propylene-rich feedstock, and decants oil from the Fluid Catalytic Cracking unit (FCCU).

Warri Refinery is capable of producing the following products: LPG; PMS; HHK; ATK; AGO and Fuel Oil.



10.4 Niger Delta Petroleum Resources (NDPR)

The NDPR refinery was commissioned in 2010 and is a 1,000 bpsd capacity plant located at Ogbele, Rivers State. The plant is targeted at the production of diesel for its internal consumption, and the excess is sold to its immediate locality. The plant receives crude oil from the flow station operated by its upstream affiliate, the Niger Delta Exploration and Production (NDEP) Company, within its marginal field. NDPR was the first private refinery in Nigeria to receive a License to Operate (LTO) from the Federal Government. An expansion of the plant is ongoing to increase processing capacity to 11,000bpsd.

The plant is targeted at the production of diesel for its internal consumption, and the excess is sold to its immediate locality.



Table 31: Monthly Refined White Petroleum Products from Local Refineries

	2016	2017	2018	2019
Jan	162	328	112	81
Feb	101	264	137	80
Mar	111	182	153	82
Apr	234	233	126	-
May	165	222	162	14
Jun	331	186	206	-
Jul	67	80	39	-
Aug	220	78	22	-
Sep	108	87	2	-
Oct	210	204	-	-
Nov	192	44	14	-
Dec	123	233	35	-
Total	2,022	2,142	1,006	258

Source: NNPC

At the time of this report, a total of 29 companies had valid licences to operate refineries in Nigeria. The total capacity of these refineries stood at 1.54 million bpsd; Dangote Refinery alone has a total capacity of 650,000 bpsd.

Modular refineries are refineries whose capacities are within 1,000 and 30,000 bpsd.

Most of the modular refineries particularly the ones with capacities of less than 20,000 bpsd, are built to refine petroleum products other than PMS. Modular refineries are better suited for AGO and DPK.

10.5 Modular Refineries

Modular refineries are refineries whose capacities are within 1,000 and 30,000 bpsd. Most of the modular refineries, particularly those with capacities of less than 20,000 bpsd, are built to refine petroleum products other than PMS. Modular refineries are better suited for AGO and DPK. They have the following advantages over conventional refineries that have capacities in excess of 30,000bpsd:

- i. They can be a good model to supply products to a regional market and thereby reduce logistics cost, which is usually a large cost in downstream operations;
- ii. They are usually very flexible to upgrade from one form to the other, and can be constructed in phases;
- iii. The capital outlay to construct a modular refinery is low and the payback period is usually shorter than the conventional refinery;
- iv. The land requirement is lower than that of a conventional refinery; and
- v. It does not take a long period to complete; the scope of installation and other work required is lower than that of the conventional refinery.

Usually, a modular refinery can take one of the following forms: **Traditional Model** and **Special Purpose Vehicle Model**

Traditional Model: The market partners with an operator of an onshore marginal field to run the refinery. Usually, the marginal field operator provides the land and the crude oil and they agree on a sharing ratio for the proceeds of the refined products.

Special Purpose Vehicle Model: The marketer and an upstream company establish a refinery company. They then agree on a sharing ratio of the profit they make from refining the crude oil into petroleum products.

DPR designates 6 companies with a combined refinery capacity of 81,000bpsd as companies that can break ground.

At the time of this report, the Department of Petroleum Resources (DPR) had awarded 23 companies with modular refinery licences having a combined capacity of 340,000bpd. The licence to establish for two of these companies (with a capacity of 44,000bpd) has expired. DPR designates 6 more companies with a combined refinery capacity of 81,000bpd as companies that can break ground. FSDH Merchant Bank believes these 6 companies are the refineries that can start operations within the next 5 years. Although these modular refineries are not necessarily high-yielding PMS refineries, because they do not have Fluid Catalytic Cracking (FCC) units that increase the yield in PMS, they will find a market for their products in Nigeria.

The success of these modular refineries will depend on the following:

- i. Closeness to marginal fields where they can obtain crude oil easily
- ii. Closeness to specific regional markets within the locality of the refinery, to enable them reduce logistics costs.

Table 32: Companies operating refineries that can break ground

S/N	Name	Location	Plant Configuration	Capacity (bpsd)
1	Waltersmith Refining & Petrochemical Company Ltd	Ibigwe, Imo State	Topping plant	5,000
2	Clairgold Oil & Gas Engineering Ltd	Koko, Delta State	Hydro-skimming plant	20,000
3	Niger Delta Petroleum Resources	Ogbele, Rivers State	Hydroskimming plant	10,000
4	Dee Jones Ltd	New Port Extension, Calabar Port, Cross Rivers State	Topping plant	6,000
5	Energia Ltd	Kwale, Delta State	Hydro-skimming plant	20,000
6	Southfield Petrochemical & Refinery Ltd	Owanoba, Edo State	Hydro-skimming plant	20,000
Total				81,000

Source: Department of Petroleum Resources (DPR)

11.0 Dangote Refinery

Dangote Refinery is positioned to sell its products both in Nigeria and at the international market.

The Dangote Oil Refinery Company (DORC) is a 2,100-hectare integrated refinery and petrochemical complex currently undergoing construction in the Lekki Free Zone, Lagos State. With an estimated cost of \$12 billion, this Oil and Gas venture of the Dangote Group is billed for completion by 2021. It would produce Euro-V quality gasoline, diesel, kerosene, jet/kerosene fuel, polypropylene and other petrochemical products, and have the following infrastructure in place: a pipeline system with a length of 1,100km, access roads, tank storage facilities, crude and product handling facilities, and a marine terminal, including a breakwater, jetty and harbour. The refinery will also include a fertiliser plant that will process by-products from the refinery.

Dangote Refinery may prefer a situation where it sells all its products in the international market as opposed to the local market.

The Dangote Refinery has the capacity to refine 650,000 barrels (of crude oil) per day (bpd), which is more than the combined capacity (446,000 bpd) of all the local refineries that Nigeria has at the moment. In addition, the refinery is designed to refine different grades of local and foreign crude oil. Therefore, at any time the refinery is not able to obtain crude oil from the domestic market, it can import crude oil from other countries and export the refined products at a higher price, thereby earning a spread.

The refinery is expected to create about 135,000 direct and indirect jobs. In order to boost human development of its staff, it has sponsored overseas education of 2 batches of engineers to India in order to acquire knowledge and skills that will be useful for operating the refinery. It should be noted that India has the largest refinery (Jamnagar Refinery) in the world, with a 1.24 million bpd capacity.

Will Dangote Oil Refinery Company create a near monopoly or a market structure that will not allow other refineries to operate profitably in Nigeria? Our answer is no. We believe Dangote Refinery is positioned to sell its products both in Nigeria and at the international market, and may therefore prefer a situation where it sells all its products in the international market, as opposed to the local market, since this would likely give it higher revenue and foreign

The refinery is expected to create about 135,000 direct and indirect jobs.

exchange earnings from which it services its foreign exchange liabilities. The company had however made a promise to sell to the local market to meet the supply gap. Therefore, as more operators come into the crude oil refining market, we envisage a gradual withdrawal of Dangote from selling to the local market.

9.1 Benefits of the Dangote Refinery

The following are the benefits that will accrue to Nigeria from Dangote Refinery:

- Market for the Nigerian crude oil
- Increase in supply of foreign exchange to Nigeria
- Reduction in importation of petroleum products in the long run
- Foreign exchange savings for Nigeria in the medium-to-long-term when Dangote starts selling products in the local market
- Job creation, both direct and indirect
- Skill transfer through the training of employees in foreign countries
- Establishment of associated resources such as petro-chemicals and fertiliser plants.

12.0 Recent Changes in the Industry

In this section, we highlight recent business mergers and acquisitions in the industry.

✓ **Ardova Plc (Formerly Forte Oil Plc)**



In June 2019, Prudent Energy and Services Limited, through an investment vehicle (Ignite Investments and Commodities Limited), completed the acquisition of Mr. Femi Otedola's 74.02% equity stake in Forte Oil Plc. The entirety of the existing board members of the company resigned effective 20 June 2019, and a new board, headed by Mr Abdulwasiiu Sowami was appointed immediately. The name of the company was also changed to Ardova Plc on 11 February 2020.

✓ **ENYO Retail and Supply**



Enyo Retail and Supply Limited (ERSL), a relatively new entrant into the Nigerian downstream energy space, has continued to grow aggressively, as evidenced by its increasing retail footprint. In just over two years of operation, ERSL now controls 84 retail stations across 19 states, and continues to push the frontiers of how the downstream business is done with its innovative product delivery initiatives, such as its Diesel2Door scheme.

✓ **Quest Oil and Engineering Services**



Quest Oil and Engineering Services Limited (Quest Oil) from its inception in 2015 projected to be involved across the Oil and Gas value chain. The company started with focus on Oil and Gas services, engaging in Engineering, Procurement, Construction and Installation (EPCI), Manpower supply and Material supply services. However, following the decision of the erstwhile owners of Ascon Oil to divest their 100% interest in the business, Quest Oil won the ensuing bid and acquired the downstream assets of Ascon Oil, including 31 retail stations, 3 tank farms and one lube blending plant in 2019, effectively kicking off its venture into downstream operations.

Operators in the industry need to look for ways to bring innovative solutions to meet the needs of customers, retain them and win additional customers.

Under the current deregulated regime, operators in the industry need to look for ways to bring innovative solutions to meet the needs of customers, retain them and win additional customers. We observed that a number of new operators are entering the industry, bringing fresh ideas and innovation into the industry's operations and setting new standards of quality of products, equipment and safety. They use good customer relationship strategies to persuade and win customers, and invest in modern equipment and mega stations to change the customers' experience.

Some of the specific measures the new entrants have deployed which are responsible for their successes are highlighted below:

1. Investment in mega stations;
2. Investment in state of the art technology that eliminates fraudulent services usually associated with filling stations;
3. Offering attractive welfare packages to the petrol attendants to motivate them to give their best to the business;
4. Establishing policies to employ only university graduates as petrol attendants in order to give excellent service (This might not be a fair labour practice but is a reflection of the high unemployment level in Nigeria);
5. Training staff members to offer excellent service to customers;
6. Provision of a pleasant ambiance at the filling stations and housing other business activities that drive traffic to the stations; and
7. Deployment of Point of Sale (POS) to avoid cheating customers by withholding the balance after purchase of products.

We highlighted below the profile of some of the new entrants that are causing disruptive innovation in the industry.

12.1 Selected Oil Marketers

We obtained the information presented in the following sections from the companies' websites and other reliable sources.

12.1.1 A.A. Rano Nigeria Limited



Commencement and Operations: It started with the marketing and distribution of petroleum products in 1994. The company has since restructured its operations to take advantage of the opportunities in nearly all aspects of the Oil and Gas value chain in Nigeria. It is now involved in exploration and production, refining, distribution, marketing, trading, provision of cargo and haulage logistic services.

Subsidiaries: It has three subsidiaries: Marine and Shipping, A.A. Rano Transport and Logistics, and A.A. Rano Farms.

Tank Farm and Vessel: Capacity of 60million Litres in Lagos State and has a vessel, Mt. Hajara.

Retail Outlets: 26 retail outlets in the North and 4 in the Southern part of Nigeria.

12.1.2 NIPCO Plc



Commencement and Operations: Formerly known as IPMAN Petroleum Marketing Company Limited (IPMCL), NIPCO Plc was incorporated in 2001 by the members of the Independent Petroleum Marketers Association of Nigeria (IPMAN) in order to engage in the distribution of petroleum products across Nigeria.

Tank Farms – Ten tanks in its terminal, where six are designated for PMS, two for AGO and the remaining two for DPK; and a depot in Apapa, Lagos State.

The terminal has facilities that can store 76.3 million litres of petroleum products.

Truck Loading Farm – The terminal is fully equipped with a fully automated and operational 10-point gantry.

Tanker Parking Area – The terminal has a tanker parking lot that can accommodate 250 tankers and also features a rest house, convenience and restaurant for the tanker drivers.

Power Supply - The terminal is fed by 1,000KVA power supply through the National Electric Grid. In case of power failure from the distribution company, 4 standby Diesel Generator sets, having capacity of 725 KVA and 500 KVA have been provided to ensure smooth functioning of the terminal.

Fire Fighting Systems – Fully equipped with Fire Protection Hydrant Network comprising strategically located Fire Water Monitors and Hydrant Points, Tank/TLF Cooling Systems & DCP/ Foam Extinguishing Systems. The terminal is also equipped with a central control room and has facilities for the analysis of all parameters such as Flash Point, Density, Temperature, Viscosity, etc, to ensure quality control and guarantee safety.

Retail Outlets: Over 150 retail outlets in different parts of the country.

12.1.3 A.Y.M Shafa



Commencement – A.Y.M Shafa Limited was incorporated on 12th July 1996 and licensed by the DPR in 1998, thereby giving the company the authorization to engage in the trading of petroleum products and other Oil and Gas services. The head office of the company is in Bauchi State.

Storage – The Company has 1 depot located at Ifiekporo community, Warri, Delta State. It also has 2 tank lease agreements with A&E Petroleum, Warri, Delta State.

For different petroleum products, A.Y.M Shafa has the following yearly volume: 781,500,060.59 MT of PMS; 111,000 MT of DPK; and 236,800 MT of AGO.

Transport Services – A.Y.M Shafa Limited has more than 400 trucks across the nation

Retail Outlets – 107 service stations in different parts of the country.

12.1.4 Prudent Energy & Services Limited



Assets – Prudent Energy & Services Limited has 45

trucks, jetty and channel drafts of 6.5m each. In addition, the average volume of the company is 35kt. 3 vessel interests including MT Ashabi (29,005DWT) and MT Mosunmola (16,326DWT) provide support for the company's logistics. With Prudent, a trader, effectively owning controlling shares in Ardova Plc, a major marketer, Prudent would become the major supplier of products (asides NNPC and its subsidiaries) to Ardova Plc which controls about 450 retail stations. This would increase Prudent's trade volumes significantly.

12.1.5 Heyden Petroleum Limited (HPL)



Commencement and Operations: HPL was incorporated in October 2001 as an independent Oil Trading Company in Nigeria and in the United Kingdom. Its trading activities range from refined white products to semi-refined black products.

Jetty and Tank Farm: This is located in Ijora, Lagos State with a combined onshore and floating storage capacity of 70,000 metric tons for PMS, AGO and DPK. The information on the company's website indicates that it is building two jet fuel storage tanks of 15,000MT. However, we could not confirm the status of the storage tanks as at the time of this report.

Vessels and Barges: It has sea-going vessels and barges (MT Orion1 – 5,000 metric tons and MT Shujah 5 – 6,000 metric tons, Barge Heyden Lamissa – 14,000MT, Barge Heyden Bamidele – 40,000MT) that undertake marine haulage of petroleum products to their storage terminal and other third party terminals.

Trucks and Trailer Parks: Heyden Petroleum has over seventy trucks for inland deliveries of petroleum products to clients' locations. The company also has a trailer park that can accommodate between 300-400 tankers/trailers at any point in time.

Locations: HPL is strategically located in Abuja, Lagos and London, with affiliates in Dubai, UAE and Cape Town in South Africa.

Industry Partners: Some of its leading industry partners are: Projector S.A in the UK, MRS, Conoil, Total, Vitol, 11 Plc, Addax, OVH Energy and Ardova.

12.1.6 Matrix Energy Limited



Commencement and Operations: Incorporated in 2004, Matrix Energy Ltd is an oil marketing and trading company in Nigeria.

Terminal and Storage – It owns and operates three petroleum storage facilities in Warri, Delta State with a total capacity of 104 Million litres for white products and 5,000MT for LPG. It also has a private jetty with a draft of 11 meters and an overall length of 224 meters.

Supply and Trading – Matrix is one of Nigeria’s largest independent traders of petroleum products, handling over 1.5 Million Metric Tonnes per annum, a significant portion of the country’s products requirement.

Haulage – The Company owns a fleet of over 230 Trucks consisting of PMS, Jet A1, DPK, AGO, LPG, and Bitumen trucks. Matrix owns and manages 2 Shipping Vessels with Deadweight tonnage (DWT) of over 86,000 MT.

Retail Outlets – 35 locations across the country.

Exploration and Production – A subsidiary company of Matrix, Matrix Exploration and Production Company Limited was granted two exploration licences in the Port Loko region of western Sierra Leone, West Africa. It also holds Gold Exploration Licences in Nigeria.

Supply and Distribution – The company stores and distributes petroleum products at owned and third-party tanks.

12.1.7 Masters Energy Oil and Gas Limited



Commencement and Operations: Incorporated in 2005, it has interests in other industries such Power, Engineering, Procurement and Construction (EPC), Petrochemicals, Aviation, Shipping and Marine.

Transport Services – It has over 50 trucks of 33,000 litres each in its fleet, 10-metered digitalised trucks of 10,000 litres each, as well as an ultra-modern transport yard that can accommodate its trucks and allow for repairs and maintenance on the premises.

HSSE – The Company prides itself on the fact that its Gas LPG plants, products and accessories meet the strictest Health, Safety, Security and Environment (HSSE) policies and customer service standards, and guarantee premium safety, quality, quantity and, reliability.

Oil Service – A tank farm in Port Harcourt.

Storage – Private and dedicated jetty which allows for convenient discharge of 30,000 tonnage tankers. It also has 18 loading gantries with demonstrated road loading capacity of 5million litres per hour.

12.1. 8 Bovas & Company Limited



Commencement and Operations: Incorporated in 1981, with its first service station opened in 1991.

Retail Outlets: Over 35 service stations around the country.

Storage Tank Farm: Storage tank farm located at the Mosheshe Industrial Estate, Kirikiri, Lagos State, which is meant primarily to store and aid the delivery of PMS, AGO and DPK. The tank farm is designed to load out truck tankers of 33,000 litres capacity in fifteen minutes for every product. The total capacity of the tank farm is 22 million litres.

Trailer Park: Trailer parks of not less than 50 trailers per tank farm.

12.1.9 Acorn Petroleum Plc



Commencement and Operations: Acorn Petroleum was established in 1981 and has businesses in retail, aviation, lubricant and storage.

Storage Division – Ownership of a 30,000MT capacity petroleum product storage facility in Apapa, Lagos and a fleet of branded distribution trucks.

12.1.10 NorthWest Petroleum & Gas Co. Limited:



Commencement and Operations: Established in 1998.

Retail Outlets: Over 25 retail stations with 22-26 nozzles in each station.

Trucks: Over 1,000 trucks distributing products nationwide.

Jetty and Vessel: 250m jetty capable of berthing a 30,000 MT vessel.

Storage Capacity: Over 100M litres of storage capacity. Between 1998 and the present, the company has increased the supply of diesel from 200 litre drums to 33,000 litre trucks. NorthWest has a storage facility for PMS in Calabar and a network of trucks that aid distribution to different parts of the country.

Lubricants and Autocare: It has a range of diverse products, including 8 lubricants and 5 autocare products available in different sizes.

Customer Service: NorthWest introduced an innovative program referred to as the “NorthWest Loyalty Program” where customers are able to monitor their purchases and are notified if they reach/surpass reward thresholds. The company employs only graduates as pump attendants, and gives them the required training that enables them to offer first-class services to their customers. As noted earlier, this might not be a fair labour practice but is reflective of the high unemployment rate in Nigeria.

12.1.11 Techno Oil Limited: The Future of Energy

Techno Oil Ltd has the following strategic assets:

- 65,000 MT fuel terminal facility
- 10,000 MT lubricant blending/manufacturing plant in Lekki, Lagos State
- 1,000 MT LPG bottling plant
- 5 Million annual capacity LPG cylinder manufacturing plant in Kajola, Lagos State
- 12,000 MT LPG storage terminal
- 200 Techno Oil branded trucks
- 20 retail outlets across the country
- 15,000 MT capacity ocean on-going vessel (MT TECHNOOIL)
- 50 mobile LPG skids
- A large warehouse that stocks 15,000 MT of packed lubricants
- Open storage of over 150 MT of drums
- 200-meter two-finger jetty at Kirikiri lighter terminal in Apapa, Lagos State.

In addition to their strategic assets, Techno Oil Ltd also offers some products such as the Loyalty Club Card and the “SWAP ‘N’ GO”: The Techno Gas Loyalty membership card assures customers of Techno Oil of reliable supply, discounted prices and free cylinder maintenance; while the SWAP ‘N’ GO is the operating identity of the TechnoGas Parlour - a Techno Oil LPG cylinder refill and exchange programme pioneered to create and add value to the domestic LPG industry chain.

12.1.12 ENYO Retail and Supply Limited: ENYO Retail and Supply Limited

Commencement and Operations: It started operations less than two years ago and has grown to over 55 retail stations spread across 13 states of Nigeria. The company has the following facilities and strong points:

- 90 million litres terminal capacity
- Over 420 customer-facing employees
- Possesses a fleet of over 52 trucks
- Over 50 retail stations
- 3 mega stations in Olowo Eko, Still Waters, and Lekki, all in Lagos State
- The Lekki mega station is open 24 hours a week and offers some customer-tailored services such as ENYO Relax and confectionary store with free Wi-Fi, VEHICON, a car maintenance service and Superior Liquefied Gas (SL-Gas)
- 40,000 customers served daily across the country
- Active use of interactive technology such as the internet to generate feedback from customers and provide other services such as vehicle assistance
- Online order platform for diesel, with delivery option

Some innovative measures by ENYO Retail and Supply Limited include the following:

Acquisition: The company is combining organic growth with inorganic growth strategies to enable it achieve its market leadership position. It also acquires filling stations in strategic locations that are associated with fast-growing populations.

POSIP 2.0

POSIP 2.0 is initiative intended to take regular feedback from both ENYO customers and staff through the use of a survey. This enables the company proffer timely solutions to matters bothering both parties, which in turn helps the company retain and expand its customer base. The survey asks questions that relate to the ambience of the retail stations and attendants,

customer service and suggested areas of improvement of ENYO services.

MECHTECH

ENYO Retail and Supply Limited has a mechanics and technicians training academy known as MECHECH, which commenced operations in 2018. The academy aims to improve the functional and entrepreneurial competencies of identified mechanics and support their ability to improve their value proposition to their customers, growing their businesses and income at the same time.

12.1.13 Petrocam Gas Trading Ltd:



Commencement and Operations: Established in 2004 and has its headquarters in South Africa. The company has ventured into establishing operations in Nigeria, Ghana and Kenya.

Outlets: Strategic outlets in the Ajah, Lekki, Igando and Epe areas of Lagos State.

Innovative Source of Power: Its service stations are powered by solar energy, which has helped to reduce the pressure on the national grid for electricity. The company also plans to carve a niche for itself in the Nigerian Oil and Gas industry by promoting green energy.

12.1.14 Sahara Energy Resource Limited:



Commencement – Sahara Energy Resource Limited was established in 1996 and has operations in over 38 countries that cut across Africa, Middle East, Europe and Asia. The company operates in the upstream, midstream and downstream sectors of the petroleum industry.

Upstream Activities – In the upstream sector, the company has a portfolio of nine Oil and Gas assets in prolific basins across Africa. The company also has the capacity to produce at least 10,000 bpd.

Midstream Activities – The Company has traded an average of 80 million barrels of crude and 4 million MT of refined products annually. In addition, Sahara is a key shareholder in some African refineries, including Societe Ivoirienne de Raffinage (SIR) and Societe Africaine de Raffinage (SAR).

Sahara also operates in the Gas market. The West Africa Gas Limited (WAGL), a joint venture company of the Nigerian National Petroleum Corporation (NNPC) and Sahara Gas Limited unveiled two 38,000 CBM LPG vessels in South Korea – MT Africa Gas and MT Sahara Gas – worth \$101 million, to ensure stability in the supply of LPG to West Africa. The design and size allow the vessels to berth at virtually any LPG terminal facility globally.

Downstream Activities – Sahara has storage terminals across Africa, the Middle East, and Europe, with a combined capacity in excess of 300million litres for a range of refined petroleum products. Sahara has an additional capacity of 180 million litres of bulk storage in Antwerp and Malta.

Power Activities – Sahara was able to acquire majority shareholding stakes in Egbin Power Plc and Ikeja Electric Plc. In addition, the company also acquired a 70% stake in First Independent Power Limited (FIPL).

12.2 Increase in MOMAN Membership

FSDH recommends that MOMAN opens up its membership to other dominant petroleum marketers in the industry. The Association must continue to maintain large market share to enable it influence the industry to achieve its vision of a Sustainable Downstream Petroleum Industry. MOMAN must choose petroleum marketers that will share its values and can run with its vision; new members must not be fringe players in the industry.

The following marketers are our recommendations based on a review of their operations.

Table 33: Suggested Petroleum Marketers to Join MOMAN Membership

S/N	Name of Operators	S/N	Name of Operators
1	Northwest	6	Heyden
2	Enyo	7	Rainoil
3	Acorn	8	Petrocam
4	Eterna Plc	9	AYM Shafa
5	Aiteo	10	Matrix

13.0 Financial Analysis

The companies we analyse here recorded weak performances on average between 2014 and 2018.

The companies we analyse here recorded weak performances on average between 2014 and 2018. Although the total turnover of the operators improved marginally, recording a Compound Annual Growth Rate (CAGR) of 7.80% during the period, the Consumer Price Index recorded a CAGR of 16.94%. This is an indication of a weak performance for the period. The Gross Profit (GP) and the Profit Before Tax (PBT) however recorded a CAGR of 1.08% and 3.47% respectively.

In a situation where the ROE in the industry is lower than the risk-free rate, investors may not be encouraged to invest in the sector, considering the high level of risk the investments in the industry face.

The GP Margin for all the operators declined during the period, and the Earnings Before Interest Tax Depreciation and Amortisation (EBITDA) margin for most of the operators also declined. The average Return on Equity (ROE) for all the operators remained lower than the average risk-free Nigeria Treasury Bill (NTB) yield for 4 years out of the five years analysed. 11 Plc recorded the highest ROE throughout the period because of the substantial rental income the company generates from its investment properties. In a situation where the ROE in the industry is lower than the risk-free rate, investors may not be encouraged to invest in the sector, considering the high level of risk the investments in the industry face.

Table 34: Company Analysis (N' Billion)

FY 2018	Turnover	EBITDA	PBT	Gross Profit Margin	EBITDA Margin	ROE	Debt Ratio	Interest Cover	Current Ratio
11 Plc	164.61	16.45	13.70	10.08%	9.99%	27.62%	52.20%	325.93	1.77
Conoil Plc	122.21	5.03	2.57	10.45%	4.12%	9.81%	69.95%	2.70	1.16
Eterna Plc	251.88	3.36	1.99	1.84%	1.33%	7.83%	75.76%	3.20	1.38
Arдова Plc	134.70	4.10	0.76	8.41%	3.04%	0.57%	55.09%	0.88	1.00
MRS Oil Plc	89.55	(0.02)	(1.43)	4.80%	(0.02%)	(6.10%)	61.83%	(6.80)	1.16
Total Nigeria Plc	307.99	14.15	12.10	11.29%	4.59%	25.91%	76.81%	2.20	0.92

Sources: Company Annual Accounts and FSDH Merchant Bank Ltd Analysis

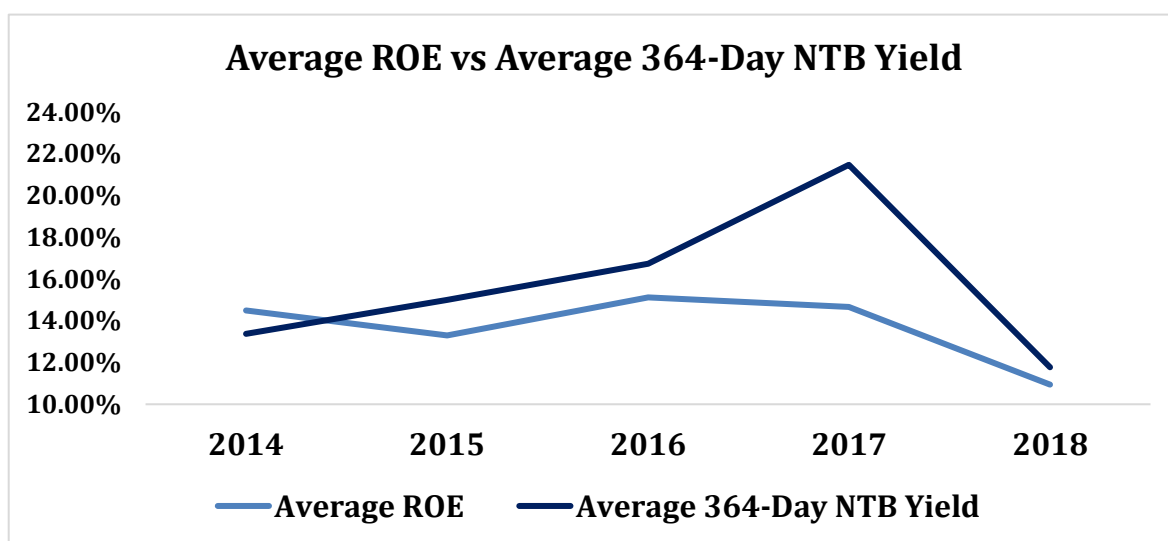
Table 35: Five –Year Summary (2014-2018)

Turnover (N'Billion)							
	2018	2017	2016	2015	2014	Average	CAGR
11 Plc	164.61	125.26	94.11	64.22	79.58	105.56	19.92%
Conoil Plc	122.21	115.51	85.02	82.92	128.35	106.80	(1.22%)
Eterna Plc	251.88	173.03	106.89	92.07	81.94	141.16	32.41%
Ardova (Forte Oil) Plc	134.70	129.44	148.61	124.62	170.13	141.50	(5.67%)
MRS Oil Nigeria Plc	89.55	107.09	109.64	87.10	92.33	97.14	(0.76%)
Total Nigeria Plc	307.99	288.06	290.95	208.03	240.62	267.13	6.37%
Total	1,070.95	938.40	835.21	658.95	792.95	859.29	7.80%
Gross Profit (N' Billion)							
	2018	2017	2016	2015	2014	Average	CAGR
11 Plc	16.59	15.27	15.49	10.99	10.74	13.82	11.50%
Conoil Plc	12.77	13.05	14.14	11.54	13.79	13.06	(1.90%)
Eterna Plc	4.64	6.34	8.57	3.08	3.02	5.13	11.38%
Ardova (Forte Oil) Plc	11.33	24.12	20.58	18.36	18.47	18.57	(11.50%)
MRS Oil Nigeria Plc	4.30	7.70	8.76	6.42	6.96	6.83	(11.36%)
Total Nigeria Plc	34.79	29.30	49.10	25.35	27.90	33.29	5.67%
Total	84.42	95.77	116.64	75.74	80.87	90.69	1.08%
PBT (N' Billion)							
	2018	2017	2016	2015	2014	Average	CAGR
11 Plc	13.70	11.14	12.02	6.91	8.45	10.44	12.84%
Conoil Plc	2.57	2.31	4.28	3.45	1.53	2.83	13.77%
Eterna Plc	1.99	2.81	2.40	1.31	1.79	2.06	2.65%
Ardova (Forte Oil) Plc	0.76	10.63	5.34	7.01	6.01	5.95	(40.39%)
MRS Oil Nigeria Plc	(1.43)	(1.00)	2.29	1.46	1.28	0.52	-
Total Nigeria Plc	12.10	11.80	20.35	6.50	6.83	11.51	15.35%
Total	29.68	37.68	46.68	26.63	25.89	33.31	3.47%
Sources: Company Annual Accounts and FSDH Merchant Bank Ltd Analysis							

Table 36: Five Year Key Ratios (2017-2013)

Gross Profit Margin						
	2018	2017	2016	2015	2014	Average
11 Plc	10.08%	12.19%	16.46%	17.11%	13.49%	13.87%
Conoil Plc	10.45%	11.30%	16.63%	13.91%	10.74%	12.61%
Eterna Plc	1.84%	3.66%	8.02%	3.35%	3.68%	4.11%
Ardova (Forte Oil) Plc	8.41%	18.63%	13.85%	14.73%	10.85%	13.29%
MRS Oil Nigeria Plc	4.80%	7.19%	7.99%	7.37%	7.54%	6.98%
TOTAL Nigeria Plc	11.29%	10.17%	16.88%	12.18%	11.60%	12.42%
EBITDA Margin						
	2018	2017	2016	2015	2014	Average
11 Plc	9.99%	12.97%	15.21%	13.81%	8.28%	12.05%
Conoil Plc	4.12%	4.47%	8.50%	10.29%	4.09%	6.29%
Eterna Plc	1.33%	2.07%	5.77%	2.33%	2.95%	2.89%
Ardova (Forte Oil) Plc	3.04%	15.12%	8.49%	8.18%	5.46%	8.06%
MRS Oil Nigeria Plc	-0.02%	1.45%	4.37%	3.64%	4.36%	2.76%
TOTAL Nigeria Plc	4.59%	5.46%	8.30%	4.45%	4.97%	5.55%
Return on Equity (ROE)						
	2018	2017	2016	2015	2014	Average
11 Plc	27.62%	27.48%	38.00%	31.72%	47.18%	34.40%
Conoil Plc	9.81%	8.82%	15.37%	13.03%	5.18%	10.44%
Eterna Plc	7.83%	16.12%	13.65%	13.20%	15.32%	13.22%
Ardova (Forte Oil) Plc	0.57%	22.12%	6.25%	12.52%	10.05%	10.30%
MRS Oil Nigeria Plc	-6.10%	5.99%	6.61%	4.46%	3.69%	2.93%
TOTAL Nigeria Plc	25.91%	7.43%	10.81%	4.84%	5.54%	10.91%
Average	10.94%	14.66%	15.12%	13.30%	14.49%	13.70%
Average 364-Day NTB Yield	11.77%	21.46%	16.73%	15.00%	13.37%	15.67%

Sources: Company Annual Account and FSDH Merchant Bank Ltd Analysis



Sources: Company Annual Accounts, Central Bank of Nigeria and FSDH Merchant Bank Analysis

14.0 Recommendations

1. We recommend urgent passage into law of the Petroleum Industry Bill (PIB) and the Petroleum Industry Governance Bill (PIGB). Such bills and laws must contain deliberate provisions and policies that will encourage private capital into the Oil and Gas Industry.
2. Special measures that will encourage investments in the refining business in Nigeria should be implemented, and should remove the obstacles that hinder free flow of investment capital into the sector.
3. The FGN should sell the government-owned refineries at their current states, rather than injecting its scarce resources in them for turnaround maintenance. New investors can inject fresh capital into them and take on that responsibility.
4. Although PMS has a social dimension, it is essentially a private good and should be treated as such for the benefit of all stakeholders. The FGN should therefore take the bold decision to adopt a price deregulation instead of the current price modulation for the product, and allow competition to set in, which will drive efficiency in the industry.
5. NNPC can strategically set PMS prices at its retail outlets across the country in a way that will check the excessive price hike or collusion by other petroleum marketers.
6. Prices should be monitored against anticompetitive and antitrust abuses subject to clearly stated rules and regulations.
7. The Government should adopt an open, transparent and free market environment with clear rules and regulations on promoting competition, consumer protection, health, safety, quality and the protection of the environment.
8. All suppliers, transporters, service providers and market players, including NNPC should be subject to the same rules and regulations, backed by appropriate legislation.

9. Open Access rules and pricing for national infrastructure such as depots, pipelines and rail services must be clearly defined, competitive and transparent.
10. There should be equal access to foreign exchange at competitive rates to all market players for importation of petroleum products. In addition, we strongly suggest strict sanctions for any operator who engages in any form of foreign exchange malpractice. Such sanctions could include withdrawal of license to operate in the Oil and Gas industry, and prosecution of the company and owners.
11. Operators should also be allowed to source their foreign exchange on their own for the importation of petroleum products, subject to compliance with the required guidelines issued by the Central Bank of Nigeria (CBN) on utilization of foreign exchange.
12. Any form of activity that can encourage the emergence of a monopoly or dominant market players, which can have undue market influence and lead to the exploitation of the consumers should be deliberately curtailed and discouraged.
13. The regulator should collaborate with industry players to identify and install internationally accepted standards and norms in technical and HSEQ fields, as well as in operational areas of the petroleum downstream industry.
14. The government should collaborate with the private sector operators to agree on modalities to upgrade the pipelines, truck transportation and station facilities, as well as the infrastructure of the depot. The government may consider a form of concession to the private operators or other forms of Public Private Partnership (PPP) to upgrade the facilities.
15. Multiple government agencies that levy duplicated charges on the operators in the industry, which eventually increase cost of running business and reduce trading and profit margins, should be abolished.

Appendix

Table 1: 11 Plc - Financial Analysis – 2014 - 2018 (N'mn)

Profit & Loss Account							
	2018	2017	Change	2016	2015	2014	CAGR
Turnover	164,610	125,257	31.42%	94,108	64,221	79,584	19.92%
Cost of Sales	148,016	109,984	34.58%	78,618	53,230	68,846	21.09%
Gross Profit	16,594	15,273	8.65%	15,490	10,991	10,737	11.50%
Operating Profit	13,242	13,085	1.20%	11,759	6,955	5,622	23.88%
EBITDA	16,445	16,244	1.24%	14,317	8,866	6,593	25.67%
EBIT	13,242	13,085	1.20%	11,759	6,955	5,622	23.88%
PBT	13,695	11,138	22.96%	12,020	6,906	8,446	12.84%
Tax	4,367	3,619	20.66%	3,866	2,033	2,053	20.76%
PAT	9,329	7,519	24.07%	8,154	4,873	6,393	9.91%
Balance Sheet							
	2018	2017	Change	2016	2015	2014	CAGR
Fixed Assets	10,923	8,780	24.41%	7,937	7,613	7,275	10.70%
Current Assets	34,263	37,822	(9.41%)	22,328	15,315	12,261	29.29%
Total Assets	70,661	74,649	(5.34%)	61,701	54,072	49,227	9.46%
Current Liabilities	19,328	28,138	(31.31%)	18,822	14,280	16,342	4.28%
Long Term Liabilities	17,560	19,152	(8.31%)	21,422	24,428	19,335	(2.38%)
Total Liabilities	36,888	47,290	(22.00%)	40,244	38,709	35,677	0.84%
Working Capital	14,935	9,683	54.24%	3,507	1,035	(4,081)	-
Total Equity	33,773	27,359	23.44%	21,457	15,363	13,549	25.65%

Sources: Company Annual Accounts and FSDH Merchant Bank Ltd Analysis

Table 2: 11 Plc - Key Financial Ratio (2014 - 2018)

	2018	2017	2016	2015	2014
Gross Profit Margin	10.08%	12.19%	16.46%	17.11%	13.49%
EBITDA Margin	9.99%	12.97%	15.21%	13.81%	8.28%
PBT Margin	8.32%	8.89%	12.77%	10.75%	10.61%
ROE	27.62%	27.48%	38.00%	31.72%	47.18%
ROCE	25.80%	28.13%	27.42%	17.48%	17.10%
Current Ratio (x)	1.77	1.34	1.19	1.07	0.75
Debt Ratio	52.20%	63.35%	65.22%	71.59%	72.48%
Interest Cover(x)	326	151	40,272	57	30
EPS	25.87	20.85	22.61	13.51	17.73
PAT Margin	5.67%	6.00%	8.66%	7.59%	8.03%
DPS	8.00	8.00	8.00	7.20	6.60

Sources: Company Annual Accounts and FSDH Merchant Bank Ltd Analysis

Table 3: Conoil Plc- Financial Analysis - 2014-2018 (N'mn)

Profit & Loss Account							
	2018	2017	Change	2016	2015	2014	CAGR
Turnover	122,213	115,513	5.80%	85,024	82,919	128,353	(1.22%)
Cost of Sales	109,442	102,464	6.81%	70,883	71,381	114,563	(1.14%)
Gross Profit	12,771	13,049	(2.13%)	14,141	11,538	13,789	(1.90%)
Operating Profit	4,075	4,442	(8.27%)	6,045	7,206	3,840	1.49%
EBITDA	5,034	5,164	(2.52%)	7,230	8,535	5,251	(1.05%)
EBIT	4,075	4,442	(8.27%)	6,045	7,206	3,840	1.49%
PBT	2,567	2,305	11.36%	4,281	3,448	1,532	13.77%
Tax	770.72	726	6.16%	1,443	1,141	698	2.51%
PAT	1,796	1,579	13.75%	2,838	2,308	834	21.14%
Balance Sheet							
	2018	2017	Change	2016	2015	2014	CAGR
Fixed Assets	3,085	2,520	22.40%	2,438	3,169	3,927	(5.86%)
Current Assets	54,908	57,372	(4.29%)	64,071	63,654	81,368	(9.36%)
Total Assets	60,897	62,855	(3.11%)	69,833	69,387	87,527	(8.67%)
Current Liabilities	41,642	44,045	(5.46%)	50,384	50,444	69,967	(12.17%)
Long Term Liabilities	954	917	4.09%	984	1,233	1,464	(10.14%)
Total Liabilities	42,596	44,962	(5.26%)	51,368	51,678	71,431	(12.12%)
Working Capital	13,267	13,327	(0.45%)	13,687	13,210	11,402	3.86%
Total Equity	18,301	17,893	2.28%	18,466	17,710	16,096	3.26%

Sources: Company Annual Accounts and FSDH Merchant Bank Ltd Analysis

Table 4: Conoil Plc - Key Financial Ratio (2014 - 2018)

	2018	2017	2016	2015	2014
Gross Profit Margin	10.45%	11.30%	16.63%	13.91%	10.74%
EBITDA Margin	4.12%	4.47%	8.50%	10.29%	4.09%
PBT Margin	2.10%	2.00%	5.03%	4.16%	1.19%
ROE	9.81%	8.82%	15.37%	13.03%	5.18%
ROCE	21.16%	23.61%	31.08%	38.04%	21.87%
Current Ratio (x)	1.32	1.30	1.27	1.26	1.16
Debt Ratio	69.95%	71.53%	73.56%	74.48%	81.61%
Interest Cover(x)	2.70	2.08	3.43	1.92	1.66
EPS	2.59	2.27	4.09	3.33	1.2
PAT Margin	1.47%	1.37%	3.34%	2.78%	0.65%
DPS	2.00	2.00	3.10	3.00	1.00

Sources: Company Annual Accounts and FSDH Merchant Bank Ltd Analysis

Table 5: Eterna Plc - Financial Analysis – 2014 -2018 (N'mn)

Profit & Loss Account							
	2018	2017	Change	2016	2015	2014	CAGR
Turnover	251,878	173,030	45.57%	106,888	92,065	81,942	32.41%
Cost of Sales	247,235	166,693	48.32%	98,319	88,985	78,926	33.04%
Gross Profit	4,642	6,337	(26.74%)	8,568	3,080	3,017	11.38%
Operating Profit	2,781	3,206	(13.24%)	5,828	1,816	2,155	6.59%
EBITDA	3,359	3,587	(6.37%)	6,168	2,142	2,421	8.53%
EBIT	2,781	3,206	(13.24%)	5,828	1,816	2,155	6.59%
PBT	1,990	2,813	(29.26%)	2,400	1,307	1,792	2.65%
Tax	980.9	811	20.95%	923	29	503	18.17%
PAT	1,009	2,002	(49.60%)	1,478	1,278	1,290	(5.96%)
Balance Sheet							
	2018	2017	Change	2016	2015	2014	CAGR
Fixed Assets	8,339	7,255	14.93%	5,974	5,868	6,069	8.27%
Current Assets	43,319	39,764	8.94%	25,058	22,160	12,114	37.51%
Total Assets	53,136	48,046	10.59%	31,690	28,565	18,567	30.07%
Current Liabilities	36,582	33,677	8.62%	18,304	17,775	8,773	42.90%
Long Term Liabilities	3,677	1,952	88.36%	2,558	1,106	1,373	27.92%
Total Liabilities	40,258	35,629	12.99%	20,862	18,881	10,147	41.13%
Working Capital	6,737	6,087	10.69%	6,754	4,385	3,341	19.17%
Total Equity	12,878	12,417	3.71%	10,828	9,684	8,420	11.21%

Sources: Company Annual Accounts and FSDH Merchant Bank Ltd Analysis

Table 6: Eterna Plc - Key Financial Ratio (2014 - 2018)

	2018	2017	2016	2015	2014
Gross Profit Margin	1.84%	3.66%	8.02%	3.35%	3.68%
EBITDA Margin	1.33%	2.07%	5.77%	2.33%	2.95%
PBT Margin	0.79%	1.63%	2.25%	1.42%	2.19%
ROE	7.83%	16.12%	13.65%	13.20%	15.32%
ROCE	16.80%	24.97%	46.08%	19.85%	24.72%
Current Ratio (x)	1.18	1.18	1.37	1.25	1.38
Debt Ratio	75.76%	74.16%	65.83%	66.10%	54.65%
Long Term Debt to Equity	13.14%	4.99%	11.21%	1.57%	3.90%
Interest Cover(x)	3.20	5.98	1.65	3.41	5.57
EPS	0.77	1.54	1.13	0.98	0.99
PAT Margin	0.40%	1.16%	1.38%	1.39%	1.57%
DPS	0.40	0.40	-	0.25	-

Sources: Company Annual Accounts and FSDH Merchant Bank Ltd Analysis

Table 7: Total Nigeria Plc - Financial Analysis – 2014 - 2018 (N'mn)

Profit & Loss Account

	2018	2017	Change	2016	2015	2014	CAGR
Turnover	307,988	288,063	6.92%	290,953	208,028	240,619	6.37%
Cost of Sales	273,203	258,767	5.58%	241,851	182,682	212,714	6.46%
Gross Profit	34,785	29,296	18.74%	49,102	25,345	27,904	5.67%
Operating Profit	9,812	12,269	(20.03%)	20,931	6,255	9,111	1.87%
EBITDA	14,149	15,730	(10.05%)	24,138	9,253	11,966	4.28%
EBIT	9,812	12,269	(20.03%)	20,931	6,255	9,111	1.87%
PBT	12,098	11,795	2.57%	20,353	6,495	6,833	15.35%
Tax	4,138	3,776	9.58%	5,556	2,448	1,542	27.99%
PAT	7,961	8,019	(0.72%)	14,797	4,047	5,290	10.76%

Balance Sheet

	2018	2017	Change	2016	2015	2014	CAGR
Fixed Assets	33,856	28,520	18.71%	25,228	23,091	21,922	11.48%
Current Assets	89,912	72,245	24.45%	106,771	56,126	70,334	6.33%
Total Assets	132,521	107,982	22.72%	136,928	83,654	95,512	8.53%
Current Liabilities	95,984	76,939	24.75%	113,113	63,950	76,604	5.80%
Long Term Liabilities	5,806	2,817	106.10%	245	3,461	2,979	18.15%
Total Liabilities	101,790	79,756	27.63%	113,358	67,411	79,582	6.35%
Working Capital	(6,072)	(4,694)	29.35%	(6,342)	(7,824)	(6,270)	(0.80%)
Total Equity	30,731	28,226	8.87%	23,570	16,242	15,930	17.85%

Sources: Company Annual Accounts and FSDH Merchant Bank Ltd Analysis

Table 8: Total Nigeria Plc - Key Financial Ratio (2014 - 2018)

	2018	2017	2016	2015	2014
Gross Profit Margin	11.29%	10.17%	16.88%	12.18%	11.60%
EBITDA Margin	4.59%	5.46%	8.30%	4.45%	4.97%
PBT Margin	3.93%	4.09%	7.00%	3.12%	2.84%
ROE	25.91%	7.43%	10.81%	4.84%	5.54%
ROCE	26.85%	50.67%	101.35%	46.96%	63.28%
Current Ratio (x)	0.94	0.94	0.94	0.88	0.92
Debt Ratio	76.81%	73.86%	82.79%	80.58%	83.32%
Interest Cover(x)	2.20	4.00	24.57	3.49	3.48
EPS	23.45	23.62	43.58	11.92	15.58
PAT Margin	2.58%	2.78%	5.09%	1.95%	2.20%
DPS	17.00	17.00	14.00	14.00	11.00

Sources: Company Annual Accounts and FSDH Merchant Bank Ltd Analysis

Table 9: Ardova Plc (Forte Oil) Plc - Financial Analysis – 2014 - 2018 (N'mn)

Profit & Loss Account							
	2018	2017	Change	2016	2015	2014	CAGR
Turnover	134,704	129,444	4.06%	148,605	124,617	170,128	(5.67%)
Cost of Sales	123,375	105,328	17.13%	128,021	106,256	151,663	(5.03%)
Gross Profit	11,329	24,116	(53.02%)	20,584	18,361	18,465	(11.50%)
Operating Profit	2,679	14,258	(81.21%)	9,622	8,688	8,137	(24.25%)
EBITDA	4,101	19,570	(79.04%)	12,611	10,195	9,296	(18.50%)
EBIT	2,679	14,258	(81.21%)	9,622	8,688	8,137	(24.25%)
PBT	759	10,627	(92.86%)	5,340	7,012	6,006	(40.39%)
Tax	397	(1,599)	(124.83%)	2,450	1,218	1,550	(28.86%)
PAT	361	12,226	(97.04%)	2,890	5,794	4,457	(46.63%)
Balance Sheet							
	2018	2017	Change	2016	2015	2014	CAGR
Fixed Assets	8,790	65,731	(86.63%)	69,298	62,420	54,253	(36.56%)
Current Assets	130,399	76,019	71.53%	69,263	57,047	82,437	12.15%
Total Assets	141,538	147,238	(3.87%)	140,756	121,758	139,238	0.41%
Current Liabilities	70,427	68,525	2.78%	69,409	59,618	82,146	(3.77%)
Long Term Liabilities	7,542	23,434	(67.82%)	28,014	15,859	12,758	(12.31%)
Total Liabilities	77,969	91,959	(15.21%)	97,423	75,477	94,904	(4.80%)
Working Capital	59,972	7,494	700.27%	(146)	(2,571)	291	278.89%
Total Equity	63,568	55,279	15.00%	43,334	46,281	44,335	9.43%

Sources: Company Annual Accounts and FSDH Merchant Bank Ltd Analysis

Table 10: Ardova Plc (Forte Oil) Plc - Key Financial Ratio (2014 - 2018)

	2018	2017	2016	2015	2014
Gross Profit Margin	8.41%	18.63%	13.85%	14.73%	10.85%
EBITDA Margin	3.04%	15.12%	8.49%	8.18%	5.46%
PBT Margin	0.56%	8.21%	3.59%	5.63%	3.53%
ROE	0.57%	22.12%	6.25%	12.52%	10.05%
ROCE	3.77%	24.86%	17.67%	16.41%	16.28%
Current Ratio (x)	1.85	1.11	1.00	0.96	1.00
Debt Ratio	55.09%	62.46%	69.21%	61.99%	68.16%
Long Term Debt to Equity	8.93%	37.59%	60.23%	30.15%	27.64%
Interest Cover(x)	0.88	2.49	1.56	1.69	1.93
EPS	1.46	9.33	2.21	5.3	4.08
PAT Margin	0.27%	9.45%	1.95%	4.65%	2.62%
DPS	-	-	-	3.45	2.5

Sources: Company Annual Accounts and FSDH Merchant Bank Ltd Analysis

Table 11: MRS Plc - Financial Analysis – 2014 - 2018 (N'mn)

Profit & Loss Account							
	2018	2017	Change	2016	2015	2014	CAGR
Turnover	89,553	107,088	(16.37%)	109,635	87,099	92,325	(0.76%)
Cost of Sales	85,256	99,394	(14.22%)	100,880	80,677	85,367	(0.03%)
Gross Profit	4,297	7,695	(44.16%)	8,755	6,422	6,959	(11.36%)
Operating Profit	(1,484)	101	(1569.24%)	3,290	1,611	2,432	-
EBITDA	(18)	1,555	(101.13%)	4,788	3,166	4,022	-
EBIT	(1,484)	101	(1569.24%)	3,290	1,611	2,432	-
PBT	(1,427)	(997)	43.17%	2,287	1,461	1,282	-
Tax	(163)	(2,382)	(93.18%)	821	525	536	-
PAT	(1,265)	1,385	(191.33%)	1,466	936	746	-
Balance Sheet							
	2018	2017	Change	2016	2015	2014	CAGR
Fixed Assets	16,789	17,338	(3.17%)	18,402	19,054	20,212	(4.53%)
Current Assets	36,716	44,132	(16.80%)	62,006	47,483	37,278	(0.38%)
Total Assets	54,283	62,190	(12.71%)	81,365	66,894	57,847	(1.58%)
Current Liabilities	32,233	36,914	(12.68%)	54,070	40,592	32,090	0.11%
Long Term Liabilities	1,329	2,167	(38.65%)	5,131	5,325	5,538	(30.00%)
Total Liabilities	33,563	39,081	(14.12%)	59,201	45,916	37,629	(2.82%)
Working Capital	4,483	7,218	(37.90%)	7,936	6,892	5,188	(3.59%)
Total Equity	20,721	23,109	(10.33%)	22,164	20,977	20,218	0.62%

Sources: Company Annual Accounts and FSDH Merchant Bank Ltd Analysis

Table 12: MRS Plc - Key Financial Ratio (2014 - 2018)

	2018	2017	2016	2015	2014
Gross Profit Margin	4.80%	7.19%	7.99%	7.37%	7.54%
EBITDA Margin	(0.02%)	1.45%	4.37%	3.64%	4.36%
PBT Margin	(1.59%)	(0.93%)	2.09%	1.68%	1.39%
ROE	(6.10%)	5.99%	6.61%	4.46%	3.69%
ROCE	(6.73%)	0.40%	12.05%	6.12%	9.44%
Current Ratio (x)	1.14	1.20	1.15	1.17	1.16
Debt Ratio	61.83%	62.84%	72.76%	68.64%	65.05%
Interest Cover(x)	-	0.08	2.01	0.86	1.7
EPS	(4.15)	5.45	5.77	3.68	2.94
PAT Margin	(1.41%)	1.29%	1.34%	1.07%	0.81%
DPS	-	-	1.73	1.1	0.88

Sources: Company Annual Accounts and FSDH Merchant Bank Ltd Analysis

S/N	Name	Location	Licence Granted (Date)	Capacity (bpsd)	Current Status	Project Description
1	Waltersmith Refining & Petrochemical Company Limited	Ibigwe, Imo State	Approval to Construct (March 2017)	5,000	ATC granted. EPC contract terms agreed with VELEM. EIA review session with DPR. Closing out funding with AFC	Modular plant capable of producing naphtha, kerosene, diesel, and low pour fuel oil
2	Clairgold Oil & Gas Engineering Limited	Koko, Delta State	Approval to Construct (March 2017)	20,000	ATC granted. Company to start equipment sourcing	Modular plant capable of producing naphtha, kerosene, diesel, and low pour fuel oil
3	Niger Delta Petroleum Resources	Ogbele, Rivers State	Approval to Relocate/Construct 5,000 bpsd Atmospheric Distillation Unit. (Feb. 2017)	10,000	Engineering design, equipment re-engineering and conditioning on- going	Modular plant capable of producing naphtha, kerosene (DPK), diesel (AGO), Marine diesel, Liquified Petroleum Gas (LPG)
4	Dee Jones	New Port Extension, Calabar Port, Cross Rivers State	Approval to Construct/Relocate (June 2016)	6,000	Project site inspected. Engineering design and equipment re-engineering and conditioning on- going	Modular plant capable of producing naphtha, kerosene (DPK), diesel (AGO), and low pour fuel oil (LPFO)
5	Energia Limited	Kwale, Delta State	Licence to Establish (August 2015)	20,000	FEED approval granted. Yet to proceed from FFED because of funding challenges. Company says it intends to scale down project to phases of 5,000 bpsd each	Modular plant capable of producing LPG, gasoline (PMS), kerosene (DPK), diesel (AGO), and low pour fuel oil (LPFO)
6	Southfield Petrochemical & Refinery Ltd.	Owanoba, Edo State	Licence to Establish (August 2016)	20,000	FEED is on-going	Modular plant capable of producing Gasoline, LPG, kerosene (DPK), diesel (AGO), and low pour fuel oil (LPFO)
7	Starex Petroleum Refinery Ltd	Onne Oil & Gas Free Trade Zone	Approval to Construct (2004)	100,000	Fund sourcing on-going	Conventional plant capable of producing transportation fuels PMS, HHK, AGO; and heating oil LPFO

Source: Department of Petroleum Resources (DPR)
ATC : Approval to Construct, EPC: Engineering, Procurement, Construction FEED: Front End Engineering Design

Table 14: Licenced Refineries in Nigeria Granted as at April 2018 (Active Licences/Approvals)

S/N	Name	Location	Licence Granted (Date)	Capacity (bpsd)	Current Status	Project Description
1	RG Shinjin Petrochemicals Limited	Koko, Delta State	Approval to Construct (Sept. 2017)	10,000	Requested expansion of refinery to 50,000bpsd. company to submit detailed engineering of proposed capacity of 50,000bpsd	Modular plant capable of producing naphtha, kerosene, diesel, and low pour fuel oil
2	Dangote Oil Refinery Company	Lekki Free Trade Zone, Lagos	Approval to Construct (Mar. 2018)	650,000	Equipment fabrication and testing at the factories and manufacturer's yards are on-going	Conventional plant capable of producing transportation fuels PMS, HHK, AGO; heating oils' LPFO, and petrochemicals. HHK, AGO; heating oils' LPFO, and petrochemicals
3	OPAC Refineries	Umuseti, Delta	Approval to Construct (Mar. 2018)	7,000	Refinery equipment has been cleared from the wharf and transported to project site. Ground preparation and foundation construction for equipment is on- going	Modular plant capable of producing naphtha, kerosene, diesel, and low pour fuel oil
4	Azikel Petroleum Limited	Obunagha, Bayelsa State	Approval to Construct (revalidated in Mar. 2018)	12,000	Equipment sourcing on-going. Approval to construct revalidated	Modular plant capable of producing naphtha, kerosene, diesel, and low pour fuel oil, and power
5	Resource Petroleum & Petrochemicals International Incorporated	Ibendo, Akwa Ibom State	ATC (revalidated in Oct. 2017)	100,000	EIA with Ministry of Environment	Conventional plant capable of producing transportation fuels PMS, HHK, AGO; and heating oil LPFO
6	Don Mac Ltd	Oben, Edo State	Licence to Establish (August 2016)	10,000	Secured bank guarantee letter for US\$5.5billion, Jan. 2017, no proof sent to DPR. According to submission, construction of refinery was to commence August, 2017	Modular plant capable of producing Gasoline, kerosene (DPK), diesel (AGO), and low pour fuel oil (LPFO)
7	Bua Refinery & Petrochemicals Ltd	Ntaikang, Akwa-Ibom State	Licence to Establish (Sept., 2017)	150,000	Commenced Front End Engineering Design but yet to submit to DPR for review and approval	Conventional plant capable of producing Polypropylene, Propane, Benzene, Butane, Gasoline, DPK, ATK, AGO, LPFO
8	Kingdom Global Trading Petroleum & Gas Nig. Ltd	Okwagbe, Ughelli south L.G.A., Delta state	Licence to Establish (April, 2017)	12,000	Fund sourcing on-going	Modular plant capable of producing Off Gas, Unleaded gasoline, kerosene (DPK), diesel (AGO), and low pour fuel oil (LPFO)

Source: Department of Petroleum Resources (DPR) ATC : Approval to Construct, EIA: Environmental Impact Assessment

Table 15: Licenced Refineries in Nigeria Granted as at April 2018 (Active Licences/Approvals) (cont.)

S/N	Name	Location	Licence Granted (Date)	Capacity (bpsd)	Current Status	Project Description
9	Platinum Hydrocarbon Resources Ltd.	Ikewu-Amukpe, Sapele, L.G.A. Delta state	License to Establish (April,2017)	10,000	Fund sourcing on-going	Modular plant capable of producing Gasoline/ Naphtha, kerosene (DPK), diesel (AGO), and low pour fuel oil (LPFO)
10	Mondonat Nigeria Ltd.	Okpaka, Delta State	License to Establish (October 2016)	20,000	Fund sourcing on-going	Modular plant capable of producing Gasoline/ Naphtha, kerosene (DPK), diesel (AGO), and low pour fuel oil (LPFO)
11	Ikwe-Onna Refinery Ltd	Ikwe, Akwa Ibom State	License to Establish (August 2016)	5,000	Fund sourcing on-going	Modular plant capable of producing Naphtha, kerosene (DPK), diesel (AGO), and low pour fuel oil (LPFO)
12	Shepha Petroleum & Petrochemicals Company Limited	Ovode, Delta State	License to Establish (June 2016)	30,000	Fund sourcing on-going	Modular plant capable of producing gasoline (PMS), kerosene (DPK), diesel (AGO), and low pour fuel oil (LPFO)
13	Conodit Refinery Nigeria Limited	Umukwata, Delta State	License to Establish (June 2016)	20,000	Fund sourcing on-going	Modular plant capable of producing gasoline (PMS), household kerosene (HHK), diesel (AGO), and low pour fuel oil (LPFO)
14	JIL-Amber	Port Harcourt Refinery	Approval to Relocate (Sept. 2017)	100,000	Fund sourcing on-going	Conventional plant capable of producing transportation fuels PMS, HHK, AGO; heating oils' LPFO, and petrochemicals. HHK, AGO; heating oils' LPFO, and petrochemicals
15	Duport Midstream Company Limited	Egbokor, Orhionmwon L.G.A, Edo State	License to Establish (Sept-2017)	10,000	FEED dossier for the refinery project has been submitted for review	Modular plant capable of producing gasoline (PMS), household kerosene (HHK), diesel (AGO), and low pour fuel oil (LPFO)
16	Gazingstock Petroleum Company Limited	Abalagada, Ndokwa-East L.G.A, Delta State	License to Establish (Oct-2017)	5,000	Fund sourcing on-going	Modular plant capable of producing naphtha, kerosene, diesel, and low pour fuel oil
17	Petrolex Oil & Gas Limited	Ibefun Ijebu, Ogun State	License to Establish (December 2017)	250,000	Fund sourcing on-going	Conventional plant capable of producing transportation fuels PMS, HHK, AGO; heating oils' LPFO, and petrochemicals. HHK, AGO; heating oils' LPFO, and petrochemicals

Source: Department of Petroleum Resources (DPR) FEED: Front End Engineering Design

Table 16: Licenced Refineries in Nigeria Granted as at April 2018 (Active Licences/Approvals) (cont.)

S/N	Name	Location	Licence Granted (Date)	Capacity (bpsd)	Current Status	Project Description
18	Etopo Energy Plc	Obotobe, Burutu L.G.A, Delta State	License to Establish (LTE) (Jan-2018)	30,000	Fund sourcing on-going	Modular plant capable of producing gasoline (PMS), household kerosene (HHK), diesel (AGO), and low pour fuel oil (LPFO)
19	Eghudu Refinery Limited	Eghudu Village, Ovia North East L.G.A, Edo State	License to Establish (LTE) (Mar. 2018)	24,000	Fund sourcing on-going	Modular plant capable of producing gasoline (PMS), household kerosene (HHK), diesel (AGO), and low pour fuel oil (LPFO)
20	Ibafon Refinery FZE	Calabar FTZ, Calabar Cross River State	License to Establish (LTE) (Mar. 2018)	10,000	Company making plans to commence Front End Engineering Design	Modular plant capable of producing naphtha, kerosene, diesel, and low pour fuel oil

Source: Department of Petroleum Resources (DPR)

Table 17: Licenced Refineries in Nigeria Granted as at April 2018 (FEED Approval granted but Licence to Establish expired)

S/N	Name	Location	Licence Granted (Date)	Capacity (bpsd)	Current Status	Project Description
1	Kainji Resources Limited	Oguta, Imo State	License to establish (LTE) (July 2015)	24,000	Plans to commence engineering for the refinery project is underway	Modular plant capable of producing PMS, HHK, AGO, and LPFO
2	Eko Petrochem & Refining Company Limited	Tomaro Island, Lagos State	License to Establish (LTE) (August 2015)	20,000	FEED approval granted. Awaiting submission for Detailed Engineering Design. License to establish (LTE) expired	Modular plant capable of producing LPG, gasoline (PMS), kerosene (DPK), diesel (AGO), and low pour fuel oil (LPFO)

Source: Department of Petroleum Resources (DPR) FEED: Front End Engineering Design

Disclaimer Policy

This publication is produced by FSDH Merchant Bank Limited solely for the information of users who are expected to make their own investment decisions without undue reliance on any information or opinions contained herein. The opinions contained in the report should not be interpreted as an offer to sell, or a solicitation of any offer to buy any investment. FSDH Merchant Bank Limited invests substantially in securities of companies using information contained herein and also performs or seeks to perform investment services for companies mentioned herein. Whilst every care has been taken in preparing this document, no responsibility or liability is accepted by any member of FSDH Merchant Bank Limited for actions taken as a result of information provided in this publication.