



Department of Petroleum Resources

2018 NIGERIAN OIL AND GAS INDUSTRY ANNUAL REPORT



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1.0 REMARKS FROM DIRECTOR OF PETROLEUM RESOURCES



Globally, energy discourses in many fora has centred on energy security, sustainability, climate change and impact of global oil markets on developing countries; producers and consumers alike. Recently, the Federal Government of Nigeria reiterated its commitment to resolving its energy challenges and harnessing the potentials toward energy prosperity for her citizenry. This is to ensure that Nigeria remains a competitive supplier of energy as it strives to deepen its energy utilization and domestication to facilitate economic diversification to other sectors.

This year's Nigeria Oil and Gas Industry Annual Report (NOGIAR) contains expository data detailing the activities across the oil and gas value chain in the period under review. The upstream industry performance is quite steady with only marginal improvement. The aggregate hydrocarbon reserves are 37 billion barrels of oil and condensate and 200.79 trillion cubic feet (TCF) for gas, representing an increase of 0.08% and 0.85% year-on-year (y-o-y) respectively. Production Sharing Contracts (PSC) account for about 24% of the nation's crude oil and condensates reserves, while Joint Venture (JV) arrangements account for approximately 48% of the aggregate reserves. Notably, 45% of Nigeria's aggregate reserves resides in the offshore terrain while 29% are on land. Swamp accounts for the remaining 26%.

In the period under review, oil production marginally increased by 2.4% (y-o-y) to 773.8 million barrels of oil in 2018. In the last 5 years, production capacity of PSC's has steadily increased, averaging 3% growth, to account for about 35% of total production. JV arrangements contributed about 55% of aggregate production in the preceding year. Indigenous Oil Companies' production capacity accounts for about one-eighth of aggregate production. The depletion and reserves replacement rate y-o-y averaged 2.04% and 4.00% respectively. Currently, the reserves life index stands at about 49.03 years.



Gas reserves has been on the incline from 2013 and is projected to continue to grow at a conservative rate of about 1.0%. In the review period, gas development picked up to six (6) NAG development plans from 2 NAG development plans in 2017. This is attributable to growing commitments to gas projects. The Domestic Supply Obligation (DSO) performance was about 48.0%. The national gas capacity performance for 2018 was about 80.0% with an average 1.3 BSCF/D gas delivery to the domestic market.

Overall, gas utilization in the country for 2018 shows the export market accounting for 41%, field/plant use accounts for 32%, domestic market is about 13.6% and flare gas is 11%. The zero routine gas flaring target in 2020 is vigorously being pursued by the Department. The impact of regulatory instruments such as Flare Gas (Prevention of Waste and Pollution) Regulations 2018 would undoubtedly facilitate the attainment of the zero flare elimination target and improve gas utilization in the coming years. The Department continues to drive the on-going implementation of the Nigerian Gas Transportation Network Code (NGTNC). The review of the Network Code licensing framework and development of all its ancillary agreements have been firmed preparatory to formal launch in 2019.

Gas utilization is being deepened by increasing liquefied petroleum gas (LPG) penetration. LPG consumption increased by about 16.0% year on year. A total of 364 LPG plants licenses and approvals were issued in 2018. This is expected to give about 15.0% rise in the nation's LPG consumption based on storage capacity. Safety and environmental compliance performance in the review year shows a decline path. Incidents and fatal accidents are mainly due to petroleum tanker truck accident and gas plants explosions.

In conclusion, this annual report is put together to acquaint our stakeholders with relevant reliable data on the 2018 operations of the Nigerian oil and gas industry, with a little more focus on the near virgin but attractive midstream sector. The data in the NOGIAR report would aid investors in making informed decisions on the Nigeria oil and gas industry investment opportunities. It would also provide researchers, academia and planners with updated knowledge and information on the developments in the industry. The Department would continue in its transparency commitment in providing reliable and high quality data to the public. It is our hope that this edition would enrich policies, plans and studies on the industry thereby facilitating value creation and addition to all stakeholders.

A. R. Shakur

2.0 REGULATORY STRUCTURE OF THE NIGERIAN OIL AND GAS INDUSTRY

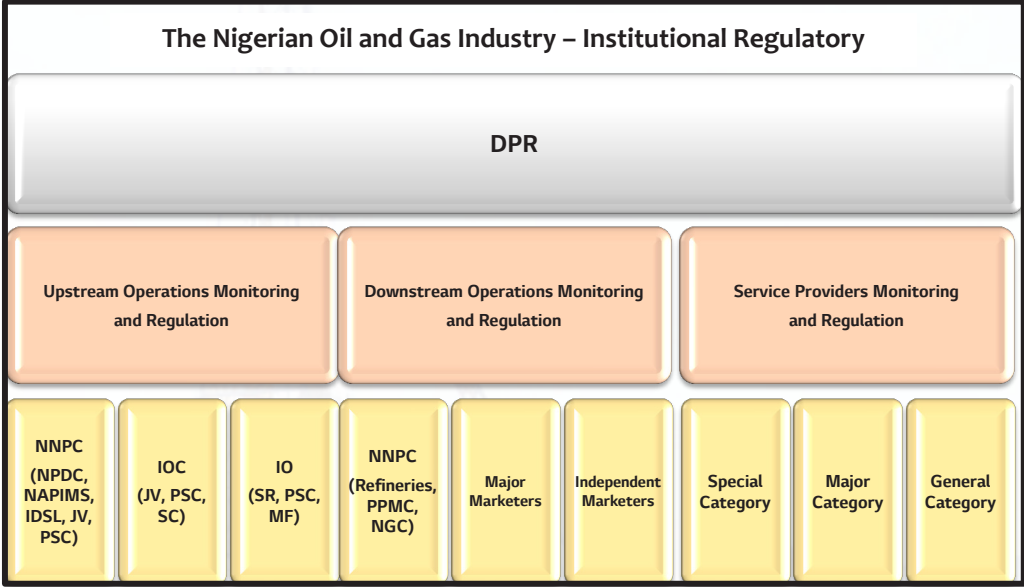


Figure 1: The Nigeria Oil and Gas Industry

Department of Petroleum Resources is the regulatory agency of the oil and gas industry in Nigeria. Specifically, the roles of the Department include:-

1. Conservation of Nigeria's Hydrocarbon Resources
2. Regulation and Monitoring of industry activities to ensure compliance with best standards & practices
3. Ensure safe, and environmentally sustainable development of the oil and gas operations' activities
4. Maintenance and administration of the national repository for archiving and retrieval of oil and gas data
5. Administration & management of acreages and concessions
6. Implementation of all government policies

3.0

MAKING MODULAR (MINI) REFINERIES WORK

In the face of dependency on importation for petroleum products availability, attempts by the Nigerian Government to encourage local private investments in refining of crude oil in the past had yielded very low success. The present government has launched new initiatives to encourage establishment of modular (mini) refineries as a short-term solution to the product supply problem. A study of the modular (mini) refinery project shows that it is a viable project even in the event of competing with mega refineries in the same market (though the margin may become very low under this situation). In order to meet government's aspiration of making Nigeria a crude oil refining hub, government has provided conducive environment and incentives to make mini (modular) refinery projects more attractive. This article evaluates the progress status in the establishment of modular refineries in Nigeria while identifying the major challenges being faced with recommended solutions.

Nigeria's four state-owned refineries with a plate capacity of 445,000 barrels per stream day have continued to perform far below capacity. Over eighty percent of the petroleum products consumed in Nigeria is imported¹. The pump prices of these products except Automotive Gas Oil (Diesel) are subsidized by the government. It is believed that the Federal Government of Nigeria spends over 200 billion Naira every year to subsidized petroleum products. These monies would have been used to provide infrastructure or provide better quality education or health facilities. A conservative estimate suggests that 55 million litres of petroleum products are consumed daily in Nigeria at the ratio of 35:12:8 for PMS, AGO and DPK respectively. Analysis also shows that at the current demand growth rate, we will need to process 750,000 barrels of crude per day to meet the nation's demand for petroleum product by 2020. There is currently a deficit of 2.6 million barrels per stream day between demand and supply of petroleum products in Africa².

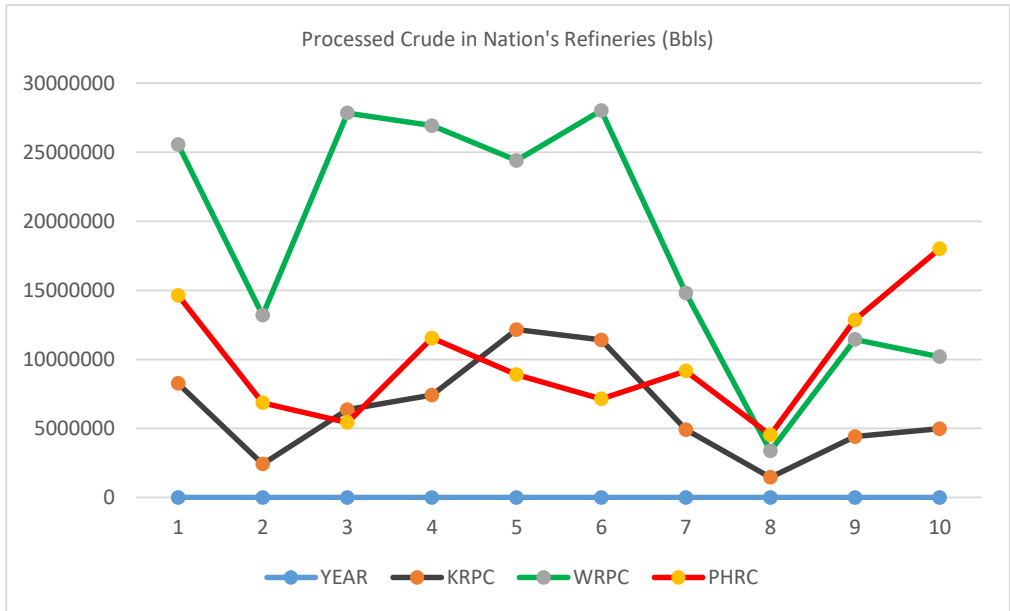


Figure 2: Crude oil processed in Nigeria's Refineries Between 2008 and 2017

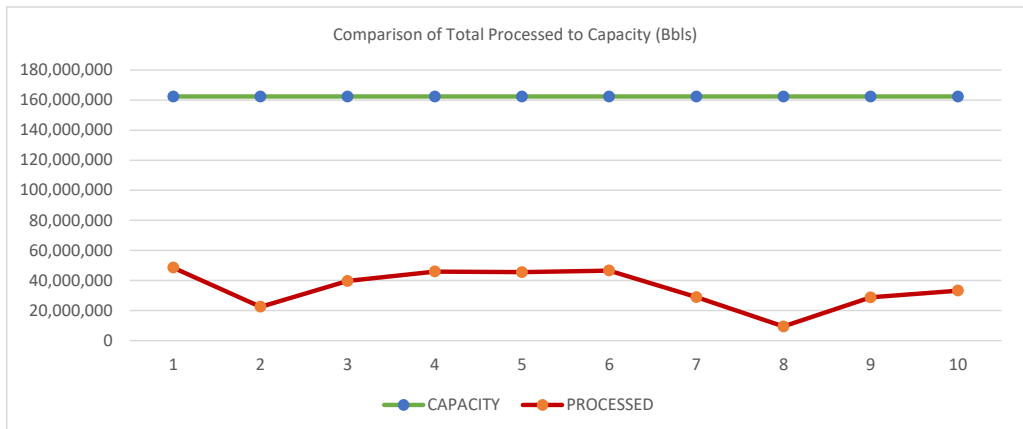


Figure 3: Comparison of the Total Crude Processed to Capacity of the Nation's Refineries (2008 – 2017)

In order to ensure regular supply of petroleum products for domestic consumption and provide veritable platforms for Nigerians and investors to take advantage of these opportunities, the Federal Government launched some initiatives to support the establishment of private mini (modular) refineries. These initiatives include:

- i. The "7 Big Wins" Initiative (2015 – 2019). The initiative captured the short and medium-term priorities to grow Nigeria's Oil and Gas Industry. It proffers



a roadmap for developing a stable and enabling oil and gas landscape with improved transparency, efficiency, stable investment climate, and a well-protected environment. The “Big Win 4” focuses on expansion of domestic refining capacity and rehabilitation of existing refineries.

- ii. The National Petroleum and Gas Policies. The National Gas Policy was approved by the Federal Executive Council on the 28th day of June 2017. This was followed immediately by the approval of the National Petroleum policy on the 19th day of July 2017. These policies provide the framework for creation of strong refining hub in Nigeria, divestment of government-owned refineries, co-location of brownfield refineries with existing refineries and construction of private refineries.

The Mini (Modular) Refinery Project

A modular refinery is a prefabricated crude oil processing plant constructed on skid mounted surfaces, with each structure containing a portion of the entire refining process plant, with by interstitial piping to form an easily manageable process. Technically, a modular refinery could be either simple or complex, with capacity ranging from 100 bpsd to 10,000 bpsd. They are however not defined by size. They can be transported in modules across distances and put together at the location desired. The other advantages of modular refineries include short project completion time, relatively small overall project cost, provides quicker investment return, can be installed in small space and could be designed towards petroleum product need around its location.

Attempts to construct private refineries in Nigeria started in 1990 with the call for indigenous private participation in crude oil refining by the government. Between 1990 and 2000, the Department of Petroleum Resources received over 100 applications. From 2001 to 2007, the 3-Stage Licensing (License to Establish - LTE, Approval to Construct - ATC and License to Operate - LTO) process, which is still in use to date was adopted. About 105 applications were received during the period, leading to grant of 21 LTEs in 2002 and 17 ATCs in 2004. Between 2008 and 2011, focus was placed more on mini (modular) refineries. Nine (9) LTEs were granted and two plants were fabricated, but only the 1,000 bpsd capacity Niger Delta Petroleum Resources refinery at Ogbelle River State was commissioned. From 2012 to date, about 34 LTEs have been granted for mini(modular) refinery projects; six (6) of these companies have been granted ATCs and are at different levels of construction.

The success rate of establishment of mini(modular) refineries in Nigeria is low; only one modular refinery has been commissioned since 2008 out of about 43 LTEs issued.



However, in the last two years, construction of 7,000 bpsd OPAC Refinery in Umusetti, Delta State and 10,000 bpsd Niger Delta Petroleum Resources Refinery expansion project in Ogbelle, Rivers State started off and are near completion owing to the implementation of government policies and the support from the Department of Petroleum Resources. A few other modular refinery projects, namely Edo Refinery, Ikpoba Okha; Petrolex Refinery, Ijebu Ode; African Refinery, Port Harcourt and Southfield Refinery, Ologbo have either completed detailed engineering, secured modules to relocate or the equipment are being fabricated at the manufacturers yard.

Using Bonny Light Crude as an example, If the buying of the crude and the selling of the products are done using international prevailing prices, it is possible to show that the operation of the plant is profitable using the RefTexas Yield / Profit calculator for a 10,000 bpsd mini(modular) topping refinery that processes Bonny Light crude oil into naphtha, diesel and fuel oil.

 Refinery Equipment of Texas, LLC						
Crude Oil Type: Bonny Light Assay (32.9 API)						
11/05/2019	Yield / Profit Calculator - Per Day					
10,000	Barrels per day	Cost per barrel USD		\$78.00	Total	\$780,000.00
		Percent of cost	Barrels	Liters	Sell \$	Projected Sell \$\$
1.00%	Avg. % yield for water-gas	\$7,800.00	100	15,899	\$0.00	\$0.00
28.78%	Avg. % yield for naphtha	\$224,484.00	2,878	457,564	\$0.80	\$366,051.21
52.96%	Avg. % yield for diesel	\$413,088.00	5,296	841,994	\$0.80	\$673,595.27
17.26%	Avg. % yield for HFO **	\$134,628.00	1,726	274,411	\$0.80	\$219,528.97
0.00%	Avg. % yield for asphalt**	\$0.00	0	0	\$0.00	\$0.00
Assumptions: Crude API see above					return	\$1,259,175.46
** heavy fuel oil is a blend of diesel no. 4,5,6 & resid (higher quality than #6)					cost	\$780,000.00
** yield for asphalt road base / residuum or bitumen					Daily \$\$	\$479,175.46
www.platts.com					30 days	\$14,375,263.68
					Annual	\$172,503,164.16
*A reliable feedstock assay, including a True Boiling Point (TBP) distillation to verify the crude oil yields are required. The spreadsheet above is the best estimates that can be done without the True Boiling Point Assay.						

Figure 4: Yield /Profit Calculation for a 10,000 bpsd Mini Refinery

Conclusion and Recommendations

Modular refinery is a profitable project, even in the event of mega refineries competing in the same market. Competition in the same market with mega refineries will only reduce the profit margin for the smaller plant based on economies of scale. The establishment of



modular refineries is the short-term remedy for availability of petroleum products from local production in Nigeria and the government in the last few years have been providing conducive environment and support for the realization of establishment of modular refineries in Nigeria. The government has also approved total waiver (100%) on custom duties for modular refinery equipment imported for licensed modular refinery projects. These efforts by the government and the support from the Department of Petroleum Resources have changed the modular refinery projects landscape in the last two years. It is projected that at least five modular refineries with each processing up to 40,000 barrels of crude per day will be operational in Nigeria in the next five years.

The efforts of the government in providing conducive environment for establishment of modular refineries in Nigeria have been commendable. However, a lot more incentives can be put in place to realize government's aspiration of making Nigeria a refining hub in Africa. These incentives can take the form of establishing a special purpose vehicle (trust fund) to assist in funding modular refinery projects; providing tax holidays and foreign loan guarantees for modular refinery projects; and investing in power and road/rail infrastructure especially in areas where mini refinery licenses have been granted.

References

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2. International Energy Agency (2018). Oil Market Report; 13 April 2018 <https://www.iea.org/media/omrreports/fullissues/2018-04-13.pdf> – [Accessed 12 May 2019]

4. STATISTICAL DATA

4.1 UPSTREAM

4.1.1 Concessions

Table 1: 2018 Annual Report on Multi-client Projects in Nigeria

S/N	Company	Survey Name	Geological Province	Type of Survey/Project	Quantum of Survey Km/Km2 (Approx.)	Remarks
1	Mabon Limited	African Region Survey	Onshore/Offshore Niger Delta	2D Seismic & Geochemistry Survey	62,000 km	Data available for licensing. Contact company.
2	Mabon Limited	Nigeria Span Survey	Offshore Niger Delta	2D Seismic Regional Survey	12,000 km	Data available for licensing. Contact company.
3	TGS Petrodata JV Offshore Services Ltd	Brokerage of Data	Offshore Niger Delta	2D Seismic	17,000 km	Data available for licensing. Contact company.
4	PGS Geophysical Nig. Ltd.	Brokerage of Data	Offshore Niger Delta	3D Seismic	26,000 km2	Data available for licensing. Contact company.
5	PGS Geophysical Nig. Ltd.	MC3D	Offshore Benin Basin	3D Seismic	2,845 km2	Data available for licensing. Contact company.
6	PGS Geophysical Nig. Ltd.	Mega Survey	Offshore Niger Delta	3D Seismic	98,000 km2	Data available for licensing. Contact company.
7	Sonar / Ikon Science	Niger Delta Pressure Study	Onshore/Offshore Niger Delta	Pore-Pressure Study	Niger Delta	Data available for licensing. Contact company
8	Polarcus Nigeria Limited	Brokerage of Data	Offshore Niger Delta	3D Seismic Survey	9,308km2	Data available for licensing. Contact company.
9	Blivew Energy Services	Well Logs Scanning & Digitizing	Onshore/Offshore Niger Delta	Digital Well Logs	Over 7,000 LAS	Digital Well Logs available for licensing. www.geoinfoweb.com
10	Harvex Geosolutions Limited	Brokerage of Data	Offshore Niger Delta	Controlled Source Electromagnetic	NA	Data is being marketed and licensed. Contact company.



Table 2: Status of Oil Mining Leases (OMLs)

S/N	Concession Held	Type Of Grant	Area (Sq.Km)	Equity Distribution	Basin / Terrain	Operator	Date Of Grant	Date Of Lease Expiration
1	OML 29	JVC	983	AITEO-45% NNPC-55%	Niger Delta (Onshore)	NNPC/AITEO EASTERN E&P CO. LTD (AITEO)	17.10.2018	16.10.2038
2	OML 120	SR	910	ALLIED-97.5% CAMAC-2.5% (ERIN ENERGY-100%)	Niger Delta (Deep Offshore)	ALLIED ENERGY RESOURCES NIG. LTD	27.02.2001	26.02.2021
3	OML 121	SR	885	ALLIED-97.5% CAMAC-2.5% (ERIN ENERGY-100%)	Niger Delta (Deep Offshore)	ALLIED ENERGY RESOURCES NIG. LTD	27.02.2001	26.02.2021
4	OML 112	SR	438	AMNI-60% ELF-40%	Niger Delta (Continental Shelf)	AMNI INTERNATIONAL PETROLEUM LTD	17.09.2017	16.09.2037
5	OML 117	SR	51	AMNI-60% Total E&P-40%	Niger Delta (Continental Shelf)	AMNI INTERNATIONAL PETROLEUM LTD	17.09.2017	16.09.2037
6	OML 52	JVC	247	AMNI-40% NNPC-60%	Niger Delta (Onshore)	NNPC/Amni Int'l Pet. Dev. Co. Ltd (Amni Oml 52)	14.06.1997	13.06.2027
7	OML 109	SR	772	ATLAS-70% SUMMIT OIL-30%	Niger Delta (Continental Shelf)	ATLAS PETROLEUM NIG. LTD	25.04.2017	24.05.2016
8	OML 55	JVC	849	BELEMA-40% NNPC-60%	Niger Delta (Onshore)	NNPC/BELEMAOIL PRODUCING LTD.	13.06.1997	13.06.2027
9	OML 110	SR	966	CAVENDISH-100%	Niger Delta (Continental Shelf)	CAVENDISH PETROLEUM NIG. LTD	07.08.1996	6.08.2016
10	OML 49	JVC	1707	NNPC-60% CNL-40%	Niger Delta (Onshore)	NNPC/CHEVRON NIG. LTD.	14.06.1997	13.06.2027
11	OML 51	JVC	145	NNPC-60% CNL-40%	Niger Delta (Onshore)	NNPC/CHEVRON NIG. LTD.	14.06.1997	13.06.2027
12	OML 89	JVC	364	NNPC-60% CNL-40%	Niger Delta (Continental Shelf)	NNPC/CHEVRON NIG. LTD.	18.08.2014	17.08.2034
13	OML 91	JVC	157	NNPC-60% CNL-40%	Niger Delta (Continental Shelf)	NNPC/CHEVRON NIG. LTD.	18.08.2014	17.08.2034
14	OML 86	JVC	385	NNPC-60% CNL-40%	Niger Delta (Continental Shelf)	NNPC/CHEVRON NIG. LTD.	18.08.2014	17.08.2034
15	OML 88	JVC	773	NNPC-60% CNL-40%	Niger Delta (Continental Shelf)	NNPC/CHEVRON NIG. LTD.	18.08.2014	17.08.2034
16	OML 90	JVC	653	NNPC-60% CNL-40%	Niger Delta (Continental Shelf)	NNPC/CHEVRON NIG. LTD.	18.08.2014	17.08.2034
17	OML 95	JVC	1217	NNPC-60% CNL-40%	Niger Delta (Continental Shelf)	NNPC/CHEVRON NIG. LTD.	18.08.2014	17.08.2034
18	OML 132	PSC	804	CHEVRON-100%	Niger Delta (Deep Offshore)	CHEVRON NIG. LTD.	20.12.2005	19.12.2025
19	OML 131	PSC	1210	OANDO-52.5% EXXON MOBIL-47.5%	Niger Delta (Deep Offshore)	OANDO PLC	24.04.2005	23.04.2025
20	OML 103	SR	914	CONOIL-100%	Niger Delta (Onshore)	CONOIL PRODUCING LTD	02.06.1993	19.12.2036
21	OML 136	SR	1295	CONOIL-60% TOTAL-40%	Niger Delta (Continental Shelf)	CONOIL PRODUCING LTD	27.07.2006	26.07.2026
22	OML 153	PSC	531	CONOIL-100%	Niger Delta (Continental Shelf)	CONOIL PRODUCING LTD	15.02.2018	14.02.2038
23	OML 59	SR	836	CONOIL-100%	Niger Delta (Onshore)	Continental Oil & Gas Coy Ltd (CONOG)	06.06.1998	05.06.2028
24	OML 150	PSC	428	CONOIL-100%	Niger Delta Onshore	Continental Oil & Gas Coy Ltd (CONOG)	10.03.2016	09.03.2036
25	OML 96	SR	221	DUBRI-100%	Niger Delta (Onshore)	DUBRI OIL CO. (NIG) LIMITED	02.05.2013	01.05.2033
26	OML 138	PSC	656	SINOPEC-20% EXXON-30% CNL-30% NEXEN-20%	Niger Delta (Deep Offshore)	TOTAL EXP & PROD NIG. LTD.	17.05.2007	16.05.2017
27	OML 139	PSC	656	TOTAL-100%	Niger Delta (Deep Offshore)	TOTAL EXP & PROD NIG. LTD.	17.05.2007	16.05.2017
28	OML 99	JVC	171	NNPC-60% TOTAL-40%	Niger Delta (Continental Shelf)	NNPC/TOTAL EXP & PROD NIG. LTD.	02.05.2013	01.05.2033
29	OML 100	JVC	179	NNPC-60% TOTAL-40%	Niger Delta (Continental Shelf)	NNPC/TOTAL EXP & PROD NIG. LTD.	02.05.2013	01.05.2033
30	OML 102	JVC	796	NNPC-60% TOTAL-40%	Niger Delta (Continental Shelf)	NNPC/TOTAL EXP & PROD NIG. LTD.	02.05.2013	01.05.2033
31	OML 58	JVC	518	NNPC-60% TOTAL-40%	Niger Delta (Onshore)	NNPC/TOTAL EXP & PROD NIG. LTD.	14.06.2007	13.06.2027
32	OML 141	SR	1295	EMERALD-53.9% AMNI INTNL-44.1% SUPERNOVA ENERGY (BLUEWATER GROUP)-2%	Niger Delta (Onshore)	EMERALD ENERGY RES. LTD	08.11.2007	07.08.2027
33	OML 148	PSC	870	ENAGEED 100%	Niger Delta (Onshore)	ENAGEED RESOURCES LTD.	15.05.2015	14.05.2035
34	OML 18	JVC	1035	EROTON-45% NNPC-55%	Niger Delta (Onshore)	NNPC/EROTON E&P CO. (EROTON)	22.10.2018	21.10.2038
35	OML 133	PSC	1100	EXXON - 56.25% SNEPCO-43.75%	Niger Delta (Deep Offshore)	ESSO E & P LTD	08.02.2006	07.02.2026
36	OML 145	PSC	1293	ESSO 20%, Svenska 20%, Phillips 20%, Chevron 20%, NPDC 15%, Sasol 5%	Niger Delta (Deep Offshore)	ESSO E & P LTD	30.05.2014	29.05.2034
37	OML 154	PSC	463	TEPING 18% Esso 27% Chevron 27% Nexen 18% NNPC 10%	Niger Delta (Deep Offshore)	ESSO E & P LTD	28.06.2018	27.06.2038
38	OML 108	SR	759	EXPRESS-57.5% SHELL-40% CAMAC-2.5%	Niger Delta (Continental Shelf)	EXPRESS PETROLEUM & GAS CO. LTD	01.11.1995	31.10.2015



S/N	Concession Held	Type Of Grant	Area (Sq.Km)	Equity Distribution	Basin / Terrain	Operator	Date Of Grant	Date Of Lease Expiration
39	OML 83	JVC	109	FIRST E&P/DANGOTE-45%, NNPC-55%	Niger Delta (Continental Shelf)	NNPC/FIRST E&P	18.08.2014	17.08.2034
40	OML 85	JVC	515	FIRST E&P/DANGOTE-45%, NNPC-55%	Niger Delta (Continental Shelf)	NNPC/FIRST E&P	18.08.2014	17.08.2034
41	OML 71	JVC	730	WAEF/DANGOTE-45%, NNPC-55%	Niger Delta (Continental Shelf)	NNPC/WEST AFRICAN E&P CO. LTD (WAEF)	18.12.2014	17.12.2034
42	OML 72	JVC	1129	WAEF/DANGOTE-45%, NNPC-55%	Niger Delta (Continental Shelf)	NNPC/WEST AFRICAN E&P CO. LTD (WAEF)	18.12.2014	17.12.2034
43	OML 149	PSC	941	NAOC - 48%, Global Energy 42%, BLJ Energy Ltd - 10%	Niger Delta (Onshore)	Gea Pet Dev. Company Ltd (Global Energy)	05.02.2015	04.02.2035
44	OML 151	PSC	171	GEC 100%	Niger Delta (Continental Shelf)	Gea Pet Dev. Company Ltd (Global Energy)	10.03.2016	09.03.2036
45	OML 127	SR	1281	NNPC-50%, CNL-32% FAMFA-10%, PETROBRAS-8%	Niger Delta (Deep Off-shore)	Famfa / Star Deep Water Pet. Ltd	25.11.2004	24.11.2024
46	OML 104	JVC	675	NNPC-60%, MPN-40 %	Niger Delta (Continental Shelf)	Mobil Producing Ng. Unlimited	10.01.2018	09.01.2038
47	OML 67	JVC	119	NNPC-60%, MPN-40 %	Niger Delta (Continental Shelf)	Mobil Producing Ng. Unlimited	11.03.2011	10.03.2031
48	OML 68	JVC	119	NNPC-60%, MPN-40 %	Niger Delta (Continental Shelf)	Mobil Producing Ng. Unlimited	11.03.2011	10.03.2031
49	OML 70	JVC	1250	NNPC-60%, MPN-40 %	Niger Delta (Continental Shelf)	Mobil Producing Ng. Unlimited	11.03.2011	10.03.2031
50	OML 114	SR	464	MONIPULO-60% LUDAL-40%	Niger Delta (Continental Shelf)	Mobil Producing Ng. Unlimited	03.01.1999	02.01.2019
51	OML 24	JVC	162	NEWCROSS E&P-45%, NNPC-55%	Niger Delta (Onshore)	Moni Polo Ltd.	01.07.2009	30.06.2019
52	OML 152	PSC	990	Newcross-100%	Niger Delta (Onshore)	NNPC/NEWCROSS E & P	14.03.2017	13.03.2037
53	OML 134	PSC	1131	ENI-85% OANDO-15%	Niger Delta (Deep Off-shore)	NEWCROSS PETROLEUM LTD.	31.05.2006	30.05.2026
54	OML 125	PSC	1219	ENI-85% OANDO-15%	Niger Delta (Deep Off-shore)	NIGERIA AGIP EXPLORATION (NAE)	02.01.2003	01.01.2023
55	OML 60	JVC	358	NNPC-60%, NAOC-20%, OANDO-20%	Niger Delta (Onshore)	NNPC/NIGERIA AGIP OIL CO. LTD.	14.06.1997	13.06.2027
56	OML 61	JVC	1500	NNPC-60%, NAOC-20%, OANDO-20%	Niger Delta (Onshore)	NNPC/NIGERIA AGIP OIL CO. LTD.	14.06.1997	13.06.2027
57	OML 62	JVC	1211	NNPC-60%, NAOC-20%, OANDO-20%	Niger Delta (Onshore)	NNPC/NIGERIA AGIP OIL CO. LTD.	14.06.1997	13.06.2027
58	OML 63	JVC	2246	NNPC-60%, NAOC-20%, OANDO-20%	Niger Delta (Onshore)	NNPC/NIGERIA AGIP OIL CO. LTD.	14.06.1997	13.06.2027
59	OML 116	SC	360	ENI-100%	Niger Delta (Continental Shelf)	NNPC / agip energy and natural resources (AENR)	06.08.1979	05.08.2019
60	OML 126	PSC	705	ADDAX-100%	Niger Delta (Continental Shelf)	NNPC/ADDAX PETROLEUM (ADDAX)	25.11.2004	24.11.2024
61	OML 137	PSC	849	ADDAX-100%	Niger Delta (Continental Shelf)	NNPC/ADDAX PETROLEUM (ADDAX)	23.04.2007	22.04.2027
62	OML 123	PSC	401	ADDAX-100%	Niger Delta (Continental Shelf)	NNPC/ADDAX PETROLEUM (ADDAX)	14.08.2002	13.04.2022
63	OML 124	PSC	300	ADDAX-100%	Niger Delta (Onshore)	NNPC/ADDAX PETROLEUM (ADDAX)	14.08.2002	13.04.2022
64	OML 40	JVC	498	NPDC-55% ELCREST-45%	Niger Delta (Onshore)	NPDC/ELCREST E&P NIG. LTD.	22.10.2018	21.10.2038
65	OML 42	JVC	814	NECONDE-45%, NPDC-55%	Niger Delta (Onshore)	NPDC/NECONDE ENERGY LTD.	22.10.2018	21.10.2038
66	OML 26	JVC	165	FIRST HYDROCARBON-45%, NPDC-55%	Niger Delta (Onshore)	NPDC/FIRST HYDROCARBON NIG. LTD.	01.07.1989	30.06.2019
67	OML 34	JVC	950	NPDC-55% ND WESTERN-45%	Niger Delta (Onshore)	NNPC/ND WESTERN LTD.	01.07.1989	30.06.2019
68	OML 119	SR	715	NPDC-100%	Niger Delta (Continental Shelf)	NIGERIA PET. DEV. CO. (NPDC)	31.10.2000	30.10.2020
69	OML 111	SR	461	NPDC-100%	Niger Delta (Onshore)	NIGERIA PET. DEV. CO. (NPDC)	1996	2016
70	OML 64	SR	278	NPDC-100%	Niger Delta (Onshore)	NIGERIA PET. DEV. CO. (NPDC)	09.1989	9.2019
71	OML 65	SR	1019	NPDC-100%	Niger Delta (Onshore)	NIGERIA PET. DEV. CO. (NPDC)	09.1989	9.2019
72	OML 66	SR	204	NPDC-100%	Niger Delta (Onshore)	NIGERIA PET. DEV. CO. (NPDC)	07.09.1989	06.09.2019
73	OML 13	SR	1988	NPDC-100%	Niger Delta (Onshore)	NIGERIA PET. DEV. CO. (NPDC)	20.12.2016	19.12.36
74	OML 30	JVC	1097	NPDC-55% SHORELINE NAT RESOURCES-45%	Niger Delta (Onshore)	NNPC/SHORELINE NATURAL RESOURCES LTD.	01.07.89	30.06.2019
75	OML 140	SR	1220	PSA Partner: Oil & Gas 10%, Star Ultra Deep 40%, PSC Partner: NNPC 50%	Niger Delta (Deep Offshore)	OIL AND GAS NIG. LTD.	18.07.07	17.07.27
76	OML 115	SR	248	ORIENTAL-100%	Niger Delta (Continental Shelf)	ORIENTAL ENERGY RESOURCES LTD	20.5.1999	19.05.2019
77	OML 98	JVC	523	NNPC-60%, PANOCCEAN-40%	Niger Delta (Onshore)	NNPC/PAN OCEAN OIL CORPORATION	06.1976	7.7.2018
78	OML 147	PSC	544	PANOCCEAN 100%	Niger Delta (Onshore)	PAN OCEAN/ANIOMA	23.10.2014	22.10.2034



S/N	Concession Held	Type Of Grant	Area (Sq.Km)	Equity Distribution	Basin / Terrain	Operator	Date Of Grant	Date Of Lease Expiration
79	OML 122	SR	1295	PEAK-(95 OIL/88 GAS),OANDO (5 OIL/12 GAS)	Niger Delta (Continental Shelf)	PEAK PETROLEUM INDUSTRIES NIG. LTD	17.05.2001	16.05.2021
80	OML 4	JVC	267	SEPLAT-45% NPDC-55%	Niger Delta (Onshore)	NPDC/SEPLAT	22.10.2018	21.10.2038
81	OML 38	JVC	2152	SEPLAT-45% NPDC-55%	Niger Delta (Onshore)	NPDC/SEPLAT	22.10.2018	21.10.2038
82	OML 41	JVC	291	SEPLAT-45% NPDC-55%	Niger Delta (Onshore)	NPDC/SEPLAT	22.10.2018	21.10.2038
83	OML 53	JVC	1562	SEPLAT-45% NPDC-55%	Niger Delta (Onshore)	NPDC/SEPLAT	14.06.1997	13.06.2027
84	OML 11	JVC	3097	NNPC-55% SPDC-30% ELF-10% AGIP-5%	Niger Delta (Onshore)	NNPC / Shell Petroleum Dev. Coy Ltd. (SPDC)	01.07.1989	30.06.2019
85	OML 17	JVC	1301	NNPC-55% SPDC-30% ELF-10% AGIP-5%	Niger Delta (Onshore)	NNPC / Shell Petroleum Dev. Coy Ltd. (SPDC)	18.10.2018	17.10.2038
86	OML 20	JVC	405	NNPC-55% SPDC-30% ELF-10% AGIP-5%	Niger Delta (Onshore)	NNPC / Shell Petroleum Dev. Coy Ltd. (SPDC)	18.10.2018	17.10.2038
87	OML 21	JVC	372	NNPC-55% SPDC-30% ELF-10% AGIP-5%	Niger Delta (Onshore)	NNPC / Shell Petroleum Dev. Coy Ltd. (SPDC)	18.10.2018	17.10.2038
88	OML 22	JVC	722	NNPC-55% SPDC-30% ELF-10% AGIP-5%	Niger Delta (Onshore)	NNPC / Shell Petroleum Dev. Coy Ltd. (SPDC)	18.10.2018	17.10.2038
89	OML 23	JVC	483	NNPC-55% SPDC-30% ELF-10% AGIP-5%	Niger Delta (Onshore)	NNPC / Shell Petroleum Dev. Coy Ltd. (SPDC)	18.10.2018	17.10.2038
90	OML 25	JVC	429	NNPC-55% SPDC-30% ELF-10% AGIP-5%	Niger Delta (Onshore)	NNPC / Shell Petroleum Dev. Coy Ltd. (SPDC)	18.10.2018	17.10.2038
91	OML 27	JVC	165	NNPC-55% SPDC-30% ELF-10% AGIP-5%	Niger Delta (Onshore)	NNPC / Shell Petroleum Dev. Coy Ltd. (SPDC)	18.10.2018	17.10.2038
92	OML 28	JVC	936	NNPC-55% SPDC-30% ELF-10% AGIP-5%	Niger Delta (Onshore)	NNPC / Shell Petroleum Dev. Coy Ltd. (SPDC)	18.10.2018	17.10.2038
93	OML 31	JVC	1097	NNPC-55% SPDC-30% ELF-10% AGIP-5%	Niger Delta (Onshore)	NNPC / Shell Petroleum Dev. Coy Ltd. (SPDC)	18.10.2018	17.10.2038
94	OML 32	JVC	565	NNPC-55% SPDC-30% ELF-10% AGIP-5%	Niger Delta (Onshore)	NNPC / Shell Petroleum Dev. Coy Ltd. (SPDC)	18.10.2018	17.10.2038
95	OML 33	JVC	336	NNPC-55% SPDC-30% ELF-10% AGIP-5%	Niger Delta (Onshore)	NNPC / Shell Petroleum Dev. Coy Ltd. (SPDC)	18.10.2018	17.10.2038
96	OML 35	JVC	1144	NNPC-55% SPDC-30% ELF-10% AGIP-5%	Niger Delta (Onshore)	NNPC / Shell Petroleum Dev. Coy Ltd. (SPDC)	18.10.2018	17.10.2038
97	OML 36	JVC	338	NNPC-55% SPDC-30% ELF-10% AGIP-5%	Niger Delta (Onshore)	NNPC / Shell Petroleum Dev. Coy Ltd. (SPDC)	18.10.2018	17.10.2038
98	OML 43	JVC	767	NNPC-55% SPDC-30% ELF-10% AGIP-5%	Niger Delta (Onshore)	NNPC / Shell Petroleum Dev. Coy Ltd. (SPDC)	18.10.2018	17.10.2038
99	OML 45	JVC	76	NNPC-55% SPDC-30% ELF-10% AGIP-5%	Niger Delta (Onshore)	NNPC / Shell Petroleum Dev. Coy Ltd. (SPDC)	18.10.2018	17.10.2038
100	OML 46	JVC	1080	NNPC-55% SPDC-30% ELF-10% AGIP-5%	Niger Delta (Onshore)	NNPC / Shell Petroleum Dev. Coy Ltd. (SPDC)	18.10.2018	17.10.2038
101	OML 74	JVC	1324	NNPC-55% SPDC-30% ELF-10% AGIP-5%	Niger Delta (Continental Shelf)	NNPC / Shell Petroleum Dev. Coy Ltd. (SPDC)	18.12.2014	17.10.2038
102	OML 77	JVC	962	NNPC-55% SPDC-30% ELF-10% AGIP-5%	Niger Delta (Continental Shelf)	NNPC / Shell Petroleum Dev. Coy Ltd. (SPDC)	18.12.2014	17.10.2038
103	OML 79	JVC	970	NNPC-55% SPDC-30% ELF-10% AGIP-5%	Niger Delta (Continental Shelf)	NNPC / Shell Petroleum Dev. Coy Ltd. (SPDC)	18.12.2014	17.10.2038
104	OML 118	PSC	1167	SNEPCO-55% Exxon-20% Elf-12.5% Elf-12.5%	Niger Delta (Deep Off-shore)	Shell Nig. Exp & Prod. Co. Ltd	28.11.2005	27.11.2025
105	OML 135	PSC	926	SNEPCO-55% Exxon-20% Elf-12.5% Elf-12.5%	Niger Delta (Deep Off-shore)	Shell Nig. Exp & Prod. Co. Ltd	03.07.2006	02.07.2026
106	OML 130	SR	1295	CNOOC-45% South Atlantic-15% Petrobras-16% TOTAL-24%	Niger Delta (Deep Off-shore)	South Atlantic Pet. Ltd.	25.04.2005	24.04.2025
107	OML 128	PSC	1198	STATOIL-53.85% CNL-46.15%	Niger Delta (Deep Off-shore)	StatOil (Nigeria) Limited	28.12.2004	27.12.2024
108	OML 129	PSC	1023	STATOIL-53.85% CNL-46.15%	Niger Delta (Deep Off-shore)	StatOil (Nigeria) Limited	28.12.2004	27.12.2024
109	OML 142	SR	1295	SUMMIT-30% SUNTERA-70%	Anambra Basin (Onshore)	Summit Oil International	12.06.2009	11.06.2029
110	OML 144	SR	96	SUNJUNK-60% SHELL-40%	Niger Delta (Continental Shelf)	Sunink Petroleum Limited	02.05.2013	01.05.2033
111	OML 146	PSC	29	Sterling Global 51% DOMON 24% Kunoch 15% Primetime 10%	Niger Delta (Onshore)	Sterling Oil&P Production Co. Ltd (SEPCO)	25.10.2014	24.10.2034
112	OML 143	PSC	369	Sterling Global 80% ALLENE 20%	Niger Delta (Onshore)	Sterling Oil&P Production Co. Ltd (SEPCO)	29.12.2010	28.12.2030
113	OML 113	SR	835	Yinka Pet-69, VTOL-12.831, EER-9%, PAN PET.-6.502, MX-2.667)	Benin Basin (Continental Shelf)	Folawiyi Pet. Co. Ltd	23.07.2018	22.07.2038



Table 3: Status of Oil Prospecting Licenses (OPLs)

S/N	Concession Held	Contract Type	Area (Sq. Km)	Equity Distribution	Geological Location/Terrain	Name of Company	Year of Award / Unit / Conversion / Renewal	Date Of Expiration
1	OPL 907	PSC	2498	AGER 41% BUSTON ENERGY 25%, ALLENNE E&P 14%, KAZTEC 5% VP ENERGY 3%, DE ATAL 2%, BEPTA 10%	Anambra Basin	Afren Global Energy Resources Ltd.	2005	19.02.2018
2	OPL 917	PSC	1710	AGER 42% VP ENERGY 18%, PETROLOG 17%, DE ATAL 10%, GOLAND 13%	Anambra Basin	Afren Global Energy Resources Ltd.	2005	19.02.2018
3	OPL 452	SR	522	ALMAGAMATED OIL-100%	Niger Delta (Onshore)	Amalgamated Oil Co. Ltd.	08.01.1992	24.05.2016
4	OPL 325	PSC	1265	ASHBERT-80%, NPDC-20%	Niger Delta (Deep Offshore)	Ashbert Oil & Gas Ltd / Npdc / Train-Cosy Energy	2005	-
5	OPL 286	PSC	804	BG 66%, SAHARA 24%, EQUINOX 10%	Niger Delta (Deep Offshore)	Sahara / Bg Exp. Nic Ltd.	2006	07.03.2017
6	OPL 240	PSC	48	Bayelsa Oil Comp? & Tianjin Energy Resources?	Niger Delta (Continental Shelf)	Boc Jhnp Consortium	2007	-
7	OPL 471	PSC	1370	CNODC 90%, SEVEN WAVES 10%	Niger Delta (Continental Shelf)	China National Oil Dev. Co (CNODC)	2006	22.04.21017
8	OPL 257	PSC	426	Continental Oil & Gas-50% TUPNI-40%, TIGER HEAD-10%	Niger Delta (Deep Offshore)	Conoil Producing Ltd	2005	08.02.2016
9	OPL 289	PSC	386	Cleanwaters 90%, Seven Waves 10%	Niger Delta (Continental Shelf)	Cleanwaters Consortium	2006	22.04.2012
10	OPL 305	SR	1558	Crownwell-60%, Platinum Natural Res.-40%	Benin Basin	Crownwell Petroleum Ltd	8.1993	17.05.2020
11	OPL 306	SR	1889	Crownwell-60%, Platinum Natural Res.-40%	Benin Basin	Crownwell Petroleum Ltd	8.1993	17.05.2020
12	OPL 322	SR	1789	PSA-DAUO-10%, SNERCO-40%	Niger Delta (Deep Offshore)	Dajo Oil Limited	30.03.2004	26.02.2019
	OPL 204	SR	1670	AFRICOIL-100%	Niger Delta (Onshore)	Africoil & Marketing Co. Ltd	10.08.1993	08.07.2010
14	OPL 221	PSC	2286	TEPNG 60%, Chevron 40%	Niger Delta (Deep Offshore)	Total Exp. & Prod. Nig. Ltd.	19.11.2003	18.11.2013
15	OPL 227	SR	974	EXPRESS-39%, ADDAX-40%, PPL-15%, NIGER DELTA E&P-6%	Niger Delta (Continental Shelf)	Express Pet. & Gas Co. Ltd / Petroleum Prospects Int'l Ltd.	2000	02.12.2018
16	OPL 226	PSC	1257	Essar 100%	Niger Delta (Continental Shelf)	Essar E&P Ltd.	18.05.2007	09.03.2015
17	OPL 235	SR	1480	FIRST ARIES(OP) 60%, MAJESTIC INT 40%	Niger Delta (Onshore)	First Aries Petroleum Ltd.	10.08.1993	-
18	OPL 905	PSC	2600	GPL-50% Energy 905 Suntera Ltd 40% Ideal Oil & Gas 10%	Anambra Basin	Gas Transmission & Power Ltd	23.04.2007	22.04.2017
19	OPL 2010	PSC	179	GPDC 100%	Niger Delta (Continental Shelf)	Geopet. Dev. Coy Ltd (Global Energy)	18.05.2007	29.12.2015
20	OPL 2012	PSC	849	SIGMUND-94% GRASSO-6%	Niger Delta (Continental Shelf)	Grasso Nig. Ltd / Sigmund Oil Fields Ltd.	2012	17.06.2019
21	OPL 247	SR	1165	NNPC 50%, Esso 40%, Heritage 7%, Kenda 3%	Niger Delta (Deep Offshore)	Heritage Oil & Gas Co. Ltd.	1999	05.04.2019
22	OPL 252	PSC	814	INC- 100%	Niger Delta (Deep Offshore)	Inc Natural Resources	2006	-
23	OPL 292	PSC	1195	INC- 100%	Niger Delta (Deep Offshore)	Inc Natural Resources	2006	-
24	OPL 234	PSC	1214	MONIPULO 100%	Niger Delta (Onshore)	Moni Pulo Ltd.	2007	15.12.2013
25	OPL 239	PSC	65	MONIPULO 100%	Niger Delta (Continental Shelf)	Moni Pulo Ltd.	2007	15.12.2013
26	OPL 231	PSC	244	MONIPULO 100%	Niger Delta (Onshore)	Moni Pulo Ltd.	2007	16.05.2016
27	OPL 276	PSC	472	NEW CROSS- 60%, ALBRIGHT WAVES PET. DEV.-40%	Niger Delta (Onshore)	Newcross Petroleum Ltd.	16.02.2006	20.01.2017
28	OPL 733	PSC	2611	NNDC-100%	Chad Basin	New Nigeria Development Coy Ltd.	2005	
29	OPL 809	PSC	2581	NNDC-100%	Benue Trough	New Nigeria Development Coy Ltd.	2005	07.08.2016
30	OPL 810	PSC	2584	NNDC-100%	Benue Trough	New Nigeria Development Coy Ltd.	2005	
31	OPL 722	PSC	2540	NNDC-100%	Chad Basin	New Nigeria Development Coy Ltd.	2005	
32	OPL 244	PSC	1700	NAE 60%, Svenska 30%, NPDC 10%	Niger Delta (Deep Offshore)	Nigeria Agip Exploration	2000	19.12.2011
33	OPL 282	PSC	695	NAOC 90%, Alliance 10% (OANDO-4% Arc Oil & Gas-6%)	Niger Delta (Continental Shelf)	Nigeria Agip Oil Co. Ltd.	2005	07.09.2015
34	OPL 291	PSC	1287	Addax 72.5%, STARCREST 27.5%	Niger Delta (Deep Offshore)	Starcrest Ltd.	2006	15.10.2016
35	OPL 702	SR	2574	NNPC/FES- 100%	Chad Basin	NNPC/FES	1967	Not applicable



S/N	Concession Held	Contract Type	Area (Sq.Km)	Equity Distribution	Geological Location/ Terrain	Name of Company	Year Of Award / Contract / Conversion / Renewal	Date Of Expiration
36	OPL 703	SR	2772	NNPC/FES-100%	Chad Basin	NNPC/FES	1967	due to section
37	OPL 705	SR	2547	NNPC/FES-100%	Chad Basin	NNPC/FES	1967	20 of NNPC Act Cap 320 of LFN 1990
38	OPL 707	SR	2582	NNPC/FES-100%	Chad Basin	NNPC/FES	1967	
39	OPL 242	PSC	1789	NNPC-50%, Starcrest-35%, Cross River-10%, Obokpa-5%	Niger Delta Deep Offshore	Nigeria Pet. Dev. Co. (NPDC)	07.03.2011	-
40	OPL 233	PSC	126	Nig Del 100% (NIGDEL-60 EQUITY, ENERGY RES-20, SAKOIL-20)	Niger Delta Continental Shelf	Nig-Del United Ltd.	2006	29.06.2016
41	OPL 215	SR	2586	NOREAST-60%, TOTALE & P-40%	Niger Delta (Deep Offshore)	Noreast Pet. Nig. Ltd.	21.10.1991	20.04.2020
42	OPL 236	PSC	1652	OANDO-95%, RFO VENTURES-5%	Niger Delta (Onshore)	Oando Plc	2005	07.09.2011
43	OPL 278	PSC	92	OANDO 100% (OANDO-60, CAMAC-15, ALLIED-15, FIRST AXIS-10)	Niger Delta (Onshore)	Oando Plc	2005	07.09.2011
44	OPL 241	PSC	1257	OILWORLD-20%, OWENA OIL AND GAS LTD-80%	Niger Delta (Continental Shelf)	Oilworld Limited	2007	09.03.2020
45	OPL 285	PSC	1167	OMEL 45.5%, TUPNI 14.5%, EMO 40%	Niger Delta (Deep Offshore)	Eno E&P/Total E&P Ltd	2006	22.02.2017
46	OPL 279-N	PSC	1103	Optimum-60%, Afren Oil & Gas Inv. Ltd-40% (Afren-22.86%, Mayfair Assets & Trust Ltd-17.14%)	Niger Delta (Deep Offshore)	Eno E&P/Total E&P Ltd	2006	22.02.2017
47	OPL 310	SR	1935	Optimum-60%, Afren Oil & Gas Inv. Ltd-40% (Afren-22.86%, Mayfair Assets & Trust Ltd-17.14%)	Benin Basin	Optimum Pet. Dev. Ltd.	1992	09.06.2018
48	OPL 915	SR	1195	ORIENT PETROLEUM-100%	Anambra Basin	Orient Pet. Refinery Ltd.	31.01.2005	29.01.2015
49	OPL 916	SR	963	ORIENT PETROLEUM-100%	Anambra Basin	Orient Pet. Refinery Ltd.	31.01.2005	
50	OPL 320	PSC	1789	ORANTO 32%, PIONEER 51%, ORANDI 17%	Niger Delta (Deep Offshore)	Oranto Petroleum Ltd.	1999	20.2.2021 Extended
51	OPL 293	PSC	1023	ORANTO-100%	Niger Delta (Deep Offshore)	Oranto Petroleum Ltd.	2007	PSC SIGNED
52	OPL 284	PSC	1131	SAHARA 45%, BG 45%, LOTUS 10%	Niger Delta (Deep Offshore)	Sahara Energy E&P	17.07.2006	06.07.2017
53	OPL 228	PSC	1915	SAHARA ENERGY FIELD-100%	Niger Delta (Onshore)	Sahara Energy E&P	06.2015	
54	OPL 245	SR	1958	PSA-SNEPCo 50%, NAE 50%	Niger Delta (Deep Offshore)	Nigeria Agip Expl. Ltd (Nae)/Shell Nig. Ultra Deep Ltd.	22.12.2003	10.05.2021
55	OPL 206	SR	2020		Anambra Basin	Summit Oil International	1990	19.01.2014
56	OPL 2005	PSC	662	STERLING -100%	Niger Delta (Onshore)	Sterling Exploration Ltd (Sel)	2007	29.04.2019
57	OPL 2006	PSC	662	STERLING -100%	Niger Delta (Onshore)	Sterling Exploration Ltd (Sel)	2007	29.04.2019
58	OPL 2004	JVC	103	STERLING -100%	Niger Delta (Onshore)	Sterling Exploration Ltd (Sel)	2015	Pending PSC agreement
59	OPL 2008	PSC	41	TENOIL-100%	Niger Delta (Continental Shelf)	Tenol Pet. & Energy Services Ltd / Clayford	2007	25.05.2016
60	OPL 281	PSC	122	TRANSCORP-100%	Niger Delta (Onshore)	Transnational Corporation	2006	5.2019
61	OPL 248	PSC	2448	NNPC-50%, CONOCO-28.8%, ESSO-11.2%, ZEBRA-10%	Niger Delta (Deep Offshore)	Zebra Energy Limited	1999	6.2019



Distribution of Nigerian Concessions by Lease Contract Type

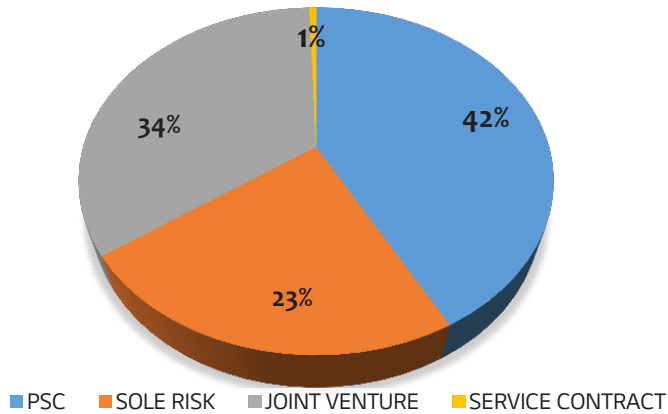


Figure 5: Distribution of Nigeria Concession by Lease Contract Type

Table 4: Summary Of Acreage Situation As At 31 December 2018

Name Of Basin	No. Of Blocks Allocated		No Of Open Blocks	Total No. Of Blocks
	OPL	OML		
Niger Delta (Onshore)	13	56	5	74
Niger Delta (Continental Shelf)	12	37	6	56
Niger Delta (Offshore)	19	18	58	95
Benin Basin	3	1	6	10
Anambra Basin	6	1	12	19
Sokoto Basin	0	0	28	28
Chad Basin	6	0	40	46
Bida	0	0	17	17
Benue Trough	2	0	41	43
Total	61	113	214	388

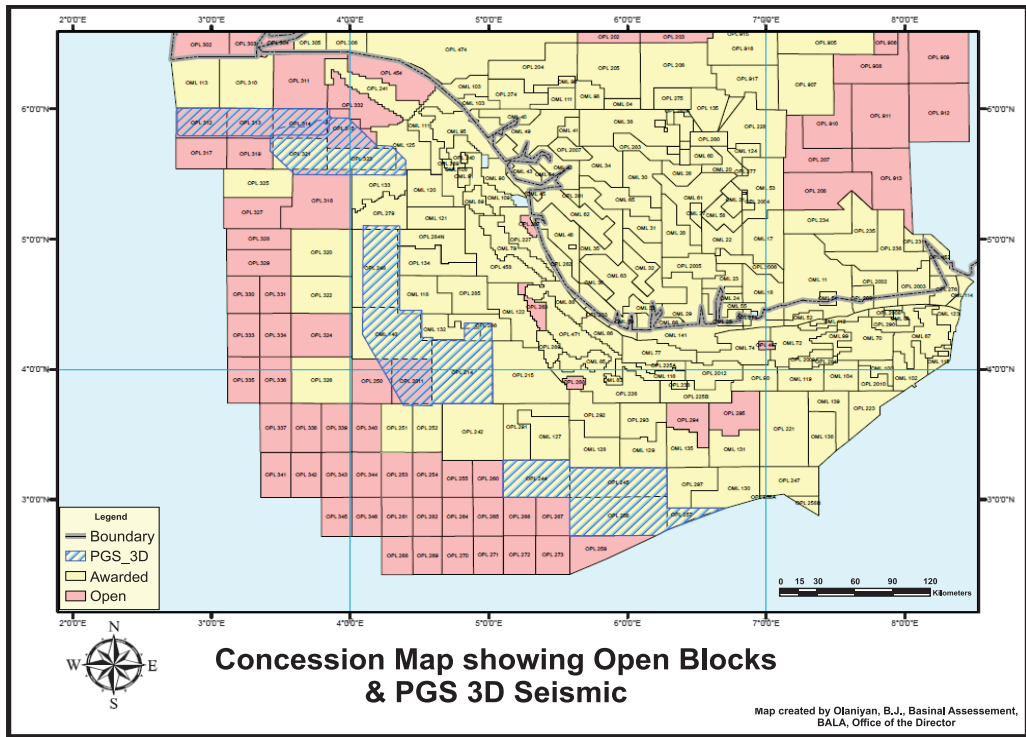


Figure 6: Concession Map showing Open Blocks & PGS 3D Seismic

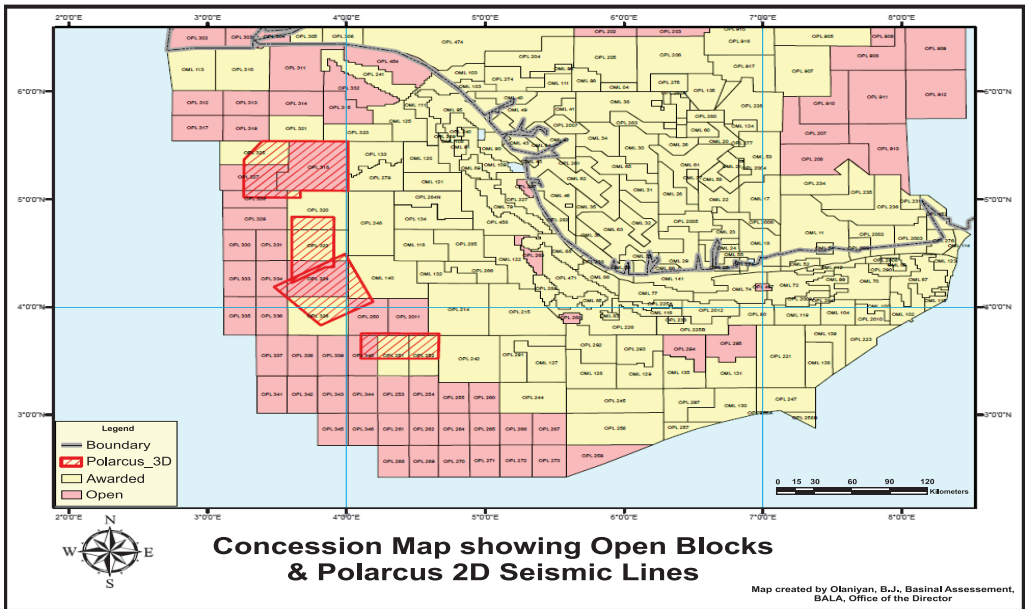


Figure 7: Concession Map showing Open Blocks & Polarcus 2D Seismic Lines

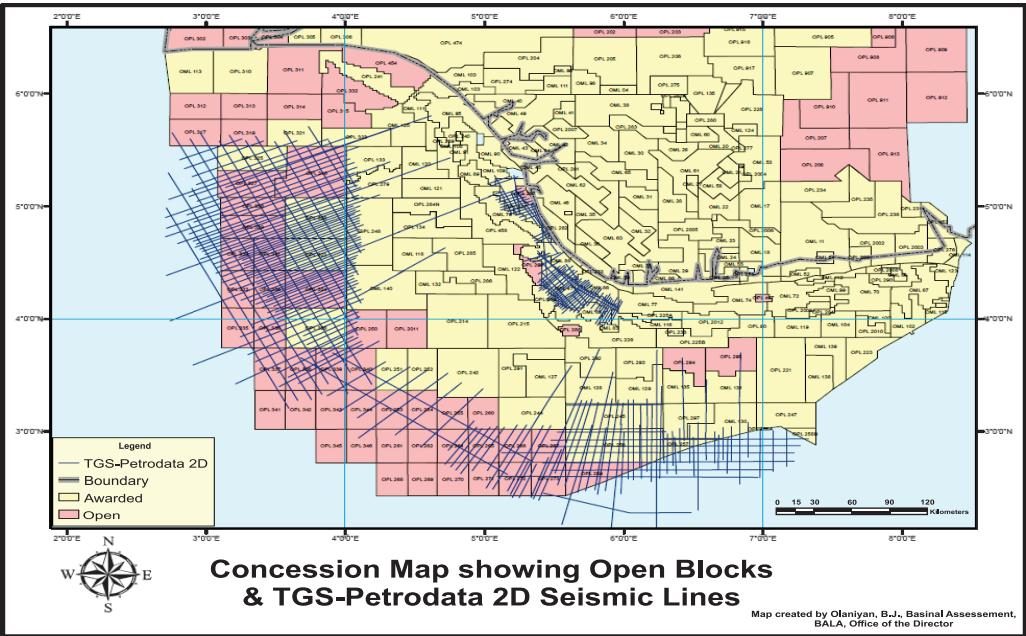


Figure 8: Concession Map showing Open Blocks & TGS-Petrodata 2D Seismic

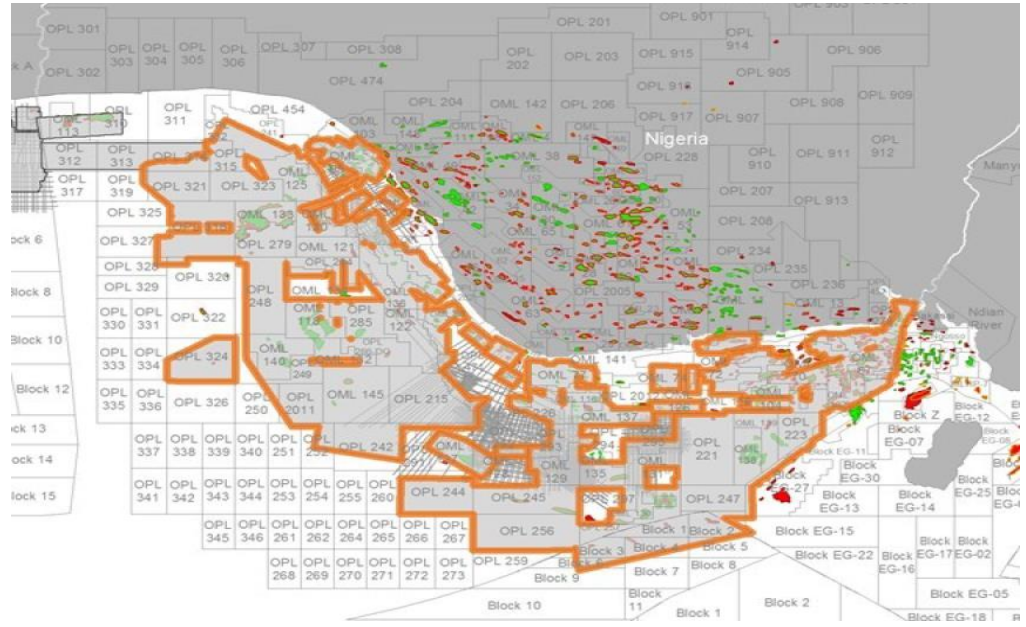


Figure 9: Concession Map showing Open Blocks & PGS's Nigeria Mega Survey



4.1.1.1 Marginal Fields

Table 5: List of Marginal Fields

S/N	Field Name	Company Name	Block
1	Ogbele	Niger Delta Petroleum Resources Limited	OML 54
2	Omerelu	Niger Delta Petroleum Resources Limited	OML 53
3	Asaramatoru	Prime Exploration & Production (Operator)/Suffolk Petroleum Limited	OML 11
4	Okwok	Oriental Energy Resources Limited	OML 67
5	Ebok	Oriental Energy Resources Limited	OML 67
6	Stubb Creek	Universal Energy Limited	OMLs 13 / 14
7	Dawes Island	Eurafric Energy Limited	OML 54
8	Umusati/Igbuku	Pillar Oil Limited	OML 56
9	Atala	Bayelsa Oil Company Ltd	OML 46
10	Ekeh	Movido E&P Limited	OML 88
11	Ogedeh	Bicta Energy & Management Systems Limited	OML 90
12	Ororo	Guarantee Petroleum Limited (Operator)/Owena Oil & Gas Limited	OML 95
13	Egbaoma (Ex Asuokpu/Umutu)	Platform Petroleum Limited	OML 38
14	Amoji /Matsogo / Igbolo	Chorus Energy Limited	OML 56
15	Akepo	Sogenal Limited	OML 90
16	Oza	Millenium Oil and Gas Limited	OML 11
17	Ajapa	Brittania U Nigeria Limited	OML 90
18	Qua Ibo	Network E&P Limited	OML 13
19	Ibigwe	Waltersmith Petroman Limited (Operator)/Morris Petroleum Limited	OML 16
20	Umusadege	Midwestern Oil and Gas Limited/Suntrust Oil Company Limited	OML 56
21	Ofa	Independent Energy Limited	OML 30
22	KE	Del Sigma	OML 55
23	Tom Shot Bank	Associated Oil and Gas Limited (Operator)/Dansaki Petroleum Unlimited	OML 14
24	Uquo	Frontier Oil Limited	OML 13
25	Ebendo/Obodeti (Ex Obodugwa /Obodeti)	Energia Limited (Operator)/Oando Production and Development Limited	OML 56
26	Oriri	Goland Petroleum Dev. Co. Limited	OML 88
27	Eremor	Excel Exploration & Production Limited	OML 46
28	Tsekelewu	Sahara Energy Limited (Operator)/African Oil & Gas Company Limited	OML 40
29	Otakikpo	Green Energy International Limited	OML 11
30	Ubima	All Grace Energy Limited	OML 17

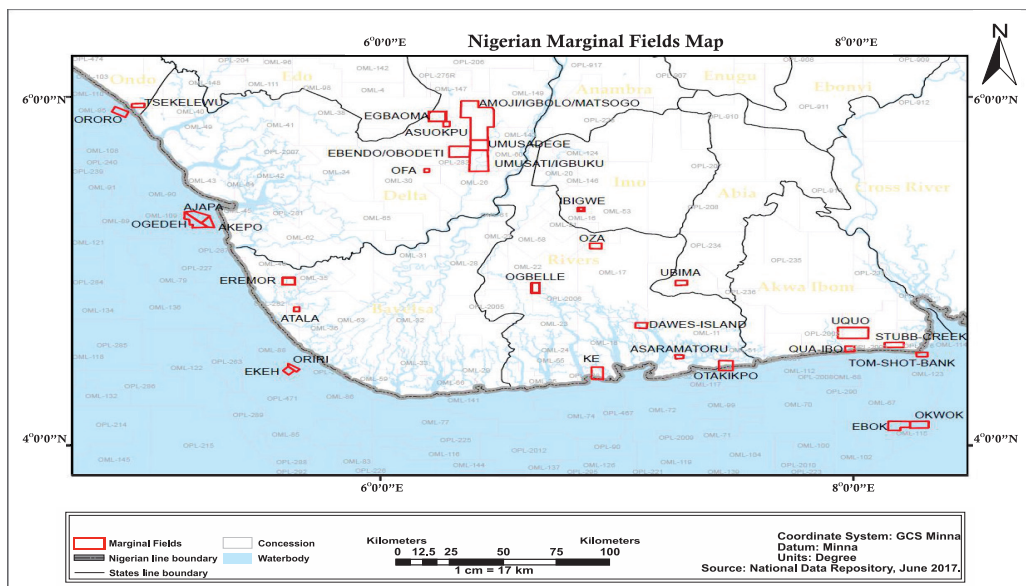


Figure 10: Marginal Fields Map, 2002 – 2004



4.1.2 Reserves

4.1.2.1 Oil and Condensates Reserves

The Oil and Condensate reserves increased by about 0.08% when compared with the year 2017 figures, which stood at 36.971 Billion barrels.

Table 6: Oil and Condensates Reserves, MMBbls

Year	Oil Reserves	Condensate Reserves	Total (Oil + Condensates), MMBbls
2010	31,219.00	5,313.97	36,532.97
2011	31,169.60	5,077.81	36,247.41
2012	32,233.24	4,905.86	37,139.10
2013	31,813.51	5,257.32	37,070.83
2014	31,870.00	5,578.24	37,448.24
2015	31,643.91	5,418.15	37,062.06
2016	31,271.77	5,467.41	36,739.18
2017	31,419.71	5,552.20	36,971.91
2018	31,667.75	5,334.35	37,002.10

* All Reserves above are as at 31st December of the reported year

4.1.2.1.1 Oil And Condensate Reserves Distribution

A. On Contract Basis

The percentage distribution of the Nation's Oil and Condensate reserves across the various contract types has remained within a +/- 2% margin over the last four years.

Table 7: Nigeria Oil & Condensate Reserves Distribution on Contract Basis

Contract Type	Reserves (Million Barrels)		Total Reserves
	Oil	Condensates	
Joint Venture	13,940	3,763	17,703
Production Sharing	8,255	497	8,752
Sole Risk	8,922	1,030	9,952
Marginal Field	551	44	595
Total	31,668	5,334	37,002

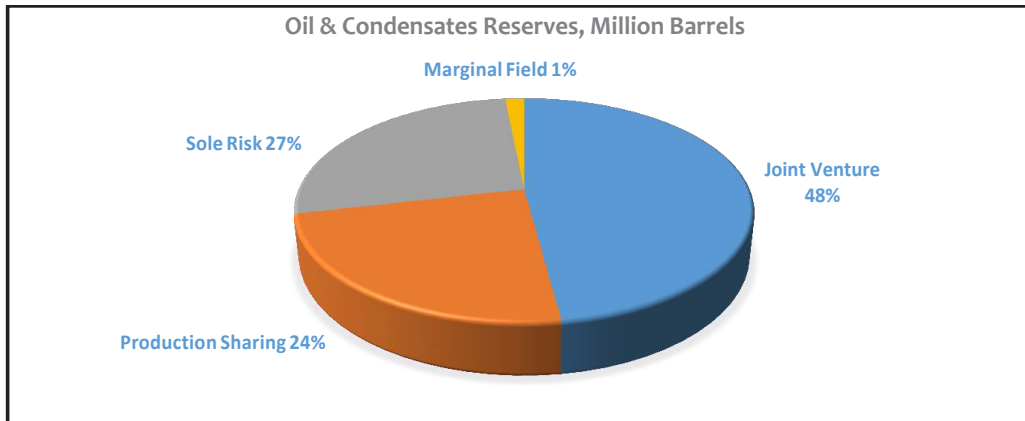


Figure 11: Nigeria Oil & Condensate Reserves Distribution on Contract Basis as at 1st January, 2019

B. On Terrain Basis

The percentage distribution of the Nation's Oil and Condensate reserves across the various operating terrains has remained within a +/- 2% margin over the last three years.

Table 8: Nigeria Oil & Condensate Reserves Distribution on Terrain Basis as at January 1, 2019

Terrain	Reserves (Million Barrels)		
	Oil	Condensates	Total Reserves
Land	8,792.9	1,882.3	10,675.2
Deep Offshore	7,284.8	461.2	7,746.0
Offshore	7,243.8	1,689.4	8,933.2
Swamp	8,346.2	1,301.4	9,647.6
Total	31,667.7	5,334.3	37,002.0

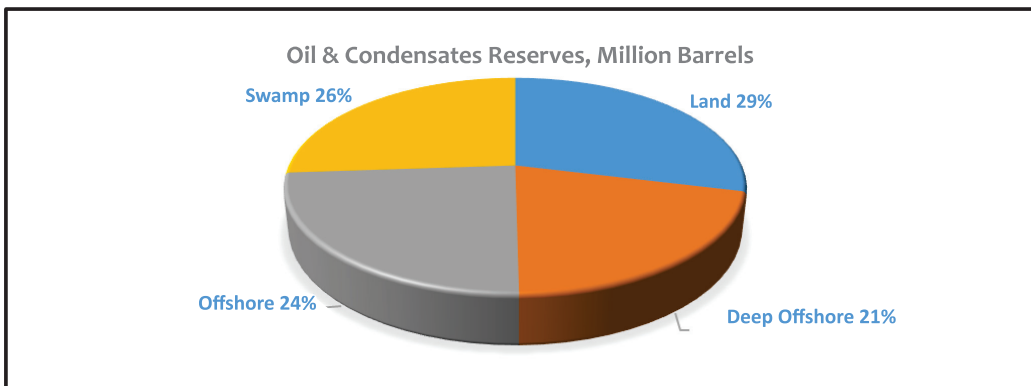


Figure 12: Nigeria Oil & Condensate Reserves Distribution on Terrain Basis as at January 1, 2019



4.1.2.1.2 Oil And Condensates Reserves Analysis

Table 9: Oil Reserves Net Addition, Depletion Rate and Life Index on Contract Basis

Contract Type	Production, Million Barrels	Net Addition (Crude Oil), Million Barrels	% Net Addition	Depletion Rate, %	Life Index, Years
Joint Venture	314.23	46.21	0.3	1.8	56.34
Production Sharing	272.25	297.43	3.5	3.1	32.15
Sole Risk	151.97	-340.54	-3.3	1.5	65.49
Marginal Field	16.17	27.09	4.8	2.7	36.83
Total	754.62	30.19	0.08	2.04	49.03

A. Net Addition to Reserves on Contract Basis and National Perspective

i. National Perspective

The net addition to the Nation's 2P Oil and Condensate reserves volumes based on an annual production of 754.62 MMB is 30.19 MMB. This shows a positive net addition to the Nation's reserves of about 0.08%. The increase in reserves is attributed mainly to an upward revision to reserves from studies in the International JV, PSC and Indigenous JV/ SR contract types and reporting of Owowo and Preowei field reserves

ii. Joint Venture

The International Joint Venture companies recorded an increase in the net addition to 2P oil and condensate reserves of about +46.21 MMB which accounts for a positive net addition of about 0.3%. This increase can be attributed to an upward revision of reserves from studies carried out by SPDC and NAOC. Mobil, Chevron, and Total recorded a downward revision in the net addition to oil and condensate reserves. This was largely attributed to production and revisions based on production/reservoir performance and studies.

iii. Production Sharing

The Production Sharing Contract companies documented an increase in the net addition to 2P oil and condensate reserves of about +297.43 MMB which accounts for a positive net addition of about 3.5%. Major contributors to this increase are the inclusion of Owowo and Preowei field reserves in the report submission of Esso and TUPNI respectively. Enageed, StarDeep and SNEPCo recorded a downward revision in their net addition to 2P oil and condensate reserves. This was largely attributed to production and revisions based on studies.



iv. Sole Risk

The analysis of Indigenous JV and Sole Risk company's contribution showed a decrease in the net addition to 2P oil and condensate reserves of about -340.54 MMB which accounts for a negative net addition of about -3.3%. The negative net addition was due to revisions, studies, and production. This negative addition is due mainly to disparity in the reserves figure for OML 42 as reported by Neconde and NPDC. Although the reserves for OML 42 in our database prior to this disparity was as quoted by Neconde. However Emerald and Consolidated Oil recorded an upward revision in the 2P oil and condensate reserves. This was largely attributed to production and revisions based on studies.

v. Marginal Field Operators

The Marginal Field operators recorded an increase in the net addition to 2P oil and condensate reserves of about +27.09 MMB which accounts for a positive net addition of about 4.8%. This increase can be attributed to an upward revision of reserves from studies carried out by Green Energy, Midwestern and reserves data for fields in the Marginal Field basket.

B. Reserves Depletion Rate and Life Index on Contract Basis and National Perspective

i. National Perspective

The reserves depletion rate is a measure (percentage) of 2018 total oil and condensate production divided by the reserves as of January 1, 2019. This indicator gives a bird's eye on an annual basis, what percentage proportion of the quoted reserves was produced.

The life index, on the other hand, is a measure of the reserves as of January 1, 2019, divided by the total production in 2018. This parameter highlights how long (in years) quoted reserves volumes will be available for production.

The Nation's depletion rate and life index are 2.04% and 49.03 years respectively. These parameters lie within the long-term range. However, to achieve the aspiration of the Federal government of 4MMBOPD daily production and reserves of 40MMMB, there is the need for corresponding increase in reserves as production is increases, otherwise, the life index will fall from a sustainable long-term threshold to a less futuristic and sustainable medium to short term range.

ii. Joint Venture

The Joint Venture Operators, despite having the highest production (about 41.64%) among all the contract types, recorded a low depletion rate of about 1.8% and high life index of 56.34 years.



iii. Production Sharing

The Production Sharing Contract companies had the highest depletion rate of 3.10% and the lowest life index of 32.15 years, while accounting for about 36.08% of the Nation's total production. It is obvious from Table 5 that PSC Companies have the highest depletion rate and lowest life index when compared to the other contract regimes. Perhaps, the Companies may have taken advantage of the poor government take in the Deep Offshore terrain to deplete the reserves there-in with little regard for long term sustainable production as amplified by the life index.

iii. Sole Risk

The Sole Risk Companies had the lowest depletion rate of 1.5% and invariably the highest life index of 65.49 years. These Companies accounted for about 20.14% of the Nation's total production in 2018. This depletion rate does not reflect the fact these companies hold the second largest reserves of about 26.90%.

iv. Marginal Field Operators

The Marginal field Companies produced about 2.14% of the Nation's total production in year 2018. The depletion rate was about 2.7%, with a life index of 36.83 years and a National reserves portfolio of 1.61%. The reserves hold a potential for production that lies within the medium-term range.

v. "Unhealthy Companies" - Life Index Less Than Fifteen Years

About nine (9) operating Companies have oil and condensate life index of less than fifteen years. The statistics paints a very gloomy picture for these companies and urgent steps will be taken to address this observed trend. The Department is engaging the Companies to review their strategic plan to guarantee future reserves growth in order for them to remain in business.

C. Reserves Replacement Rate (RRR)

The reserves replacement ratio / rate is a measure of the number of reserves added to the company's / Nation's reserves base during the year relative to the amount of oil produced. This is calculated by weighing the ratio of net additions to reserves against total production for the year and is used to judge the operating performance of the exploration and production industry. An RRR that is consistently over 100% is ideal as it indicates that more reserve is being replaced than is produced.



Table 10: 2018 Reserves Replacement Rate (RRR) on Contract Basis

Contract Type	Oil & Condensates Reserves as at 1/12019	Oil & Condensates Reserves as at 1/12018	2018 Oil & Condensates Production, MMB	Net Addition to Oil & Condensate Reserves, MMB	Reserves Replacement Rate, %
Joint Venture	17702.81	17720.13	314.23	46.21	14.71
Production Sharing	8751.68	8454.25	272.25	297.43	109.25
Sole Risk	9952.1	10229.11	151.97	340.54	-224.09
Marginal Field	595.51	568.42	16.17	27.09	167.53
Total (National)	37,002.10	36,971.91	754.62	30.19	4.00

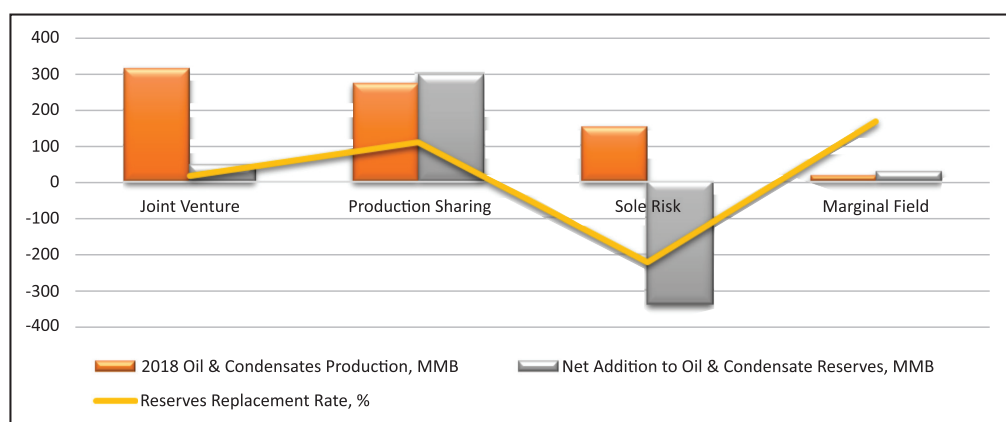


Figure 13: 2018 Reserves Replacement Rate (RRR)

Table 6 shows an RRR of over 100% for the PSC and Marginal field contract type, the JV contract type had a positive RRR calculated at 14.71% while the Sole Risk had a negative RRR of -224.09%.

As of January 1. 2019, the RRR for Nigeria's Oil and Condensate reserves stood at 4.00%. Though this shows a positive RRR, it is not an impressive performance as just 4% of the 2018 annual production was replaced via net addition to reserves. The ideal scenario is when we have a 100% RRR, i.e replace reserves at the same production rate. Table 7 below shows a nine-year trend of National RRR figures.



Table 11: Nigeria's Reserves Replacement Rate (RRR) - Nine Year Trend

Year	Oil & Condensate Production, MMB	Reserves Replacement Rate, %
1/1/2011	921.27	25.76%
1/1/2012	910.77	2.79%
1/1/2013	925.50	68.13%
1/1/2014	851.63	17.70%
1/1/2015	808.68	46.79%
1/1/2016	867.03	-44.54%
1/1/2017	801.43	-40.29%
1/1/2018	733.98	31.71%
1/1/2019	754.62	4.00%

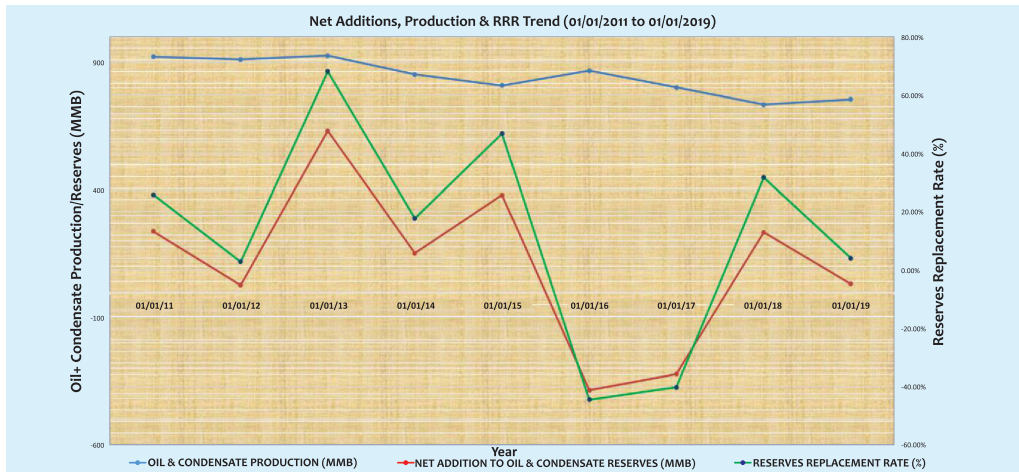


Figure 14: Net Reserve Addition , Production & RRR Nine Year Trend

4.1.2.2 Natural Gas Reserves

The national gas reserves stood at 200.79 TCF as at January 01, 2019 with an Associated Gas (AG) and Non-Associated Gas (NAG) reserves split of 101.98 TCF and 98.81 TCF respectively based on aggregated Reserves report from E&P companies. With a 2018 gas annual production of 2.18 TCF, the gas Reserves Life Index (RLI) is 92 years.

Table 12: 2018 Natural Gas Reserves

Associated Gas, AG	Non Associated Gas, NAG	Total Gas
101.98	98.81	200.79



There was a 3.88 TCF gross addition and a 1.7TCF net addition to the gas reserves of 199.09 TCF as at 01.01.2018. This translates to an increase of 0.85% and a Reserves Replacement Ratio (RRR) of 8/2.

Table 13: Natural Gas Reserves (2010-2018)

	Associated Gas, AG	Natural Gas Reserves (TCF)	
		Non Associated Gas, NAG	Total Gas
2010	92.945	89.872	182.817
2011	92.904	90.530	183.434
2012	89.729	92.529	182.258
2013	89.652	92.298	181.950
2014	90.094	97.904	187.998
2015	97.208	94.857	192.065
2016	97.253	101.485	198.738
2017	96.36	102.730	199.090
2018	101.98	98.81	200.79

* All Reserves above are as at 31st December of the reported year

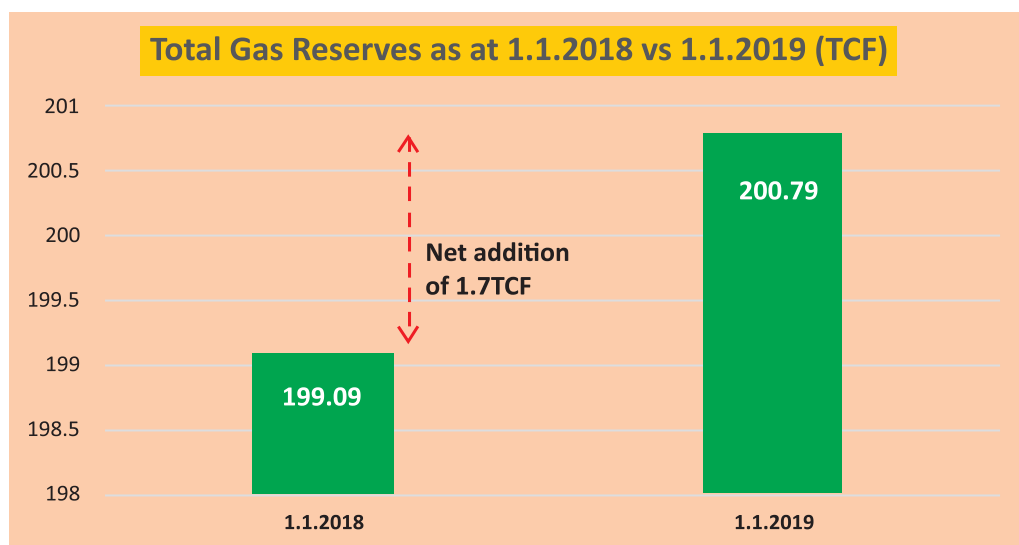


Figure 15: Total Gas Reserves as at 01.01.2018 versus 01.01.2019

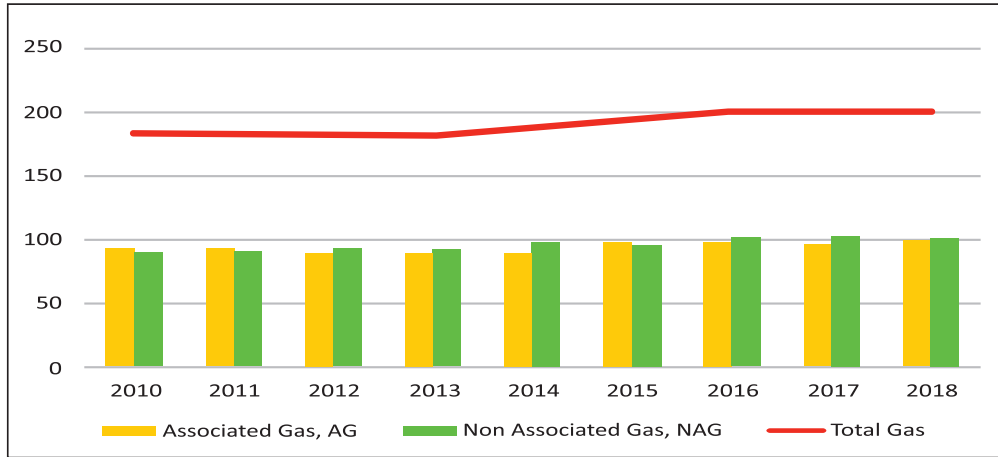


Figure 16: Natural Gas Reserves, 2010 to 2018

4.1.3 Field Exploration Activities

4.1.3.1 Seismic Activities

Table 14: Seismic Data Acquisition

Year	Type	Land	Shallow Offshore	Deep Offshore	Total
2010	3-D, Sq.Km	1,300.94	841.28	2,672.790	4,815.01
2011	3-D, Sq.Km	638.27	1,127.59	-	1,765.86
	2-D, Km	-	278.43	-	278.43
2012	3-D, Sq.Km	1,913.00	568.24	1,742.290	4,223.53
2013	3-D, Sq.Km	1,588.08	1,690.24	961.810	4,240.13
2014	3-D, Sq.Km	804.35	2,833.03	572.000	4,209.38
2015	3-D, Sq.Km	675.7987	775.497	455.505	1,906.80
2016	3-D, Sq.Km	138.50	156.00	-	294.5
2017	3-D, Sq.Km	775.61	735.28	887.100	2397.99
2018	3-D, Sq.KM	648.78	175.23	180.00	1,004.01

4.1.4 Field Development Activities

4.1.4.1 Oil Field Development Activities

4.1.4.1.1 Approved 2018 Field Development Plans

Twenty-six (26) Field Development Plans (FDPs) were approved during the year, with expected reserves addition of over 3 billion barrels.



Table 15: Approved 2018 Field Development Plans

S/N	Company	Field	Anticipated Production Rate (Bopd/MMscf/d)	Expected Reserves (MMSTB/BSCF)	Commencement Date	Remarks/ Status
1	Chevron	Malu	N/A	28.81MMSTB / 16.44BSCF	2019	Approved
2	Midwestern	Umusadege Update		37.89MMSTB		Approved
3	NAOC	Ebocha	14.8	59.78 MMSTB	N/A	Approved
4	NAOC	Kwale		90.70MMSTB		Approved
5	NAOC	Taylor Creek	176/3.18	9.7/67.52	N/A	Approved
6	Niger Delta Petroleum	Ogbele FDP Addendum	7,000 bopd	64MMSTB	2018	Approved
7	NPDC (Aferelow)	Afiesere, Eriemu, Oweh	22, 000 – 74,000 bopd	389.53 MMSTB	Q3 2018	Approved
8	Chevron	Mejo	6,037 BOPD	42.2 MMSTB	2019	Approved
9	Dubri	GilliGilli	3,500 bopd	17.3 MMSTB	2018	Approved
10	Eroton	Akaso	12,000 bopd	65 MMSTB	July 217	Approved
11	Eroton	Alakiri	27,000 bopd	80 MMSTB	January 2018	Approved
12	Eroton	Cawthorne Channel		125.2 MMSTB		Approved
13	MPNU	Ibot FDP Revalidation	30,000 bopd	93 MMSTB	Q1, 2019	Approved
14	MPNU	Ifure FDP Revalidation	25,000 bopd	28.6 MMSTB	Q1, 2020	Approved
15	MPNU	Mfem SE Revalidation	25,000 bopd	28 MMSTB	Q1, 2021	Approved
16	NAE	Abo FDP Rev.1		19.82MMSTB	Q3/4 2018	Approved
17	NAE	Abo FDP Rev.2	40/62	14.37/ 49.8	2018	Approved
18	NPDC	Ogini Rev 2	10,900 bopd	33.16MMSTB	2018	Approved
19	NPDC	Opuama	17,350	54.062 MMSTB	2018	Approved
20	Oriental Energy	Okwok Rev.1	3,500 bopd	39MMSTB	Q12019	Approved
21	Platform	Egbaoma	5,000 bopd	45.14MMSTB/332.48BSCF	2018	Approved
22	Seplat	Sapele	16,6800 bopd	105 MMSTB	2018	Approved
23	SNEPCo	Bonga FDP Rev. 8	225kbopd/ 210MMscf/d	43.1MMbbls	2018	Approved
24	SNEPCo	Bonga Southwest Aparo (BSWA)	150kbopd	980MMSTB	2023	Approved
25	TEPNG	Amenam-Kpono FDP Addendum	10,500bopd	32.6MMSTB	9/1/2018	Approved
26	TEPNG	Ofon Phase-2 Update	46,575.3/63	140 /298	Commenced August 2015	Approved

4.1.4.1.2 2018 Drilling Summary

Table 16: Number of Wells Drilled by Terrain

Year	Land / Swamp	Shallow Offshore	Deep Offshore	Total
2010	30	62	15	107
2011	44	64	12	120
2012	74	65	15	154
2013	59	61	30	150
2014	49	50	43	142
2015	41	27	45	113
2016	39	15	23	77
2017	37	20	15	72
2018	44	23	20	87



Table 17: Wells Drilled by Contract and Class in 2018

Type of Contract	Exploratory	Appraisal (1 st & 2 nd)	Ordinary Appraisal	Development	Total
JVC	-	1	2	26	29
PSC	2	1	7	28	38
SR	1	3	5	6	15
MF	-	-	-	5	5
Total	3	5	14	65	87

Table 18: Number of Wells Drilled by Class

Year	Exploratory	Appraisal (1 st & 2 nd)	Ordinary Appraisal	Development	Total
2010	4	4	9	90	107
2011	4	3	7	106	120
2012	2	8	15	129	154
2013	3	9	26	112	150
2014	4	8	10	120	142
2015	4	4	5	100	113
2016	1	5	2	69	77
2017	2	4	6	60	72
2018	3	5	14	65	87

4.1.4.1.3 2018 Well Completion Summary

Table 19: Wells Completed in 2018

Type Of Contract	Total	By Terrain
JVC	19	
PSC	21	Land/Swamp – 24
SR	9	Offshore – 14
MF	-	Deep Offshore – 11
TOTAL	49	

4.1.4.2 Gas Field Development Activities

In-line with government aspirations to develop more gas for the domestic and export market, the year under review saw the approval of six (6) Non Associated Gas and eighteen (18) Associated Gas development plans.

Table 20: Approved Non-Associated Gas (NAG) Development Plans

S/N	Company	Block	FDP	Gas Reserves (BSCF)	Condensate (MMSTB)	Gas Off-Take Rate (MMSCFD)
1.	NPDC	OML-34	Ughelli East NAG Dev.	417.7	9.4	123
2.	NPDC	OML-111	Oredo NAG Dev. Plan	903	35.54	100
3.	SPDC	OML-21/ 53	Assa North-Ohaji South	4003	197	600
4.	NAOC	OML-61	Manuso NAG Dev. Plan	485.84	56.14	144.43
5.	NAOC	OML-63	Erette NAG Dev. Plan	93.93	1.01	38
6.	NAOC	OML-63	Ekedei NAG Dev. Plan	393.69	150	9.94
Total				6,296.46	449.09	1,015.37

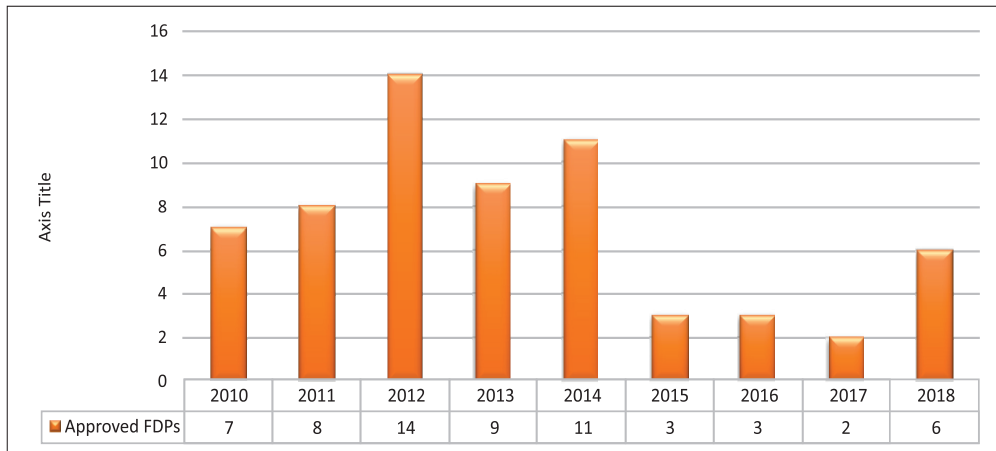


Figure 17: Approved NAG Field Development Plans

Table 21: Approved Associated Gas (AG) Development Plans

S/N	Company	Block	FDP	AG Reserves, Bscf	Off-Take Rate, MMscf/d
1.	NPDC	OML-20	Egbema AG Dev.	97.72	6.7
2.	NPDC	OML-20	Egbema West AG	310.7	6.2
3.	NPDC	OML-20	Ugada AG Dev.	5.30	0.4
4.	NPDC	OML-18	Alakiri AG Dev.	64	80.97
5.	Eroton E & P	OML-18	Cawthorne Channel	400	133.6
6.	Eroton E & P	OML-18	Akaso AG Dev.	299	41
7.	Eroton E & P	OML-95	Opolo Gas AG Dev.	25	5
8.	Chevron Nig. Ltd	OML-95	Mejo AG Dev.	12.9	3.7
9.	Dubri Oil	OML-96	Gili-Gili Gas AG Dev.	311.44	18
10.	Platform	OML-38	Egbaoma AG Dev.	176.25	55
11.	Addax	OML-123	Adanga AG Dev.	8.2	5.3
12.	Seplat	OML-41	Sapele AG Dev.	462.4	2.5
13.	Mid-Wes.	OML-56	Umusadege AG Dev.	58.8	16
14.	NAOC	OML-63	Ogbainbiri-Afuo AG	59.15	-
15.	NAOC	OML-60	Beniku AG Dev.	2.38	3
16.	NAOC	OML-63	Osiama Creek South	14.25	2.4
17.	NAOC	OML-60	Odugri	90.41	-
18.	NAOC	OML-60	Clough Creek AG	97.56	3.0
19.	NAOC	OML-61	Irri-Oleh AG Dev.	457.06	-
20.	NAOC	OML-61	Isoko South AG	204	-
21.	MoniPulo	OML-114	Abana AG Dev.	26.48	2.5
22.	Amni Pet.	OML-52	Tubu AG Dev.	73	33
23.	NPDC	OML-34	Ughelli-East AG Dev.	874.06	-
Total				4,130.06	418.27

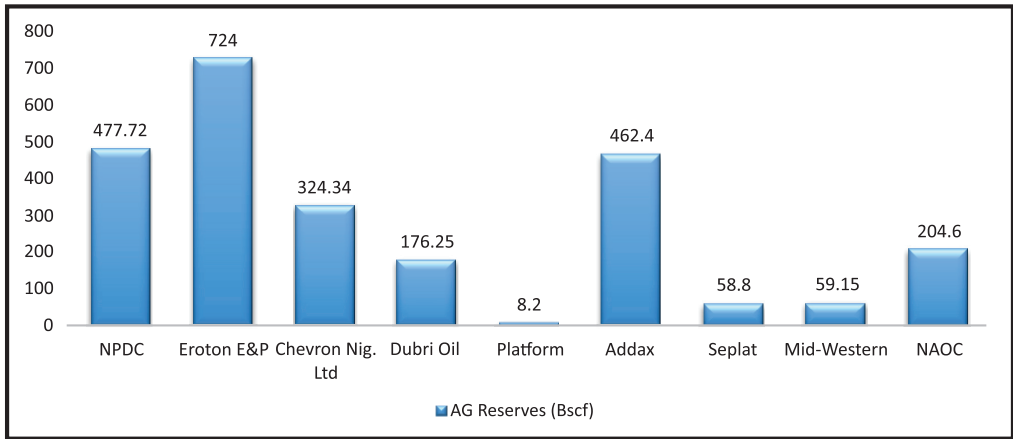


Figure 18: 2018 Targeted AG Reserves Development

Table 22: 2018 New Drill Gas Appraisal/ Development Wells

S/N	Company	Block/ Field	Well Name/ Status	Terrain	Reserves (Bscf)	Off-Take (MMscf/d)
1.	Chevron Nigeria Ltd	OML-91/ Sonam	Sonam-10 (J01A)	Swamp	192	40
2.		OML-91/ Sonam	Sonam-11 (E01A)	Swamp	268	40
3.		OML-91/ Sonam	Sonam-9 (F02C)	Swamp	363	80
4.		OML-49/ Makaraba	MK-G03A		335	43
5.		OML-49/ Abiteye	Abiteye-27ST (NAG-01)	Onshore	100	35
6.		OML-49/ Abiteye	Abiteye-28 (NAG-02)	Onshore	107	35
7.	NPDC	OML-111 / Oredo	Oredo-P	Land	903.24	32
8.		OML-111 / Oredo	Oredo-Q	Land		52
9.		OML-34/ Ughelli East	Ughelli East-S	Land	146.9	25
10.		OML-34 / Ughelli East	Ughelli East-34 (Ex T)	Land	91.31	30
11.	SEEPCO	OML-143 / Anieze	Anieze-G1		-	-
12.		OML-143 / Ameshi	Ameshi-3		-	-
14.	NAOC	OML-63 / Ogbainbiri Deep	Ogbainbiri Deep-E	Land	167.21	87
15.		OML-63 / Ogbainbiri Deep	Ogbainbiri Deep-6 (Ex F)	Land	357.56	53
16.		OML-61 / Oleh	Oleh D	Land	253.33	70
17.		OML-61 / Oleh	Oleh-5 (Ex E)	Land	104.54	84
19.	SPDC	OML-45 / Forcados Yokri	Forcados Yokri TX2K-8	Swamp	328.7	90
20.	Seplat	OML-4 / Oben	Oben KEIW-2		7.3 / 4.57	50



Table 23: Approved 2018 Gas Well Initial Completion

S/N	Company	Block	Well Name	Reserves (Bscf)	Off-Take (MMscf/d)	Processing Facility
1.	Chevron Nigeria Ltd	OML-91 / Sonam	Sonam-10	192	40	EGP
2.		OML-91 / Sonam	Sonam-E01A	268	40	EGP
3.		OML-91 / Sonam	Sonam-9	363	80	EGP
4.		OML-91 / Abiteye	Abiteye-27ST	100	35	EGP
5.	NPDC	OML-91 / Abiteye	Abiteye-28	107	35	EGP
6.		OML-34 / Ughelli East	Ughelli East-S	146.9	40	Ughelli Gas Plant
7.		OML-34 / Ughelli East	Ughelli East-34	91.31	25	Ughelli Gas Plant
8.	Seplat	OML-4 / Oben	Oben KEIW-2	127.3	50	Oben Gas Plant
9.	SPDC	OML-35 / Dodo North	Dodo North-3	35	100	Tunu Gas Plant
10.		OML-35 / Dodo North	Dodo North-4	35	100	Tunu Gas Plant
11.	NAOC	OML-61 / Oleh-Irri	Oleh-E	104.54	84	Ogbainbiri Gas Plant

Table 24: Approved 2018 Gas Wells Work-Over Operations

S/N	Company	Block	Well Name	Processing Facility
1.	NDPRL	OML-54	Ogbele-8	Ogbele Gas Plant
3.	Chevron	OML-49	Delta-16 NRW	Escravos Gas Plant
4.	SPDC	OML-28	Kolo Creek-045	Gbaran Gas Plant
5.		OML-28	Kolo Creek-047	Gbaran Gas Plant
6.		OML-28	Kolo Creek-048ST	Gbaran Gas Plant

4.1.5 Rig Activities

Twenty-three (23) rigs were reported in the year under review. Out of these, four (4) rigs operated in the Deep Offshore terrain, fourteen (14) onshore (land and swamp) and five (5) in the shallow offshore terrain. Twenty-four (4) rigs were licensed during the year.

Table 25: Rig Disposition by Terrain from January to December 2018

Terrain	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Land	4	9	10	10	9	11	10	16	11	7	7	11
Swamp	3	4	4	4	4	6	6	6	6	5	3	3
Offshore	3	2	4	5	5	5	6	6	6	6	4	5
Deep Offshore	3	3	3	3	3	3	3	3	3	3	3	4
Total	13	18	21	22	21	25	25	31	26	21	17	23



Table 26: Active Rigs by Terrain

Year	Land / Swamp	Shallow Offshore	Deep Offshore	Total
2010	14	10	6	30
2011	13	14	6	33
2012	20	15	7	42
2013	20	19	7	46
2014	14	7	8	29
2015	15	6	8	29
2016	5	4	3	12
2017	10	3	3	16
2018	14	5	4	23

4.1.6 Production Activities

4.1.6.1 Producing Fields

The total number of fields (producing) as at the end of December, 2018 stands at two hundred and thirty two (232) for the forty seven (47) oil producing companies and these are made up of two thousand, six hundred and sixteen (2,616) wells producing from two thousand, nine hundred and thirty nine (2,939) strings. The table below presents a summary of producing and non-producing fields as at December 2018.

Table 27: 2018 Fields Summary

S/N	Company	Contract Type	Producing Fields	Well	String
1	Allied Energy	Sole Risk	1	2	2
2	Amni	Sole Risk	2	26	28
3	Atlas	Sole Risk	1	3	3
4	Consolidated	Sole Risk	2	9	10
5	Continental	Sole Risk	4	18	26
6	Dubri	Sole Risk	1	3	3
7	Express	Sole Risk	1	1	1
8	Moni Pulo	Sole Risk	2	14	14
9	NPDC	Sole Risk	18	170	229
10	Yinka Folawiyo	Sole Risk	1	2	2
11	Aenr	Service Contract	1	7	7
12	Addax	Production Sharing Contract	11	126	126
13	Esso	Production Sharing Contract	3	39	44
14	NAE	Production Sharing Contract	1	5	5
15	SEPCO	Production Sharing Contract	2	58	73



S/N	Company	Contract Type	Producing Fields	Well	String
16	Star Deep	Production Sharing Contract	1	26	28
17	SNEPCO	Production Sharing Contract	1	20	20
18	TUPNI	Production Sharing Contract	1	26	26
19	Brittania-U	Marginal Field	1	1	1
20	Enageed	Marginal Field	2	2	4
21	Energia	Marginal Field	1	5	6
22	Excel	Marginal Field	1	1	1
23	Frontier	Marginal Field	1	1	1
24	Green Energy	Marginal Field	1	2	4
25	Millenium	Marginal Field	1	2	3
26	Midwestern	Marginal Field	1	16	19
27	NDPR	Marginal Field	1	4	6
28	Network	Marginal Field	1	2	3
29	Oriental	Marginal Field	1	26	26
30	Pillar	Marginal Field	1	3	5
31	Platform	Marginal Field	1	6	10
32	Prime	Marginal Field	1	2	4
33	Universal	Marginal Field	1	3	3
34	Waltersmith	Marginal Field	1	6	10
35	Aiteo	Joint Venture	4	51	65
36	Belema Oil	Joint Venture	4	19	23
37	Eroton	Joint Venture	5	51	65
38	MPN	Joint Venture	24	479	494
39	NAOC	Joint Venture	36	381	392
40	Neconde	Joint Venture	4	65	79
41	Newcross	Joint Venture	3	26	33
42	Pan Ocean	Joint Venture	6	9	11
43	Seplat	Joint Venture	7	65	94
44	Shell	Joint Venture	34	280	348
45	Total E&P	Joint Venture	7	172	178
46	CNL	Joint Venture	26	375	397
47	SGORL	Joint Venture	1	6	6
	Total		232	2616	2938



4.1.6.2 Crude oil & Condensate Production*

In 2018, a total of 773,825,133 barrels of oil was produced at an estimated daily average production of 2.12 million barrels of oil per day, which is 2.4% over the average for the year 2017. This volume was produced by forty-seven (47) oil producing companies as shown in the table/chart below:

Table 28: 2018 Production Performance*

S/No	Company	Contract	Terrain	Annual Production (Bbls)	Daily Average (Bopd)	Percentage Production
1	Allied Energy	Sole Risk	Deep Offshore	287,497	804	0.04
2	Amni	Sole Risk	Offshore	5,371,120	14,731	0.69
3	Atlas	Sole Risk	Offshore	91,364	251	0.01
4	Consolidated	Sole Risk	Offshore	463,383	1,217	0.06
5	Continental	Sole Risk	Offshore	6,372,677	17,478	0.82
6	Dubri	Sole Risk	Onshore	140,832	386	0.02
7	Express	Sole Risk	Offshore	15,762	43	0
8	NPDC	Sole Risk	Onshore/Onshore	42,304,719	115,886	5.46
9	Moni Pulo	Sole Risk	Offshore	826,820	2,257	0.11
10	Yinka	Sole Risk	Offshore/Deep	1,158,350	3,174	0.15
11	Star Deep	Production Sharing Contract	Deep Offshore	77,538,383	212,603	10.02
12	Total Upstream	Production Sharing Contract	Deep Offshore	37,071,635	101,496	4.78
13	Addax	Production Sharing Contract	Onshore/Offshore	10,765,022	29,513	1.39
14	Esso (Erha)	Production Sharing Contract	Deep Offshore	41,620,105	114,168	5.38
15	Esso (Usan)	Production Sharing Contract	Deep Offshore	27,719,268	75,934	3.58
16	NAE	Production Sharing Contract	Deep Offshore	4,103,730	11,239	0.53
17	SNEPCO	Production Sharing Contract	Deep Offshore	58,069,416	158,929	7.49
18	SEPCO	Production Sharing Contract	Onshore	11,256,488	30,864	1.45
19	SGORL	Production Sharing Contract	Onshore	698,356	3,802	0.18
20	Aenr	Service Contract	Onshore	1,386,445	3,799	0.18
21	Brittania-U	Marginal	Offshore	432,706	1,179	0.06
22	Energia	Marginal	Onshore	1,581,977	4,330	0.2
23	Frontier	Marginal	Onshore	40,934	113	0.01
24	Oriental	Marginal	Offshore	6,397,047	17,520	0.83
25	Platform	Marginal	Onshore	1,107,376	3,032	0.14
26	Midwestern	Marginal	Onshore	5,973,231	16,372	0.77
27	Millenium	Marginal	Onshore	122,856	338	0.02
28	NDPR	Marginal	Onshore	1,743,786	4,779	0.23
29	Pillar	Marginal	Onshore	918,954	2,512	0.12
30	Waltersmith	Marginal	Onshore	1,798,593	4,916	0.23
31	Universal	Marginal	Onshore	822,143	2,254	0.11
32	Network	Marginal	Onshore	655,711	1,798	0.08
33	Prime	Marginal	Onshore	69,953	191	0.01
34	Excel	Marginal	Onshore	62,320	171	0.01
35	Enageed	Marginal	Onshore	712,250	1,939	0.09
36	Green Energy	Marginal	Onshore	1,919,796	5,244	0.25
37	Chevron	Joint Venture	Onshore/offshore	71,141,824	194,937	9.19
38	Total E&P	Joint Venture	Onshore/Offshore	52,640,463	144,216	6.8
39	Mobil Producing	Joint Venture	Onshore/Offshore	105,464,100	288,808	13.61
40	NAOC	Joint Venture	Onshore/Onshore	29,969,280	82,080	3.87
41	Pan Ocean	Joint Venture	Onshore	1,224,178	3,351	0.61
42	SPDC	Joint Venture	Onshore/Offshore	71,045,329	194,820	9.81
43	Aiteo	Joint Venture	Onshore	25,529,601	69,914	3.29
44	Newcross	Joint Venture	Onshore	9,291,069	25,473	1.2
45	Eroton	Joint Venture	Onshore	14,509,636	39,773	1.87
46	Seplat	Joint Venture	Onshore	20,029,946	54,933	2.59
47	Neconde	Joint Venture	Onshore	18,309,063	50,269	2.37
48	Belema	Joint Venture	Onshore	3,049,641	8,357	0.39
TOTAL				773,825,133	2,122,246	100

*All volumes are provisional figures

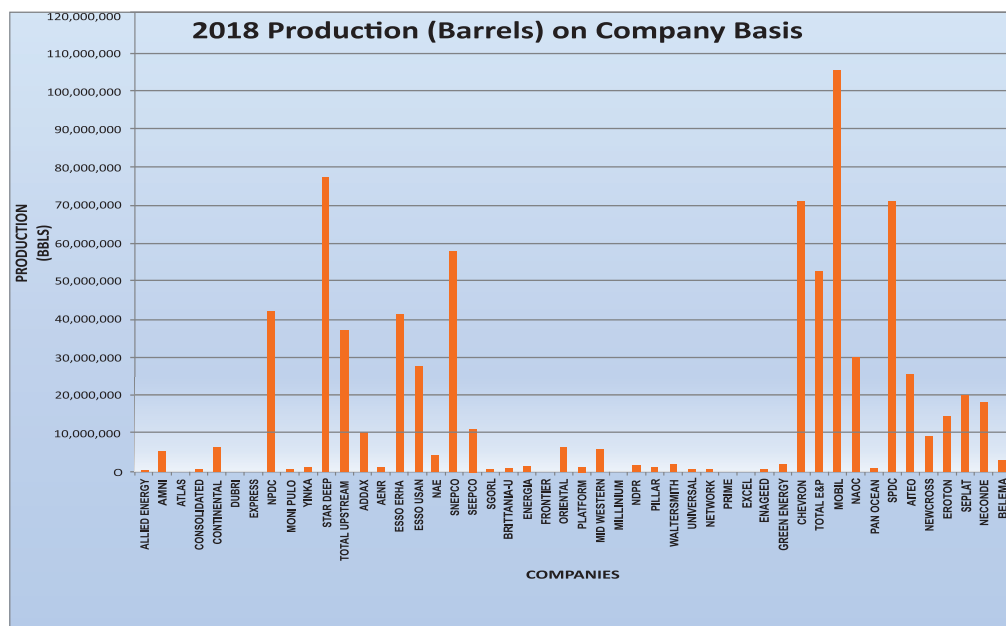


Figure 19: 2018 Oil Production on Company Basis

The table/chart below shows the average daily and monthly production performance for the year 2018.

Table 29: 2018 Monthly Production (Provisional)#

Month	Production (Bbls)	Average Daily Production (Bopd)
January	67,314,831	2,171,446
February	61,266,663	2,188,095
March	65,134,516	2,101,113
April	64,206,407	2,140,214
May	60,144,626	1,940,149
June	59,495,278	1,983,176
July	63,994,670	2,064,344
August	70,290,413	2,267,433
September	66,943,86	2,231,462
October	68,606,173	2,213,102
November	60,719,501	2,023,983
December	65,708,209	2,119,620
Total Annual Production (Bbls)	773,825,133	
Average Annual Daily Production (Bopd)		2,122,246

#All volumes are provisional figures

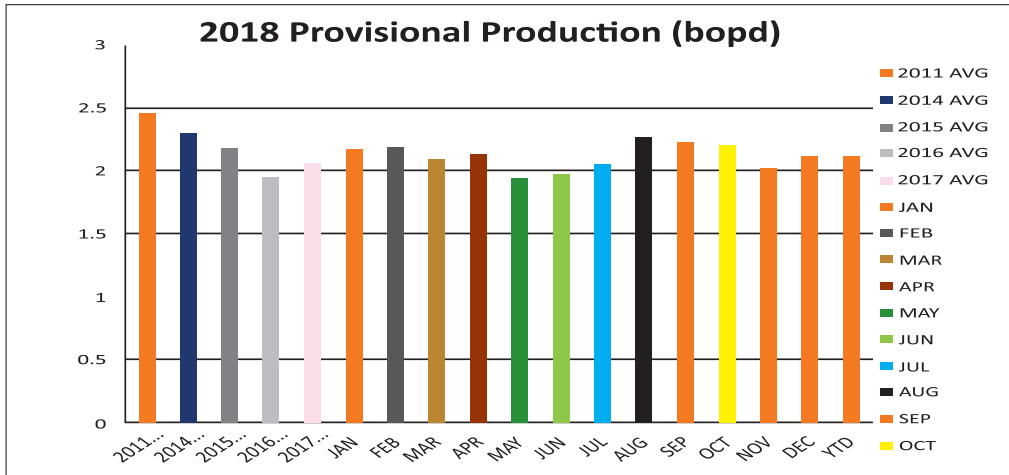


Figure 20: 2018 Provisional Production, BOPD

Table 30: 2018 Production by Contract*

Contract Type	Production, Bbls	Average Production, Bopd	Production Percentage, %
Joint Venture, JV	422,204,131	1,156,931	54.56
Production Sharing Contract, PSC	269,554,653	740,487	34.83
Sole Risk, SR	57,032,524	156,281	7.37
Marginal Field Operators, MF	23,647,379	64,749	3.06
Service Contract(SC)	1,386,445	3,799	0.18

*All volumes are provisional figures

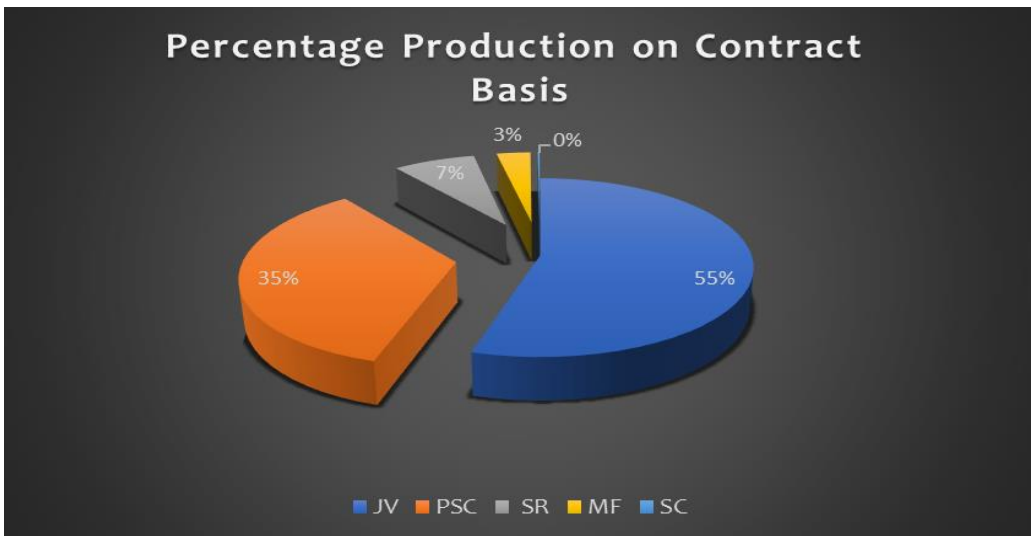


Figure 21: Percentage Distribution of Production (Bopd)



4.1.6.3 Major Production Deferments

The average production deferment for 2018 was 591,869 bopd. Deferments are attributed to shut down arising mainly from pipeline vandalism and some operational issues. The table below shows the summary of monthly deferments from all producing companies in 2018.

Table 31: 2018 Summary of Production Deferments

Month	Deferments	
	Cumulative Production (Bbls)	Daily Production (Bopd)
January	15,153,299	488,816
February	13,222,648	472,237
March	17,783,820	573,672
April	16,233,565	541,119
May	22,983,087	741,390
June	20,747,027	691,568
July	20,914,844	674,672
August	15,323,713	494,313
September	15,880,568	529,352
October	16,532,450	533,305
November	22,175,629	739,188
December	19,306,541	622,792
Total Deferment (BBLS)		216,257,191
Average Daily Deferment (BOPD)		591,869



4.1.6.4

Stabilized Crude / Condensates Volumes by Streams

Table 32 : 2018 Monthly Summary of Stabilized Crude / Condensate Volumes by Streams*

Stream/Blend	January	February	March	April	May	June	July	August	September	October	November	December	Total
Abo	361,197	325,998	360,874	351,372	364,156	354,108	363,295	363,109	348,211	343,547	219,677	352,043	4,107,587
Aje	98,206	86,176	94,030	96,578	72,812	49,868	98,370	93,208	94,088	93,712	87,021	93,120	1,057,189
Ajapa**	0	0	32,368	32,391	20,825	7,419	0	3,232	0	0	0	0	87,411
Anzan	851,675	695,615	799,026	594,010	366,773	617,822	635,724	567,181	483,099	599,400	571,598	607,491	7,389,414
Bonga	3,103,112	3,470,419	5,454,623	5,261,509	4,848,565	4,618,458	4,829,045	5,168,691	4,941,437	5,219,068	5,296,623	5,372,456	57,584,006
Bonny	7,238,303	6,512,283	5,773,914	5,664,493	5,278,441	3,163,355	4,893,708	7,298,428	6,955,785	6,643,027	7,383,251	7,387,007	74,191,995
Brass	2,598,834	2,358,303	2,580,769	2,540,222	2,537,793	2,509,595	2,672,642	2,765,798	2,657,317	2,530,947	2,217,445	2,735,598	30,705,263
Ebok	557,214	489,709	575,809	559,032	591,862	494,030	518,895	574,795	458,473	520,968	416,235	489,217	6,246,239
Ejina	0	0	0	0	0	0	0	0	0	0	0	14,143	14,143
Ekanga	0	0	0	0	0	0	0	0	0	0	0	0	0
Erha	4,007,596	3,539,575	1,958,707	3,264,792	3,084,890	3,496,221	3,719,032	4,004,101	3,571,363	3,764,570	3,708,721	3,721,144	41,840,712
Escravos	5,082,524	4,669,634	5,324,826	5,146,194	5,238,442	5,047,090	5,279,618	5,290,516	5,117,690	5,244,040	4,823,404	4,655,932	60,919,910
Forcados	7,975,767	7,592,396	7,116,236	7,547,530	4,321,419	4,849,014	6,136,591	6,988,945	6,398,031	7,127,034	6,082,304	6,023,311	78,108,578
Okoro	422,884	394,414	410,504	205,572	408,029	435,020	366,480	413,314	340,689	577,933	499,179	600,585	5,074,603
Orakipo	178,544	105,209	171,651	100,525	164,461	158,669	178,799	171,505	178,171	184,050	123,583	179,916	1,895,083
Asaramatoru	0	0	0	0	0	14,302	16,035	9,295	36,090	40,016	0	0	115,738
Jones Creek Blend	0	0	0	0	0	46,4071	228,457	0	1,250,984	1,171,448	1,220,171	1,209,134	5,544,265
Odudu - Ameriam	3,444,112	3,051,435	3,603,722	3,534,397	3,694,139	3,766,518	3,743,901	3,781,346	3,866,809	3,814,512	3,421,253	3,487,788	43,209,932
Okoro	585,037	525,473	574,320	549,405	553,875	541,367	551,704	505,366	453,845	457,577	90,767	584,058	5,972,794
Okwori	212,254	180,221	240,209	229,852	292,870	288,534	256,349	270,195	257,392	200,122	241,683	269,899	2,939,580
Oyo	122,466	107,723	56,819	0	0	0	0	0	0	0	0	0	287,008
Pennington	614,822	656,983	806,907	738,580	439,893	669,342	691,638	783,165	759,298	728,408	740,977	828,494	8,458,507
Qua Iboe	7,207,836	6,632,774	7,325,453	7,222,515	7,010,911	6,785,195	8,006,584	7,944,943	7,036,384	7,409,977	6,271,036	7,191,134	86,044,742
Sea Eagle	820,835	734,620	756,953	787,871	840,771	765,145	749,514	793,201	749,558	769,453	725,410	742,701	9,236,032
Okwibome Light	1,124,436	996,003	1,056,300	1,097,467	1,078,103	1,029,119	1,067,772	1,050,597	1,297,056	706,262	755,312	1,196,608	12,455,035
Ukpokiti	8034	7,247	8,168	11,217	7,661	7,334	11,221	8,059	7,658	11,546	7,622	5,004	100,771
Usan	2,776,468	2,347,993	2,546,851	1,934,993	2,480,838	2,700,720	2,446,195	2,502,091	2,051,933	2,387,282	1,595,576	1,941,333	27,712,273
Yoho	1,213,975	941,931	1,202,753	964,095	1,021,481	1,165,854	965,075	1,039,019	957,655	1,048,075	920,211	1,119,449	12,559,573
Sub-Total Crude Oil	50,606,131	46,422,134	48,831,792	48,434,612	44,719,010	43,998,170	48,426,644	52,390,100	50,269,016	51,592,974	47,419,059	50,807,565	583,858,383
Daily Average - Crude Oil	1,632,456	1,657,933	1,575,219	1,614,487	1,442,549	1,466,606	1,562,150	1,690,003	1,675,634	1,664,289	1,580,635	1,638,954	1,599,612



Stream/Blend	January	February	March	April	May	June	July	August	September	October	November	December	Total
Condensates													
Field Condensates													
Aghani	7,330,848	6,540,143	7,067,445	6,572,354	6,844,254	6,383,289	6,460,421	6,412,212	6,218,363	6,328,927	6,360,011	5,214,612	77,732,879
Ajapa	29,095	3,664	39,836	55,713	62,201	58,524	36,793	10,318	12,198	43,608	41,402	40,033	433,385
Alkpo	3,374,665	3,199,120	3,452,219	3,395,183	3,415,546	3,515,546	3,504,809	3,695,176	3,453,554	3,411,730	308,192	2,959,130	37,684,934
Escravos	275,146	685,216	810,538	814,059	796,812	749,621	696,923	784,880	654,055	789,094	761,609	857,811	8,676,764
Ima - Condensate	24,546	21,374	26,177	26,328	22,671	21,207	23,007	23,718	21,076	24,294	13,174	6,323	253,895
Sub-Total	11,034,300	10,449,517	11,396,215	10,863,637	11,141,548	10,728,187	10,721,953	10,926,304	10,359,246	10,597,653	7,484,388	9,077,909	124,780,857
Daily Average - Condensate	355,945	373,197	367,620	362,121	359,405	357,606	345,869	352,461	345,308	341,860	249,480	292,836	341,865
Plant Condensates													
Brt	103,870	113,517	104,149	109,184	108,797	101,902	224,390	248,789	183,396	210,357	218,151	239,188	1,965,690
Bonny NLNG	1,070,862	648,071	951,286	820,454	957,417	887,250	1,089,552	1,216,904	1,089,552	709,590	548,390	779,532	10,768,860
PNG	3,053,71	3,360,91	4,712,46	5,449,73	2,395,31	3,978,37	5,503,00	5,202,14	4,584,50	5,512,50	4,683,75	5,347,50	53,783,88
Sub-Total	1,177,786	764,949	1,060,147	935,088	1,068,609	993,130	1,319,445	1,470,895	1,277,533	925,460	771,225	1,024,068	12,788,334
Daily Average	37,993	27,320	34,198	31,170	34,471	33,104	42,563	47,448	42,584	29,854	25,707	33,034	35,037
Sub-Total	12,212,086	11,214,466	12,456,362	11,798,725	12,210,157	11,721,317	12,041,398	12,397,199	11,636,779	11,523,113	8,255,613	10,101,977	137,569,191
Condensates													
Daily Average - Condensates	393,938	400,517	401,818	393,291	393,876	390,711	388,432	399,910	387,893	371,713	275,187	325,870	376,902
Crude + Condensates													
Grand Total	62,818,217	57,636,600	61,288,154	60,233,337	56,929,167	55,719,487	60,468,042	64,787,299	61,905,795	63,116,087	55,674,672	60,909,542	721,427,574
Daily Average	2,026,394	2,058,450	1,977,037	2,007,778	1,836,425	1,857,316	1,950,582	2,089,913	2,063,527	2,036,003	1,855,822	1,964,824	1,976,514

****Ajapa consist of two streams: Anambra Basin and Bayelsa Oil**

**Table 33: Summary of Stabilized Crude / Condensates Volumes by Streams (Barrels)**

Stream / Blend	2010	2011	2012	2013	2014	2015	2016	2017	2018
Crude Oil									
Abo	11,145,508	10,384,452	8,489,519	8,022,897	8,010,447	8,062,126	7,040,035	4,933,672	4,107,587
Ajapa	0	0	0	0	0	0	0	0	1,057,189
Aje	0	0	0	0	0	0	988,806	912,870	87,411
Antan	19,108,971	14,549,317	18,664,426	19,800,170	17,722,615	15,368,208	11,810,752	9,085,269	7,389,414
Asaramatoru	0	0	0	0	0	0	0	0	57,584,006
Bonga	65,026,519	52,296,510	64,067,957	50,904,162	58,238,730	70,030,598	74,452,762	61,197,298	74,191,995
Bonny	91,633,924	98,768,247	85,516,915	64,667,075	77,754,783	68,599,843	69,528,856	66,505,640	30,705,263
Brass	47,045,801	45,985,280	38,431,091	31,339,246	36,494,930	39,120,881	32,052,323	32,361,561	6,246,239
Ebok ^{1,4}	0	3,055,560	11,116,943	12,845,312	10,159,963	10,254,615	7,868,681	6,656,084	141,43
Egina	0	0	0	0	0	0	0	0	0
Ekanga (Zaffiro)	4,500,450	4,500,450	4,512,780	4,104,610	4,073,185	3,700,353	3,258,927	1,897,507	41,840,712
Erha	60,729,787	53,063,950	45,680,658	37,657,596	36,159,774	33,469,916	45,757,675	45,145,584	60,919,910
Escravos	95,476,023	90,252,503	82,992,947	75,172,726	70,697,665	62,999,068	59,599,265	61,318,649	78,108,578
Forcados	69,232,152	82,774,072	72,439,141	71,000,792	67,932,791	68,782,930	14,160,105	57,617,372	5,074,603
Ima Crude	0	0	0	0	560,856	516,972	285,237	0	1,895,083
Jones Creek Blend	0	0	0	0	0	0	0	0	115,738
Odudu-Amenam	40,847,405	39,554,024	36,765,688	29,478,224	26,197,149	25,029,537	28,117,769	33,473,039	5,544,265
Okono	17,544,856	17,263,430	16,348,665	14,904,197	12,794,563	8,459,169	8,350,959	7,855,558	43,209,932
Okoro	5,885,411	5,767,803	6,170,120	6,601,054	6,011,655	4,294,703	3,474,331	3,581,709	5,972,794
Okwori	14,387,558	12,819,504	12,094,784	9,532,752	8,204,342	6,521,371	4,682,040	3,597,061	2,939,580
Otakipo Blend	0	0	0	0	0	0	0	1,549,326	287,008
Oyo	3,216,242	1,349,224	1,009,842	812,467	421,171	1,777,052	1,992,927	1,959,653	8,458,507
Pennington	11,129,213	10,558,221	9,102,862	7,357,435	5,505,439	4,719,541	5,432,225	6,634,572	86,044,742
Qua Iboe	131,357,971	133,001,588	128,852,443	130,674,938	134,956,728	126,774,069	79,205,809	82,664,458	9,236,032
Sea Eagle	29,746,886	23,080,837	21,075,517	15,626,909	7,206,421	14,013,061	10,948,405	9,115,405	12,455,035
Seplat Blend	0	0	0	0	0	0	2,899,345	0	100,771
Okwuibome Light ²	-	1,326,212	1,622,834	2,985,561	4,762,983	6,815,676	9,557,776	13,290,945	27,712,273
Ughelli Blend	0	0	0	0	0	0	2,876,917	0	12,559,573
Ukpokiti	492,411	386,832	927,491	756,259	565,887	334,956	229,576	2,323,880	4,107,587
Usan ³	0	0	29,409,511	39,191,544	44,520,502	39,387,436	37,385,444	35,645,714	1,057,189
Yoho	33,368,769	30,371,559	27,685,727	25,141,246	19,315,490	17,345,249	15,849,577	11,639,687	87,411
Others*	0	0	0	41,668	0	0	0	0	0
Sub-Total	751,875,857	731,109,576	722,977,861	658,618,840	658,268,069	636,377,330	537,806,524	560,962,513	584,740,671
Daily Average	2,059,934	2,003,040	1,975,349	1,804,435	1,803,474	1,743,500	1,469,417	1,536,884	1,602,029
Condensates									
Field Condensates									
Agbami	87,169,459	88,304,428	85,041,559	84,871,128	87,280,118	85,339,585	83,835,468	85,697,436	77,732,879
Ajapa	0	0	0	0	0	0	135,080	444,885	433,385
Akpo	60,210,985	56,482,856	56,651,708	61,102,205	55,311,051	55,503,303	49,847,029	45,145,907	37,684,934
Escravos	1,892,148	4,041,513	5,088,278	4,896,351	6,169,358	10,080,271	3,666,394	5,655,185	8,675,764
Ima Condensate	537,469	531,515	246,582	259,429	312,053	295,976	367,864	376,748	253,895
Sub-Total	149,810,061	149,360,312	147,028,127	151,129,113	149,072,580	151,219,135	137,851,835	137,320,161	124,780,857
Daily Average	410,439	409,206	401,716	414,052	408,418	414,299	376,644	376,220	341,865
Plant Condensates									
Brt	3,669,898	2,909,182	2,735,999	3,210,877	3,501,353	3,237,236	3,049,759	2,075,512	1,965,690
Bonny Nlng	10,095,698	13,194,066	13,042,413	9,696,677	11,037,805	10,080,271	9,800,934	11,107,379	10,768,860
PNG	0	0	0	0	0	0	0	0	53,783.88
Sub-Total	13,765,596	16,103,248	15,778,412	12,907,554	14,539,158	13,317,507	12,850,693	13,182,891	12,788,334
Daily Average	37,714	44,118	43,110	35,363	39,833	36,486	35,111	36,118	35,037
Sub-Total - Condensates	163,575,657	165,463,560	162,806,539	164,036,667	163,611,738	164,536,643	150,702,528	150,503,052	137,569,191
Daily Average	448,152	453,325	444,827	449,416	448,251	450,785	411,756	412,337	376,902
Crude + Condensates									
Grand Total	915,451,514	896,573,135	885,784,400	822,655,507	821,879,808	800,913,972	688,509,052	711,465,565	721,427,574
Daily Average	2,508,086	2,456,365	2,420,176	2,253,851	2,251,726	2,194,285	1,881,172	1,949,221	1,976,514



¹ Ebok and Tulja commenced operations in 2011, while Usan commenced operations in 2012.

² Ima Crude is production from Asaramatoru

³ Qua Iboe 2010&2011 includes unspiked Oso Condensate volumes

⁴ Others include 2013 production from Anambra Basin

⁵ 2018 reconciliation ongoing

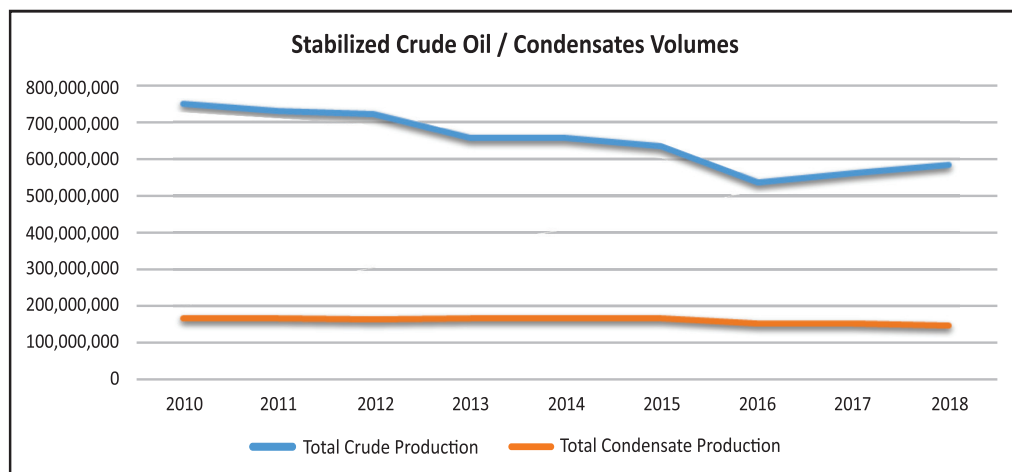


Figure 22: Stabilized Crude Oil / Condensates Annual Production Volumes

4.1.6.5 Major Upstream Projects

Table 34: Status Of Major Active Field Development / Crude Oil Handling Facilities Projects

S/N	Project	Company	Project Objective (S)	Location	Expected Oil Production, (MBopd)	Project Phase
1	Bonga Southwest (BSW) Aparo	SNEPCO	Increase hydrocarbon production	Deep Offshore	150	Front End Design
2	Agbami Infill Drilling (AIDP)	Star Deep	Increase hydrocarbon production	Deep Offshore	250*	Detailed Engineering
3	Antan Well Head Platform	Addax	Increase hydrocarbon production	Offshore	60*	Detailed Engineering
4	Alakiri Flow Station XHP Separator Installation / Commissioning	Eroton	Increase hydrocarbon production	Onshore, Rivers State	9,147	Conceptual Design
5	Ibot Satellite Fields Development Phase 2	MPNU	Increase hydrocarbon production	Offshore	28.2	Detailed Engineering
6	Usari Alternate Development	MPNU	Increase hydrocarbon production	Offshore	50	Detailed Engineering
7	Debottlenecking and Upgrade of Egbaoma Flow station	Platform Pet	Increase hydrocarbon production	Delta State	10	Conceptual Design
8	Otakikpo Field Early Production Facility	Green Energy	Extract hydrocarbon from delineated concession	Onshore, Rivers State	10	Installation
9	Further Oil Development Project – Step 1	SPDC	Increase hydrocarbon production	Onshore, Rivers State	23.45	Construction
10	OML 99 Ikike Field Development	TEPNG	Increase hydrocarbon production	Offshore	32 (88.5 mmscfd)	Detailed Engineering
11	OML 130 Preowei Development Project	TUPNI	Increase hydrocarbon production	Deep Offshore	70	Definition Studies

*Unchanged production rate, as the drilling opportunity is targeted at delaying the onset of production decline in the asset and extend the field's production plateau life.



4.1.6.6 Gas Production, Utilization And Flare Monitoring

4.1.6.6.1 Gas Production

Table 35: 2018 Gas Production Volumes (MMSCF)

Month	AG	NAG	Total Gas Produced
January	150,285.05	108,427.84	258,712.89
February	138,425.20	105,431.93	243,857.13
March	146,878.51	110,211.38	257,089.89
April	140,221.96	101,936.68	242,158.64
May	138,628.35	101,747.23	240,375.58
June	136,075.95	74,853.68	210,929.63
July	149,079.38	89,547.78	238,627.16
August	153,216.69	107,210.87	260,427.56
September	142,605.47	99,400.95	242,006.42
October	153,530.38	94,835.46	248,365.83
November	126,390.06	89,010.02	215,400.08
December	141,485.03	109,707.72	251,192.75
Total	1,716,822.03	1,192,321.54	2,909,143.56

The total volume of gas produced in the year 2018 was 2.91TCF. This averaged a daily production rate of 7.97BCF/D. Of the produced gas volumes, an average of 4.70BCF/D was produced along with oil as Associated Gas while 3.27BCF/D was produced as Non-Associated Gas. These represent 59.01% and 40.99% of total gas production respectively during the year under review.

Table 36: Gas Production, 2010 to 2018*

Year	AG	NAG	Total Gas Produced
2001	1,551,912,250	391,683,723	1,943,595,973
2002	1,340,591,744	410,542,712	1,751,134,456
2003	1,387,104,460	516,223,961	1,903,328,421
2004	1,584,922,039	525,256,005	2,110,178,044
2005	1,626,444,779	508,893,962	2,135,338,741
2006	1,542,136,671	747,754,914	2,289,891,585
2007	1,599,190,078	1,007,675,245	2,606,865,323
2008	1,593,835,503	986,561,109	2,580,396,612
2009	1,582,137,295	645,978,947	2,228,116,241
2010	1,865,159,719	954,522,126	2,819,681,845
2011	1,839,230,068	1,127,423,119	2,966,653,187
2012	1,872,875,894	1,123,160,177	2,996,036,072
2013	1,786,603,702	1,025,377,681	2,811,981,383
2014	1,880,374,658	1,168,171,828	3,048,546,486
2015	1,740,550,000	1,262,629,000	3,003,179,000
2016	1,517,667,415	1,194,135,621	2,711,803,036
2017	1,700,929,721	1,237,008,033	2,937,937,754
2018	1,716,822,031	1,192,321,524	2,909,143,555

* All volumes are in mscf (thousand standard cubic feet)

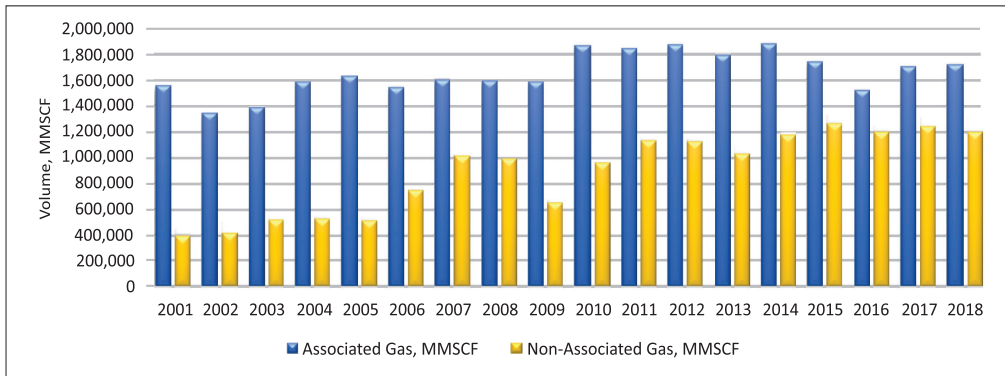


Figure 23: AG and NAG Production, 2001 to 2018

The production volume of 2.91TCF in 2018 was a slight drop from that in the year 2017 which was 2.94TCF. This was due to a 3.61% drop in Non-Associated Gas production, which tended to hide the 1% increase in AG production for 2018.

4.1.6.6.2 Gas Utilization

Table 37: Gas Utilization Status for the Year 2018

Gas Utilization	Volume (MMscf)	Utilization Factor (%)
Fuel Gas	144,492.20	4.97%
Gas Lift make-up	97,442.08	3.35%
Gas Re-injection	694,794.46	23.88%
NGL/LPG Feed Gas	51,638.62	1.78%
Local Supply (Power)	43,975.14	1.51%
Local Supply (Others)	353,127.82	12.14%
Gas Export	1,202,382.93	41.33%
Total Gas Utilised	2,587,853.21	88.96%

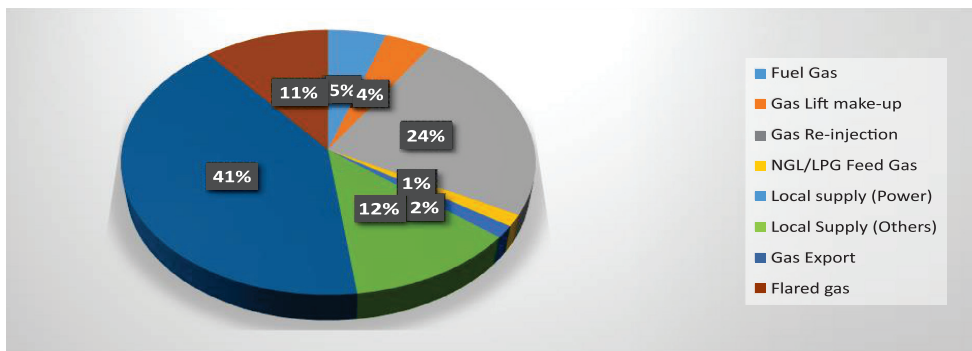


Figure 24: 2018 Gas Utilization Breakdown



In the year 2018, a total of 2.6TCF (88.96%) of gas was utilized. Gas utilization by the Companies were for inhouse gas consumption, sales to the domestic and export markets.

4.1.6.6.3 Gas Flare Report

In the year under review, a total of 321.29BSCF of produced Associated Gas was flared. This volume represents 11.04% of produced Gas.

Table 38: 2018 Gas Production and Utilization Summary

Month	Total Gas Produced	Total Gas Utilised	Total Gas Flared	% Flared
January	258,712.89	223,937.23	34,775.66	13.44
February	243,857.13	213,943.30	29,913.83	12.27
March	257,089.89	229,258.57	27,831.32	10.83
April	242,158.64	217,216.19	24,942.45	10.30
May	240,375.58	217,751.00	22,624.58	9.41
June	210,929.63	188,244.87	22,684.76	10.75
July	238,627.16	214,175.62	24,451.55	10.25
August	260,427.56	233,805.46	26,622.10	10.22
September	242,006.42	217,837.19	24,169.23	9.99
October	248,365.83	222,594.80	25,771.04	10.38
November	215,400.08	187,654.02	27,746.06	12.88
December	251,192.75	221,434.96	29,757.78	11.285
Total	2,909,143.56	2,587,853.21	321,290.35	11.04



A better way to understand the progress made in our bid to achieve zero gas flare is to view them side by side with AG production.

Table 39: Flare Volume as a Percentage of AG Production

Years	AG Production, Mscf	Total Gas Flared	
		Mscf	%
2001	1,551,912,250	1,000,748,082	64.48
2002	1,340,591,744	920,927,810	68.70
2003	1,387,104,460	801,469,311	57.78
2004	1,584,922,039	851,647,802	53.73
2005	1,626,444,779	805,517,432	49.53
2006	1,542,136,671	820,428,539	53.20
2007	1,599,190,078	816,642,948	51.07
2008	1,593,835,503	670,786,036	42.09
2009	1,582,137,295	536,368,324	33.90
2010	1,865,159,719	544,728,832	29.21
2011	1,839,230,068	503,944,277	27.40
2012	1,872,875,894	465,256,639	24.84
2013	1,786,603,702	427,971,368	23.95
2014	1,880,374,658	393,839,836	20.94
2015	1,740,550,000	330,933,000	19.01
2016	1,517,667,415	288,917,198	19.04
2017	1,700,929,721	324,192,401	19.06
2018	1,716,822,031	321,290.35	18.71

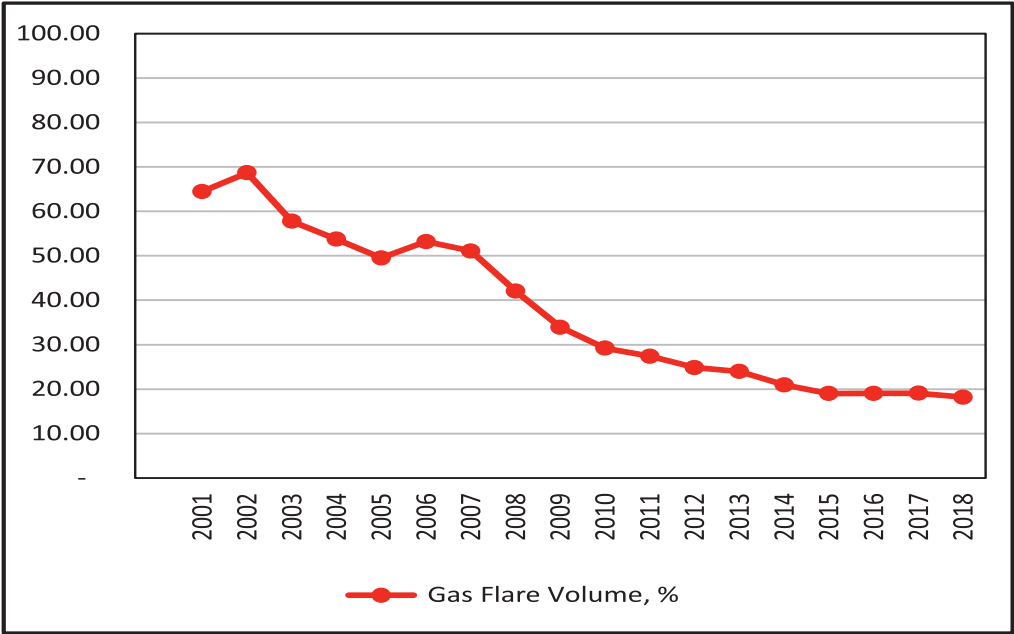


Figure 25: Gas Flare as a Percentage of AG Production

Below is a chart showing the historical Gas production, utilization and flare profile from 1958 till 2018. It shows that the gas sector is about to attain 100% utilization.

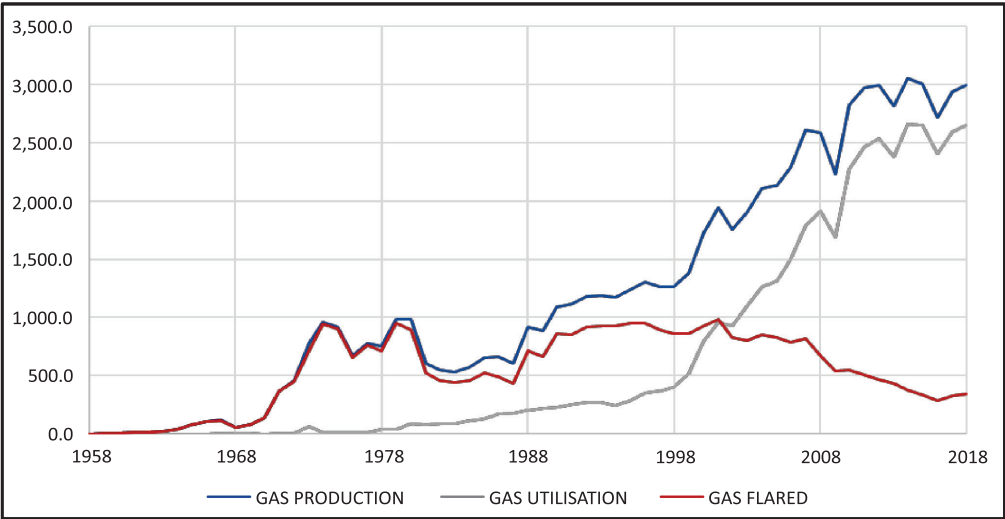


Figure 26: Historical Gas Profile (Billion Standard Cubic Feet, BSCF)



Table 40: Summary of 2018 Gas Production and Utilization*

Years	AG	Gas Production MAG	Total	Fuel Gas	Gas Lift	Re-Injection	NGU/LPG Feed Gas	Local (PPs)	Gas Sales Local (Others)	NLNG (Export)	Total Gas Utilized	% Utilized	Total Gas Flared	% Flared
January	150,285,049.09	108,427,837.98	258,712,887.07	12,786,320.58	7,563,780	61,835,697.41	3,160,410.42	4,620,973.39	25,013,577.19	108,067,992.86	223,937,231.22	86.56	34,775,655.85	13.44
February	138,425,203.99	105,431,926.38	243,857,130.37	11,199,762.74	8,273,770	56,664,219.00	3,591,983.38	3,674,520.86	28,734,566.71	100,915,313.46	213,943,297.04	87.73	29,913,833.33	12.27
March	146,878,508.99	110,211,377.00	257,089,885.99	11,879,325.36	8,058,130	9,260,966.89	4,715,381.22	4,939,519.00	31,949,024.49	107,567,928.29	229,258,561.87	89.18	27,831,324.12	10.82
April	140,221,959.36	101,936,684.73	242,158,644.09	12,070,035.26	8,006,210	57,083,991.48	3,433,571.29	4,441,481.00	30,577,229.67	100,764,515.74	217,216,193.33	89.70	24,942,450.16	10.30
May	138,628,350.06	101,747,228.32	240,375,578.38	11,949,950.16	7,368,190	57,026,334.79	3,207,189.71	4,303,624.47	28,644,080.03	104,362,840.21	217,751,002.59	90.59	22,624,575.79	9.41
June	136,075,951.94	74,853,678.47	210,929,630.41	11,482,885.51	7,183,880	7,810,107.84	2,940,520.06	3,903,513.00	27,945,713.84	76,089,098.60	188,244,874.51	89.25	22,684,755.9	10.75
July	149,079,381.77	89,547,783.19	238,627,164.96	12,714,700.99	8,234,760	63,293,866.86	3,889,459.98	4,212,605.40	30,454,300.34	90,486,764.26	214,175,619.93	89.79	24,451,545.03	10.21
August	153,216,687.25	107,210,873.02	260,427,560.27	12,509,706.89	15,743,890	57,877,803.80	5,736,427.62	1,864,239.00	29,028,252.52	110,155,977.27	233,805,458.60	89.78	26,622,101.67	10.22
September	142,605,471.76	99,400,948.19	242,006,419.94	12,320,688.34	7,118,480	59,415,425.96	3,442,658.66	2,846,274.00	24,631,228.72	107,173,272.53	217,837,191.64	90.01	24,169,228.30	9.99
October	153,530,381.29	94,635,458.11	248,165,839.41	12,797,548.03	7,234,070	64,855,538.32	2,321,076.03	3,093,545.00	30,163,686.24	101,240,173.84	222,594,801.18	89.62	25,771,038.23	10.38
November	126,390,064.15	89,010,106.65	215,400,074.81	10,637,389.45	6,240,440	49,596,968.78	2,320,627.99	3,066,473.00	31,181,116.70	83,721,873.88	187,654,019.78	87.12	27,746,055.03	12.88
December	141,485,021.63	109,707,717.95	251,192,739.58	12,143,873.07	6,416,430	50,074,399.35	2,209,473.43	3,009,414.28	34,855,030.86	111,837,174.73	221,434,959.85	88.15	29,757,779.80	11.85
Total	1,716,822,031.21	1,192,321,524.01	2,909,143,555.28	144,492,186.38	97,442,030	594,794,450.48	40,968,779.79	43,975,144.40	353,127,807.31	1,202,382,925.68	2,587,853,212.07	88.96	321,290,343.22	11.04

* All volumes are in mscf (thousand standard cubic feet)



Table 41: Summary of Gas Production and Utilization**

Years	Gas Production		Total	Fuel Gas	Gas Lift	Re-Injection	(NGU/LPG)	Sales			Export	Total Gas Utilized	% Utilized	Total Gas Flared	% Flared
	AG	NAG						Local (PPPs, Others)							
2001	1,551,912,250	391,683,723	1,943,595,973	80,269,287	26,142,438	336,523,011	52,033,317	141,067,615			306,812,223	942,847,891	48.51	1,000,748,082	51.49
2002	1,340,591,744	410,542,712	1,751,134,456	75,008,164	28,948,137	306,475,680	27,435,764	111,435,703			280,903,198	830,206,646	47.41	920,927,810	52.59
2003	1,387,104,460	516,223,961	1,903,328,421	71,590,002	28,973,434	272,481,721	36,648,692	214,182,219			477,983,042	1,101,855,110	57.89	801,469,311	42.11
2004	1,584,922,039	525,256,005	2,110,178,044	83,627,321	26,611,460	398,179,304	43,181,065	262,897,801			444,033,291	1,258,530,242	59.64	851,647,802	40.36
2005	1,626,444,779	508,893,962	2,135,338,741	88,786,060	43,781,302	402,390,225	57,345,709	234,780,140			502,373,873	1,329,821,309	62.28	805,517,432	37.72
2006	1,542,136,671	747,754,914	2,289,891,585	89,025,509	59,662,180	391,968,180	44,295,798	326,264,627			558,246,752	1,469,463,046	64.17	820,428,539	35.83
2007	1,599,190,078	1,007,675,245	2,606,865,323	99,705,731	49,204,125	485,642,132	31,751,276	279,970,609			843,948,502	1,790,222,375	68.67	816,642,948	31.33
2008	1,593,835,503	986,561,109	2,580,396,612	100,058,117	64,822,893	507,947,176	35,720,163	232,164,155			968,898,071	1,909,610,576	74.00	670,786,036	26.00
2009	1,582,137,295	645,978,947	2,228,116,241	108,676,564	58,655,769	599,618,597	46,874,213	237,287,426			640,635,350	1,691,747,917	75.93	536,368,324	24.07
2010	1,865,159,719	954,522,126	2,819,681,845	133,431,927	65,128,415	751,705,008	46,591,153	285,802,520			992,293,989	2,274,953,012	80.68	544,728,832	19.32
2011	1,839,230,068	1,127,423,119	2,966,653,187	139,425,042	91,970,753	703,579,860	68,391,658	344,481,029			1,114,860,569	2,462,708,911	83.01	503,944,277	16.99
2012	1,872,875,894	1,123,160,177	2,996,036,072	146,168,448	88,839,035	724,648,283	67,756,862	372,044,969			1,131,321,835	2,530,779,433	84.47	465,256,639	15.53
2013	1,786,603,702	1,025,377,681	2,811,981,383	152,134,470	54,264,412	758,079,412	63,286,195	391,435,743			964,809,782	2,384,010,015	84.78	427,971,368	15.22
2014	1,880,374,658	1,168,171,828	3,048,546,486	154,037,918	87,130,036	808,503,665	56,785,229	424,738,371			1,123,511,431	2,654,706,650	87.08	393,833,836	12.92
2015	1,740,550,000	1,262,629,000	3,003,179,000	152,799,000	84,396,000	743,029,000	85,917,000	445,260,000			1,157,835,000	2,672,247,000	88.98	330,933,000	11.02
2016	1,517,667,415	1,194,135,621	2,711,803,036	141,604,622	65,499,545	702,858,337	54,386,423	382,226,980			1,066,744,968	2,404,093,859	88.65	288,917,198	10.65
2017	1,700,929,721	1,237,008,033	2,937,937,754	145,951,817	63,231,678	707,140,079	48,526,917	430,414,812			1,197,455,971	2,592,721,275	88.12	324,192,401	11.05
2018	1,716,822,031	1,192,321,524	2,909,143,555	144,492,186	97,442,030	694,794,450	40,968,780	397,102,952			1,202,382,926	2,587,853,212	88.96	321,290,343	11.04

** All volumes are in mscf (thousand standard cubic feet)



Table 42: 2018 Gas Production and Utilization by Company*

S/N	Company	AG	Gas Production NAG	Total Gas Produced	Fuel Gas	Gaslift	Make-Up	Re-Injection	NGU/PG (Feed Stock)	Gas To Nip	Local	Gas Sold Export	Total Gas Utilised	% Utilized	Total Gas Flared	% Flared
1	Shell	61,360.86	624,270.84	685,631.70	14,215.65	9,346.71	-	-	-	2,002.50	17,485.23	602,216.12	663,285.21	97	22,346.49	3
2	SNEPCO	43,009.16	-	43,009.16	381,544	-	-	-	-	-	-	37,835.78	41,651.22	97	1,357.94	3
3	Chevron	11,865.40	144,812.85	263,463.26	19,014.35	26,803.46	-	-	11,463.06	-	114,973.57	68,485.93	240,740.36	96	22,722.89	4
4	Star Deep	158,304.62	-	158,304.62	6,694.54	-	-	112,891.62	-	-	-	-	115,586.16	76	38,718.46	24
5	Mobil	430,292.65	-	430,292.65	36,353.36	37,337.14	-	-	19,829.48	-	-	-	378,876.63	87	51,416.02	13
6	Esso	157,986.07	-	157,986.07	11,337.10	804.58	131,204.76	-	-	-	-	-	143,346.43	91	14,639.64	9
7	NAOC	114,141.21	159,459.95	273,601.16	21,157.40	1,509.82	-	-	718,482.70	23,953.65	43,719.16	148,117.64	256,940.42	90	16,660.74	10
8	TERNG	203,122.60	124,121.05	327,243.65	13,410.90	7,499.90	83,346.81	-	-	-	-	212,891.24	317,148.85	97	10,094.80	3
9	TUPRI	192,183.10	-	192,183.10	60,550.00	-	70,383.00	-	-	-	-	113,716.00	190,154.00	99	2,029.10	1
10	AENR	1,462.33	-	1,462.33	108.9	-	-	7,281.88	129.7	-	-	-	108.90	7	1,353.43	93
11	NAE	10,192.46	-	10,192.46	1,486.14	-	-	-	955.2	-	-	-	8,897.72	86	1,294.74	14
12	Adax	34,629.72	-	34,629.72	2,213.76	9,223.03	2,272.05	-	-	-	-	112.82	14,776.86	43	19,852.86	57
13	Pan Ocean	6,013.30	-	6,013.30	351.58	-	-	-	-	-	5,535.09	-	5,886.67	98	126.63	2
14	NPDC	39,705.84	-	39,705.84	1,940.64	3,414.89	-	-	-	-	16,046.91	-	21,402.44	54	18,303.40	46
15	AMNI	7,443.81	-	7,443.81	253.40	-	1,567.03	-	-	-	-	-	1,820.43	24	5,623.38	76
16	Atlas	283.09	-	283.09	215.74	-	-	-	-	-	-	-	215.74	76	67.35	24
17	Monipub	210.23	-	210.23	0.54	-	-	-	-	-	-	-	0.54	0	209.69	100
18	Niger Delta	12,333.64	10,902.04	23,235.68	150.46	-	-	-	-	335.68	11,463.47	11,949.60	186.08	98	16,607.4	2
19	Continental	10,621.42	-	10,621.42	1,299.5	-	-	-	-	-	-	-	1,299.5	1	10,491.47	99
20	Consolidated	2,389.1	-	2,389.1	522.3	-	-	-	-	-	-	-	522.3	22	186.68	78
21	Dubri	1,897.77	-	1,897.77	231.8	-	-	-	-	-	-	-	231.8	1	1,874.59	99
22	Platform	9,439.33	-	9,439.33	250.2	-	-	-	-	-	1,108.82	74.28	1,208.12	13	8,231.20	87
23	Walter Smith	422.42	-	422.42	0	-	421.75	-	-	-	-	-	421.75	100	0.68	0
24	Mid Western	4,797.01	-	4,797.01	53	-	-	-	-	-	-	-	53	1	4,744.02	99
25	Pillar	231.01	-	231.01	26.93	-	-	-	-	-	-	-	26.93	12	204.08	88
26	Allied Energy	858.23	-	858.23	2.21	-	-	-	-	-	-	-	2.21	0	856.02	100
27	Enigma	6,242.06	-	6,242.06	2.83	-	-	-	778.48	-	1,185.17	-	1,966.48	32	4,275.58	68
28	Britania-U	388.47	-	388.47	311.13	-	-	-	-	-	-	-	311.13	80	77.34	20
29	Seplat	20,745.56	105,673.73	126,419.28	544.75	-	-	-	-	-	117,754.02	-	118,298.78	94	8,120.52	6
30	Oriental Energy	1,827.10	-	1,827.1	688.93	-	68.91	-	-	-	-	-	757.84	41	1,069.26	59
31	SEPCO	2,109.26	-	2,109.26	1,234.67	680.61	-	-	-	-	-	-	1,915.27	91	193.99	9
32	Frontier	0.04	23,081.07	23,081.11	1,584	-	-	-	-	-	22,847.59	-	23,005.99	100	75.13	0
33	New Cross	6,486.72	-	6,486.72	85.24	-	-	-	-	-	-	1,788.22	1,873.46	29	4,613.26	71
34	Prime Exploration	1,207	-	1,207	-	-	-	-	-	-	-	-	-	-	1,207.0	100
35	Eroton	26,789.48	-	26,789.48	1,142.46	-	-	-	-	-	12,136.58	-	13,279.03	50	13,510.44	50
36	Universal Energy	577.6	-	577.6	6.39	-	-	-	-	-	-	-	6.39	1	571.21	99
37	Alteo	17,273.08	-	17,273.08	286.05	-	-	-	-	-	-	5,681.43	5,967.48	35	11,305.59	65
38	Network	597.24	-	597.24	6.2	-	-	-	-	-	-	-	6.2	1	591.04	99
39	Belema Oil	4,024.57	-	4,024.57	156.35	-	-	-	-	-	-	-	156.35	4	3,868.22	96
40	Yinka Fajana	3,896.4	-	3,896.4	-	821.89	-	-	-	-	-	-	821.89	21	3,074.51	79
41	Green Energy	1,695.65	-	1,695.65	-	-	-	-	-	-	-	-	-	-	1,695.65	100
42	Excel	8.2	-	8.2	-	-	-	-	-	-	-	-	-	-	8.2	100
43	Nicorde	12,853.08	-	12,853.08	555.53	-	-	-	-	-	-	-	555.53	4	12,297.55	96
44	Enigied	980.93	-	980.93	157.43	-	-	-	-	-	-	-	157.43	16	823.5	84
45	Millenium	646.3	-	646.3	61.58	-	-	-	-	-	-	-	-	-	646.3	100
46	Sport	76.35	-	76.35	61.58	-	-	-	-	-	-	-	61.58	81	14.77	19
47	Chorus Energy	752.05	-	752.05	6.83	-	-	-	-	-	-	-	6.83	1	745.21	99
GRAND TOTAL		1,716,822.03	1,192,321.53	2,909,143.56	144,492.18	97,442.03	694,794.46	-	51,638.62	43,975.14	353,127.82	1,202,382.93	2,587,853.21	89	321,290.35	11

* All volumes are in mscf (thousand standard cubic feet)



4.2 MIDSTREAM

4.2.1 Nigerian Crude / Condensate Export

Table 43: Summary of Crude / Condensate Export by Crude Stream 2018

Stream / Blend	January	February	March	April	May	June	July	August	September	October	November	December	Total
Abo	0	697,838	0	699,069	0	689,228	0	299,349	695,603	0	694,288	348,916	4,124,291
Aje	0	0	0	427,289	0	0	0	309,047	0	0	314,720	220,891	1,271,947
Antan	948,627	995,701	948,995	0	948,653	349,160	948,276	0	948,764	947,251	0	697,021	7,732,448
Bonga	2,848,920	3,654,851	4,870,069	5,687,420	4,742,625	4,738,549	4,752,970	5,094,044	5,335,079	4,717,493	4,837,933	5,732,129	57,012,082
Bonny	5,370,355	5,917,192	5,750,448	5,134,511	3,448,102	2,458,869	3,867,586	6,968,280	6,840,379	7,973,803	6,274,800	7,363,209	67,367,534
Brass	2,820,307	1,987,115	2,259,532	3,376,725	2,187,393	2,175,490	2,846,218	2,848,125	2,874,231	2,803,860	986,298	3,462,381	30,627,675
E A	299,595	947,581	948,357	953,756	0	947,406	902,006	948,048	946,863	947,722	49,942	898,179	8,789,455
Ebok	605,450	633,688	606,949	0	608,579	1,018,178	642,491	0	651,009	642,929	636,951	0	6,046,224
Egina	0	0	0	0	0	0	0	0	0	0	0	0	0
Erlia	4,758,156	2,855,324	2,845,964	2,854,954	2,805,903	3,805,634	3,766,436	3,805,905	3,851,856	3,806,236	3,806,995	3,806,417	42,769,780
Escravos	5,044,795	4,703,009	3,731,951	3,775,507	4,717,613	3,786,898	4,696,416	4,712,694	4,701,951	5,671,171	4,294,371	4,205,628	54,042,004
Forcados	9,894,604	7,232,763	7,897,720	6,340,018	4,786,076	4,841,687	6,310,419	6,792,837	6,841,153	5,782,778	6,675,922	6,041,863	79,437,840
Ima - Crude Oil	0	207,244	198,965	0	234,523	258,959	0	239,110	0	418,568	0	349,645	1,907,014
Odiudu / Ameriam Blend	3,893,964	2,893,957	3,844,354	2,892,610	3,892,724	3,844,647	3,891,573	3,809,246	3,893,612	3,850,281	3,799,827	2,902,850	43,409,645
Okono	0	899,980	0	900,004	899,480	0	899,479	0	899,859	0	894,032	0	5,392,834
Okoro	998,572	0	0	992,043	0	995,689	0	0	994,001	0	948,902	949,497	5,878,704
Okwori	474,219	0	648,608	0	0	672,668	0	629,532	0	0	673,375	0	3,098,402
Oyo	0	0	0	0	0	0	0	0	0	0	0	0	0
Pennington	1,066,119	985,060	0	1,039,020	1,070,796	0	1,061,435	1,082,710	0	1,079,722	1,099,412	0	8,484,274
Qua Iboe	7,648,642	6,649,949	6,804,196	7,601,044	6,651,351	7,600,286	6,651,122	7,711,525	8,597,039	7,599,521	5,700,563	7,585,814	86,801,052
Okwubome Light	997,909	998,577	996,338	947,256	949,266	1,945,590	696,944	999,435	1,000,579	926,266	206,739	0	10,664,899
Jones Creek	0	0	0	0	0	0	0	645,531	0	941,888	946,475	0	2,533,894
Ukpokiti	0	0	0	0	0	0	0	0	0	0	0	0	0
Usan	1,999,973	2,999,916	3,001,095	1,000,193	2,954,332	1,951,043	2,994,356	2,996,839	1,998,689	1,998,775	999,222	2,998,017	27,892,450
Yoho	1,276,505	1,264,679	951,052	952,478	1,274,804	951,669	950,371	950,522	1,250,322	350,352	1,548,687	950,407	12,671,948
Sub-Total Crude Oil	50,946,712	46,524,424	46,304,593	45,573,897	42,172,220	43,031,650	45,878,098	50,842,779	52,320,989	50,458,616	45,389,454	48,512,864	567,956,296
Daily Average	1,643,442	1,661,587	1,493,697	1,519,130	1,360,394	1,434,388	1,479,939	1,640,090	1,744,033	1,627,697	1,512,982	1,564,931	1,556,045



Stream/ Blend	January	February	March	April	May	June	July	August	September	October	November	December	Total
Field Condensates													
Aqiami	6,340,783	6,820,294	7,762,726	5,844,517	6,806,724	7,125,897	6,505,947	5,839,165	6,815,532	5,466,553	6,816,895	4,866,418	77,011,451
Ajapa	0	0	0	0	239,805	0	0	0	0	0	0	0	239,805
Akpo	2,970,040	2,997,854	3,992,178	2,993,438	4,023,114	3,042,759	4,044,631	3,045,827	3,045,015	3,908,196	1,047,549	2,956,623	38,067,224
Escravos	459,651.00	418,383.00	881,360.00	943,358.00	927,785.00	460,566.00	879,336.00	853,334.00	418,425.00	852,799.00	917,473.00	853,854.00	8,872,324.00
Ima - Condensate	0	0	0	0	0	0	0	0	0	55,015	0	0	55,015
Sub-Total	9,770,474	10,236,531	12,636,264	9,787,313	11,997,428	10,629,222	11,429,914	9,738,326	10,778,972	10,282,563	8,781,917	8,676,895	124,245,819
Daily Average	315,177	365,590	407,621	326,244	387,014	354,307	368,707	314,140	342,632	331,696	292,731	279,900	340,400
Plant Condensates													
BRT	0	294,638.26	0	0	269,708.99	0	296,867.78	269,700.00	0	296,678.99	269,717.98	0	1,697,312.00
Bonny/NLNG	282,268.02	538,231.30	1,098,919.62	281,072.35	842,884.42	281,440.94	272,990.34	561,641.26	272,990.34	809,702.33	552,606.31	893,659.94	6,680,407.17
PNG	3,000.21	3,360.91	3,720.70	3,600.09	5,521.18	5,400.00	5,580.00	5,176.59	8,480.00	0	5,400.00	5,580.00	54,819.68
Sub-Total	285,268	836,230	1,102,640	284,672	1,118,115	286,841	575,438	836,518	281,470	1,106,381	827,724	899,240	8,440,539
Daily Average	9,202	29,865	35,569	9,489	36,068	9,561	18,563	26,984	9,382	35,690	27,591	29,008	23,125
Crude + Condensates													
Sub-Total Condensates	10,055,742	11,072,761	13,738,904	10,071,985	13,115,543	10,916,063	12,005,352	10,574,844	10,560,442	11,388,944	9,609,641	9,576,135	132,686,358
Daily Average	324,379	395,456	443,190	335,733	423,082	363,869	387,269	341,124	352,015	367,385	320,321	308,908	363,524
Total Export													
Daily Average	61,002,454	57,597,185	60,043,497	55,645,882	55,287,763	53,947,713	57,883,450	61,417,623	62,881,431	61,847,560	54,999,095	58,088,999	700,642,654
Daily Average	1,967,821	2,057,042	1,936,887	1,854,863	1,783,476	1,798,257	1,867,208	1,981,214	2,096,048	1,995,083	1,833,303	1,873,839	1,919,569

All volumes are in barrels

Table 44: Summary of Crude / Condensate Supply to Local Refineries

Stream/ Blend	January	February	March	April	May	June	July	August	September	October	November	December	Total
Port Harcourt Refinery													
Bonny	1,813,795	1,594,027	0	350,115	1,335,853	1,160,730	498,827	0	0	0	0	0	6,753,347
Warri Refinery													
Escravos	0	0	1,311,840	937,357	1,022,427	1,210,916	892,739	132,341	0	0	700,344	619,950	6,827,914
SEPLAT	0	0	0	0	0	0	0	0	0	0	0	0	0
Ughelli	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub-Total	0	0	1,311,840	937,357	1,022,427	1,210,916	892,739	132,341	0	0	700,344	619,950	6,827,914
Niger Delta Petroleum													
Ogbole*	24,999	17,897	27,877	20,996	28,047	16,595	15,642	7,946	26,815	23,828	23,294	23,006	256,942
Total Supply to Local Refineries	1,838,794	1,611,924	2,651,557	2,245,825	3,408,754	3,599,157	2,299,947	272,628	26,815	23,828	1,423,982	1,262,906	20,666,117

All volumes are in barrels



Table 45: Summary of Crude / Condensate Export

Stream / Blend	2010	2011	2012	2013	2014	2015	2016	2017	2018
Abo	11,122,508	10,435,925	8,318,864	7,973,515	8,298,092	8,184,624	6,981,146	4,967,452	4,124,291
Aje	0	0	0	0	0	0	922,703	822,669	1,271,947
Antan	19,161,225	14,201,969	18,551,764	19,936,820	18,112,986	14,396,706	12,373,609	8,625,645	7,732,448
Bonga	65,062,445	51,637,104	64,283,129	50,858,029	58,282,931	69,715,081	74,973,146	61,371,978	57,012,082
Bonny	84,732,535	85,632,150	74,644,120	56,983,360	67,745,358	65,601,732	55,981,328	47,983,367	67,367,534
Brass	46,807,579	46,321,912	38,935,783	30,866,918	36,400,244	38,946,913	33,148,423	31,863,555	30,627,675
E A	0	0	0	0	0	0	0	0	8,789,455
Ebok ¹	0	2,632,888	11,083,168	13,118,644	9,772,103	10,274,484	7,989,189	6,773,005	6,046,224
Egina	0	0	0	0	0	0	0	0	0
Ekanga	0	0	0	0	3,763,224	3,710,955	3,832,897	1,943,624	0
Erha	61,312,426	52,491,417	46,411,568	37,031,702	35,959,867	33,431,160	45,836,394	44,849,711	42,769,780
Escravos	67,842,754	64,008,180	60,861,373	49,395,756	59,259,056	59,054,243	47,153,315	53,649,852	54,042,004
Forcados	66,334,530	74,836,802	69,586,326	66,228,558	66,442,803	69,510,040	15,528,254	52,552,227	79,437,840
Ima Crude	0	0	0	0	544,421	422,934	301,120	1,458,244	190,7014
Odudu	40,678,097	39,129,520	37,841,145	28,080,832	26,478,183	25,321,991	28,414,779	33,062,328	43,409,645
Okono	18,051,652	17,051,254	16,630,272	14,831,286	12,053,749	9,296,812	7,694,089	8,437,717	5,392,834
Okoro	5,948,727	5,375,374	6,358,125	6,431,941	5,608,008	4,840,795	2,771,027	3,990,169	5,878,704
Okwori	14,455,280	12,913,267	11,767,917	9,057,835	8,460,061	6,859,162	4,588,428	3,316,423	3,098,402
Oyo	3,612,118	1,350,055	1,015,747	671,221	5,455,256	1,646,071	1,945,602	2,096,260	0
Pennington	10,845,935	10,766,479	8,792,567	6,891,180	5,834,616	4,939,155	5,822,451	5,845,185	8,484,274
Qua Iboe ⁴	131,869,897	132,858,617	129,434,223	130,387,983	134,322,114	125,618,831	79,949,054	81,919,418	86,801,052
Sea Eagle	29,852,439	22,449,218	20,830,329	16,175,525	7,028,594	13,629,727	11,068,954	9,673,781	0
Okwuibome Light ²	0	587,591	2,132,939	2,957,822	4,202,870	7,422,126	8,626,355	13,834,994	10,664,899
Jones Creek	0	0	0	0	0	0	0	0	2,533,894
Ukpokiti	326,047	295,409	804,835	982,136	546,255	0	402,846	1,943,624	0
Usan ³	0	0	28,942,683	38,357,661	44,518,002	39,729,126	37,297,111	35,911,668	27892450
Yoho	33,188,540	30,675,473	27,699,067	24,969,999	18,971,337	17,461,456	16,177,350	11,333,401	12671848
Sub-Total Crude Oil	711,204,734	675,650,604	684,925,944	612,188,723	638,060,130	630,014,124	509,779,570	528,226,297	567,956,296
Daily Average	1,948,506	1,851,098	1,871,382	1,677,229	1,748,110	1,726,066	1,392,840	1,447,195	1,556,045
Condensates									
Field Condensates									
Agbami	86,914,891	88,318,131	85,216,347	84,752,375	86,171,532	85,628,159	84,710,980	85,634,864	77011451
Ajapa	0	0	0	0	0	0	128,874	1,045,771	239805
Akpo	60,310,968	56,874,365	57,429,881	60,787,043	51,618,224	55,354,492	50,639,254	45,045,662	38067224
Escravos	0	0	0	0	4,159,914	5,084,334	2,918,373	3,569,049	8,872,324.00
Ima - Condensate	587,031	443,148	360,694	209,822	231,712	448,182	242,151	204,918	55015
Sub-Total	147,812,890	145,635,644	143,006,922	145,749,240	142,181,382	146,515,167	138,639,632	135,500,264	124,245,819
Daily Average	404,967	399,002	390,729	399,313	389,538	401,411	378,797	371,234	340,400
Plant Condensates									
BRT	3,561,910	3,592,269	2,465,534	3,266,939	3,588,394	3,140,845	2,745,861	2,438,056	1,697,312.00
Bonny NLNG	8,711,598	9,461,472	10,940,021	9,017,151	9,663,000	8,987,510	7,724,523	8,557,554	6,688,407.17
PNG									54,819.68
Sub-Total	12,273,508	13,053,741	13,405,555	12,284,090	13,251,394	12,128,355	10,470,383	10,995,610	8,440,539
Daily Average	33,626	35,764	36,627	33,655	36,305	33,228	28,608	30,125	23,125
Sub-Total Condensates	160,086,398	158,689,385	156,412,477	158,033,330	155,432,776	158,643,522	149,110,015	146,495,874	132,686,358
Daily Average	438,593	434,765	427,356	432,968	425,843	434,640	407,404	401,359	363,524
Crude + Condensates									
Total Export	871,291,132	834,339,989	841,338,421	770,222,053	793,492,906	788,657,646	658,889,585	674,722,171	700,642,654
Daily Average	2,387,099	2,285,863	2,298,739	2,110,197	2,173,953	2,160,706	1,800,245	1,848,554	1,919,569

* All volumes are in barrels

*Ebok commenced operations in 2011.

¹Crude and Condensate comingled at QIT since 2012²Okwuibome commenced operations in 2011³Usan commenced operations in 2012⁴Qua Iboe volumes include Oso Condensates, which were reported separately in 2010 & 2011 in our earlier editions

**Table 46: 2018 Crude Export Destination Summary**

Stream	Africa	Asia and Pacific	Europe	North America	Latin America
Abo	997,187	-	1,043,204	699,069	1,384,831
Agbami		54010546	2548009	9742295	9736037
Ajapa	-	-	304805	-	-
Aje	-	314,720	957,227	-	-
Akpo	-	21991876	5992096	6041376	4041876
Antan	1,297,813	1,896,015	3,589,625	948,995	-
Bonga	-	-	-	-	-
Bonny	10,457,567	15,435,224	35,371,787	-	6,102,956
Brass	15,027,714	1,853,965	13,446,465	-	299,531
EA		4,693,303	3,796,557	299,595	
Ebok	-	-	4,741,945	1,304,279	-
Erha	19,067,124	2,854,029	17,995,215	1,902,224	951,187
Escravos	5,638,624	19,823,839	27,646,335	-	933,206
Forcados	2,997,353	13,450,601	49,842,111	11,530,472	1,829,272
Ima	-	-	1,962,029	-	-
Odudu	955,985	1,897,833	23,419,976	16,186,662	949,189
Okono Blend	-	-	4,492,854	899,980	-
Okoro	-	-	2,981,733	2,896,971	-
Okwori Blend	1,796,202	-	672,668	629,532	-
Otakikpo	-	-	1847765	-	-
Oyo	-	-	-	-	-
Pennington	2,121,730	-	5,291,748	1,070,796	-
Qua Iboe	27,804,705	21,860,820	31,434,965	753,599,395	2,850,165
Okwuibome light	1,763,816	7,814,757	1,694,137	-	-
Ukpokiti	-	-	322,768	-	-
Usan	-	9,995,727	17,896,723	-	-
Yoho	971,454	2,199,940	6,658,124	2,842,330	-
Jones Creek	941,888	-	2,533,917	947,331	-
Total	91,839,162	180,093,195	268,484,788	811,541,302	29,078,250

Table 47: Crude Export Destination History (Percent)

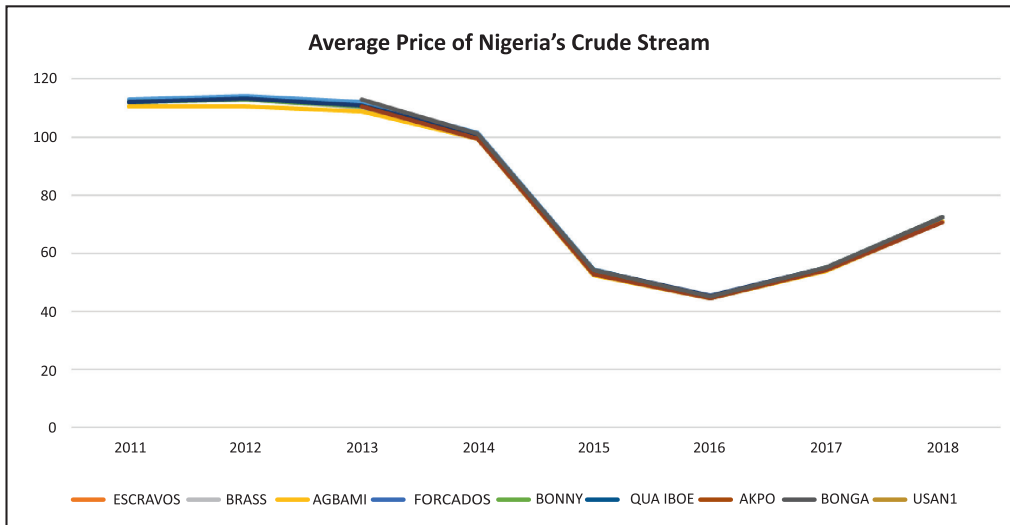
Region	2013	2014	2015	2016	2017	2018
Europe	42.8	45.8	45.6	34.9	37.3	19.4
North / South America	23.8	15.2	13.4	22.5	21.4	
Asia	20.1	25	26.8	27.9	27.7	13.0
Africa	11.1	12.6	13.9	14.6	12.5	6.7
Oceania / Pacific	2.2	1.3	0.3	0.1	1	-
Latin America	N/A	N/A	N/A	N/A	N/A	2.1

**Table 48: Average Price of Nigeria's Crude Streams as Quoted by Platts in USD***

Year	Escravos	Brass	Agbami	Forcados	Bonny	Qua Iboe	Akpo	Bonga	Usan ¹
2011	111.943	112.018	110.498	112.925	111.968	112.137	*	*	*
2012	113.103	112.823	110.712	114.212	112.838	113.209	*	*	*
2013	111.222	110.231	108.957	111.945	110.473	110.877	110.449	112.866	*
2014	100.658	99.837	99.360	101.349	100.702	100.802	99.373	101.133	*
2015	53.863	53.142	52.641	54.481	54.159	54.286	52.685	54.181	*
2016	44.855	44.838	44.495	44.540	45.229	45.490	44.483	45.055	*
2017	54.910	54.990	53.930	54.650	54.990	55.090	54.285	55.040	*
2018	72.405	72.279	70.849	72.467	72.383	72.444	70.827	72.375	70.510

* Source: Platts

* Price assessment not available

¹ Usan commenced production in 2012**Figure 27: Average Price of Nigeria's Crude Streams as Quoted by Platts**



4.2.2 Refinery Activities

Table 49: Summary of Refineries*

Process Unit	KRPC	PHRC (New)	PHRC (Old)	WRPC	NDPR	Total
Configuration	Conversion	Conversion	Hydroskimming	Conversion	Topping	
Feedstock	Escravos, Ughelli blend, Basra, Urals	Bonny light	Bonny light	Escravos, Ughelli blend	Ogbelle	
Products	Fuels, Petrochemicals, Base Oil	Fuels	Fuels	Fuels, Petrochemicals (Polypropylene & Carbon black)	Diesel	
Crude distillation	110,000	150,000	60,000	125,000	1,000	446,000
Condensate splitting					NA	NA
Vacuum distillation	38,200	54,000	NA	40,000	NA	132,200
Catalytic hydrotreating (desulphurization)	46,300	33	14,500	17,000	NA	110,800
of which: Naphtha	24,000	33,000	NA	NA	NA	57,000
of which: Gasoline	NA	NA	NA	NA	NA	NA
of which: Gas oil/diesel	NA	NA	NA	NA	NA	NA
of which: Other	22		15	17	NA	53,800
Fluid catalytic cracking	21	40	NA	25	NA	86,000
Hydrocracking	NA	NA	NA	NA	NA	NA
Cocking	NA	NA	NA	NA	NA	NA
Visbreaking	NA	NA	NA	NA	NA	NA
Catalytic reforming	17,500	33,000	6,000	17,000	NA	73,500
Alkylation	6,500	7,200	NA	2,500	NA	16,200
Aromatics / Isomerization	NAP	3,611	NA	NA	NA	3,611
Lubes	34,470	NA	NA	NA	NA	34,470
Asphalt	15,800	NA	NA	NA	NA	15,800
Hydrogen	NA	NA	NA	NA	NA	NA
MTBE	NA	NA	NA	NA	NA	NA
Propylene	NA	NA	NA	NA	NA	NA
LPG	NA	NA	NA	NA	NA	NA
Sulphur	NA	NA	NA	NA	NA	NA
Refinery Intake						
Crude Oil (b/d)						
Q1	1,812.49	31,714.39	0.00	4,009.98	786.37	38,323.22
Q2	0.00	59,437.39	0.00	4,651.30	721.30	64,809.98
Q3	0.00	64.27	0.00	1,946.93	547.86	2,559.06
Q4	0.00	0.00	0.00	983.77	762.26	1,746.03
2018	446.92	22,654.82	0.00	2,887.10	703.95	26,692.79
Utilization Rate (%)						
Q1	1.65%	21.14%	0.00%	3.21%	78.64%	8.59%
Q2	0.00%	39.62%	0.00%	3.72%	72.13%	14.53%
Q3	0.00%	0.04%	0.00%	1.56%	54.79%	0.57%
Q4	0.00%	0.00%	0.00%	0.79%	76.23%	0.39%
2018	0.41%	15.10%	0.00%	2.31%	70.40%	5.98%

*All units are in BPSD



Table 50: Refinery Performance (Capacity Utilisation), BPSD

Year	KRPC	PHRC (New)	PHRC (Old)	WRPC	NDPR	Total
Designed Capacity, BPSD	110,000.00	150,000.00	60,000.00	125,000.00	1,000.00	446,000.00
Crude Oil Processed, BPSD						
2010	21,986.72	19,345.38	-	53,345.20	-	94,677.30
2011	20,896.79	31,853.02	-	49,731.41	222.03	102,703.25
2012	31,981.86	24,530.97	-	34,868.71	557.45	91,938.99
2013	32,452.43	44,937.47	-	20,925.04	185.18	98,500.12
2014	12,160.39	23,557.15	-	24,049.59	503.71	60,270.84
2015	3,297.36	9,274.21	-	8,337.64	714.66	21,623.87
2016	10,310.69	32,669.98	-	14,746.13	605.43	58,332.23
2017	16,597.23	6,998.94	-	14,775.66	696.90	39,068.73
2018	446.92	22,654.82	-	2,887.10	703.95	26,692.79

* Old Port Harcourt Refinery was not operational during the period under review.

* NDPR commenced AGO production in May 2011.

Table 51: Refinery Performance (Capacity Utilisation), Percentage

Year	KRPC	PHRC (New)	PHRC (Old)	WRPC	NDPR	Total
2010	19.99%	12.90%	0.00%	42.68%	NAP	21.23%
2011	19.00%	21.24%	0.00%	39.79%	22.20%	23.03%
2012	29.07%	16.35%	0.00%	27.89%	55.75%	20.61%
2013	29.50%	29.96%	0.00%	16.74%	18.52%	22.09%
2014	11.05%	15.70%	0.00%	19.24%	50.37%	13.51%
2015	3.00%	6.18%	0.00%	6.67%	71.47%	4.85%
2016	9.37%	21.78%	0.00%	11.80%	60.54%	13.08%
2017	15.09%	4.67%	0.00%	11.82%	69.69%	8.76%
2018	0.41%	15.10%	0.00%	2.31%	70.40%	5.98%

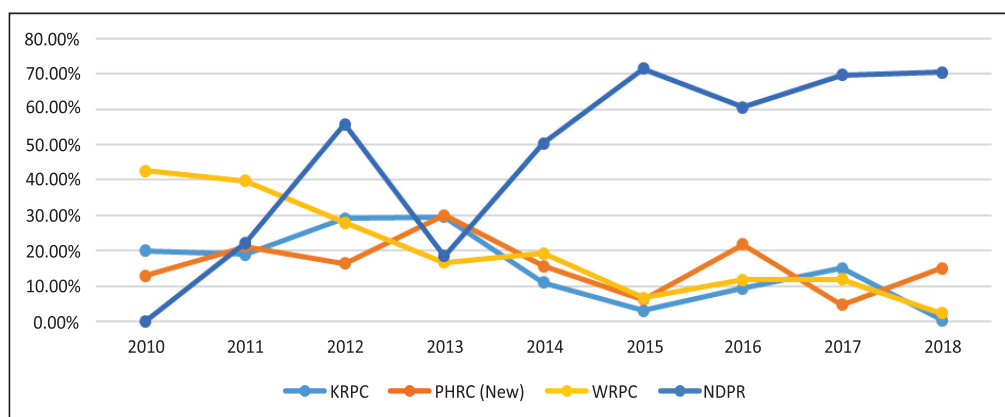


Figure 28: Refinery Performance (Capacity Utilisation), Percentage



4.2.2.1 Status of Licensed Refinery Projects

Table 52: Status of Licensed Refinery Projects

S/N	Company	Project Objective (S)	Capacity	Location	Planned Completion Date
1	Pet Oil & Gas Ltd	Conventional plant capable of producing fuels PMS, HHK, AGO; and heating oil LPFO.	20,000	Ibafun Ijebu, Odogbolu LGA, Ogun	Q1, 2021
2	Eko Pet & Refining Coy Ltd	Modular plant capable of producing LPG, gasoline (PMS), kerosene (DPK), diesel (AGO), and low pour fuel oil (LPFO).	20,000	Tomaro Island, Lagos State	Q1,2020
3	Niger Delta Pet. Resources	Modular plant capable of producing naphtha, kerosene (DPK), diesel (AGO), Marine diesel, Liquefied Petroleum Gas (LPG)	10,000	Ogbele, Rivers state	Q2, 2020
4	Ikwe-Onna Refinery Ltd	Modular plant capable of producing Naphtha, kerosene (DPK), diesel (AGO), and low pour fuel oil (LPFO).	5,000	Ikwe, Akwa Ibom State	Q4, 2019
5	Resource Petroleum & Petrochemicals Int. Incorporated	Conventional plant capable of producing transportation fuels PMS, HHK, AGO; and heating oil LPFO.	100,000	Ibeno, Akwa Ibom State	Q1,2022
6	RG Shinjin Petrochemicals Ltd.	Modular plant capable of producing naphtha, kerosene, diesel, and low pour fuel oil.	10,000	Koko, Delta State	Q2, 2020
7	OPAC Refineries	Modular plant capable of producing naphtha, kerosene, diesel, and low pour fuel oil.	7,000	Umuseti, Delta	Q3, 2020
8	Waltersmith Refining & Petrochemical Coy Ltd.	Modular plant capable of producing naphtha, kerosene, diesel, and low pour fuel oil.	5,000	Ibigwe, Imo State	Q1,2020
9	Clairgold Oil & Gas Engineering Ltd.	Modular plant capable of producing naphtha, kerosene, diesel, and low pour fuel oil.	20,000	Koko, Delta State	Q4,2019
10	Dangote Oil Refinery Coy	Conventional plant capable of producing transportation fuels PMS, HHK, AGO; heating oils' LPFO, and petrochemicals. HHK, AGO; heating oils' LPFO, and petrochemicals.	500,000	Lekki Free Trade Zone, Lagos	Q1, 2021
11	Jil-Amber Consortium	Conventional plant capable of producing transportation fuels PMS, HHK, AGO; heating oils' LPFO, and petrochemicals. HHK, AGO; heating oils' LPFO, and petrochemicals.	100,000	PHRC, Rivers state	Q1, 2020
12	Azikel Pet Ltd.	Modular plant capable of producing naphtha, kerosene, diesel, and low pour fuel oil, and power.	12,000	Obunagha, Bayelsa State	Q4, 2019
13	Gazingstock Pet Coy Ltd.	Modular plant capable of producing Offgas, Naphtha, kerosene (DPK), diesel (AGO), and Residual fuel.	5,000	Abalagada Community, Ndokwa East LGA, Delta state	Q2, 2020
14	Eghudu Refinery Ltd.		24,000	Eghudu Village, Ovia North East LGA., Edo state	Q2, 2020
15	Ibafon Refinery FZE		10,000	Calabar FTZ, Cross River State	Q1,2020
16	American Exploration Coy Nig. Ltd.		21,000	Egboide, Delta state	Q2, 2020
17	Duport Midstream	Modular plant capable of producing Offgas, Naphtha, HouseHold kerosene (HHK), diesel (AGO), and Low Pour Fuel Oil.	10,000	Egbokor, Orhionmwon LGA. Edo state	Q1,2021
18	Bua Refinery & Petrochemicals Ltd	Conventional plant capable of producing Polypropylene, Propane, Benzene, Butane, Gasoline, DPK, ATK, AGO, LPFO.	150,000	Ntaikang, Akwa-Ibom State	Q4, 2020
19	Kingdom Global Trading Pet. & Gas Nig. Ltd.	Modular plant capable of producing Off Gas, Unleaded gasoline, kerosene (DPK), diesel (AGO), and low pour fuel oil (LPFO).	12,000	Okwagbe, Ughelli south LGA., Delta state	Q3,2020
20	Etopo Energy Plc	Modular plant capable of producing Gasoline/ Naphtha, kerosene (DPK), diesel (AGO), and low pour fuel oil (LPFO).	30,000	Burutu, Delta state	Q1, 2021
21	Platinum Hydrocarbon Resources Ltd.	Modular plant capable of producing Gasoline/ Naphtha, kerosene (DPK), diesel (AGO), and low pour fuel oil (LPFO).	10,000	Ikewewu-Amukpe, Sapele, LGA. Deltas state	Q4,2021
22	Edo petrochemical refinery	Modular plant capable of producing Offgas, Naphtha, HouseHold kerosene (HHK), diesel (AGO), and Low Pour Fuel Oil.	6,000	Ikpoba-Okha LGA., Edo state	Q2, 2021



4.2.3 Domestic Gas Supply

4.2.3.1 National Gas Requirement (NGR)

The National Gas Requirement, is a critical factor in establishing annual Domestic Gas Supply Obligation (DGSO) volumes for upstream gas producers in the country, has been set at 3.83 BSCF/day for the year 2019. This figure covers the three domestic subsectors. Namely: Gas-to-power (GTP) = 2.06 Bscf/d, Gas Based Industries (GBIs) = 0.86 Bscf/d and Commercial subsector = 0.91 Bscf/d. The figure represents an increase of 448MMscf/d (13%) over the 2018 NGR.

Furthermore, the projected national pipeline capacity for 2019 is 4.6 Bscf/d, with 3.6Bscfd in the Western axis (ELPS I and II trunklines, Oben-Geregu and Oben-Ajaokuta) and 1.0 Bscfd in the Eastern axis.

Table 53: Domestic Gas Supply Obligation for E&P Companies, MMSCF/Day

S/No	Company / Gas Producers	2019	2020	2021	2022	2023
1	SPDC	499	771	780	780	780
2	CNL	470	470	470	480	490
3	MPNU	372.54	395.83	419.11	442.39	465.68
4	NAOC	300	390	390	410	420
5	TEPNL	180	260	260	260	280
6	Addax	40	40	60	60	60
7	Esso					
8	SNEPCO					
9	Famfa / Stardeep					
10	TUPNI / SAPETRO	NNPC PSC TOTAL	520.79	553.34	585.89	618.44
11	NAE					
12	AENR					
13	SEEPCO					
14	TEPNL (PSC - DW Assets)					
15	NPDC	NPDC TOTAL	400	420	450	470
16	NPDC / Shoreline					
17	NPDC / Neconde					
18	NPDC / ND Western					
19	NPDC / First Hydrocarbon					
20	NPDC / Elcrest					
21	Aiteo / NNPC	25	25.39	26.88	28.37	29.87
22	Seplat	130	130	150	180	180
24	Eroton	39.21	41.66	44.11	46.56	49.01
25	AMNI	31.38	33.34	35.3	37.26	39.22



S/No	Company / Gas Producers	2019	2020	2021	2022	2023
26	Platform	21.62	22.97	24.32	25.67	27.02
27	Energia	21.49	22.83	24.18	25.52	26.86
28	Frontier Oil	16.86	17.92	18.97	20.02	21.08
29	Monipulo	10.05	10.68	11.3	11.93	12.56
30	New Cross	9.73	10.34	10.94	11.55	12.16
31	Panocean	9.37	9.96	10.55	11.13	11.72
32	Atlas	9.09	9.66	10.23	10.8	11.37
33	Niger Delta	8.09	8.6	9.1	9.61	10.11
34	Oriental	7.46	7.93	8.4	8.86	9.33
35	Continental	7.36	7.82	8.28	8.74	9.2
36	Express	7.13	7.58	8.02	8.47	8.92
37	Midwestern	6.03	6.4	6.78	7.16	7.53
38	Universal	5.55	5.9	6.25	6.59	6.94
39	Dubri	5.46	5.8	6.14	6.48	6.82
40	Allied Energy PLC	5.15	5.47	5.79	6.12	6.44
41	Pillar Oil	3.58	3.8	4.03	4.25	4.47
42	Network E&P	2.14	2.28	2.41	2.54	2.68
43	Consolidated	1.44	1.53	1.62	1.71	1.8
44	Prime Energy	1.35	1.43	1.52	1.6	1.68
45	Walter Smith	1.27	1.35	1.43	1.51	1.59
46	Brittania-U	0.57	0.61	0.64	0.68	0.71
47	Conoco	6.18	6.57	6.95	7.34	7.73
48	Gec Pet. Dev Coy Ltd	5.65	6	6.35	6.71	7.06
49	Statoil	61.63	65.48	69.33	73.18	77.04
50	WAEP/ Dangote	23.99	25.49	26.99	28.49	29.99
51	Sunlink	18.36	19.5	20.65	21.8	22.95
52	Yinka Fawale	12.02	12.77	13.52	14.27	15.02
53	Peak	5.29	5.62	5.95	6.28	6.62
54	Oil & Gas/Star Ultradeep	4.16	4.42	4.68	4.94	5.2
55	Millenium	1.88	2	2.12	2.24	2.36
56	Enageed	1.79	1.91	2.02	2.13	2.24
57	Bayelsa	1.4	1.48	1.57	1.66	1.75
58	Summit Oil International	0.89	0.95	1.01	1.06	1.12
59	Dansaki	0.5	0.53	0.56	0.59	0.62
60	Emerald Energy	0.48	0.51	0.54	0.56	0.59
61	Guarantee	0.46	0.49	0.52	0.55	0.58
62	Green Energy Intl Ltd	0.42	0.44	0.47	0.5	0.52
63	Sogenal	0.12	0.13	0.14	0.15	0.15
64	Texaco Outershelf	0.11	0.12	0.12	0.13	0.14
65	Sahara Energy	0.08	0.09	0.09	0.1	0.1
66	Excel E&P	0.06	0.06	0.07	0.07	0.07
67	Bicta	0.05	0.06	0.06	0.06	0.07
68	First E&P/ Dangote	0.05	0.05	0.06	0.06	0.06
69	Del-Sigma	0.04	0.04	0.04	0.04	0.05



S/No	Company / Gas Producers	2019	2020	2021	2022	2023
70	Movido E&P	0.03	0.04	0.04	0.04	0.04
71	Goland	0.03	0.03	0.04	0.04	0.04
72	Cavendish	0.02	0.02	0.02	0.03	0.03
73	Chorus Energy	0	0	0	0	0
74	Eurafic Ltd	0	0	0	0	0
75	Independent Energy	0	0	0	0	0
	Total gas	3,314.41	3,856.20	4,016.09	4,176.99	4,317.88
	DSO	3,200.00	3,400.00	3,600.00	3,800.00	4,000.00

4.2.3.2 2018 DGSO Performance Report

The daily average domestic gas supply performance in 2018 was 48.33%. A total gas volume of 1279.32 MMscfd was supplied to the domestic market by eleven companies as shown in the Table below. Also, the National Domestic Gas Capacity Performance for 2018 was 80%. That is, the nation had the capacity to supply 2,063.90 MMscfd but had an actual supply of 1,279.32 MMscfd.

Table 54: DGSO Allocation vs Supply Performance

S/N	Company	Supply Oblig. (MMscf/d)	Supply Capacity (MMscf/d)	Supply Capacity to Obligation (%)	Actual Supply (MMscf/d)	% Performance
1	SPDC	390	280	71.79	102.48	26.28
2	Chevron	220	426	193.64	249.53	113.42
3	ExxonMobil	230	0	0.00	0.00	0.00
4	NAOC	280	212	75.71	178.45	63.73
5	TEPNG	160	184	115.00	8.14	5.09
6	NPDC	300	406.83	135.61	319.07	106.36
7	Addax	0	0	0.00	0.00	0.00
8	Pan Ocean	8	13.58	169.75	14.74	184.25
9	Seplat	130	408.9	314.54	319.07	245.44
10	Monipulo	8	0	0.00	0.00	0.00
11	Niger Delta	6	4.74	79.00	0.90	15.00
12	Platform	18	30.27	168.17	21.89	121.61
13	Frontier	13	150.59	1158.38	60.38	464.46
14	Universal	4	0	0.00	0.00	0.00
15	AMNI	8	0	0.00	0.00	0.00
16	Consolidated	2	0	0.00	0.00	0.00
17	Continental	6	0	0.00	0.00	0.00
18	Brittania U	0.5	0	0.00	0.00	0.00
19	Energia	18	6	33.33	4.94	27.44
20	Eroton	32	0	0.00	0.00	0.00
21	New Cross	8	0	0.00	0.00	0.00
22	Aiteo	25	0	0.00	0.00	0.00
23	Dubri	3.5	0	0.00	0.00	0.00
24	NNPC PSC	450	0	0.00	0.00	0.00
	Total	2520	2122.91	84.24	1279.59	50.78



Table 55: Summary of Domestic Gas Supply Obligation Performance 2008 to 2018 (MMSCF/Day)

Years	Performance	SPDC	CNL	Exon Mobil	MAOC	Total/EPNL	NPDC	ADDAX/NPDC PSC	Pan Ocean	SERLAT	MONPULO	NDPR	Platform	Frontier	Universal	AMNI	CONOIL	CONOG Britannia U	Energia	Eroton	Newcross	Alteo	Dubri	NMPC PSC	Total	
2008	Obligation	849	351	469	245	217	45	0	65	0															2231	
	Supply	355	185	0	176	0	0	0	0	0															716	
	% Perf	41.81	52.71	0	71.84	0	0	N/A	0	N/A															32.09	
2009	Obligation	1100	455	517	328	270	120	140	65	0															2995	
	Supply	379	185	0	188	0	0	0	0	0															752	
	% Perf	34.45	40.66	0	57.32	0	0	0	0	N/A															25.11	
2010	Obligation	1364	564	640	415	327	120	140	65	0															3635	
	Supply	530	168	0	97	0	0	0	0	0															795	
	% Perf	38.86	29.79	0	23.37	0	0	0	0	N/A															21.87	
2011	Obligation	1559	644	732	479	368	120	140	65	0															4107	
	Supply	553	268	0	101	0	0	0	44.4	0															966.4	
	% Perf	35.47	41.61	0	21.09	0	0	0	68.31	N/A															235.3	
2012	Obligation	1753	725	823	544	410	120	144	65	0															4684	
	Supply	538	358	0	120	0	65	0	36	0															1117	
	% Perf	30.69	49.38	0	22.06	0	54.17	0	55.38	N/A															24.37	
2013	Obligation	1948	805	915	608	452	120	160	65	0															5073	
	Supply	156.69	318.28	0	87.29	0	32.1	0	17.39	130															1030.65	
	% Perf	8.04	39.54	0	14.36	0	26.75	0	26.75	0															20.32	
2014	Obligation	550	500	400	300	250	700	0	20	150	11	5	20	75	5	8	5	5	1				3	1000	3940.5	
	Supply	208.4	494	0	95	0	344	0	12.86	125	0	0	0	1901	0	0	0	0	0				0	0	12992.7	
	% Perf	38.07	98.8	0	31.67	0	49.14	N/A	64.3	833.3	0	0	0	2534.7	0	0	0	0	0				0	0	3237	
2015	Obligation	750	500	400	350	280	800	0	20	210	13	7	23	9	7	8	6	5	1				40	1000	4429	
	Supply	128.35	436	0	101.93	0	450	0	28.58	1725	0	0	0	8149	0	0	0	0	0				0	0	13988.5	
	% Perf	17.11	87.2	0	29.12	0	56.25	N/A	142.9	821.4	0	0	0	9054.4	0	0	0	0	0				0	0	3158	
2016	Obligation	400	270 (+200 EGT.)	250	300	180	300	0	20	130	10	7	20	15	5	10	7	6	0.7				4	350	2567.7	
	Supply	73856	197856	0	149373	0	280065	0	5128	20338	0	0	0	7063	0	0	0	0	0				0	0	980	
	% Perf	18464	99328	0	49791	0	91335	0	25.64	15646	0	0	0	4708.7	0	0	0	0	0				0	0	3818	
2017	Obligation	390	440	230	280	160	300	0	8	120	8	6	18	13	4	8	7	6	0.5	18	32	8	25	35	450	2535
	Supply	7884	438.44	0	164.17	1	162.28	0	13.58	25134	0	4.74	20.52	7722	0	0	0	0	0	159	0	0	0	0	12277.3	
	% Perf	20.21	99.65	0	58.63	9.38	54.09	0	169.75	20945	0	79	114	594	0	0	0	0	0	883	0	0	0	0	4843	
2018	Obligation	390	220	230	280	160	300	0	8	130	8	6	18	13	4	8	2	6	0.5	18	32	8	25	35	450	1870
	Supply	102.48	249.53	0	178.45	814	319.07	0	14.74	319.07	0	0.90	21.89	6038	0	0	0	0	0	494	0	0	0	0	2652.67	
	% Perf	26.28	113.42	0	63.73	509	106.36	0	184.25	245.44	0	1500	121.61	4644.6	0	0	0	0	0	2744	0	0	0	0	137308	



4.2.3.3 Domestic Gas Pricing

The Aggregate Gas Pricing Mechanism was adopted for the Domestic Gas Market

The Upstream prices are as indicated below:

Gas to Power	US\$2.5/MCF
Gas to Commercial Sector	US\$3.0/MCF
e.g Coca cola, textile industries, cement industry	
Gas Based Industry (GBI)	US\$0.9/MCF (Floor Price)
e.g Fertilizer, Petrochemical and Methanol Plants	
(Plants that use gas as feedstock)	

Tariff: Transportation tariff for **National trunk line is US\$0.8/MCF**

Note: There is no Federal Government approved transportation tariff for secondary pipeline or distribution connecting pipeline.

Companies such as SEPLAT and Frontier Oil Limited, that have met their DSO have begun to engage in willing buyer, willing seller transactions. This allow parties to determine an agreeable price out of the DSO pricing structure.

4.2.3.4 Execution of Gas Sales & Aggregation Agreement (GSAA).

Chevron Nigeria Limited (CNL) and Dangote Fertiliser Ltd (DFL) executed a GSAA to supply 210MMscf/d of Natural Gas through the Escravos Lagos Pipeline System (ELPS) to the Dangote Group fertiliser project in the Lagos Freezone (LFZ) area. The two- train plant will produce 3 million tonnes of fertiliser which will be the largest in Africa with installed capacity

- 2 x 2,200 MTPD ammonia plant
- 2 x 4000 MTPD melt urea plant
- 2 x 4000 MTPD urea granulation plants

Pre-commissioning of Train 1 was to end by May 2018 and the train had commenced using an alternative emergency supply arrangement with the intent that gas inflow will begin by July 2018 for commissioning purposes. Commissioning required an initial volume of about 15-20mmscfd, ramping up to a full capacity of 100mmscfd over a period of sixteen (16) weeks.

Nigerian Gas Company (NGC), taking into consideration the potential future customers in the LFZ will be building a 36 inch, 50km gas pipeline from KP292 tie in on the ELPS with a targeted project completion by end of June 2018.



4.2.3.5 Re-categorisation of Textile Industry

In 2018, a presidential approval was granted to re-categorise the textile industry from strategic commercial sector to strategic industrial sector. The approval was made into effect, through a letter from HMSPR, to Gas Aggregation company of Nigeria (GACN) and the Nigerian Gas Marketing Company (NGMC), instructing the immediate implementation of the approved contractual structure for the gas value chain as:

- Volume of Gas – 8.5MMscfd
- Price of Gas - \$1.40/Mscf (Export Parity Price)
- Transmission tariff (major trunk or pipeline) - \$0.80/Mscf
- Distribution tariff (connecting pipelines from city gate to end user) - \$0.20/Mscf
- Administrative cost of NGMC - \$0.10/Mscf

On 4th January 2019, an official gazette resolving the commercial issues between consumers of gas from the textile/manufacturing industries and downstream suppliers and local distribution companies was published. The approved pricing structure are as indicated below:

Table 56: Approved Gas Supply Structure for the Textile Industry

Sector	2018	2019
Upstream EPP (\$/Mcf)	1.40	
Midstream (\$/Mcf)	0.80	0.80
Downstream (\$/Mcf)	1.65	1.65
Total (\$/Mcf)	3.85	3.85 ±

The prices are reflective of OECD market activity.

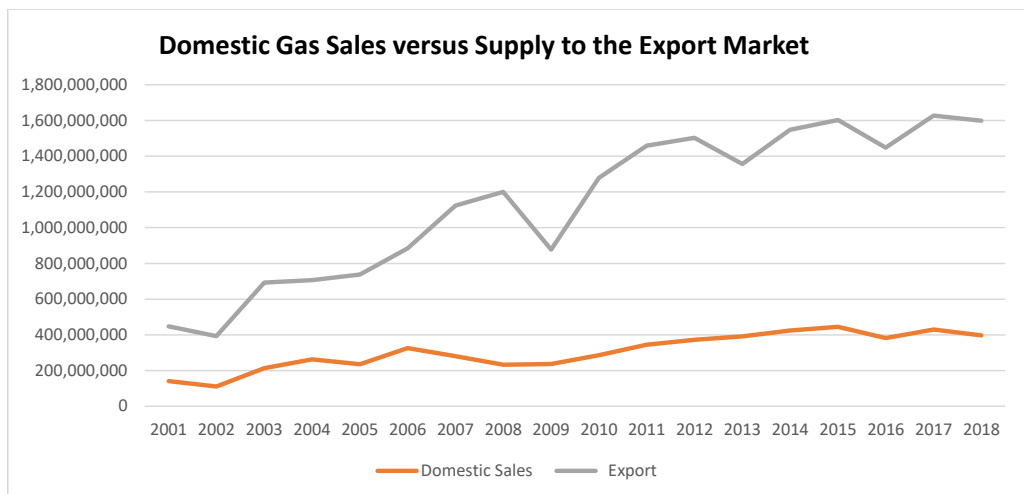


Figure 29: Domestic Gas Sales Versus Sales to NLNG (Export)



4.2.4 Gas Supply Infrastructures

Table 57: Summary of Major Gas Supply Facilities

S/N	Company	Facility	Facility Type	Location	Design Capacity (Mmscf/D)	Facility Design Life	Date Of Commissioning
1				Afiesere	8	25yrs	1977
2		Afiesere Gas Lift Compressor Station	Compressor Station	Afiesere	21	25yrs	NGC
3		Aghada AGG Plant	AGG Plant	Aghada	58	25yrs	2002
4		Aghada 1 FS Booster Compressor Station	Compressor Station	Aghada	12	25yrs	2002
5		Alakiri NAG Plant	NAG Plant	Alakiri	120	25yrs	1987
6		Awoba AGG Plant	AGG Plant	Awoba	50	25yrs	2004
7		Batan FS Booster Compressor Station	Compressor Station	Batan	10	25yrs	2002
8		Belema FS Booster Compressor Station	Compressor Station	Belema	12	25yrs	2002
9		Belema AGG Plant	AGG Plant	Belema	55	25yrs	2002
10		Bonny NAG Plant	NAG Plant	Bonny	450	25yrs	2002
11		Cawthorne Channel AGG Plant	AGG Plant	Cawthorne Channel	150	25yrs	2005
12		EGWA 1 FS Booster Compressor Station	Compressor Station	EGWA	10	25yrs	2002
13		EGWA 2 FS Booster Compressor Station	Compressor Station	EGWA	10	25yrs	2002
14		Ekulama 1 FS Booster Compressor Station	Compressor Station	Ekulama	12	25yrs	2002
15		Ekulama 2 FS Booster Compressor Station	Compressor Station	Ekulama	12	25yrs	2002
16		Eriemu NGC Compressor Station	Compressor Station	Eriemu	10	25yrs	2002
17		Escravos Beach FS NGC Compressor Station	NGC Compressor Station	Escravos Beach	18	25yrs	NGC
18		Imo River 2 FS Booster Compressor Station	Compressor Station	Imo River	12	25yrs	2002
19	SPDC	Imo River 3 FS Booster Compressor Station	Compressor Station	Imo River	12	25yrs	2002
20		Imo River AGG Plant	AGG Plant	Imo River 1	65	25yrs	2002
21		Jones Creek NGC Compression Station	Compressor Station	Jones Creek	18	25yrs	NGC
22		Kokori NGC Compressor Station	Compressor Station	Kokori	8	25yrs	NGC
23		Krakama FS Booster Compressor Station	AGG Plant	Krakama	5	25yrs	Not Commissioned
24		Nembe Creek 1 FS Booster Compressor Station	Compressor Station	Nembe Creek	10	25yrs	2001
25		Nembe Creek 2 FS Booster Compressor Station	Compressor Station	Nembe Creek	10	25yrs	2001
26		Nembe Creek 3 FS Booster Compressor Station	Compressor Station	Nembe Creek	5	25yrs	2001
27		Nembe Creek 4 FS Booster Compressor Station	Compressor Station	Nembe Creek	5	25yrs	2001
28		Nkali FS Booster Compressor Station	Compressor Station	Nkali	12	25yrs	2003
29		Oben NAG Plant	NAG Plant	Oben	240	25yrs	1982/Expanded 2015
31		Oben NGC Compressor Station	Compressor Station	Oben	16	25yrs	NGC
32		Oben AG Compressor Station	Compressor Station	Oben	30	25yrs	2015
33		Obigbo North AGG Plant	AGG Plant	Obigbo North	54	25yrs	1989
34		Obigbo North NAG Plant	NAG Plant	Obigbo North	90	25yrs	1984
35		Odeama Creek FS Booster Compressor Station	Compressor Station	Odeama Creek	5	25yrs	Not Commissioned
36		Odidi AGG Plant	AGG Plant	Odidi	80	25yrs	2001
37		Odidi NGC Compressor Station	Compressor Station	Odidi	18	25yrs	NGC
38		Oguta Gas Injection Plant	Gas Injection Plant	Oguta	40	25yrs	2004*



S/N	Company	Facility	Facility Type	Location	Design Capacity (Mmscf/D)	Facility Design Life	Date Of Commissioning
39		Okoloma NAG Plant	NAG Plant	Okoloma	240	25yrs	2008
40		Olomoro-Oleh NGC Compressor Station	Compressor Station	Olomoro-Oleh	3.3	25yrs	NGC
41		Oweh NGC Compressor Station	Compressor Station	Oweh	5.5	25yrs	NGC
42		Santa Barbara FS Booster Compressor Station	Compressor Station	Santa Barbara	8	25yrs	2001
43		Sapele NAG Plant	NAG Plant	Sapele	120	25yrs	1978
44		Sapele NGC Compressor Station	Compressor Station	Sapele	24	25yrs	2003
45		Soku FS Booster Compressor Station	Compressor Station	Soku	5	25yrs	2002
46		Soku LNG Gas Supply Plant	AG/NAG Plant	Soku	1100	25yrs	1999
47		Ughelli East NAG Plant	NAG Plant	Ughelli East	150	25yrs	1966
48		Utorogu NAG Plant	NAG Plant	Utorogu	270**	25yrs	1988
49		Utorogu NGC Compressor Station	Compressor Station	Utorogu	7	25yrs	2004
50		Uzere West NGC Compressor Station	Compressor Station	Uzere West	10	25yrs	NGC
51		Agbami FPSO	FPSO	Agbami – Deep Offshore	415		
52		Escravos Gas Plant	Gas Plant	Escravos Island	680		
53		Meren Gas Gathering Compression Station	Compressor Station	Meren-Offshore	24		
54		Okan Gas Gathering Compression Station	Compressor Station	Okan-Offshore	140		
55	CNL	Meji Gas Gathering Compressor Station	Compressor Station	Meji-Offshore	70		
56		Abiteye Gas Compression Plant	Gas Compression Plant	Abiteye	29		
57		Oloro Creek Compression Station	Compressor Station	Oloro	52		
58		Dibi Compression Station	Compressor Station	Dibi	52		
59		Escravos Gas To Liquid Plant	GTL Plant	Escravos Island	328/340	25	
60		Erha FPSO	FPSO	Erha-Deep Offshore	340		March – 2006
61		OSO-RX (Offshore)		Offshore	600		
62	MPNU	BRT LPG Fractionating Plant	Fractionation Plant	Bonny Island	85MBPD		
63		BRT LPG Fractionating Plant	Fractionation Plant	Bonny Island			
64		EAP - GX (Offshore)	Fractio-nation Plant	Offshore	950		
65		Obite AG Plant	AG Plant	Obite-Obaagi	334.1		
66	TEPNG & TUPNI	Amenam Kpono AG Plant – Offshore	AG Plant	Amenam/ Kpono	441.5		
67		Akpo FPSO	Gas Export/Injection	Akpo Offshore	215		
68		Okpai Gas Plant		Kwale			
69		Irri Isoko Condensate Flow Station	Flow Station	Isoko			
70	NAOC & NAE	ABO FPSO	FPSO	Offshore			
71		OB/OB AG Plant	AG Plant	Obaifo/ Obrikom	654		
72		Kwale Gas Compression Station	Compressor Station		375		
73		Izombe Gas Injection Plant	Injection Plant	Imo/Izombe	48 @3500 PSI		
74	ADDAX	Izombe Flare Down Gas Compression Plant	Compression Plant	Imo/Izombe	16.78 @ 3500 PSI		
75	NLNG	LNG Plant	NAG Plant	Bonny	680	20	EGP1/2 (1997) EGP3 (2010)



S/N	Company	Facility	Facility Type	Location	Design Capacity (Mmscf/D)	Facility Design Life	Date Of Commissioning
76	POOCN	Ogharefe Gas Plant		Ogharefe			
77	NPDC	Early Production Facility		Ogharefe			
78		Gas Handling Facility	AG Plant	Ogharefe			
79	Global Gas & Refining Limited	BOT FPSO	Gas Processing Plant	Bonny River			
80		Oben Gas Plant	NAG Plant	Oben	240	25yrs	1982
81	SEPLAT	Sapele Gas plant	NAG Plant	Sapele	120	25yrs	1978
82		Jisike AG Plant	Compressor Station	Jisike-Offshore			
83	ENERGIA/XENERGI	Nedo Gas Plant	AG Plant	Ebendo	25		2011
84		Odidi					
85	NPDC	Ughelli East			2836.5		
86		Utorogu			6807.6		
87	PAN OCEAN	Ovade-Ogharefe GPP			130		
88	NAOC	Obiafu/Obrikom			654		
89		Kwale Gas Compression Station	Compression Station		375		
90		Egbaoma Gas Processing Plant	Gas Processing Plant	Egbaoma	30	25	
91	PLATFORM	Egbaoma Wet Gas Met Syst	Metering System	Egbaoma	40		
92	FRONTIER	Uquo Gas Processing Facility	Gas Processing Facility		200		

**Table 58: Status of Major Midstream Gas Projects**

S/N	Project Title	Company	Project Objective	Capacity	Project / Location	Planned Completion Date
1	LPG Extraction Plant	Green Energy Int. Ltd.	To eliminate gas flaring by incorporating an LPG extraction facility	12mmscfd	Otakikpo Marginal Field, Rivers State	Q3 2019
2	Train 3 Mini LNG Plant	Greenville Oil & Gas Co. Ltd.	To bridge the natural gas supply gap to promote economic and social development in parts of Northern Nigeria	0.25 Million TPA LNG	Rumuji, Rivers State	Q3 2019
3	Ogbele Gas Plant Expansion/Enhancement Project	Niger Delta Petroleum Resources Ltd.	To increase the capacity of the existing Ogbele Gas Plant.	300MMSCFD	Ogbele, Rivers State	D FVV
4	Train 7 NLNG Project	Nigerian LNG Ltd. (NLNG)	To expand the existing LNG facility and relevant facilities.	7 million TPA LNG	Bonny Island, Rivers State	Q1 2024
5	Ovade-Ogharefe Gas Plant	Pan Ocean Oil Corporation	To eliminate gas flaring at the Ovade-Ogharefe oil field	200 MMSCFD	Ovade Ogharefe, Delta State	Q2 2019
6	Seplat -Assa North/ Ohaji South (ANOH) Midstream Project	Seplat Pet. Dev. Co. Plc.	To support the Federal Government's National Gas Master Plan aspirations, by profitably developing 4.3 Tscf of gas.	30MMSCFD	Ohaji – Egbema LGA, Imo State	Q1 2021
7	SPDC=Assa North/ Ohaji South Gas Plant Project	Shell Pet. Dev. Co. (SPDC)	To support the Federal Government's National Gas Master Plan aspirations, by profitably developing 4.3 Tscf of gas.	300 MMSCFD	Ohaji – Egbema LGA, Imo State	Q1 2021
8	Sapele Gas Plant Upgrade Project	Seplat Pet. Dev. Co. Plc.	To replace the existing gas plant at Sapele with a new integrated gas processing plant where both AG and NAG will be conditioned to produce sales gas which meets WAGP specifications.	85MMSCFD	Sapele, Delta State	Q4 2019
9	Oben Gas Plant LPG Recovery Project	Seplat Pet. Dev. Co. Plc.	To incorporate an LPG plant into the existing Oben Gas Plant in compliance with Federal Government's flare out policy by reducing gas flaring to the barest minimum.	140 TPD LPG	Oben, Edo state	Q4 2019
10	LPG Plant Project	Ashtavinayak Hydrocarbon Nigeria Limited	To produce and supply LPG to large/bulk off takers to meet industrial requirements and/or company engaged in LPG bottles refilling.	234TPA LPG	Kwale LGA, Delta State.	Q4 2019



4.2.5 Petrochemicals

Table 59: Major Petrochemical Plants

S/N	Plant Location	Ownership	Processing Plant & Capacity Type	MTPA	Feedstock	Products
1	Warri, Delta State	NNPC	Polypropylene (PP) Carbon Black (CB)	35,000 18,000	Propylene-rich Feed (PRF) Decant oil	Polypropylene (PP) Carbon Black (CB)
2	Kaduna, Kaduna State	NNPC	Linear Alkyl Benzene (LAB)	30,000	i. Raw kerosene ii. Reformate	i. Linear Alkyl Benzene (LAB) ii. Heavy 2 iii. Kero solvent
3	Eleme, Rivers State	i. Indorama	Polypropylene (PP)	120,000	i. Propylene-rich Feed (PRF)	i. Polypropylene Homo-polymer (PPHP)
		ii. Federal Govt.			ii. Natural Gas Liquid (NGL)	ii. Polypropylene Co-polymer (PPCP)
		iii. Rivers State Govt.	Polyethylene (PE)	360,000		i. High Density Polyethylene (HDPE) ii. Linear Low Density Polyethylene (LLDPE)
			Olefin	440,000		Olefin

Table 60: Major Petrochemical Plants Projects

S/N	Plant Name	Plant type	Capacity by unit	Output yield	Status	Start year	Estimated completion
1	Dangote Refinery & Petrochemicals Co	Petrochemical plant lined up near the Refinery	1.3 Million MTPA	1.3 million MTPA	Under Construction	2015	2019
2	Dangote Fertilizer Limited	Urea-based fertilizer plant	6,849.32 MTPD	2.5 million MTPA	Under Development	2015	2018
3	Quantum Methanol Limited	Methanol Plant	3,000 MTPD	3000 MTPD	Early Stage	N/A	N/A
4	Brass Fertilizer Co. Ltd	Methanol and Urea fertilizer plant	• 2.45 Million MTPA Urea • 1 Million MTPA Methanol	2.45 Million MTPA	Planning	N/A	N/A
5	Pamaque Nig. Ltd	Hydrocarbon Refrigerant from LPG	20MMscf/d hydrocarbon refrigerant	20MMscf/d	Early Stage	N/A	N/A
6	Uruga Methanol Limited (Honeywell Group Ltd)	Methanol plant	1.2 million MTPA methanol for export	1.2 Million MTPA	Early Stage	N/A	N/A
7	Indorama Eleme Fertilizer & Chemicals Ltd.	urea fertiliser plant	1.4 million MTPA		Early Stage	2018	N/A
8	Sterling Petrochemicals & Fertilizers Limited	LPG	1 million MTPA LPG,				
		Petrochemical/Polymer Power Plant	1 million M TPA Polymer	1 million MTPA	Early Stage	2019	N/A



4.2.6 Lubricant Blending Plants

Table 61: Existing Blending Plants, their Locations and Total Capacities

S/N	Market Segment	Name of Company	Location	Base Oil storage capacity (liters)
1	Major	Total Nigeria Plc	SCOA Yard Kirikiri Town, Lagos	9,825,400
2		Conoil Plc	No. 1, AP/Conoil Road, Apapa, Lagos State.	9,075,130
3		Total Nig. Plc	2, Ibrahim Dasuki Avenue, Kudenda, Kakuri, Kaduna South, Kaduna State.	1,900,000
4		MRS Oil Nigeria Plc	5, Alapata Road, Apapa, Lagos	11,000,000
5		Total Nigeria Plc	Ajoki Road, Warri North, Koko, Delta	10,050,000
6		11 Plc (Formerly Mobil Oil Nig. Plc)	No. 1 Mobil Road, Apapa, Lagos State.	24,966,122
7		OVH Marketing Plc II (Formerly Oando Plc II)	Along Kachia Road, Chikun, Kaduna.	7,200,000
8		OVH Marketing Plc I (Formerly Oando Plc I)	Behind NNPC Refinery, Rido Village, Chikun, Kaduna	8,064,808
9		OVH Marketing Plc (Oando Marketing Plc)	Oando Terminal 2, Apapa	9,350,000
10	Independent	Lubcon Limited	Pilgrims Camp Road, Adewole Industrial Estate, Ilorin West, Kwara State.	5,000,000
11		Ammasco International Limited	No. 17 Club Road, Bompai Industrial Area, Kano State.	6,600,000
12		Specialty Oil Company Nig Ltd	Plot IN/62 Obodoukwu Road, Ogboro, Onitsha, Anambra State	425,000
13		Tonimas Nigeria Limited	KM 5, Aba – Umuahia Expressway, Aronga, Abia State.	4,494,348
14		Dozzy Oil & Gas Ltd	Plot ION/10-14 Niger Bridge Industrial Layout, Onitsha, Anambra State.	3,000,000
15		Ibeto Petrochemicals Industry Limited	60/61 Igwe Orizu Road, Nnewi, Anambra State.	1,200,000
16		Moye Oil & Chemical Limited	KM 3, Iwo – Ibadan Road, Osogbo, Osun State	926,179
17		Whiz Products W.A Limited	Udo Ozalla, Isuofia, Anambra State.	900,000
18		Dezern Nigeria Limited	Ndibezani, Arondizuogu Area, Okiogwe, Imo State.	990,000
19		Equatorial Pet. Coastal & Process Ltd.	Pilgrims Camp Road, Ilorin West, Kwara State.	2,000,000
20		Forte Oil Plc (African Petroleum Plc)	AP/Conoil Road, Apapa, Lagos State	8,000,000
21		Zico Pet. Marketing Company	KM 8, Auchu – Benin Road, Aduwama, Benin, Edo State.	226,597
22		Veeco Oil resources Limited	Independence Road, Kano	264,000
23		Ascon Oil Company Ltd	KM 30 Lagos-Ibadan Expressway, Magboro, Ogun State	356,000
24		Eterna Industries Plc.	Lagos-Ibadan Expressway, Sagamu, Ogun	2,132,000
25		T.Y Chemicals Limited	Chikun, Kaduna	700,000
26		Abnnox Oil Limited	10A, Upper Iweka Road, Onitsha, Anambra	99,000
27		A-Z Petroleum Products Limited	Rimco Drive Akwu-Uru Industrial Estate, Nnewi, Anambra State.	2,110,000
28		Jezco Oil Nigeria Ltd	Plot L12, ikenga Industrial Layout, Awka, Anambra State	360,000
29		Onyx Crown Oil Limited	Plot 6, Onitsha Road, Layout, Owerri Road, Imo State	355,000
30		HOGL Energy Limited (Formerly Honeywell Oil & Gas Ltd).	39, Town Planning Way, Ilupeju, Industrial Estate, Lagos	187,000
31		Bestlub International Nig. Ltd.	No. 167 Happy Home Avenue, Kirikiri, Industrial Estate, Apapa, Lagos	360,000
32		Highlight Oil and Gas Limited	Asese Area, Along Lagos – Ibadan Expressway, Agbodi Village, Ogun	375,000
33		Techno Oil Limited	Plot 28, Block 118, Lekki – Epe Expressway, Ikate Elegushi Layout, Lagos State	210,000
34		Ronad Oil and Gas (WA) Ltd	Plot 1, Industrial Layout, Off Bamk Road, Uzii, Idiatu North, Imo State.	6,684,000
35		Premier Petroleum Limited	Km 7, Aba-Umuahia/Osisioma, Abia State.	3,135,000
36		Alsa Petrochemical Industries Ltd	At Omuaku, Uturu, Abia State	350,000
37		Necit Nigeria Limited	Necit Plaza, Canteen Daji Industrial Area, Sokoto North, Sokoto.	500,000
38		I.M.N Auto Parts Ltd,	Kontagora Sokoto road Niger State	245,000
39		Mubeco Petroleum Company Ltd	KM 2 Zaria Kaduna Road Kaduna State	1,500,000
40		Petroleum Managers Ltd	Along Oshodi-Apapa Expressway, Isolo, Lagos	270,000
41		Peace Petroleum Nigeria Ltd	No.2, Destiny Layout, Emene, Enugu East, Enugu State.	450,000
42		Saclux Industries Nigeria Ltd.	Aba Road, Off NNPC Filling Station (Betheliland), Umuahia North, Abia State.	1,150,000
43		Westbridge Energy & Lubricants Ltd.	KM 42, Lagos-Ibadan Expressway, Orinmerunmu, Obafemi Owode L.G.A, Mowe, Ogun State.	61,500
44		Polar Petrochemical Limited (Formerly Ejide Energy Limited)	Plot 176 Afon Industrial Layout, Laduba, Asa L.G.A, Kwara State	3,135,000



S/N	Market Segment	Name of Company	Location	Base Oil storage capacity (liters)
45		Delight Energy Limited	Orimerumun Village, Owode/Obafemi L.G.A, Ogun State.	311,486
46		Vitme Ventures Limited	Along Benin-Sagamu Expressway, Ijebu Ode, Ogun State.	302,432
47		Seahorse Lubricant Industries Limited	KM 24, Onitsha-Owerri Expressway, Ozubulu, Anambra State.	4,888,620
48		Mate Energy Industries Limited	Along Redeem -Shimawa Road, Alawun Village, Obafemi Owode, Ogun State.	1,506,000
49		Autosheck Oil and Gas Limited	Plot C 35B, Amuwo Odofin Industrial Estate, Lagos State.	1,803,568
50		Salasar Enterprise Limited	Plot 19, Wabel Junction Behind Nigerian Cable Factory, Sharada, Kano State	6,300,000
51		Axxon Energy Limited	2, Axxon Close Off Chevron Clinic Road, Warri, Delta State.	274,000
Total Base Oil Storage Capacity				175,568,190

Table 62: Licences / Approvals / Permits Granted

S/N	Facility Type		Licences / Approvals / Permit Issued			
1	Process Plants	Refineries	11			
2		Fertilizer	2			
3		Petrochemical				
4		Gas Refining	9			
5	Oil and Gas Production	Early Production Facility	2			
6		Production Platform	6			
7		Floating Production facility				
8		Gas Production/Handling	9			
9	Measurement	Metering systems	29			
10	Transportation	Oil & Gas Pipelines	PTS	OPLL	Length Constructed (km)	
			46	26	Oil	16.5
					Gas	16.5

***Approval to use LACT Unit for Export**



4.3 DOWNSTREAM

4.3.1 Summary of Refined Products

4.3.1.1 Domestic Production Summary

Table 63: 2018 Refinery Production Volumes (Litres)

Month	Product	Warri Refining & Petrochemical Co. (WRPC)	Kaduna Refining & Petrochemical Co. (KRPC)	PortHarcourt Refinery (PHRC)	Niger Delta Petroleum Resources (NDPR)	Total, Litres
January	Petrol	0.00	0.00	78,563,826.00		78,563,826.00
	Diesel	0.00	3,597,924.00	46,976,712.00	2,223,119.42	52,797,755.42
	Kerosene	0.00	5,881,568.00	35,222,880.00	0.00	41,104,448.00
	Fuel Oil	0.00	5,965,050.00	23,924,250.00	0.00	29,889,300.00
	LPG	0.00	0.00	0.00	0.00	0.00
February	Petrol	44,638,000.00	0.00	47,243,430.00	0.00	91,881,430.00
	Diesel	7,635,000.00	3,018,252.00	47,545,908.00	1,554,418.83	59,753,578.83
	Kerosene	7,108,000.00	0.00	34,006,896.00	0.00	41,114,896.00
	Fuel Oil	25,789,000.00	8,424,150.00	11,705,400.00	0.00	45,918,550.00
	LPG	0.00	0.00	0.00	0.00	0.00
March	Petrol	53,956,000.00	0.00	26,160,228.00	0.00	80,116,228.00
	Diesel	47,232,000.00	7,103,892.00	0.00	2,453,651.00	56,789,543.00
	Kerosene	47,242,000.00	1,509,200.00	0.00	0.00	48,751,200.00
	Fuel Oil	33,201,000.00	5,614,350.00	0.00	0.00	38,815,350.00
	LPG	0.00	0.00	0.00	0.00	0.00
April	Petrol	31,152,000.00	0.00	71,923,194.00		103,075,194.00
	Diesel	19,884,000.00	1,021,992.00	18,557,652.00	1,797,828.39	41,261,472.39
	Kerosene	2,362,000.00	0.00	22,677,424.00	0.00	25,039,424.00
	Fuel Oil	31,043,000.00	6,500,550.00	74,650,800.00	0.00	112,194,350.00
	LPG	0.00	0.00	0.00	0.00	0.00
May	Petrol	20,431,000.00	906,516.00	46,841,130.00		68,178,646.00
	Diesel	29,344,000.00	0.00	28,010,496.00	2,430,438.86	59,784,934.86
	Kerosene	36,386,000.00	2,143,680.00	20,392,064.00	0.00	58,921,744.00
	Fuel Oil	43,109,000.00	9,192,750.00	3,451,350.00	0.00	55,753,100.00
	LPG	0.00	0.00	0.00	0.00	0.00
June	Petrol	60,252,620.00	2,655,180.00	71,511,507.00	0.00	134,419,307.00
	Diesel	32,695,340.00	0.00	50,007,768.00	1,410,217.35	84,113,325.35
	Kerosene	22,456,900.00	0.00	48,898,080.00	0.00	71,354,980.00
	Fuel Oil	41,215,000.00	7,073,850.00	42,202,650.00	0.00	90,491,500.00
	LPG	0.00	0.00	0.00	0.00	0.00
July	Petrol	47,637,000.00	2,015,523.00	0.00	0.00	49,652,523.00
	Diesel	12,129,000.00	0.00	0.00	1,355,843.69	13,484,843.69
	Kerosene	15,686,000.00	0.00	0.00	0.00	15,686,000.00
	Fuel Oil	60,035,000.00	2,774,100.00	0.00	0.00	62,809,100.00
	LPG	0.00	0.00	0.00	0.00	0.00
August	Petrol	20,953,000.00	0.00	0.00	0.00	20,953,000.00
	Diesel	19,463,000.00	0.00	0.00	664,248.94	20,127,248.94
	Kerosene	11,340,000.00	0.00	0.00	0.00	11,340,000.00
	Fuel Oil	13,234,000.00	0.00	0.00	0.00	13,234,000.00
	LPG	0.00	0.00	0.00	0.00	0.00
September	Petrol	17,987,000.00	3,974,724.00	0.00	0.00	21,961,724.00
	Diesel	0.00	278,196.00	0.00	2,390,533.04	2,668,729.04
	Kerosene	0.00	0.00	0.00	0.00	0.00
	Fuel Oil	0.00	8,453,550.00	0.00	0.00	8,453,550.00
	LPG	0.00	0.00	0.00	0.00	0.00
October	Petrol	35,829,000.00	2,255,562.00	0.00		38,084,562.00
	Diesel	0.00	0.00	0.00	2,091,159.96	2,091,159.96
	Kerosene	0.00	5,025,328.00	0.00	0.00	5,025,328.00
	Fuel Oil	0.00	9,052,050.00	0.00	0.00	9,052,050.00
	LPG	0.00	0.00	0.00	0.00	0.00
November	Petrol	26,965,000.00	3,442,347.00	0.00	0.00	30,407,347.00
	Diesel	2,736,000.00	1,796,052.00	0.00	2,045,371.61	6,577,423.61
	Kerosene	2,247,000.00	0.00	0.00	0.00	2,247,000.00
	Fuel Oil	14,256,000.00	4,293,450.00	0.00	0.00	18,549,450.00
	LPG	0.00	0.00	0.00	0.00	0.00
December	Petrol	26,159,000.00	2,267,631.00	0.00	0.00	28,426,631.00
	Diesel	502,000.00	1,175,640.00	0.00	2,039,171.11	1,365,531.11



Month	Product	Warri Refining & Petrochemical Co. (WRPC)	Kaduna Refining & Petrochemical Co. (KRPC)	PortHarcourt Refinery (PHRC)	Niger Delta Petroleum Resources (NDPR)	Total, Litres
	Kerosene	11,982,000.00	0.00	0.00	0.00	11,982,000.00
	Fuel Oil	9,875,000.00	9,581,250.00	0.00	0.00	19,456,250.00
	LPG	0.00	0.00	0.00	0.00	0.00
	Petrol	385,959,620.00	17,517,483.00	342,243,315.00	0.00	745,720,418.00
	Diesel	171,620,340.00	15,640,668.00	191,098,536.00	22,456,002.20	400,815,546.20
Total	Kerosene	156,809,900.00	14,559,776.00	161,197,344.00	0.00	332,567,020.00
	Fuel Oil	271,757,000.00	76,925,100.00	155,934,450.00	0.00	504,616,550.00
	LPG	0.00	0.00	0.00	0.00	0.00

Table 64: Summary of Refinery Production Volumes (Litres)

Month	Product	Warri Refining & Petrochemical Co. (WRPC)	Kaduna Refining & Petrochemical Co. (KRPC)	PortHarcourt Refinery (PHRC)	Niger Delta Petroleum Resources (NDPR)*	Total, Litres
2010	Petrol	642,375,300.87	238,746,772.17	267,678,377.82	NA	1,148,800,451.54
	Diesel	774,392,205.60	301,928,947.32	222,747,567.96	NA	1,299,068,721.38
	Kerosene	497,658,194.88	148,752,825.76	182,644,726.88	NA	829,055,748.07
	Fuel Oil	NA	NA	NA	NA	NA
	LPG	NA	NA	NA	NA	NA
2011	Petrol	673,147,603.35	409,886,184.51	528,246,076.32	NA	1,611,279,865.13
	Diesel	741,801,800.28	261,609,465.60	412,883,359.56	5,035,254.48	1,421,329,877.73
	Kerosene	475,122,598.72	146,908,521.76	292,217,217.60	NA	914,248,338.68
	Fuel Oil	NA	NA	NA	NA	NA
	LPG	NA	NA	NA	NA	NA
2012	Petrol	442,815,096.60	414,971,109.00	303,357,131.10	NA	1,161,143,364.20
	Diesel	489,017,305.44	343,490,568.36	338,511,639.84	15,480,396.84	1,186,499,913.09
	Kerosene	340,193,096.32	200,358,940.32	194,727,887.20	NA	734,836,404.33
	Fuel Oil	NA	NA	NA	NA	NA
	LPG	NA	NA	NA	NA	NA
2013	Petrol	479,703,123.45	535,777,776.00	346,416,265.62	NA	1,361,897,160.51
	Diesel	631,386,762.36	359,047,440.00	204,452,968.32	5,330,316.84	1,200,217,487.14
	Kerosene	469,820,736.00	246,845,971.68	170,783,030.88	NA	887,449,739.15
	Fuel Oil	NA	NA	NA	NA	NA
	LPG	NA	NS	NA	NA	NA
2014	Petrol	400,793,198.76	186,869,677.59	87,312,697.74	NA	674,975,574.49
	Diesel	329,485,494.96	160,435,284.00	666,992,498.04	15,690,591.96	1,172,603,874.45
	Kerosene	242,358,596.48	109,751,426.40	224,460,999.84	NA	576,571,023.10
	Fuel Oil	NA	NA	NA	NA	NA
	LPG	NA	NA	NA	NA	NA
2015	Petrol	113,661,000.99	54,529,994.88	209,705,003.37	NA	377,896,000.22
	Diesel	108,105,999.48	28,000,997.76	139,895,002.44	22,310,876.88	298,312,876.99
	Kerosene	91,504,003.36	25,384,004.80	84,678,994.40	NA	201,567,000.13
	Fuel Oil	NA	NA	NA	NA	NA
	LPG	NA	NA	NA	NA	NA
2016	Petrol	281,122,559.91	161,200,269.00	357,780,141.00	NA	800,102,983.32
	Diesel	191,183,042.40	127,704,768.00	666,663,540.00	19,424,238.36	1,004,975,588.76
	Kerosene	146,619,334.40	71,230,544.00	298,480,336.00	NA	516,330,202.08
	Fuel Oil	NA	NA	NA	NA	NA
	LPG	NA	NA	NA	NA	NA
2017	Petrol	100,119,060.00	253,674,288.00	573,779,034.00	NA	927,572,322.00
	Diesel	217,209,384.00	222,723,252.00	598,813,980.00	22,117,164.00	1,060,864,289.00
	Kerosene	160,270,880.00	98,764,512.00	430,356,080.00	NA	689,391,662.00
	Fuel Oil	112,016,100	62,681,850	602,938,350	NA	777,636,690.00
	LPG	0	0	832,667,957.74	NA	83,266,795.74
2018	Petrol	385,959,620.00	17,517,483.00	342,243,315.00	0.00	745,720,418.00
	Diesel	171,620,340.00	15,640,668.00	191,098,536.00	22,456,002.20	400,815,546.20
	Kerosene	156,809,900.00	14,559,776.00	161,197,344.00	0.00	332,567,020.00
	Fuel Oil	271,757,000.00	76,925,100.00	155,934,450.00	0.00	504,616,550.00
	LPG	0.00	0.00	0.00	0.00	0.00

* NDPR commenced diesel production in May 2011.



4.3.1.2 Petroleum Product Importation

4.3.1.2.1 Approved Petroleum Product Import Permit Volumes

Table 65: 2018 Petroleum Products Volumes as per Import Permits Issued (Metric Tonnes)*

Month	Petrol	Diesel	HouseHold Kerosene	Aviation Fuel	Fuel Oil	Base Oil	Bitumen
January	1,150,000	1,274,500	195,000	392,000	125,000	505,000	40,000
February	350,000	450,000	55,000	192,500	-	75,000	150,700
March	745,000	972,500	200,000	257,500	30,000	69,500	10,000
April	1,075,000	967,500	225,000	365,000	50,000	165,000	72,400
May	783,000	951,000	210,000	265,000	-	145,000	152,500
June	755,000	1,127,500	235,000	397,500	100,000	65,300	-
July	420,000	410,000	135,000	130,000	10,000	30,000	54,200
August	475,000	492,500	170,000	200,000	35,000	98,600	45,000
September	350,000	745,000	110,000	175,000	100,000	105,000	110,000
October	875,000	795,000	170,000	280,000	20,000	80,460	24,000
November	690,000	950,500	196,000	325,000	325,000	70,000	88,600
December	360,000	780,000	115,000	135,000	115,000	95,000	104,500
Total	8,028,000	9,916,000	2,016,000	3,114,500	500,000	1,503,860	851,900

*This excludes importation by NNPC

Table 66: Petroleum Products Volumes as per Import Permits Issued (Metric Tonnes) *

Year	Petrol	Diesel	HouseHold Kerosene	Aviation Fuel	Fuel Oil	Base Oil	Bitumen
2014	10,665,337	14,356,908	705,000	2,623,500	1,640,000	1,327,400	1,105,500
2015	10,104,300	14,981,597	1,312,000	3,884,500	2,340,800	1,602,680	952,300
2016	14,052,500	20,116,000	3,708,500	3,733,000	1,853,000	1,616,450	665,250
2017	14,538,000	15,158,000	3,452,500	3,755,500	855,000	1,252,310	829,600
2018	8,028,000	9,916,000	2,016,000	3,114,500	500,000	1,503,860	851,900

*This excludes importation by NNPC

Table 67: Approved Product Import (By Import Permits) 2017 vs 2018

Products	MAJORS (MT)			DAPPMA(MT)			TRADERS (MT)			Total(MT)	
	2017	2018	% Diff.	2017	2018	% Diff.	2017	2018	% Diff.	2017	2018
Petrol	1,835,000	1,995,000	9%	10,078,000	5,128,000	49%	715,000	905,000	26%	12,628,000	8,028,000
Diesel	805,000	1,040,000	29%	7,554,000	5,296,000	29%	5,340,000	3,580,000	33%	13,699,000	9,916,000
HHK	150,000	210,000	40%	2,571,500	1,401,000	45%	305,000	405,000	33%	3,026,500	2,016,000
ATK	510,000	690,000	35%	1,406,500	995,000	29%	1,409,000	1,429,500	1%	3,325,500	3,114,500
Fuel Oil	70,000	60,000	14%	305,000	230,000	24%	405,000	210,000	48%	780,000	500,000
Base Oil	275,000	385,000	6%	380,000	633,000	66%	405,310	485,860	20%	1,060,310	1,503,860
Bitumen	60,000	30,000	50%	425,000	613,800	44%	165,000	208,100	26%	650,000	851,900
Total	3,705,000	4,410,000	19%	22,720,000	14,296,800	37%	8,744,310	7,223,460	17%	35,169,310	25,930,260



4.3.1.2.2 Actual Petroleum Products Importation

Table 68: Summary of 2018 Petroleum Products Importation by Market Segment (Litres)

Month	Petrol	Diesel	HouseHold Kerosene	LPG	Aviation Fuel	Fuel Oil	Base Oil	Bitumen
NNPC, Litres								
January	1,512,753,492.45	738,351,191.38	33,623,062.70	7,405,894.11	6,106,681.50	0.00	0.00	0.00
February	1,600,623,346.19	31,336,709.81	27,081,798.13	0.00	0.00	0.00	0.00	0.00
March	2,200,163,794.79	0.00	0.00	28,963,131.09	0.00	0.00	0.00	0.00
April	1,618,967,452.43	12,835,547.89	0.00	39,532,411.76	0.00	0.00	0.00	0.00
May	1,595,801,804.82	0.00	0.00	28,324,654.70	18,469,561.26	0.00	0.00	0.00
June	1,242,321,314.81	55,593,695.75	43,318,152.42	33,747,130.06	16,019,502.58	0.00	0.00	0.00
July	1,292,873,461.16	202,007,435.75	77,030,229.58	0.00	0.00	0.00	0.00	0.00
August	1,556,302,177.79	65,722,109.05	19,677,656.77	36,067,986.80	36,636,294.46	0.00	0.00	0.00
September	1,687,814,847.03	105,439,445.42	0.00	33,728,851.72	48,367,856.77	0.00	0.00	0.00
October	1,896,481,314.29	12,533,064.17	0.00	18,998,460.00	45,247,773.65	0.00	0.00	0.00
November	1,599,071,468.57	152,715,481.19	24,465,096.66	30,724,948.80	48,755,413.17	10,336,919.25	0.00	0.00
December	1,757,880,143.19	162,560,347.58	66,470,936.22	17,649,975.29	24,576,163.92	0.00	0.00	0.00
Total	19,561,054,617.50	985,579,027.99	291,666,932.48	275,143,444.33	244,179,247.31	10,336,919.25	0.00	0.00
Major Marketers								
January	0.00	11,526,789.36	0.00	0.00	16,526,503.84	0.00	10,705,248.35	0.00
February	0.00	22,759,088.59	0.00	0.00	0.00	0.00	9,082,028.44	0.00
March	20,014,800.48	35,279,080.30	0.00	0.00	22,103,453.57	0.00	0.00	0.00
April	0.00	0.00	0.00	0.00	0.00	0.00	4,728,809.87	0.00
May	0.00	0.00	0.00	0.00	0.00	0.00	5,040,941.03	0.00
June	0.00	45,741,920.35	0.00	0.00	0.00	0.00	20,723,584.69	0.00
July	0.00	14,786,379.60	0.00	0.00	33,788,408.61	0.00	21,841,148.61	31,367,895.41
August	0.00	20,190,606.92	0.00	0.00	44,781,183.69	0.00	0.00	0.00
September	0.00	0.00	0.00	0.00	0.00	0.00	5,648,365.76	0.00
October	0.00	24,061,237.14	0.00	0.00	0.00	0.00	16,057,969.44	0.00
November	1,981,459.320	27,075,200.35	0.00	0.00	20,059,632.79	0.00	5,627,013.01	0.00
December	0.00	33,106,275.43	0.00	0.00	13,491,613.26	0.00	5,261,409.48	0.00
Total	39,829,393.68	234,526,578.04	0.00	0.00	164,169,765.71	0.00	104,716,518.67	31,367,895.41
Independent Marketers								
January	0.00	144,671,141.21	5,760,232.02	0	19,446,061.71	0.00	17,820,204.94	10,845,863.74
February	0.00	314,382,412.03	0.00	9,346,725.75	60,995,344.77	6,725,096.23	61,216,472.99	38,958,139.28
March	0.00	307,994,641.67	0.00	5,761,575.66	5,821,732.92	0.00	12,017,096.60	33,132,392.75
April	0.00	331,439,390.26	0.00	22,571,581.92	20,590,891.40	0.00	50,931,975.21	43,559,613.15
May	0.00	415,890,190.17	0.00	5,353,262.61	71,675,642.72	13,302,556.40	18,824,590.57	35,626,608.50
June	0.00	401,442,529.73	0.00	5,701,187.75	57,619,902.94	0.00	43,425,452.81	42,204,733.80
July	0.00	97,971,854.82	0.00	30,488,911.63	0.00	0.00	10,056,057.08	43,725,969.57
August	26,820,000.00	199,368,316.56	6,681,551.27	6,871,981.32	35,154,901.02	13,422,267.47	26,966,221.30	17,368,986.02
September	0.00	128,766,534.57	0.00	3,343,744.61	13,360,946.22	0.00	40,841,096.38	19,555,679.63
October	0.00	128,688,850.44	0.00	5,635,252.12	13,384,504.91	0.00	19,390,585.10	39,612,468.16
November	0.00	202,332,892.08	13,353,196.58	0	46,794,099.79	0.00	37,348,408.24	27,418,666.65
December	20,078,742.04	531,763,572.96	0.00	5,372,992.75	66,816,975.77	0.00	6,650,157.12	50,552,822.21
Total	46,898,742.04	3,204,712,326.50	25,794,979.87	100,447,216.12	411,661,004.17	33,449,920.10	345,488,318.34	402,561,943.46



Month	Petrol	Diesel	Household Kerosene	LPG	Aviation Fuel	Fuel Oil	Base Oil	Bitumen
January	1,512,753,492.45	230,033,121.95	39,383,294.72	7,405,894.11	42,079,247.05	0.00	28,525,453.29	10,845,863.74
February	1,600,623,346.19	368,478,210.43	27,081,798.13	9,346,725.75	60,995,344.77	6,725,096.23	70,298,501.43	38,958,139.28
March	2,220,178,595.27	343,273,721.97	0.00	34,724,706.75	27,925,186.49	0.00	12,017,096.60	33,132,392.75
April	1,618,967,452.43	344,274,938.15	0.00	62,103,993.68	20,590,891.40	0.00	55,660,785.08	43,559,613.15
May	1,595,801,804.82	415,890,190.17	0.00	33,677,917.31	90,145,203.98	13,302,556.40	23,865,531.60	35,626,608.50
June	1,242,321,314.81	502,778,145.83	43,318,152.42	39,448,317.81	107,427,814.13	0.00	64,149,037.50	42,204,733.80
July	1,292,873,461.16	314,765,670.17	77,030,229.58	30,488,911.63	134,18,969.95	0.00	31,897,205.69	75,093,864.98
August	1,583,122,177.79	285,281,032.53	26,359,208.04	42,939,968.12	116,572,379.17	13,422,267.47	26,966,221.30	17,368,986.02
September	1,687,814,847.03	234,205,979.99	0.00	37,072,596.33	61,728,802.99	0.00	46,489,462.14	19,555,679.63
October	1,896,481,314.29	276,283,151.75	0.00	24,633,712.12	58,632,278.56	0.00	35,448,554.54	39,612,468.16
November	1,618,886,061.77	382,123,573.62	37,818,293.24	30,724,948.80	115,609,145.75	10,336,919.25	42,975,421.25	27,418,666.65
December	1,777,958,885.23	727,430,195.97	66,470,936.22	23,022,968.04	104,884,752.95	0.00	11,911,566.60	50,552,822.21
Total	19,647,782,753.24	4,424,817,932.53	317,461,912.35	375,590,660.45	820,010,017.19	43,786,839.35	450,204,837.02	433,929,838.87
Average Daily Imported Volumes								
January	48,798,499.76	7,420,423.29	1,270,428.86	238,899.81	1,357,395.07	-	920,175.91	349,866.57
February	57,165,119.51	13,159,936.09	967,207.08	333,811.63	2,178,405.17	240,182.01	2,510,660.77	1,391,362.12
March	71,618,664.36	11,073,345.87	-	1,120,151.83	900,812.47	-	387,648.28	1,068,786.86
April	53,965,581.75	11,475,831.27	-	2,070,133.12	686,363.05	-	1,855,359.50	1,451,987.11
May	51,477,477.57	13,415,812.59	-	1,086,384.43	2,907,909.81	429,114.72	769,855.86	1,149,245.44
June	41,410,710.49	16,759,271.53	1,443,938.41	1,314,943.93	3,580,927.14	-	2,138,301.25	1,406,824.46
July	41,705,595.52	10,153,731.30	2,484,846.12	983,513.28	432,870.00	-	1,028,942.12	2,422,382.74
August	51,068,457.35	9,202,613.95	850,297.03	1,385,160.26	3,760,399.33	432,976.37	869,878.11	560,289.87
September	56,260,494.90	7,806,866.00	-	1,235,753.21	2,057,626.77	-	1,549,648.74	651,855.99
October	61,176,816.59	8,912,359.73	-	794,635.87	1,891,363.82	-	1,143,501.76	1,277,821.55
November	53,962,868.73	12,737,452.45	1,260,009.77	1,024,164.96	3,853,638.19	344,563.98	1,432,514.04	913,955.56
December	57,353,512.43	23,465,490.19	2,144,223.75	742,676.39	3,383,379.13	-	384,244.08	1,630,736.20
Total	53,829,541.79	12,122,788.86	869,758.66	1,029,015.51	2,246,602.79	119,963.94	1,233,437.91	1,188,848.87



Table 69: Summary of Petroleum Products Importation by Market Segment (Litres)

Market Segment / Product	2011	2012	2013	2014	2015	2016	2017	2018
NNPC								
Petrol	7,267,588,254.90	7,199,127,536.31	6,534,824,350.95	6,561,867,909.06	7,092,590,812.38	9,794,756,046.24	11,922,106,564.98	19,561,054,617.50
Diesel	597,684,329.64	33,927,038.16	36,631,254.60	112,649,126.40	15,172,449.00	34,302,684.24	699,749,809.32	985,579,027.99
Household kerosene	1,533,240,976.96	1,614,044,653.76	1,653,152,670.40	1,661,012,584.00	1,094,919,068.32	241,804,590.72	57,312,184.16	291,666,932.48
LPG	NA	NA	NA	NA	NA	NA	23,147,538.00	275,143,444.33
Aviation Fuel	0	0	0	0	0	108,522,986.88	123,458,412.00	244,179,247.31
Fuel oil	0	0	0	0	0	0	0	10,336,919.25
Base Oil	0	0	0	0	0	0	0	0
Bitumen	0	0	0	0	0	0	0	0
Major Marketers								
Petrol	3,892,558,422.33	2,359,020,525.48	2,588,821,298.91	2,987,749,099.62	2,456,122,362.30	2,464,251,920.01	1,367,434,341.81	39,829,393.68
Diesel	373,794,994.08	423,465,714.24	506,540,126.52	428,663,335.08	268,714,952.28	329,521,253.04	260,373,134.64	234,526,578.04
Household Kerosene	5,776,281.28	6,157,967.20	18,372,310.88	12,161,429.28	6,144,427.52	0	0	0
LPG	NA	NA	NA	NA	NA	NA	0	0
Aviation Fuel	504,122,215.52	507,763,785.76	421,737,784.16	343,898,016.00	233,435,873.44	227,798,278.40	84,772,219.84	164,169,765.71
Fuel Oil	39,047,893.50	64,433,302.50	0	7,032,900.00	10,089,450.00	0	0	0
Base Oil	0	0	0	0	0	64,363,830.08	40,528,405.17	104,716,518.67
Bitumen	0	0	0	0	0	0	0	31,367,895.41
Independent Marketers								
Petrol	9,328,859,858.79	5,661,710,421.48	7,492,452,418.44	8,561,212,535.25	8,577,202,994.73	5,921,239,890.96	3,420,451,782.27	46,898,742.04
Diesel	1,420,934,376.00	1,642,381,395.12	1,952,340,103.32	3,245,450,575.92	4,117,491,812.40	4,092,314,038.44	3,289,188,597.60	3,204,712,326.50
Household Kerosene	274,318,080.96	539,874,917.12	960,804,804.96	1,180,372,091.36	784,099,143.52	353,676,942.08	269,592,510.88	25,794,979.87
LPG	NA	NA	NA	NA	NA	NA	50,172,363.16	100,447,216.12
Aviation Fuel	86,425,477.60	139,130,967.36	87,056,175.36	80,045,984.48	309,493,220.96	327,528,321.12	428,185,751.84	411,661,004.17
Fuel Oil	69,943,671.00	28,420,402.50	15,701,490.00	154,061,607.00	56,627,749.50	311,496,276.00	31,183,278.00	33,449,920.10
Base Oil	0	0	0	0	0	210,790,576.81	109,532,298.15	345,488,318.34
Bitumen	0	0	0	0	0	139,264,795.80	230,167,360.02	402,561,943.46

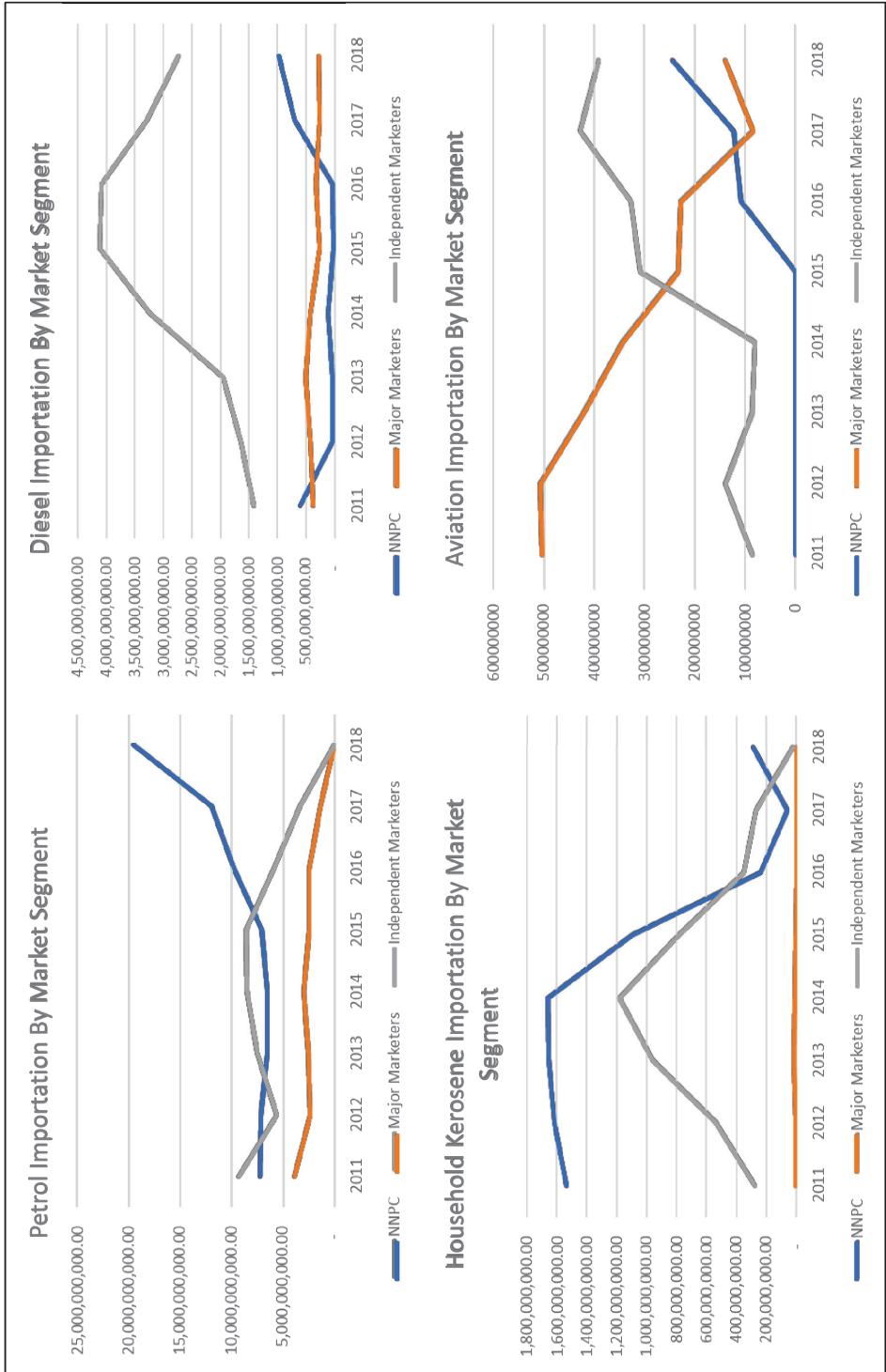


Figure 31: Petroleum Products Import by Market Segment



Table 70: Petroleum Products Import Summary, Litres

Year	Petrol	Diesel	Household Kerosene	LPG	Aviation Fuel	Fuel Oil	Base Oil	Bitumen
2008	11,577,486,139.74	2,559,339,145.08	1,843,376,069.92	NA	NA	NA	NA	NA
2009	14,048,673,202.17	3,832,600,368.00	1,728,501,876.64	NA	NA	NA	NA	NA
2010	15,961,278,917.70	3,032,555,360.04	1,863,074,838.24	NA	NA	NA	NA	NA
2011	20,489,006,536.02	2,392,413,699.72	1,813,335,339.20	NA	NA	NA	NA	NA
2012	15,219,858,496.68	2,099,774,147.52	2,160,077,538.08	NA	NA	NA	NA	NA
2013	16,616,098,068.30	2,495,511,496.08	2,632,329,786.24	NA	NA	NA	NA	NA
2014	18,110,829,530.52	3,786,763,037.40	2,853,546,104.64	-	423,944,000.48	161,094,507.00	220,066,328.34	336,907,001.97
2015	17,960,783,002.20	4,395,841,099.56	1,885,162,639.36	14,313,217.74	515,275,622.40	60,929,830.50	226,124,629.28	105,436,343.68
2016	18,180,247,870.62	4,461,980,149.92	595,481,532.80	-	663,849,574.08	311,496,276.00	275,670,160.23	139,264,679.99
2017	16,709,992,689.06	4,249,311,529.92	326,904,707.36	73,336,161.96	636,416,383.68	31,183,278.00	150,341,979.24	230,167,168.61
2018	19,647,782,753.24	4,424,817,932.53	317,461,912.35	375,590,660.45	820,010,017.19	43,786,839.35	450,204,837.02	433,929,838.87

Table 71: Product Import: Number of Product Vessels

Field Office	PMS Import Vessels	DPK Import Vessels	AGO Import Vessels	ATK Import Vessels
Calabar	101	11	25	0
Eket	6	0	0	0
Lagos	449	24	212	63
Port-Harcourt	83	2	39	2
Umuahia	0	0	370	0
Warri	246	7	70	1
Total	885	44	716	66

4.3.1.3 Petroleum Products Importation versus Local Production

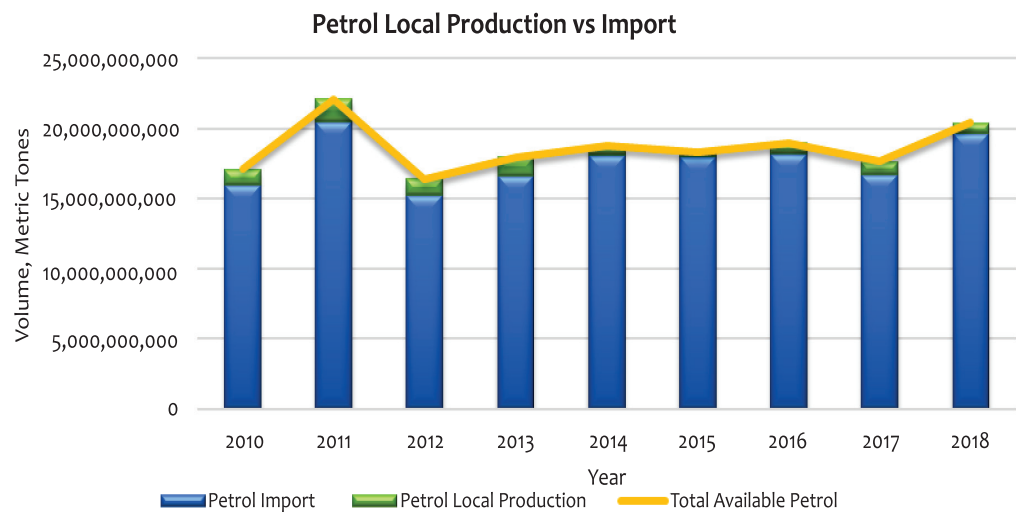


Figure 32: Petrol Local Production vs Importation

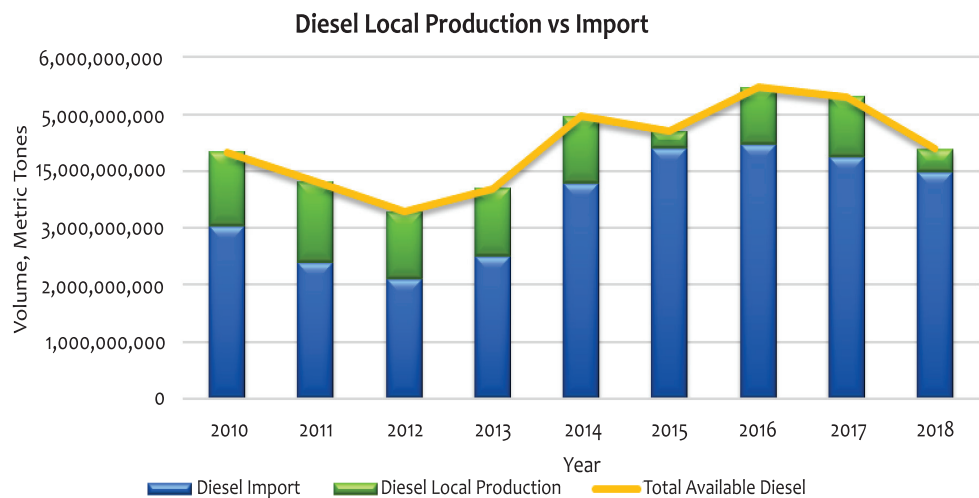


Figure 33: Diesel Local Production vs Importation

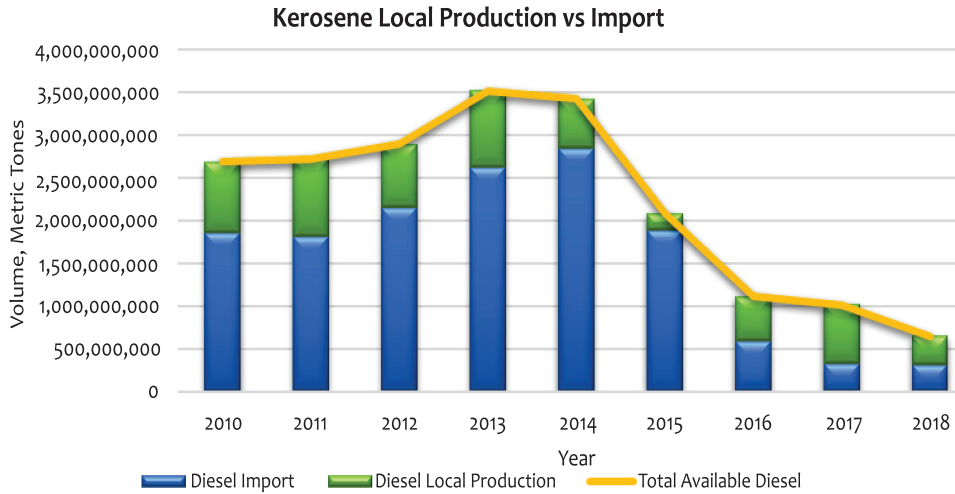


Figure 34: Kerosene Local Production vs Importation

4.3.2 Retail Outlets

Table 72: 2018 Retail Outlets Summary - Filling Stations Count

State	Independent	Major	NNPC Franchise	NNPC Mega	Grand Total
Abia	803	55	2	2	862
Abuja	340	119	12		471
Adamawa	684	104	18	2	808
Akwa Ibom	704	31	2		737
Anambra	841	53	1		895
Bauchi	497	56	5		558
Bayelsa	104	8	1		113
Benue	491	80	9		580
Borno	673	65	7		745
Cross River	363	65	6		434
Delta	950	90	20	1	1,061
Ebonyi	205	22			227
Edo	459	81	6		546
Ekiti	278	31	5		314
Enugu	581	69	2		652
Gombe	301	52	19		372
Imo	751	63	2		816
Jigawa	328	34			362
Kaduna	1,204	141	39		1,384
Kano	1,185	164		1	1,350
Katsina	738	65	7		810
Kebbi	682	87	26		795
Kogi	445	49	11		505
Kwara	947	113	4		1,064
Lagos	1,069	649	29		1,747



State	Independent	Major	NNPC Franchise	NNPC Mega	Grand Total
Nasarawa	353	55	11		419
Niger	802	81	1		884
Ogun	2,509	267	24		2,800
Ondo	941	89	7		1,037
Osun	812	113	11	1	937
Oyo	1,674	216	7	1	1,898
Plateau	354	83	16		453
Rivers	757	140	5	1	903
Sokoto	510	53	14		577
Taraba	454	57	12		523
Yobe	236	31	2		269
Zamfara	245	34	10		289
Grand Total	25,270	3,565	353	9	29,197

Table 73: 2018 Petroleum Product Marketers Total Capacities

Marketers	PMS	DPK	AGO
Independent	1,886,058,883	826,206,705	904,175,289
Major	290,701,319	111,994,750	122,763,346
NNPC Franchise	37,145,293	13,854,930	15,498,350
NNPC Mega	1,980,000	1,040,000	1,040,000
Nation wide	2,215,885,495	953,096,385	1,043,476,985

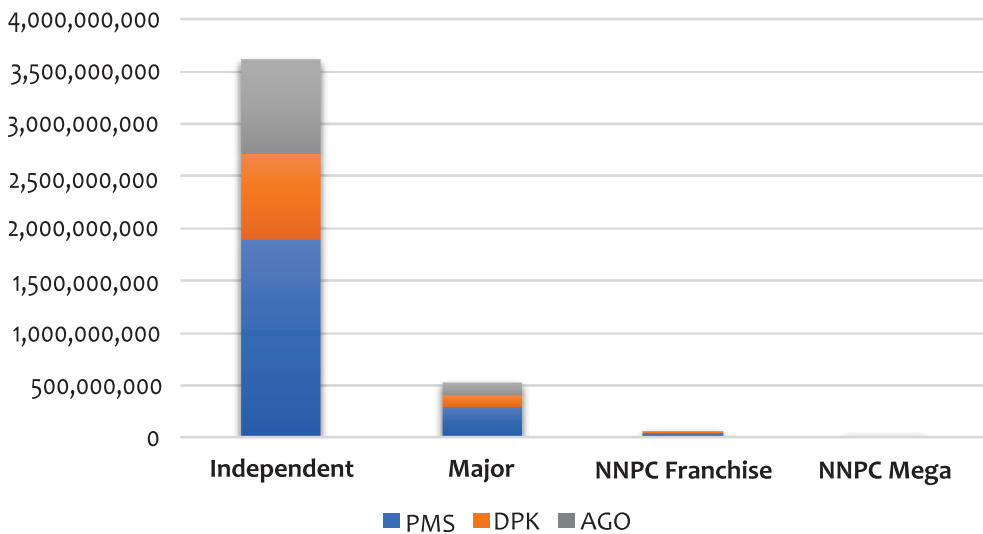


Figure 35: Petroleum Products Storage Capacities by Market Segment



Table 74: Storage Capacities of Retail Outlets by State and Market Segment

State	Independent			Major			NNPC Franchise			NNPC Mega		
	Petrol	Diesel	Kerosene	Petrol	Diesel	Kerosene	Petrol	Diesel	Kerosene	Petrol	Diesel	Kerosene
Abia	73,356,570	32,197,227	28,136,063	4,344,260	1,792,080	1,592,780	315,000	180,000	90,000	600,000	450,000	400,000
Abuja	44,606,709	15,734,050	13,089,380	14,885,400	4,901,600	4,428,200	1,716,150	459,850	423,650			
Adamawa	48,374,800	25,920,200	25,183,700	6,976,700	3,712,700	3,627,700	1,625,000	686,000	650,000	400,000	200,000	200,000
Akwa Ibom	51,998,087	23,984,400	23,513,985	2,180,020	736,240	854,940	100,000	139,100	66,000			
Anambra	75,413,390	33,610,370	28,940,690	4,410,220	1,745,160	1,495,800	33,000	33,000	33,000			
Bauchi	40,740,866	19,012,962	17,715,320	4,388,280	2,098,700	1,861,580	520,000	186,000	186,000			
Bayelsa	10,967,000	4,053,000	3,970,000	613,000	286,500	286,500	66,000	33,000	33,000			
Benue	45,299,900	19,583,490	17,753,900	5,845,700	2,908,760	2,493,620	936,000	690,000	479,000			
Borno	51,026,000	26,273,500	23,401,500	5,661,260	2,565,440	2,033,660	801,000	328,000	280,000			
Cross River	31,021,150	13,699,065	12,784,440	4,488,400	2,019,180	1,982,140	758,000	414,000	279,000			
Delta	72,157,562	36,312,650	32,109,270	6,843,840	3,151,300	2,713,880	2,077,000	916,000	834,080	180,000	90,000	90,000
Ebonyi	14,483,418	7,883,180	6,706,070	967,960	725,480	456,480						
Edo	33,353,380	18,702,000	15,285,580	5,911,875	2,605,020	2,057,620	639,000	309,000	234,000			
Ekiti	10,662,650	5,374,210	5,108,340	2,034,770	680,860	816,580	459,000	258,000	201,000			
Enugu	44,941,499	23,187,458	19,450,337	4,491,724	1,851,910	1,518,360	266,000	133,000	133,000			
Gombe	25,442,400	12,008,600	11,318,890	3,489,140	1,765,160	1,640,000	1,443,000	671,200	676,000			
Imo	70,836,772	28,734,406	26,088,813	4,186,950	1,962,360	1,664,960	400,000	200,000	200,000			
Jigawa	24,863,500	12,020,500	11,288,500	2,081,940	1,224,000	998,160						
Kaduna	84,204,506	44,979,900	41,089,600	11,186,300	4,907,840	4,452,780	3,509,000	1,436,000	1,323,000			
Kano	114,435,770	48,129,120	42,428,740	13,913,926	5,935,713	7,211,550				200,000	100,000	100,000
Katsina	60,909,700	28,081,720	26,339,820	5,168,320	2,360,120	2,141,820	711,800	285,700	235,700			
Kebbi	48,760,000	24,238,000	23,829,500	6,239,000	3,159,200	2,937,000	2,138,000	887,000	887,000			
Kogi	31,943,070	15,887,610	14,610,710	3,011,200	1,424,860	1,409,780	1,392,000	494,000	382,900			
Kwara	59,919,270	31,879,640	29,814,120	9,528,868	3,890,280	3,159,820	366,000	153,000	138,000			
Lagos	105,365,700	46,021,900	40,707,200	67,484,980	24,422,563	21,178,160	4,169,000	1,274,000	1,215,000			
Nasarawa	34,752,760	14,165,360	13,087,000	4,446,320	2,202,700	1,954,120	1,230,170	484,000	432,000			
Niger	46,944,810	24,133,069	22,079,350	6,168,500	3,012,620	2,771,120	180,000	45,000	40,000			
Ogun	127,544,400	70,689,520	63,528,300	21,330,380	9,870,460	8,457,700	2,574,000	1,004,000	960,000			
Ondo	33,844,900	16,207,340	16,200,600	6,074,030	2,303,840	2,359,780	836,000	391,000	343,000			
Osun	48,785,740	25,794,850	25,339,870	6,994,760	2,803,600	3,083,100	837,000	463,100	397,100	200,000	100,000	100,000
Oyo	106,147,320	55,420,140	52,608,820	14,200,350	5,591,920	5,659,500	498,000	270,000	234,500	200,000	100,000	100,000
Plateau	27,788,055	13,175,011	11,814,408	6,446,656	3,129,220	2,402,430	1,916,173	804,400	714,000			
Rivers	75,209,999	31,971,961	29,240,389	11,759,290	4,528,960	4,490,320	644,000	304,000	304,000	200,000	-	50,000
Sokoto	40,648,500	19,126,000	18,003,000	4,031,000	1,953,000	1,739,000	1,422,000	562,000	456,000			
Taraba	33,225,030	18,041,380	16,701,990	4,680,000	2,313,000	2,050,000	1,618,000	530,000	520,000			
Yobe	17,546,300	9,314,500	8,612,200	1,973,000	1,113,000	970,000	132,000	66,000	66,000			
Zamfara	18,537,000	8,627,000	8,326,310	2,263,000	1,108,000	1,039,810	818,000	409,000	409,000			
Grand Total	1,886,058,883	904,175,289	826,206,705	290,701,319	122,763,346	111,994,750	37,145,293	15,498,350	13,854,930	1,980,000	1,040,000	1,040,000



4.3.3 Petroleum Products Average Pricing

Table 75: Petroleum Products Average Consumer Price Range (Naira Per Litre)

Year	/	Market Segment	Petrol	Diesel	Kerosene
2010		Major	64-65	100-117	50-70
		Independent Marketers	65-70	100-130	50-85
		NNPC	65	106	50
2011		Major	64-65	115-170	50-70
		Independent Marketers	65-70	120-180	100-160
		NNPC	65	110-115	50
2012		Major	97	145-170	50
		Independent Marketers	97-120	150-180	110-140
		NNPC	97	145	50
2013		Major	97	150-170	135-140
		Independent Marketers	97-130	140-170	135-140
		NNPC	97	160	50
2014		Major	97	145-170	50
		Independent Marketers	97-100	150-180	100-150
		NNPC	97	150-175	50
2015		Major	86.50-97	150-170	50
		Independent Marketers	86.50-180	130-175	50-150
		NNPC	86.50-97	150-155	50
2016		Major	145	200	220
		Independent Marketers	145	200	220
		NNPC	145	200	220
2017		Major	145	210	150
		Independent Marketers	145	210	150
		NNPC	143	210	150
2018		Major	145	210	150
		Independent Marketers	145	210	150
		NNPC	143	210	150

4.3.4 LPG PENETRATION

The domestic LPG sector witnessed a significant growth in 2018. There was a 15.92% rise in LPG consumption from the year end of 2017 to 2018.



Table 76: LPG Importation by Zone

Months	LPG Import Figures (Metric Tonnes)		
	Lagos	Warri	Calabar
January	6981.000	3982.665	4195.974
February	17463.000	7482.680	0
March	21880.000	4356.523	4296.099
April	37340.000	4145.390	4182.903
May	28732.000	10672.919	3982.493
June	30575.000	9386.064	4250.530
July	19637.000	9353.693	0
August	26439.000	10589.907	4124.520
September	41321.984	8973.554	2493.471
October	47098.324	16586.938	4202.276
November	33050.773	14629.672	0
December	28245.355	12210.450	4006.706
Total	338,763.436	112,370.455	35,734.972

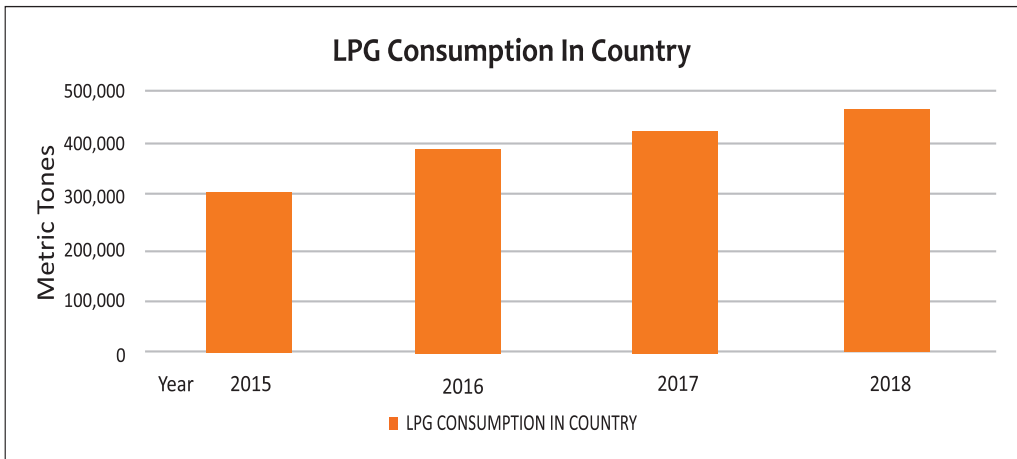


Figure 36: LPG consumption in 2018



4.4 HEALTH, SAFETY AND ENVIRONMENT

4.4.1 Accident Report

Table 77: 2018 Accident Report – Industry-wide

Incident Date	Incidents	Work Related	Non Work Related	Fatal Accidents	Non Fatal Accidents	Work Related Fatal Accidents	Non Work Related Fatal Accidents	Fatality
January	6	5	1	2	4	2	0	4
February	4	3	1	3	1	2	1	3
March	2	0	2	2	0	0	2	2
April	1	1	0	0	1	0	0	0
May	2	0	2	0	2	0	0	0
June	1	1	0	1	0	1	0	2
July	12	8	4	5	7	1	4	7
August	8	5	3	5	3	3	2	9
September	4	3	1	2	2	1	1	10
October	7	2	5	2	5	0	2	36
November	5	4	1	3	2	3	0	4
December	3	2	1	0	3	0	0	0
Total	55	34	21	25	30	13	12	77

Table 78: 2018 Accident Report – Upstream

Incident Date	Incidents	Work Related	Non Work Related	Fatal Accidents	Non Fatal Accidents	Work Related Fatal Accidents	Non Work Related Fatal Accidents	Fatality
January	2	1	1	1	1	1	0	1
February	2	1	1	1	1	0	1	1
March	2	0	2	2	0	0	2	2
April	1	1	0	0	1	0	0	0
May	1	0	1	0	1	0	0	0
June	0	0	0	0	0	0	0	0
July	9	5	4	5	4	1	4	7
August	6	3	3	3	3	1	2	6
September	3	2	1	1	2	0	1	1
October	6	2	4	1	5	0	1	1
November	0	0	0	0	0	0	0	0
December	2	1	1	0	2	0	0	0
Total	34	16	18	14	20	3	11	19



Table 79: 2018 Accident Report – Downstream

Incident Date	Incidents	Work Related	Non Work Related	Fatal Accidents	Non Fatal Accidents	Work Related Fatal Accidents	Non Work Related Fatal Accidents	Fatality
January	4	4	0	1	3	1	0	3
February	2	2	0	2	0	2	0	2
March	0	0	0	0	0	0	0	0
April	0	0	0	0	0	0	0	0
May	1	0	1	0	1	0	0	0
June	1	1	0	1	0	1	0	2
July	3	3	0	0	3	0	0	0
August	2	2	0	2	0	2	0	3
September	1	1	0	1	0	1	0	9
October	1	0	1	1	0	0	1	35
November	5	4	1	3	2	3	0	4
December	1	1	0	0	1	0	0	0
Total	21	18	3	11	10	10	1	58

**Work related incidents in this context, refer to incidents that occur in the course of direct work; slips, trips and falls that occur whilst working are common examples.

**Non work related incidents include road traffic accidents (conveying workers) and natural causes.

¹ Petroleum tanker road accidents are not included in the reports.

Table 80: Accident Report – Upstream

Accident Date	Accidents	Work Related	Non-Work Related	Fatal Accidents	Non-Fatal Accidents	Work Related Fatal Accidents	Non-Work Related Fatal Accidents	Fatality
2010	41	18	23	17	24	3	14	18
2011	44	21	23	17	27	5	12	17
2012	48	26	22	26	22	11	15	34
2013	45	17	28	16	29	5	11	28
2014	32	8	24	13	19	0	13	14
2015	35	11	24	23	12	6	17	50
2016	33	9	24	15	18	2	13	24
2017	39	17	22	19	20	3	16	21
2018	34	16	18	14	20	3	11	19

Table 81: Accident Report – Downstream

Accident Date	Accidents	Work Related	Non-Work Related	Fatal Accidents	Non-Fatal Accidents	Work Related Fatal Accidents	Non-Work Related Fatal Accidents	Fatality
2010	9	6	3	4	5	3	1	7
2011	9	8	1	2	7	1	1	2
2012	1	1	0	1	0	1	0	1
2013	12	12	0	2	10	2	0	2
2014	8	7	1	2	6	1	1	8
2015	14	13	1	9	5	8	1	36
2016	17	15	2	6	11	6	0	14
2017	21	20	1	12	9	12	0	49
2018	21	18	3	11	10	10	1	58

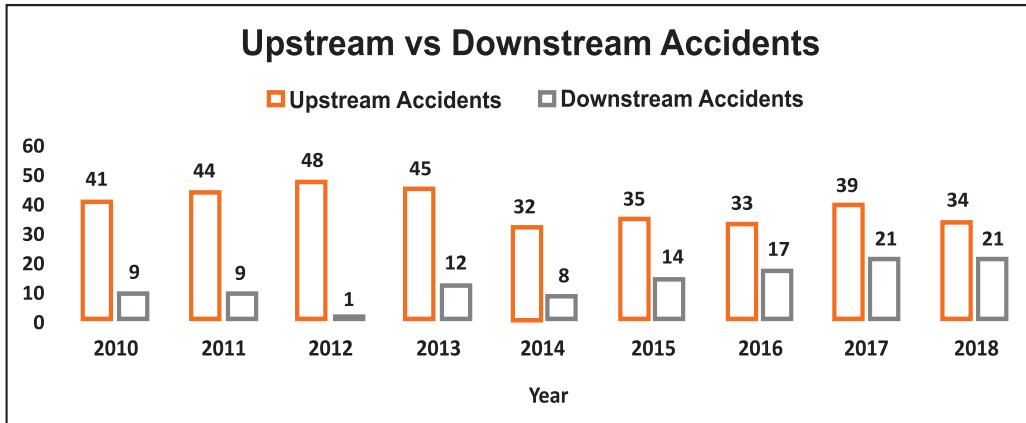


Figure 37: Downstream Versus Upstream Incidents

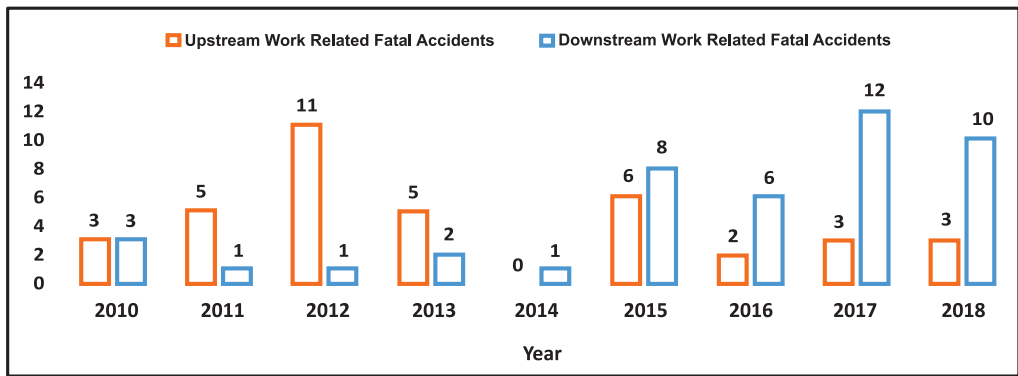


Figure 38: Upstream Work Related Fatal Accidents Versus Downstream Work Related Fatal Accidents

Table 82: Accident Report – Industry-wide

Incident Date	Incidents	Work Related	Non Work Related	Fatal Accidents	Non Fatal Accidents	Work Related Fatal Accidents	Non Work Related Fatal Accidents	Fatality
2010	50	24	26	21	29	6	15	25
2011	53	29	24	19	34	6	13	19
2012	49	27	22	27	22	12	15	35
2013	57	29	28	18	39	7	11	30
2014	40	15	25	15	25	1	14	22
2015	49	24	25	32	17	14	18	86
2016	50	24	26	21	29	8	13	38
2017	61	37	24	31	30	15	16	70
2018	55	34	21	25	30	13	12	77



4.4.2 Spill Incidence Report

Table 83: 2018 Spill Incidence Report

Month	No. Of Spills Reported	Total Quantity Spilled	Total Quantity Recovered	Natural Accident	Corrosion	Equipment Failure	Erosion/ Waves/Sand	Human Error	Mystery	Operational/ Maintenance Error	Sabotage	YTBD
January	45	406,823	0		2	5		1	5		28	4
February	33	111,318	0		2	3			6	1	13	8
March	47	85,089	0	1	1	1			7		28	9
April	47	319,845	0		3	7			4	1	17	15
May	56	111,891	0		2	5	1	3		2	20	23
June	41	644,713	0		3	8					15	15
July	46	314,506	31,539		1	8			1	1	24	11
August	53	340,596	11,125		2	1					25	25
September	36	273,126	7,251		2	3			2	2	17	10
October	40	273,144	645,625		2	5			2		20	11
November	79	199,033	105,013		8	6			4		48	13
December	46	379,679	0		3	5			1		28	9
Total	569	9718,222	800,555	1	31	57	1	4	32	7	263	153

¹ Spills caused by natural disasters/events such as flooding, extreme weather conditions etc.

² Spills caused by corrosion of pipelines, vessels, tanks and other crude oil handling installations.

³ Spills caused by preventable failure of oil and gas installations/equipment

⁴ Spills caused by third party intervention. This also includes cases of vandalism and crude oil theft that may not have resulted to hydrocarbon release to the environment.

⁵ Spills caused by operational errors involving a human interface.

⁶ This means "Yet-to-be-determined". The cause(s) of the spill(s) were not reported in the submitted oil spill reporting forms. Usually indicative that the Form B was not submitted, or the Joint Investigation Visit (JIV) was either not carried out or was inconclusive. Often, the quantity spilled for this category of spills may also not have been reported.

⁷ Spills identified or reported by operators who assert that the spill did not originate from their facilities. The origin of the spill is thus said to be inconclusive. Usually the operator is expected to take reasonable steps to respond to the spill in addition to the reporting of same.



Table 84: Spill Incidence Summary

Years	Number Of Spills	Quantity Spilled (Barrels)
2010	537	17,658.10
2011	673	66,906.84
2012	844	17,526.37
2013	522	4,066.20
2014	1087	10,302.16
2015	753	32,756.87
2016	434	1,658.98
2017	429	9097.05
2018	569	9718.22

Table 85: 2018 Report on Produced Water Volumes Generated

Company	Facility	Concession	Terrain	Volume/Day (Bbls)
Addax	Knock Adoon	Oml 123	Continental Shelf	40,000
Addax	Izombe Field	Oml 124	Land	25,000
Oriental	Fso Virini	Oml 67	Continental Shelf	30,000
Chevron	Funiwa	Oml 85	Continental Shelf	14,535
Chevron	Delta	Oml 49	Continental Shelf	10,000
Chevron	Parabe	Oml 95	Continental Shelf	20,600
Chevron	Okan	Oml 95	Continental Shelf	58,000
Chevron	Meren1	Oml 95	Continental Shelf	26,000
Chevron	Pennington	Oml 88	Continental Shelf	20,000
Tepng	Amenam/Kpono	Oml 99	Continental Shelf	19,869
Pooc	Ogharefe	Oml 98	Continental Shelf	8,500
Moni Pulo	Agbani Barge	Oml 114	Continental Shelf	10,000
Spdc	Sea Eagle Fpso	Oml 79	Continental Shelf	70,000
Spdc	Spdc	Forcados Terminal	Land	11,0517
Spdc	3rd Party	Forcados Terminal	Land	8,7320
Spdc	Spdc	Bonny Terminal	Land	70,686
Spdc	3rd Party	Bonny Terminal	Land	14,966
Naoc	Brass O.T	Oml 61	Swamp	110,000
Mobil	Qit	Oml 67	Continental Shelf	150,410
Amni Int.	Okoro Field	Oml 112	Continental Shelf	15,000
Amni Int.	Ima (Ailsa Craig/Langley)	Oml 117	Continental Shelf	60,000
Midwestern	Umusadege	Oml 56	Land	4,399
Network	Qua Iboe	Oml 13	Land	70
Atlas	Ejulebe	Oml 109	Continental Shelf	60,500
Energia	Ebendo	Oml 56	Land	65
Esso Exp	Usan Production North	Oml 138	Deep Offshore	821
Esso Exp	Usan Production South	Oml 138	Deep Offshore	36,657
Esso Exp	Erha	Oml 133	Deep Offshore	27,878
Nae	Abo	Oml 125	Deep Offshore	13,080
Snepco	Bonga Main Fpso	Oml 118	Deep Offshore	50,000
Star Deep	Agbami	Oml 127/128	Deep Offshore	32,000
Tupni	Akpo	Oml 130	Deep Offshore	18,000



Company	Facility	Concession	Terrain	Volume/Day (Bbls)
Tupri	Egina	Oml 130	Deep Offshore	1,100
Niger Delta Pet. Resources	Ogbele Field	Oml 54	Land	52,000
Brittania-U	Ajapa Field	Oml 90	Continental Shelf	12,000
Belema Oil	Robertkiri, Inda, Belema North, Idama & Jokker	Oml 55	Swamp	60,000
Seepco	Okwuibume, Anieze, Asemeku Jetty	Oml 143	Land	15,000
Seepco	Agwu Flowstation, Ndoni Jetty	Oml 146	Land	1,000
Npdc/Neconde	Batan, Jones Creek, Odidi	Oml 42	Swamp	60,000
Npdc/Nd Western	Ughelli East, Ughelli West, Utorogu	Oml 34	Land	35,000
Npdc/Fhn	Ogini, Isoko Fields	Oml 26	Land	12,000
Npdc	Okono	Oml 119	Continental Shelf	13,500
Npdc	Oredo	Oml 111	Land	20,000
Npdc	Abura	Oml 65	Land	10,000
Platform	Egbaoma Field	Oml 38	Land	15453
Seplat	Sapele/Oben	Oml 41/4	Land	18027
Seplat	Amukpe	Oml 38	Land	10934
Newcross	Ekulama 1,2 & Awoba Fields	Oml 24	Land	4500
Heritage/Snrl/Npdc	Afesere, Eriemu, Ewwereni, Kokori, Olomoro-Oleh, Oroni, Osioka, Owhe, Uzere Fields, Ughelli Production Centre And Ughelli Pump Station	Oml 30	Land	145453
Excel	Eremor	Oml 46	Swamp	15000
Bayelsa Oil & Gas	Atala Field	Oml 46	Swamp	
Conoil	Auntie Julie Platform	Oml 59	Continental Shelf	32000
Tepng	Fso Unity	Oml 100	Offshore	70000
Yinka Fawawiyi	Aje Field	Oml 113	Deep Offshore	1200
Waltersmith	Ibigwe Field	Oml 16	Land	3400

Table 86: 2018 Drilling Waste Volumes

Months	Sum of WBMC (MT)	Sum of OBMC (MT)	Sum of SPENT WBM (MT)	Sum of Spent OBM (MT)
January	4357.5	4993.3	6866.7	7385
February	7268	8503	7237	4220.7
March	14773.72	9246.55	6569.8	6226.56
April	1989.1	4339.2	380.5	550.7
May	3288.4	2801.76	4248.8	1397.092
June	5906.1	4076.8	2835.9	1586.62
July	7700.12	2984.26	6307.58	5177.4
August	4825.31	2793.65	2224	1438
September	70	502	240	674
October	4740.8	1640.2	1175.68	1110.42
November	3358.04	3579.88	2335.63	3668.71
December	1644.4	1116.59	1003.45	1398.87
Total	59,921.50	46,577.19	41,425.04	34,834.07

**Table 87: 2018 Accredited Waste Managers**

Company Name	Type Of Facility	Location Area	Operational Status
Specialty Drilling Fluids Ltd	TDU: 1 unit WBM: 1 unit	Rivers State	Operational
Nubian Nigeria Ltd	TDU: 1 LTDU (Rotomil Low Temperature) WBM Handling	Rivers State	Operational
Delta Waste Management Company Limited (DEL)	TDU: 3 HTDUs, 2 LTDUs INCINERATOR: 1 High Temp Hazardous Waste Incinerator WBM Handling: Using HT Incinerator	Rivers State	Operational
ITS Drilling Services	INCINERATOR: 2 Trash Incinerators CA1000 & RD700 (Models) Secondary Waste Management Hazardous Waste Transportation	Abia State	Operational
Paschal Technical Services Ltd	INCINERATOR: 1 Macroburn V500C Incinerator Tank Cleaning: Gamajet-8	Rivers State	Operational
Golden Years Ltd	INCINERATOR: 2 Incinerators Hazardous Waste Transportation: Onshore	Rivers State	Operational
Allman Global	INCINERATOR: 1 Incinerator WBM: Mobile Water based Treatment Plant	Rivers State	Operational
The Initiates	TDU: 1 Indirect Fire Soil Remediation, WBM and Associated cuttings treatment Unit Secondary Waste Management Tank Cleaning: Super Macs Hazardous Waste Transportation: Onshore INCINERATOR: 1 AANL Kg/hr Rotary Kiln Incinerator	Rivers State	Operational
Nautilus Engineering and Construction Company (NECC)	TDU: 1 Mobile TDU	Rivers State	Operational
Seric Impianti International Limited	TDU: 1 Unit Bethlehem Thermal D System INCINERATOR: 1 High Temp. Rotary Kiln incinerator, 1 High Temp. Liquid incinerator.	Rivers State	Operational
Boskel Engineering Services	TDU: 1 unit	Rivers State	Operational
Halden Nigeria Limited	INCINERATOR: 1-unit Dual Chamber Incinerator WBM Handling	Rivers State	Operational
FrigateUpstream & Energy Services Ltd	TDU: 2 units LTDU WBM: 1 unit Hazardous Waste Transportation: 4 Coral Barges Waste Water Treatment: 50kl/hr SS50000 Secondary Waste Management	Rivers State	Operational
FIBOW	INCINERATOR: 1-unit High Temp Horizontal Flow Multi-Chambered Incinerator	Rivers State	Operational
EPCC Ltd	INCINERATOR: 1-unit Sludge Incinerator	Rivers State	Operational
SPDC	INCINERATOR: 1 Medical Incinerator • Recycling Waste Depot • Sewage Treatment Plant • Eneka Dump Site	Rivers State	Operational
Titan Project Nigeria Ltd	TDU: 2 units WBM Handling Secondary Waste/Solidification Hazardous Waste Transportation: 3 Coral Barges	Rivers State	Operational
MPNU	INCINERATOR (3): • 1 Gencorp Beverly Type Waste Incinerator (for general waste) • 1 Howden Pyrolytic Gasification System (medical incinerator) • 1 Municipal Waste (Trash) incinerator	Rivers State	Operational
Comprehensive Remediation Technologies (CRT)	TDU: 1 unit INCINERATOR: 1-unit Therm-Tec Incinerator	Rivers State	Operational
Mosab Marine and Engineering Services Limited	TDU: 1 unit Vulcan TDU WBM Handling: Onsite	Rivers State	Operational
Amotoi Global Services Limited	INCINERATOR: 1 unit Hazardous Waste Transportation: Onshore	Bayelsa State	Operational
Franco Intl Energy Services	TDU: 1 unit	Bayelsa State	Operational
Prime Sources Ltd	INCINERATOR: 1 unit	Rivers State	Operational
Petro-Scan Ltd	TDU: 1 unit	Rivers State	Operational
Fidella Oil and Gas Services Ltd	TDU: 1-unit Vulcan TDU WBM Waste Water Treatment	Rivers State	Operational



Company Name	Type Of Facility	Location Area	Operational Status
Olutee Engineering Services	INCINERATOR (3): • 1 Gencorp Beverly Type Waste Incinerator (for general waste) • 1 Howden Pyrolytic Gasification System (medical incinerator) • 1 Municipal Waste (Trash) incinerator	Delta State	Operational
Mawe Services Limited	TDU: 1 unit	Delta State	Operational
Titan Projects Nigeria Limited	TDU: 2 units	Delta State	Operational
Ebenco Global Resources Limited	Incinerator	Delta State	Operational
Vmart Company Limited	Incinerator Sewage Treatment Plant	Delta State	Operational
Silver Star Environmental Nigeria Limited	TDU: 4 units WBM Handling Hazardous Waste Transportation: Onshore	Delta & Rivers States	Operational
ITS Drilling Services Nigeria Limited	TDU: 1 UNIT	Abia State	Operational
ICREN Services Limited	INCINERATOR: 1 unit	Rivers State	Operational
JAPPCO Nigeria Limited	WBM Handling: On-site treatment unit		Operational
Stelmas Integrated Services Limited	Waste Recycling	Rivers State	Operational
Blueworks Technologies	WBM Handling: On-site treatment unit		Operational
Ejovi Dredging & Marine Services Limited	WBM Handling	Rivers State	Operational
Salasar Enterprises Limited	Pyrolysis plant	Ogun State	Operational
Technoserve Africa Limited	WBM Handling	Rivers State	Operational
Dubi Nigeria Company Limited	WBM Handling	Rivers State	Operational
Montego Upstream Services Limited	TDU WBM Handling	Delta State	Operational
Dakotelin Nigeria Limited	WBM Handling: On-site	Rivers State	Operational
Currenters Nigeria Limited	Waste Recycling Plant	Rivers State	Operational
JB Synergy Limited	Hazardous Waste Transportation: 1 Coral Barge	Rivers State	Operational
Consolidated Integrated Field Services Limited	Hazardous Waste Transportation: Onshore	Lagos	Operational
Prompt Technology Services Limited	Hazardous Waste Transportation: Onshore	Rivers State	Operational
Elvimex Nigeria Limited	Waste Recycling Hazardous Waste Transportation: Onshore	Rivers State	Operational
Emtobi Multi Services Limited	Hazardous Waste Transportation: Onshore	Rivers State	Operational
Phronesis Oil and Gas Tek Limited	WBM Handling: On-site	Rivers State	Operational
Wilton Services Nig. Limited	Hazardous Waste Transportation: Offshore	Rivers State	Operational
Oilfield Management Services Limited	TDU: 1 Unit (Model WJ 9) WBM Handling	Rivers State	Operational
TMCH Group Limited	Hazardous Waste Transportation: Onshore	Rivers State	Operational
TYJ Trinity oilfield Services	Zero Discharge Drilling Waste Streams Fixation	Delta State	Operational
Newbirth Environmental Project Limited	Hazardous Waste Transportation: Onshore	Rivers State	Operational
Elywin Wealth Nigeria Limited	Hazardous Waste Transportation: Onshore	Akwa Ibom State	Operational
Integrated Waste Solutions Limited	Hazardous Waste Transportation: Onshore	Rivers State	Operational
Greenbelt Tropical Environs Limited	TDU: 1-unit LTDU	Delta State	Operational
Roadlamp Limited	Hazardous Waste Transportation: Onshore	Rivers State	Operational
Philcom Integrated Limited	Hazardous Waste Transportation: Onshore	Rivers State	Operational
FILCO Drilling & Completion Services Limited	Offshore Drill Cuttings Evacuation	Rivers State	Operational
Coson Oil and Gas Projects Limited	WBM Handling: On-site	Rivers State	Operational
Anam Resources Limited	Waste Recycling	Rivers State	Operational

**Table 88: Summary Of Waste Management Facilities**

S/N	Type Of Facility	No Of Approved Facilities
1	TDU	21
2	Incinerator	21
3	Tank Cleaning	24
4	Wbm Handling	13
5	Slop/Produced Water	1
6	Slop Oil	3
7	Sludge Separation/Recovery	3
8	Integrated Facility/Landfill	2
9	Hazardous Waste Transportation	22
10	Lube/Waste/Tyre Recycling	2
11	Waste Water Treatment	2
12	Secondary Waste/Solidification/	7
13	Sewage Treatment	6
14	Offshore Drill Cuttings Evacuation	1

Table 89: 2018 Oil Spill Contingency Plan Activation Exercises

Location	Nos Of Companies For Oscp/Fi	Actual Nos Of Companies Audited
Lagos (Depots)	52	52
Kano (Depot)	1	1
Zamfara (Depot)	1	1
Kaduna (Depot/Refinery)	2	2
Port Harcourt (Refinery, Plants, Installations)	2	1
Port-Harcourt Upstream (Onshore)	19	17
Warri (Refinery, Plants, Installations)	12	12
Warri Upstream (Onshore)	15	12
Deep Offshore (Lagos)	7	6
Deep Offshore (Others)	8	8
Owerri	1	1
Total	120	113

Table 90: Number of Petitions Received In 2018

Category	CSR	Pollution	Compensation	Others (Disputes, Contractual Issues, Recognition As Host Community)
Count	2	19	8	9



Table 91: Request for Approvals – Chemicals

No. of Applications Received	Approved	Disapproved	Pending
98	57 Biocides: 12, Demulsifier-10, Cleaning/remediation- 13, Mud system- 9, Scale inhibitor-1, Corrosion Inhibitor-2, Oxygen scavenger-1, Cocktail- 1, Degreaser-1, Dispersant-1, Defoamer- 1, Bioremediation-6	4	0

Table 92: Summary of Accredited Laboratories

Laboratory Service	Lagos Zone	Number Port Harcourt Zone	Warri Zone	Total
Environmental Quality Monitoring	13	22	8	43
Bio-Monitoring	11	10	1	22
Petroleum Product monitoring	13	7	4	24
Geological	3	10	0	13
Material Safety Investigation	1	5	0	6
Total	41	54	13	108

Table 93: Summary of Drilling Chemicals

S/N	Drilling Fluid Type	Numbers
1	Water Base Mud	3
2	Synthetic Base Mud	2
3	Oil Base Mud	4
	Total	9

Table 94: 2018 Approved Production Chemicals Inventory

S/N	Production Chemicals	Numbers
1	Biocide	55
2	Corrosion Inhibitors	65
3	Oxygen Scavenger	21
4	Emulsion Breakers	47
5	Bioremediation	13
6	Antifoam	26
7	Scale Inhibitor	39
8	Others	28
	Total	294



Table 95: Applications For Environmental Restoration Services

Service	Approval Status	Approval Type		Total
		New	Renewal	
Soil Remediation	Approved	17	14	31
	Under Processing	14	1	15
	Disapproved	23	2	25
Oil Spill Containment / Cleanup	Approved	63	54	117
	Under Processing	13	6	19
	Disapproved	14	6	20
Pit Backfilling / Land Reclamation	Approved	0	0	0
	Under Processing	0	0	0
	Disapproved	0	0	0
Total		144	83	227

Table 96: Environmental Studies*

Month	ESR		TOR/SOW		PAIR		EIA		EER/EES		EMP		BIO MON		PIA		PDSS		TOTAL
	A ¹	UR ²	A	UR	A	UR	A	UR	A	UR	A	UR	A	UR	A	UR	A	UR	
January	0	0	1	1	0	0	2	1	2	1	0	0	0	0	1	0	0	0	9
February	1	0	3	3	2	0	6	0	3	0	1	0	0	0	1	0	0	0	20
March	0	0	11	1	1	1	4	3	5	1	0	1	0	0	0	0	0	0	28
April	1	0	6	0	1	1	2	6	1	2	0	0	0	0	0	0	0	0	20
May	0	0	6	1	1	0	3	1	2	0	0	0	2	0	0	0	1	0	17
June	0	4	10	3	0	5	5	2	2	2	0	1	0	0	0	0	1	0	35
July	1	0	12	3	1	2	7	2	3	0	0	0	0	0	0	0	0	0	31
August	0	0	4	6	0	3	0	7	0	0	0	0	0	0	0	0	0	0	20
September	1	2	1	4	2	2	0	1	0	1	0	0	0	0	0	0	0	0	14
October	1	2	8	6	0	2	10	4	0	1	0	0	0	0	0	0	0	0	34
November	2	2	5	4	3	3	4	1	1	2	0	0	0	0	0	0	0	0	27
December	0	5	8	2	1	4	5	4	13	1	0	0	0	0	0	0	0	0	43
Total	7	15	75	34	12	23	48	32	32	11	1	2	2	0	2	0	2	0	298

¹A = Approved²UR = Update required

Table 97: Offshore Safety Permit (OSP) Summary

Year	Personnel Registered	Personnel Captured	Permits Issued
2013	5962	3610	727
2014	11543	9541	11637
2015	10369	9388	10160
2016	4681	4569	5029
2017	6361	5537	5246
2018	9884	8915	9072



Table 98: Approved Safety And Medical Emergency Training Centres

S/N	Company	Facility Location Address	Approved Courses
1	Tolmann Allied Services Company Limited	Plot 7b Trans Amadi Industrial Layout, Mothercat Junction (Opp. Anadrill), Port Harcourt	Basic Firefighting; Breathing Apparatus Course; Basic First Aid; Helicopter Landing Officer; Advanced First Aid; Helideck Team Member; Basic Offshore Safety Induction and Emergency Training; Emergency Response Course; Helicopter Underwater Escape Training; Confined Space Entry; Further Offshore Emergency Training; Swing Rope Transfer
2	Charkins Maritime Safety Training Center	KM 4, East West Road, Ozuoba, Port Harcourt	Basic Firefighting; Advanced Firefighting; Basic First Aid; Advanced first Aid; Basic Offshore Safety Induction and Emergency Training; Further Offshore Emergency Training; Compressed Air Emergency Breathing System; Well Control and Intervention; Helicopter Underwater Escape Training; Travel Safely by Boat; Minimum Industry Safety Training; Helicopter Team Member; Work at Height; Authorized Gas Tester; H2SAwareness/Confined Space Entry Rescue; Rigging & Banksman Slinging; Rig Safety Officer Training 1,2,3
3	Opeans Nigeria Limited	32 Jenny & Jessie Road, Off Peter Odili Road, Port Harcourt, Rivers State	Tropical Helicopter Underwater Escape Training; Breathing Apparatus Course; Tropical Basic Offshore Safety Induction and Emergency Training; Confined Space Entry; Basic Firefighting; Swing Rope/Basket Transfer; Basic First Aid; Advanced First Aid; Lifeguard/Offshore Rescue and Survival Techniques
		34 Opete Road, Off Okokutu Junction, Warri, Delta State	Helicopter Underwater Escape Training
4	Safety Center International Limited	Opposite Port Harcourt Int'l Airport Hotel, Port Harcourt, Rivers State	Basic Firefighting; Basic First Aid; Advanced Firefighting; Breathing Apparatus Course; Confined Space Entry; Health & Safety in Welding
5	JC International Limited	Plot 5 JC Street, Off Peter Odili Road, Port Harcourt, Rivers State	Rope Access; Lifting Operations Course; Drilling & Well Intervention; Confined Space Entry
6	Falck Prime Atlantic Limited	9 Younis Bashorun Street, Victoria Island Lagos	Basic Firefighting; Travel Safely by Boat; Advanced Firefighting; Travel Safely by Boat Further Training; Basic First Aid; Helicopter Landing Officer; Advanced First Aid; Helideck Assistant/Team Member; Helicopter Underwater Escape Training; Emergency Response Courses; Basic Offshore Safety Induction and Emergency Training; Rigging & Slinging; Further Offshore Emergency Training; Working at Heights; Confined Space Course (Entry/Exit & Search/Rescue); Breathing Apparatus Course
7	Blisstion Nigeria Limited	Block B, Plot 7, Eleko Beach Road, Lekki, Lagos State	Basic Firefighting; Tropical Further Offshore Emergency Training; Advanced Firefighting; Helicopter Landing Officer; Helicopter Underwater Escape; Training Emergency Response Courses; Tropical Basic Offshore Safety Induction and Emergency Training; Swing Rope Transfer
8	Lym Consults	Km 10 Sapele-Warri Express Road, Otomewo Community, Near Warri, Delta State	Basic Offshore Safety Induction and Emergency Training; Basic Firefighting; Basic First Aid; Helicopter Underwater Escape Training (HUET); Survival at Sea (SAS)
9	EMERGENCY RESPONSE SERVICES LIMITED	Off 394, Ikwere Road, Rumuokwuta, Port Harcourt, Rivers State	Basic Life Support (BLS), Advanced Cardiovascular Life Support (ACLS), Pediatric Advanced Life Support (PALS), Basic Emergency Response Training (Medical), Rig Medic
10	KAYGRILL SERVICES NIGERIA LIMITED	Eleme East West Road, Behind GVC Filing station, Okaken, Aleto Eleme, Port Harcourt, Rivers State	Advanced Fire Safety Training, Confined Space Entry Training, Emergency Response & Rescue Training.

*** Please note that the list may be withdrawn, modified or updated without notice.**



4.5 REVENUE PERFORMANCE

Table 99: Revenue Performance Summary

Year	Oil Royalty, N	Gas Royalty, N	Gas Flare Penalty, N	Concession Rentals, N	Misc Oil Revenue, N	Total Revenue
2010	694,352,412,710.14	0	2,388,572,351.20	728,308,923.82	951,380,744.23	698,420,674,729.39
2011	1,066,836,980,909.87	14,613,812,392.68	3,482,627,975.15	388,502,293.27	2,077,222,926.87	1,087,399,146,497.84
2012	1,052,043,067,383.93	22,242,285,752.85	3,849,873,091.61	444,535,531.69	1,370,171,171.68	1,079,949,932,931.76
2013	960,540,365,106.84	23,235,123,088.28	3,120,786,665.13	178,630,934.47	3,981,983,109.64	991,056,888,904.36
2014	986,343,364,217.80	21,110,923,948.24	2,930,215,304.51	413,496,723.26	5,983,027,290.84	1,016,781,027,484.65
2015	545,061,446,369.23	22,292,228,906.41	2,590,365,296.82	201,275,922.56	17,489,298,348.58	587,634,614,843.60
2016	437,356,879,889.83	16,298,590,492.52	2,333,879,050.11	342,495,121.25	6,408,509,381.58	462,740,353,935.29
2017	704,431,333,766.93	33,173,790,789.60	2,779,377,359.95	356,894,436.55	6,357,674,731.33	747,099,071,084.37
2018	1,203,042,070,005.05	55,711,326,236.96	4,800,060,125.66	734,511,531.86	5,499,593,981.90	1,269,787,561,881.43
Total	7,650,007,920,359.62	208,678,081,607.54	28,275,757,220.14	3,788,651,418.73	50,118,861,686.65	7,940,869,272,292.69

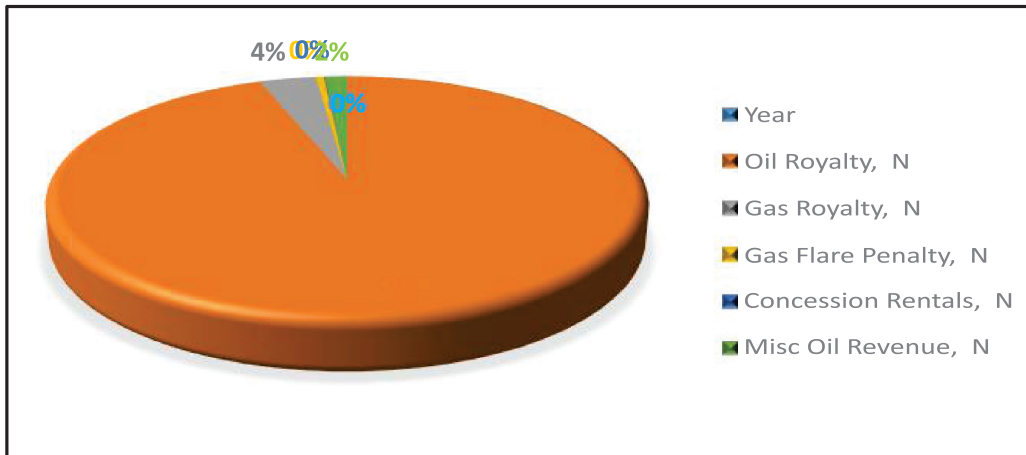


Figure 39: 2018 Revenue Performance

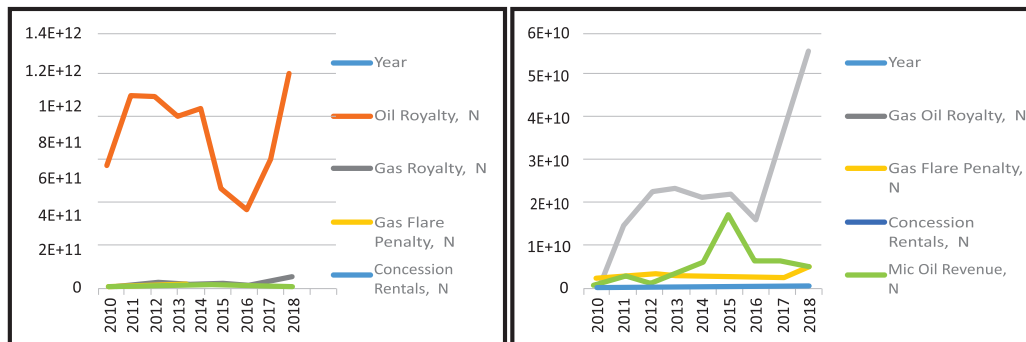


Figure 40: Revenue Performance

5.0 GLOSSARY OF TERMS

AG	–	Associated Gas
AGO	–	Automated Gas Oil
AR2	–	African Regional Line
ATC	–	Approval to Construct
BPSD	–	Barrel Per Stream Day
CB	–	Carbon Black
DGSO	–	Domestic Gas Supply Obligation
DPK	–	Dual Purpose Kerosene
DPR	–	Department of Petroleum Resources
EGP	–	Escravos Gas Plant
EOR	–	Enhanced Oil Recovery
FCT	–	Federal Capital Territory
FPSO	–	Floating Production Storage and Offloading
IDSL	–	Integrated Data Services Limited
IO	–	Indigenous Operator
IOC	–	International Oil Company
JV	–	Joint Venture
KM	–	Kilometer
KRPC	–	Kaduna Refinery & Petrochemical Company
LAB	–	Linear Alkyl Benzene
LLDPE	–	Linear Low Density Polyethylene
MF	–	Marginal Field
MMbbls	–	Million Barrels
MMSCFD	–	Million Standard Cubic Feet Per Day
MT	–	Metric Tonnes
NAG	–	Non-Associated Gas
NAOC	–	Nigerian Agip Oil Company
NAPIMS	–	National Petroleum Investment Management Services



NDPR	–	Niger Delta Petroleum Resources
NDRC	–	Niger Delta Regional Data Compilation
NGC	–	Nigerian Gas Company
NGL	–	Natural Gas Liquid
NNPC	–	Nigerian National Petroleum Corporation
NPDC	–	Nigerian Petroleum Development Company
OBLG	–	Obligation
OML	–	Oil Mining Lease
OPEC	–	Organization of the Petroleum Exporting Countries
OPL	–	Oil Prospecting License
PE	–	Polyethylene
PERF	–	Performance
PHRC	–	Port Harcourt Refining Company
PMS	–	Petroleum Motor Spirit
PP	–	Polypropylene
PPHP	–	Polypropylene Homo-Polymer
PPMC	–	Petroleum Product Marketing Company, a subsidiary of NNPC
PPT	–	Petroleum Profit Tax
PRF	–	Propylene-Rich Feed
PSC	–	Production Sharing Contract
SC	–	Service Contract
SPDC	–	Shell Petroleum Development Company
SQ KM	–	Square Kilometer
SR	–	Sole Risk
TA	–	Technology Adaptation
TCF	–	Trillion Cubic Feet
TQ	–	Technology Qualification
WRPC	–	Warri Refining & Petrochemical Company



The data and information published in this report are subject to ongoing review by DPR based on continuous reconciliation with various stakeholders. Therefore, reliance on data contained herein should be based on final confirmation by DPR.

