

# THE NIGERIAN UPSTREAM PETROLEUM REGULATORY COMMISION (NUPRC)

2023

**ANNUAL REPORT** 

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#### **EXECUTIVE SUMMARY**

In accordance with the provisions of sections 24(9) and (10) of the Petroleum Industry Act (PIA) 2021, the Nigerian Upstream Petroleum Regulatory Commission (NUPRC) is required to submit its annual report of its operations, performance, and an audited financial account to the Honourable Minister of Petroleum Resources for the year not later than 31<sup>st</sup> March of the following year.

This is the third edition of the Commission's 2021 Annual Report since the passage of the PIA 2021 and over the year NUPRC have recorded high level of achievements and initiatives which have boosted the industry and prospered the economy in diverse ways.

In the bid to actualize government aspirations for the industry, substantial deployment of digitization strategy formed the backbone against the reporting year which could be termed successful.

As at 1/1/2023, the hydrocarbon reserve stood at **36.96** billion bbls for Oil and Condensate. **208.83** trillion scf for associated and non-associated gas. 2023 crude oil reserves decreased by 0.46% and condensate increased by 0.99% when compared with 2022 which stood at 36.096 billion barrels for (Oil + Condensate). Gas Reserves status as of January 1, 2023, is **208.83 TCF** representing an increase of 0.10% in comparison with January 1, 2022.

The total production for 2023 was 552,841,582 barrels (457,866,880 barrels of oil and 94,974,702 barrels of condensate) with an estimated daily average of **1,515,353 Million** barrels per day (**1,255,159** barrels of oil per day and **260,194** barrels of condensate per day). 2.503TCF of Associated and Non-Associated gas was produced at an estimated daily average production of 6.857BCF/D which reflects a slight decrease of about 0.57% compared to year 2022. Daily average of associated and non-associated gas production stood at 4.213BCF/D and 2.644BCF/D representing 61.4% and 38.6%, respectively. A total of 2.316TCF (92.54%) was utilised, 0.182TCF (7.25%) was flared and 0.005TCF (0.21%) was reported by NAOC and TEPNG as shrinkage.

The total approved budget for 2023 was N152,400,227,633.04 with total income of N118,333,008,493.41 and total expenditure was N117,742,398,736.23.

The total revenue generated in 2023 was N 4,344,220,368,740.80 against a revenue target of N3,789,056,987,922.68 which represents a performance of 114.65%. This also signified a 14.89% increase in revenue generated compared to the 2022 figure which was N 3,781,643,444,861.73.

571 oil spill incidents were reported. 59.01% of the spills was a result of sabotage.

173 contracts and procurements were carried out which amounted to 5.478 billion Naira.

In 2023 three (3) notable judgments were delivered in favour of the Commission.

Twelve (12) Regulations have ben gazetted while 13 others are in final draft and have met the requirements of stakeholders' engagement as provided in Section 216 of the PIA 2021. They are currently being prepared for legal drafting input and gazetting by the office of the Attorney General of the Federation.

## INTRODUCTION

The Commission's 2023 Annual Report is in fulfilment of the Petroleum Industry Act 2021, Sections 24(9) and (10). The Commission is statutorily required to submit to the Honourable Minister of Petroleum Resources an annual report of its operations and performance.

The report is structured in accordance with the PIA, starting with, Development & Production, Exploration & Acreage Management, Health Economic Regulation & Strategic Planning, Safety, Environment & Community, Corporate Services & Administration, and Finance & Accounts.

## 1.0 DEVELOPMENT AND PRODUCTION

## 1.1 **RESERVES**

#### Table 1.1 Hydrocarbon Reserves as at 1/1/2023.

Oil (Billion Barrels)	Condensate (Billion Barrels)	Associated Gas Reserves (Trillion SCF)	Non-Associated Gas Reserves (Trillion Scf)
31.06	5.90	102.32	106.51
36.9	6		208.83

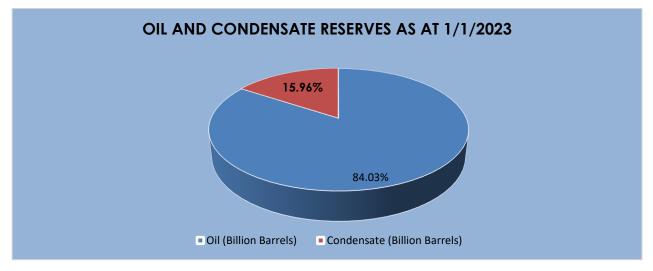


Figure 1.1 Oil and Condensate Reserves as at 1/1/2023.

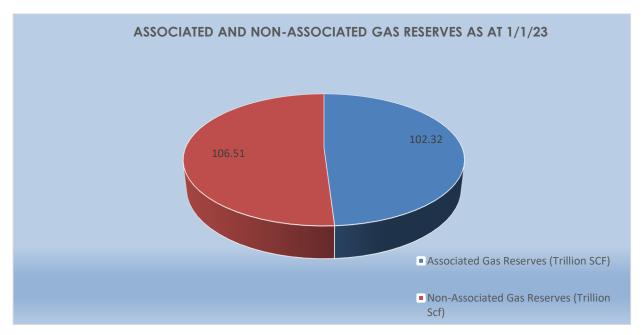


Figure 1.2: Associated And Non-Associated Gas Reserves as at 1/1/23

The National Gas Reserves status as of January 1, 2023, is **208.83 TCF** representing an increase of 0.10% in comparison with January 1, 2022 reserve of 208.62 **TCF**.

# 1.1.2 COMPARISON OF 2022 VS 2023 CRUDE OIL AND CONDENSATE RESERVES

2023 crude oil reserves decreased by 0.46% and condensate increased by 0.99% respectively when compared with 2022. which stood at 36.096 billion barrels for (Oil + Condensate) and 208.83 TCF for (Associated + Non-Associated Gas) respectively.

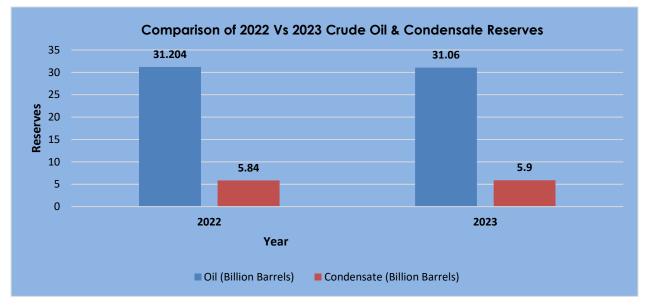


Figure 1.3 Comparison of 2022/2023 Oil and Condensate Reserve

# **1.2 OIL PRODUCTION**

# **1.2.1 PRODUCTION ALLOCATION AND CURTAILMENT**

# 1.2.2 TECHNICAL ALLOWABLE RATE (TAR)

The technical allowable rate (TAR) is the optimised production capacity of all wells in-country that is determined by the Commission after the execution of the statutory bi-annual maximum efficiency rate test (MER) by all operators. The MER test serves as the first technical basis for hydrocarbon measurement and accounting.

#### Table:1.2 2023 approved TAR

1H2023	2,206,584 BPD
2H2023	2,273,827 BPD

## 1.2.3 TECHNICAL ALLOWBALE RATE (TAR) Violations

Six (6) Companies violated the TAR policy by producing at rates above the approved TAR at various times within the review period. The companies include CONOIL, SNEPCO, SGORL, NDPR and SEEPCO.

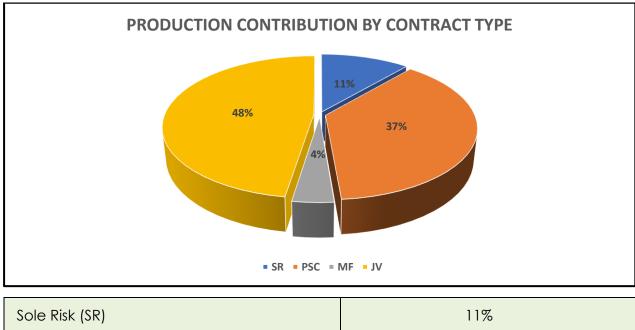
# **1.2.4 PROVISIONAL PRODUCTION**

The total volume of crude produced for the year 2023 is **552,841,582 barrels** (**457,866,880 barrels** of Oil and **94,974,702 barrels** of Condensate).

The daily average production figure is **1,515,353 million** barrels per day (**1,255,159** barrels of Oil per day and **260,194** barrels of Condensate per day).

Production performance against TAR in year 2023 was about 68%.

\* Please note that these figures are unreconciled volumes and should not be reported as export volumes. Kindly note that unreconciled volumes play an important role in reservoir management, production measurement and accounting.



5010 Kisk (5K)	1170
Production Sharing Contract	37%
Marginal Field	4%
Joint Venture	48%

Figure 1.4 Production percentage (%) contribution by contract type



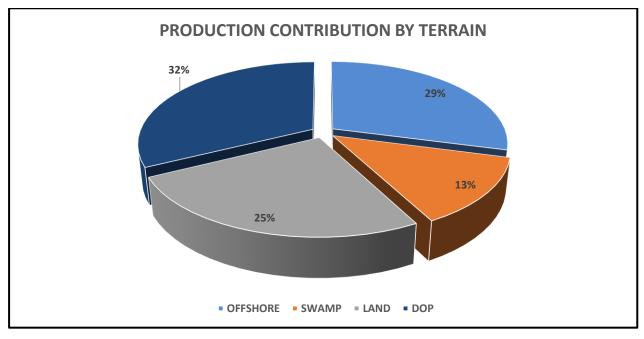


Figure 1.5: Production percentage (%) Contribution by Terrain

Swamp	13%
Land	25%
Offshore	29%
Deep Offshore (DOP)	32%

## **1.2.6 CRUDE OIL & CONDENSATE PRODUCTION ON COMPANY BASIS**

MPNU and TUPNI (Akpo & Egina) accounted for the highest production contributing 11.21% and 10.67% respectively to National production for the year 2023.

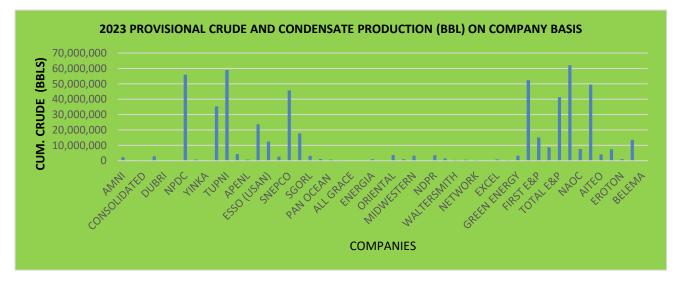
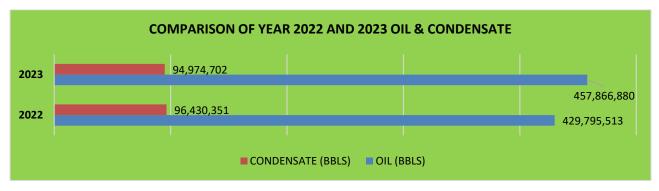


Figure 1.6 2023 Provisional Crude and Condensate Production (bbl) On company Basis

#### 1.2.7 COMPARISON OF 2022 VS 2023 PROVISIONAL PRODUCTION PERFORMANCE.

Table 1.3 shows a comparison of 2022 vs 2023 provisional production performance.

*PROVISIONA	*PROVISIONAL PRODUCTION (YEAR 2022 VS 2023)								
PRODUCTION	2022	2023	% PERFORMANCE						
OIL (BBLS)	429,795,513	457,866,880	6.5%						
CONDENSATE (BBLS)	96,430,351	94,974,702	-1.5%						
OIL + CONDENSATE (BBLS)	526,225,863	552,841,582	5.1%						
AVG. OIL (BOPD)	1,178,642	1,255,159	6.5%						
AVG. CONDENSATE (BPD)	264,438	260,194	-1.6 %						
OIL+CONDENSATE (BPD)	1,443,079	1,515,353	5%						



#### Figure 1.7: Comparison Of Year 2022 And 2023 Oil & Condensate

There was a 6.5 % increase in cumulative oil production and 1.5% decrease in cumulative condensate production in year 2023 as compared to oil and condensate produced in 2022.

#### Table 1.4: Provisional Production 2023

	PROVISIONAL PRODUCTION 2023									
S/N	S/N OPERATORS				CUMM. OIL (BBLS)	CUMM. COND. (BBLS)	CUMM. CRUDE (BBLS)			
1	AMNI		6,407	-	6,407	2,337,590	-	2,337,590		
2	ATLAS		-	-	-	-	-	-		
3	CONSOLIDATED		629	-	629	230,470	-	230,470		
4	CONTINENTAL		7,778	-	7,778	2,836,566	-	2,836,566		
5	DUBRI	SR	-	164	164	-	60,000	60,000		
6	GHL		414	-	414	151,614	-	151,614		
7	NPDC		138,705	14,887	153,592	50,509,474	5,425,542	55,935,016		
8	MONI PULO		2,005	-	2,005	730,546	-	730,546		
9	YINKA		-	-	-	-	-	-		
10	STAR DEEP		-	96,814	96,814	-	85,350,721	35,350,721		
11	TUPNI		92,907	68,696	161,603	33,911,434	25,063,773	58,975,207		
12	APDNL		11,880	-	11,880	4,334,511	-	4,334,511		
13	APENL		2,241	-	2,241	821,332	-	821,332		
14	ESSO (ERHA)		64,983	-	64,983	23,702,277	-	23,702,277		
15	ESSO (USAN)		34,164	-	34,164	12,444,522	-	12,444,522		
16	NAE	PSC	7,170	-	7,170	2,605,830	-	2,605,830		
17	SNEPCO		125,131	-	125,131	45,690,536	-	45,690,536		
18	SEEPCO		39,108	9,558	48,666	14,275,698	3,490,619	17,766,317		
19	SGORL		8,608	-	8,608	3,144,579	-	3,144,579		
20	ENAGEED		3,069	-	3,069	1,114,240	-	1,114,240		
21	PAN OCEAN		-	2,114	2,114	-	769,940	769,940		
	EWCROSS PETR.									
22	LTD.		-	726	726	-	265,220	265,220		
23	ALL GRACE		363	-	363	131,758	-	131,758		
24	BRITTANIA-U	MF	-	347	347	-	126,148	126,148		
25	ENERGIA		-	2,664	2,664	-	969,828	969,828		
26	FRONTIER		567	147	714	207,547	53,608	261,156		

27	ORIENTAL		10,092	-	10,092	3,688,244	-	3,688,244
28	PLATFORM		925	1,737	2,663	336,825	632,910	969,735
29	MIDWESTERN		9,009	-	9,009	3,278,065	-	3,278,065
30	MILLENIUM		69	-	69	25,365	-	25,365
31	NDPR		9,024	697	9,721	3,292,085	256,035	3,548,120
32	PILLAR		3,822	-	3,822	1,390,498	-	1,390,498
33	WALTERSMITH		1,572	-	1,572	576,401	-	576,401
34	UNIVERSAL		1,908	-	1,908	696,839	-	696,839
35	NETWORK		1,233	-	1,233	449,983	-	449,983
36	PRIME		-	-	-	-	-	-
37	EXCEL		2,330	-	2,330	850,155	-	850,155
38	CHORUS		-	871	871	-	318,357	318,357
39	GREEN ENERGY		9,094	-	9,094	3,316,275	-	3,316,275
40	CHEVRON		122,376	21,073	143,449	44,675,174	7,695,053	52,370,227
41	FIRST E&P		41,542	-	41,542	15,155,119	-	15,155,119
42	HEIRS		21,822	2,116	23,938	7,933,675	767,818	8,701,493
43	TOTAL E&P		106,828	6,533	113,360	38,962,462	2,384,170	41,346,632
44	MOBIL		161,411	8,374	169,785	58,945,396	3,054,600	61,999,996
45	NAOC	JV	15,804	5,210	21,015	5,758,772	1,900,860	7,659,632
46	SPDC	JV	124,794	10,936	135,730	45,501,818	4,002,815	49,504,633
47	AITEO		11,321	-	11,321	4,147,673	-	4,147,673
48	NEWCROSS		20,225	-	20,225	7,385,680	-	7,385,680
49	EROTON		2,378	663	3,041	870,739	244,216	1,114,954
50	SEPLAT		31,274	5,867	37,141	11,384,911	2,142,469	13,527,380
51	BELEMA		176	-	176	64,201	-	64,201

# 1.2.8 DOMESTIC CRUDE OIL SUPPLY OBLIGATION (DCSO)

a. Developed Production Curtailment and Domestic Crude Oil Supply Obligation Regulation 2023 pursuant to provisions Section 109(2) of the PIA 2021.

b. Developed DCSO framework and procedure guide for implementation.

c. Engaged all stakeholders including Nigerian Midstream and Downstream Petroleum Regulatory Authority (NMDPRA) for alignment on operationalization of the DCSO.

d. Provided data for publishing on the Commission website and three newspapers on the 1<sup>st</sup> of January 2024 in-line with the provision of section 10 (3) of PC&DCSO Regulations.

e. Commenced the facilitation of crude oil supply to local refineries including newly commissioned Dangote refinery.

## **1.2.9 DEFERRED OIL AND CONDENSATE VOLUMES IN 2023**

The average production deferment for 2023 was 230,252 bopd.

#### 1.3 GAS

## **1.3.1 GAS PRODUCTION, UTILIZATION AND FLARE**

A total of 2.503TCF of Associated and Non-Associated gas was produced at an estimated daily average production of 6.857BCF/D. This represents a slight decrease of about 0.57% compared to year 2022. The daily average associated, and non-associated gas production stood at 4.213BCF/D and 2.644BCF/D representing 61.4% and 38.6%, respectively. A total of 2.316TCF (92.54%) was utilised, 0.182TCF (7.25%) was flared and 0.005TCF (0.21%) was reported by NAOC and TEPNG as shrinkage and the liquid volume spiked to the crude stream. These volumes were produced by forty-seven (47) oil and gas companies as shown in the figure and Table below:

3 CI 4 CI 5 M 6 ES 7 N, 8 TE 9 TU 10 N, 11 AI 12 P, 13 NE 14 EN 15 AI	NEPCO HEVRON HEVRON STAR DEEP OBIL SSO AOC PING JPNI AE NITAN PRODUCING AN OCEAN EPL VAGEED	TYPE JV PSC JV PSC JV PSC JV JV JV SC PSC PSC PSC PSC SR	TERRAIN Onshore/Offshore Deep Offshore Offshore Deep Offshore Onshore/Offshore Onshore/Offshore Onshore/Offshore Deep Offshore Deep Offshore Onshore/Offshore	AG 67,241.50 34,099,63 134,087,24 153,521,54 305,096,59 150,749,44 97,858,44 181,297,08 187,178,66 10,454,37	NAG 281,397.61 - 123,755.08 - - - 92,916.61 103,770.20	AG+NAG 348,639.11 34,099.63 257,842.32 153,521.54 305,096.59 150,749.44 190,775.04	UTILIZATION 332,682,45 33,450,23 243,278,97 150,240,74 282,133,45 141,540,23 176,418.06	CAS FLARED 15,956.66 649.40 14,563.35 3,280.79 22,963.14 9,209.22 10,654.90	SHRINKAGE 	FLARED 5 2 6 2 2 8 8 6
2 SN 3 Cl 4 Cl 5 M 6 ES 7 N, 8 TE 9 TU 10 N, 11 Al 12 P/ 13 NE 14 EN 15 Al	NEPCO HEVRON HEVRON STAR DEEP OBIL SSO AOC PING JPNI AE NITAN PRODUCING AN OCEAN EPL VAGEED	PSC JV PSC JV PSC JV JV JV PSC PSC PSC PSC	Deep Offshore Offshore Deep Offshore Onshore/Offshore Deep Offshore Onshore/Offshore Deep Offshore Deep Offshore	34,099.63 134,087.24 153,521.54 305,096.59 150,749.44 97,858.44 181,297.08 187,178.66	123,755.08 - - 92,916.61 103,770.20	34,099.63 257,842.32 153,521.54 305,096.59 150,749.44 190,775.04	33,450.23 243,278.97 150,240.74 282,133.45 141,540.23	649.40 14,563.35 3,280.79 22,963.14 9,209.22		2 6 2 8 6
3 CI 4 CI 5 M 6 ES 7 N, 8 TE 9 TU 10 N, 11 AI 12 P, 13 NE 14 EN 15 AI	HEVRON HEVRON STAR DEEP OBIL SSO AOC IPNG JPNI AE NTAN PRODUCING AN OCEAN EPL VAGEED	JV PSC JV PSC JV JV PSC PSC PSC PSC	Offshore Deep Offshore Onshore/Offshore Deep Offshore Onshore/Offshore Deep Offshore Deep Offshore	134,087.24 153,521.54 305,096.59 150,749.44 97,858.44 181,297.08 187,178.66	- - - - - - - - - - - - - - - - - - -	257,842.32 153,521.54 305,096.59 150,749.44 190,775.04	243,278.97 150,240.74 282,133.45 141,540.23	14,563.35 3,280.79 22,963.14 9,209.22		6 2 8 6
4 Cl 5 M 6 ES 7 N, 8 TE 9 TU 10 N, 11 AI 12 P/ 13 NE 14 EP 15 AJ	HEVRON STAR DEEP OBIL SSO AOC PNG JPNI AE NTAN PRODUCING AN OCEAN EPL VAGEED	PSC JV PSC JV JV PSC PSC PSC PSC	Deep Offshore Onshore/Offshore Deep Offshore Onshore/Offshore Onshore/Offshore Deep Offshore Deep Offshore	153,521.54 305,096.59 150,749.44 97,858.44 181,297.08 187,178.66	- - - - - - - - - - - - - - - - - - -	153,521.54 305,096.59 150,749.44 190,775.04	150,240.74 282,133.45 141,540.23	3,280.79 22,963.14 9,209.22		2 8 6
5 M 6 ES 7 N, 8 TE 9 TU 10 N, 11 AI 12 P/ 13 NE 14 EP 15 A/	OBIL SSO AOC PNG JPNI AE NTAN PRODUCING AN OCEAN EPL VAGEED	JV PSC JV JV PSC PSC PSC PSC	Onshore/Offshore Deep Offshore Onshore/Offshore Onshore/Offshore Deep Offshore Deep Offshore	305,096.59 150,749.44 97,858.44 181,297.08 187,178.66	103,770.20	305,096.59 150,749.44 190,775.04	282,133.45 141,540.23	22,963.14 9,209.22	-	8
6 ES 7 N, 8 TE 9 TU 10 N, 11 A1 12 P/ 13 NE 14 EP 15 A/	SSO AOC IPNG JPNI AE NTAN PRODUCING AN OCEAN EPL VAGEED	PSC JV JV PSC PSC PSC PSC	Deep Offshore Onshore/Offshore Onshore/Offshore Deep Offshore Deep Offshore	150,749.44 97,858.44 181,297.08 187,178.66	103,770.20	150,749.44 190,775.04	141,540.23	9,209.22	-	6
7 N/ 8 TE 9 TU 10 N/ 11 AI 12 P/ 13 NE 14 EN 15 A/	AOC PNG JPNI AE NTAN PRODUCING AN OCEAN EPL VAGEED	JV JV PSC PSC PSC PSC	Onshore/Offshore Onshore/Offshore Deep Offshore Deep Offshore	97,858.44 181,297.08 187,178.66	103,770.20	190,775.04			- 3 702 08	
8 TE 9 TU 10 N/ 11 AI 12 P/ 13 NE 14 EN 15 A/	IPNG IPNI AE NTAN PRODUCING AN OCEAN EPL VAGEED	JV PSC PSC PSC PSC	Onshore/Offshore Deep Offshore Deep Offshore	181,297.08 187,178.66	103,770.20		176,418.06	10.654.90	3 702 08	,
9 TU 10 N/ 11 AI 12 P/ 13 NI 14 EN 15 A/	AE NTAN PRODUCING AN OCEAN EPL NAGEED	PSC PSC PSC PSC	Deep Offshore Deep Offshore	187,178.66					0,7 02.00	6
10 N/ 11 AI 12 P/ 13 NI 14 EN 15 A/	AE NTAN PRODUCING AN OCEAN EPL NAGEED	PSC PSC PSC	Deep Offshore			285,067.27	278,497.22	4,899.49	1,670.56	2
11 AI 12 PA 13 NE 14 EN 15 AI	NTAN PRODUCING AN OCEAN EPL NAGEED	PSC PSC		10 454 37	-	187,178.66	184,179.81	3,056.88	-	2
12 PA 13 NE 14 EN 15 AI	AN OCEAN EPL NAGEED	PSC	Onshore/Offshore	10,434.37	-	10,454.37	6,486.46	3,967.91	-	38
13 NE 14 EN 15 AI	EPL AGEED			21,641.38	-	21,641.38	6,595.43	15,045.95	-	70
14 EN 15 A/	NAGEED	SR	Onshore	10,072.50	-	10,072.50	9,013.89	1,058.61	-	11
15 AI	-		Onshore/Offshore	96,688.66	152,345.09	249,033.74	217,029.57	32,004.17	-	13
	MNI	PSC	Onshore	931.58	-	931.58	87.97	843.60	-	91
14 14		SR	Offshore	2,350.77	-	2,350.77	1,759.70	591.07	-	25
10///	ONIPULO	MF	Offshore	192.41	-	192.41	16.41	176.00	-	91
17 AI	RADEL	MF	Onshore	3,573.22	6,117.54	9,690.76	9,623.98	66.78	-	1
18 C	ONTINENTAL	SR	Offshore	2,446.67	-	2,446.67	233.17	2,213.51	-	90
19 C	ONSOLIDATED	SR	Offshore	197.13	-	197.13	77.36	119.77	-	61
20 DI	UBRI	SR	Onshore	667.51	-	667.51	8.14	659.37	-	99
21 PL	ATFORM	MF	Onshore	3,454.25	6,990.44	10,444.68	9,961.29	483.40	-	5
22 W.	ALTER SMITH	MF	Onshore	448.77	3.67	452.44	297.82	154.62	-	34
23 M	ID WESTERN	MF	Onshore	799.36	-	799.36	60.63	738.73	-	92
24 PI	LLAR	MF	Onshore	647.44	-	647.44	381.66	265.77	-	41
25 G	ENERAL HYDROCARB	MF	Offshore	1,502.27	-	1,502.27	-	1,502.27	-	100
26 EN	VERGIA	MF	Onshore	-	6,896.50	6,896.50	4,333.88	2,562.61	-	37
27 Bri	itania-U	MF	Offshore	97.57	-	97.57	74.05	23.52	-	24
28 SE	PLAT	JV	Onshore	17,059.66	84,640.78	101,700.45	93,803.24	7,897.21	-	8
29 O	RIENTAL ENERGY	MF	Deep Offshore	5,252.86	-	5,252.86	4,128.18	1,124.68	-	21
		PSC	Onshore	8,924.55	42,705.95	51,630.49	51,623.91	6.58	-	0
		MF	Onshore	226.85	46,900.51	47,127.36	46,856.62	270.74	-	1
32 Ne	ew Cross E&P	JV	Onshore	6,486.10	-	6,486.10	3,436.73	3,049.37	-	47
		PSC	Onshore	-	5,666.93	5,666.93	5,608.67	58.26	-	1
34 UI	NIVERSAL ENERGY	MF	Onshore	544.03	-	544.03	40.45	503.58	-	93
35 AI	ITEO	JV	Onshore	4,292.99	-	4,292.99	1,729.38	2,563.61	-	60
36 NI	ETWORK	MF	Onshore	924.30	-	924.30	35.34	888.96	-	96
37 BE	ELEMA OIL	JV	Onshore	115.88	-	115.88	64.15	51.74	-	45
		SR	Deep Offshore	-	-	-	-	-	-	#DIV/0!
39 G	REEN ENERGY	MF	Onshore	1,988.86	-	1,988.86	-	1,988.86	-	100
40 EX		MF	Onshore	183.32	-	183.32	101.17	82.15	-	45
41 M	ILLENIUM	MF	Onshore	481.78	-	481.78	-	481.78	-	100
42 SC		PSC	Onshore	149.84	-	149.84	147.38	2.45	-	2
		MF	Onshore	-	3,968.10	3,968.10	666.08	3,302.02	-	83
		MF	Deep Offshore	9,182.36	-	9,182.36	618.48	8,563.88	-	93
		MF	Onshore	207.66	-	207.66	-	207.66	_	100
	EIRS HOLDING OIL & (		Onshore	7,034.29	7,056.37	14,007.57	11,244.64	2,762.93	-	20
	EWCROSS PETROLEUN		Onshore	7,479.23	-	7,479.23	7,479.23	-	-	-
				1,537,830.5	965,131.4	2,502,878.8	2,316,046.3	181,517.9	5,372.6	7.3

#### Table 1.5: 2023 Annual Gas Production, Utilization and Flare Data (MMscf)

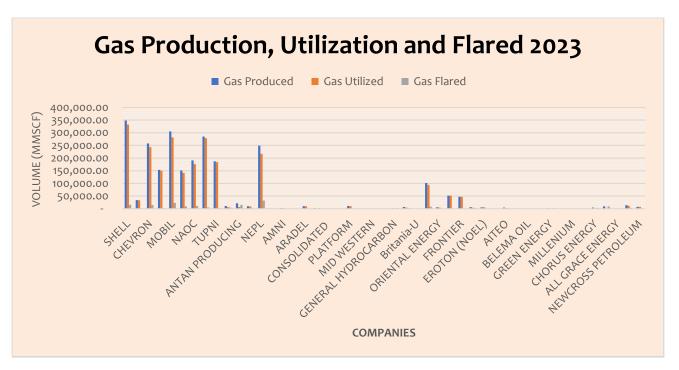


Figure 1.8: Gas production, Utilization & Flared.

## **1.3.2 MONTHLY DAILY AVERAGE GAS PRODUCTION**

The average daily and monthly gas production performance for 2023 is shown in table 1.4. Historical average daily production for 2012 to 2023 is summarized in figure 1.4 below.

	I	Production (MMSC	:)	Average
Month	AG (MMSCF)	NAG (MMSCF)	otal Gas Produced (MMSCF)	Daily Production (MMSCF/D)
January	136,782.7	77,222.6	214,005.2	6,903.4
February	124,217.7	78,131.5	202,349.2	7,226.8
March	136,952.4	90,513.7	227,466.1	7,337.6
April	110,258.1	81,685.9	191,944.0	6,398.1
May	128,075.7	84,602.2	212,677.9	6,860.6
June	127,835.0	72,129.2	199,964.2	6,665.5
July	128,703.5	78,499.6	207,203.0	6,684.0
August	125,769.8	75,080.8	200,850.6	6,479.1
September	128,882.7	88,255.7	217,138.4	7,237.9
October	142,163.3	83,857.9	226,021.2	7,291.0
November	127,374.8	74,110.7	201,402.4	6,713.4
December	120,815.1	81,041.6	201,856.7	6,511.5
<b>Total Production</b>	1,537,830.5	965,131.4	2,502,878.8	6,857

Table 1.6: Average Daily and Monthly Gas Production Performance for 2023

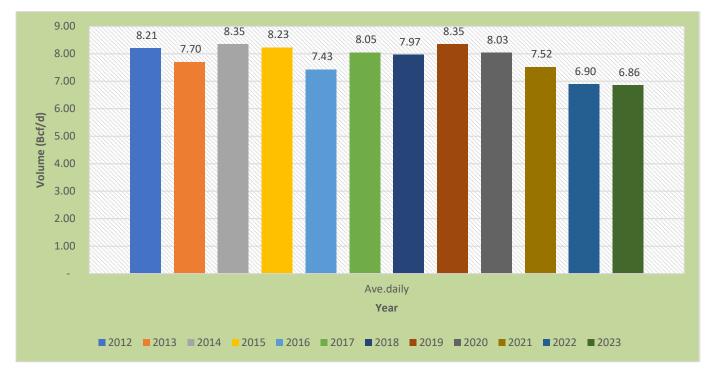


Figure 1.9: Historical Average daily production performance for 2012-2023

# **1.3.3 GAS PRODUCTION ON CONTRACT TYPE BASIS**

It is important to note that out of the 2.503Tcf of Gas produced during year 2023, Joint Venture (JV) companies contributed 1.514Bcf (60.49%), Production Sharing Contract companies produced a total of 0.634Bcf (25.31%),Sole Risk (SR) companies produced 0.255Bcf (10.18%),while Marginal Fields (MF) produced a total of 0.101BSCF (4.02%) as depicted in the table and figure overleaf.

Contract Type	Total Production (MMSCF)	Total Gas Utilised	Total Gas Flared	Average Production (MMSCF/Day)	6 Production	% Utilized	6 Flared
Joint Venture (JV)	514,023.33	1,423,288.29	85,362.40	4,148.01	60.49	61.45	47.03
Production haring Contract (PSC)	633,575.60	596,453.96	37,179.67	1,735.82	25.31	25.75	20.48
Sole Risk (SR)	254,695.83	219,107.94	35,587.89	697.80	10.18	9.46	19.61
Marginal Field (MF)	100,584.05	77,196.06	23,387.99	275.57	4.02	3.33	12.88
TOTAL	502,878.80	2,316,046.25	181,517.94	6,857.20	100.00	100.00	100.00

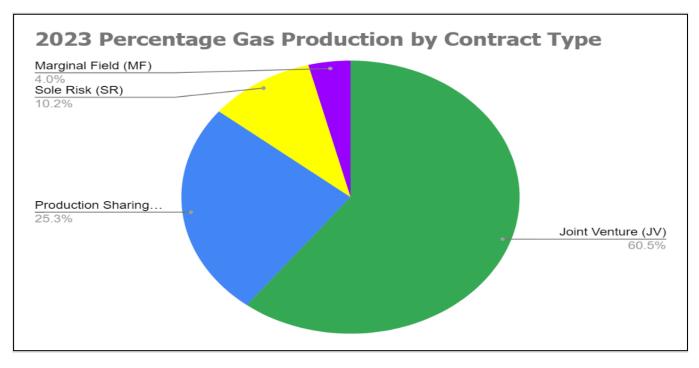


Figure 2.0: Gas production on contract basis

## 1.3.4 GAS UTILIZATION

2.503 TCF of gas was produced and 2.316TCF (92.54%) was utilized. Gas utilization by the companies were for in-house gas consumption for fuel, gas lifting, injection for pressure maintenance or storage and sales to either the domestic or export markets. The details of gas utilization breakdown for the period are shown below.

Gas utilization	Volume (MMScf)	% Utilization
Fuel Gas	143,604.09	6.2
Gas Lift	113,589.66	4.9
Gas re-Injection	545,995.89	23.6
Domestic Sales	666,384.76	28.8
Export Sales	846,471.85	36.5
Total	2,316,046.250	92.535

Table 1.8: Gas Utilization Profile for the year 2023 (MMSCF)

# 1.3.5 Gas Flare

2.503 TCF of gas produced, a total of 0.181TCF (7.2%) was flared. The table below shows the volume of gas flared in the country monthly.

Month	Gas Production (MMscf)	Sas Flared Volume (MMscf)	% Flared
January	214,005	15,005	7.01
February	202,349	15,717	7.77
March	227,466	16,190	7.12
April	191,944	13,563	7.07
Мау	212,678	14,169	6.66
June	199,964	14,345	7.17
July	207,203	13,875	6.70
August	200,851	15,177	7.56
September	217,138	15,565	7.17
October	226,021	14,897	6.59
November	201,402	15,627	7.76
December	201,857	17,389	8.61
Total	2,502,878.8	181,517.9	Avg. 7.3

Table 1.9: Monthly Gas Flare Profile for the January-December (MMSCF)

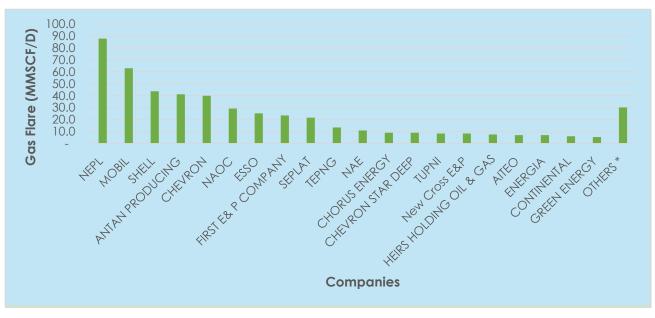


Figure 2.1: 2023 Companies Gas Flare

# 1.3.6 DOMESTIC GAS DELIVERY OBLIGATION AND PERFORMANCE.

2023 National Gas Demand Requirement (NDGR) from the Authority was put at 4.484 Bscf per day. However, a total of 3.245Bcfd was allocated to the producers using the DGDO algorithm. The average annual performance of actual deliveries against the allocated obligations stood at 58%. The table and chart below show the daily performance for gas supplied to the domestic market from January to December 2023.

Table 2.0. 2023 DG3O Allocation and Penormance											
Month	Dbligation (MMSCFD)	Actual Supply (MMSCFD)	% Performance								
January	3,244.5	1,989.1	61%								
February	3,244.5	1,995.5	62%								
March	3,244.5	1,919.0	59%								
April	3,244.5	1,881.6	58%								
May	3,244.5	1,893.7	58%								
June	3,244.5	1,731.8	53%								
July	3,244.5	1,867.7	58%								
August	3,244.5	1,821.6	56%								
September	3,244.5	1,997.7	62%								
October	3,244.5	2,053.6	63%								
November	3,244.5	1,779.0	55%								
December	3,244.5	1,724.1	53%								
Average	3244.50	1887.87	58%								

Table 2.0: 2023 DGSO	Allocation and	Performance
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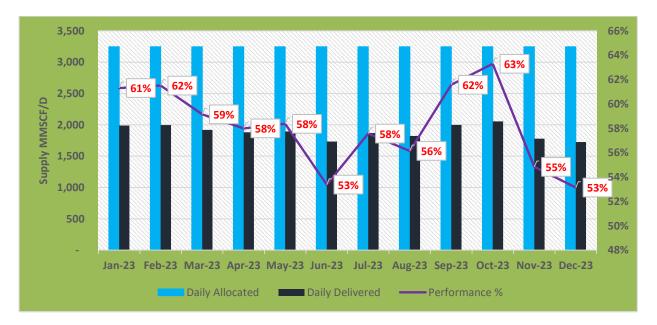


Figure 2.2: Domestic Gas Delivery Obligation (DGDO) Performance for 2023

# 1.3.7 FIELD DEVELOPMENT PLAN (FDP)

In line with government's aspirations to boost oil production, maximize reserves recovery and develop gas for domestic and export purposes, fortythree (43) FDP applications were processed in 2023. Thirty-one (31) FDP were approved. The approved field development plans aim to develop about 1,309.83 MMstb and 10.25 TCF of oil and gas reserves respectively. Additionally, oil and gas production anticipated from these developments are about 301 kbopd and 1,869 MMscfd respectively.

			SUMMARY OF AP	PROVED FD	)P											
S/N	Company	Block	Field	FDP Type	Terrain	Estimated Oil Reserves (MMSTB)	Estimated Gas Reserves (BSCF)	Estimated Condensate Reserves (MMSTB)	Expected Oil Rate (bopd)	Expected Gas Rate (MMscf/D)	Expected Condensate Rate (bcpd)	First Oil Date	CAPEX (US\$M)	-	ABEX (US\$M)	Drilling Commencemer Date
1	NAOC	61	IDU	Addendum	Onshore	61.18	607.00		2,000	100		2023	852			Q1 2023
2	NAOC	63	OGBAINBIRI DEEP	Addendum	Onshore	62.00	947.00		7,100	37		2023	472			Q1 2023
3	SGEPL	157	UGUALI & UKPICHI	Main	Onshore	97.93	79.90		15,574	49		2023	707.1			Q1 2023
4	CNL		West-Isan	Main	Offshore	27.86			4,500			2024	213.9			Q1 2024
5	SPDC	35	AJATITON	Main	Onshore	10.00	4.00		4,000	1		2027	54.9			Q4 2026
6	SPDC	46	AKONO	Main	Onshore	14.00	13.00		5,000			2027	47.8			Q1 2027
7	SPDC	35	ANGALALEI	Main	Onshore	33.00	88.00		7,500			2026	129.1			Q3 2026
8	NPDC	30	Oroni	Main	Onshore	52.20	646.80		11,000	80		2023	289.4			Q1 2023
9	NPDC	30	Kokori	Main	Onshore	125.83	41.36		30,000	9		2023	422.64			Q1 2023
10	NNPC E&P Limited	34	Utorogu	Main	Onshore	99.33	3,280.00		17,000	210		2024	444.4			Q1 2024
11	First E&P	83	Anyala	Addendum	Offshore	125.00	332.00		30,000	120		2023	800			Q2 2023
12	Seplat West Limited	38	Okpohuru	Addendum	Onshore	3.90	32.20		3,100	2		2023	22.18			Q2 2023
13	HHOG	17	Agbada	Addendum	Onshore		139.00			130			29.9			
14	TEPNG	OML 102	OFON	Addendum	Offshore	22.30	-	-	-	-	-	Q1 2023	4.565	0	0	0
15	SEPLAT	OML 41	Ovhor	Addendum	Onshore	7.28	1.43	-	5,000	0	-	Q3 2023	69.9	48.36	45.12	Q2 2023
16	SPDC	OML 23	Soku	Addendum	Swamp	-	38.00	0.30	-	50		Q2 2024	34.9	6.58	3.78	Q4 2023
17	TEPNG	OML 58	UBETA	Addendum	Offshore	-	900.00	19.40	-	350	19	Q3 2026	437	184	23	Q2 2026
18	SNEPCO	OML 118	Bonga-North	Addendum	Deep Offshore	54.00	33.90	-	45,000	11	-	Q1 2027	490.19	79.79	110.39	Q1 2024
19	SEEPCO	OML 143	ENYIE	Revision	Onshore	35.02	18.16	-	12,000	2	-	Q2 2023	84	576600		Q2 2023
20	AMNI	OML 52	Tubu	Revision	Offshore	55.00	155.00	-	30,000	57	-	Q4 2023	535.5	576.7	28.3	Q3 2023
21	NEPL	OML 30	Olomoro-Oleh	Revision	Land	335.40	154.50	-	33,000	23	-	Q3 2023	536.39	322	57.5	Q2 2023
22	FRONTIER	OML 13	Uquo	Revision	Land	5.18	503.20	-	7,500	135	-	Q4 2023	160			Q3 2023
23	SPDC		Kolo Creek	Revision	Onshore	-	637.00	11.00	-	140	-		100			2025
24	SNEPCO	OML 118	Bonga Main	Revision	Deep Offshore	10.00	21.64	-	10,000	8	-	Q1 2024	205	24.5	36.79	Q4 2023
25	SPDC	OML 28		Revision-2	Onshore	-	448.00	7.00	-	100	-	Q2 2027	180.95	48.58	19.2	Q3 2025
26	SEEPCO	OML 146	Agu	Revision-2	Onshore	37.55	39.00	-	10,400	12	-	Q1 2024	151.9	208.48	14.12	Q4 2023
27	SEEPCO	OML 143	Anieze	Revision-3	Onshore	25.65	41.30	-	7,700	14	-	Q2 2024	112.1	180.6	15.3	Q4 2023
28	NEPL	OML 13		Main	Onshore	10.22	89.60	-	3,750	35	-	Q2 2024	82.4	174.4	7	Q3 2023
29	SEEPCO	OML 143	Enyie NAG	Main	Onshore	-	189.83	-	-	50	-		173.13	TBA	TBA	Q1 2024
30	SEEPCO	OML 143	Unere NAG	Main	Onshore	-	201.23	17.12	-	45	-		187.34	TBA	9.9	
31	SGEPL	OML 157	Oguali NAG	Main	Onshore	-	568.60	-	-	100	-		168.18	TBA	TBA	
						1,309.83	10,250.65	54.82	301,124.00	1.869.25	319.40				+	
	1					1,309.83	10,250.65	54.82	301,124.00	1,869.25	319.40				<u> </u>	<u> </u>

#### Table 2.1: 2023 Approved FDPs with the value addition

The average unit development cost for the approved FDPs on terrain basis are as follows.

Table 2 2: Average	Init developmen	t cost for approve	d FDPs on terrain basis
Tuble Z.Z. Aveluge	e unil developmen	i così ioi appiove	a rurs on tenain basis

S/N	TERRAIN	UDC/ (\$/boe)
1	Onshore	4.16
2	Offshore	4.20
3	Deep offshore	9.93

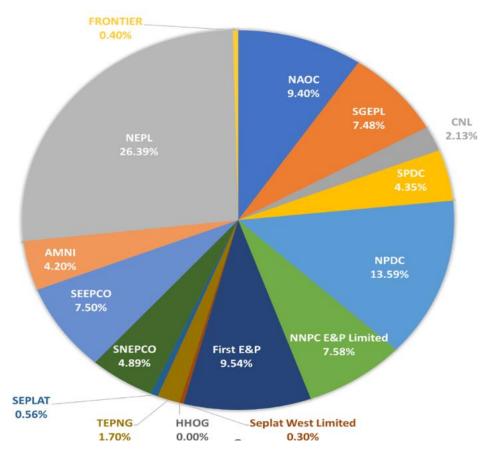


Figure 2.3: Reserve distribution of 2023 approved FDP on company basis

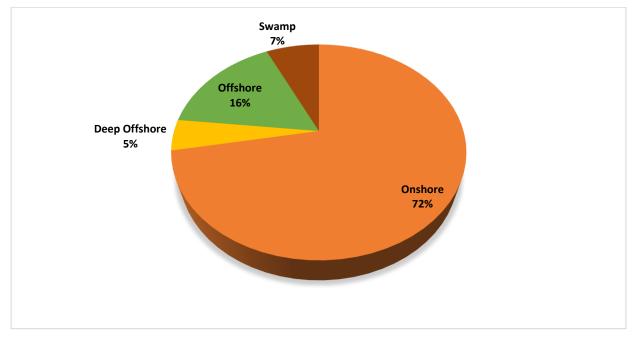


Figure 2.4: Year 2023 FDP distribution by terrain

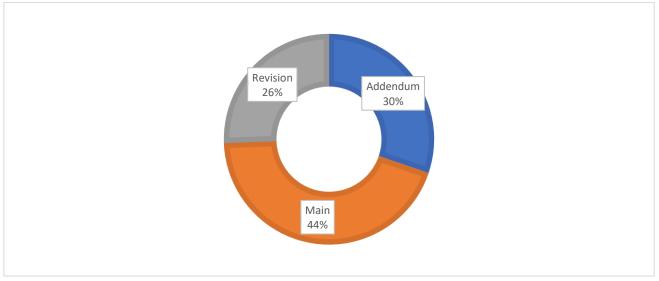


Figure 2.5: Year 2023 FDP Types distribution

There was 55% increase in FDP approvals relative to year 2022 which can be attributed to the impact of the Petroleum Industry Act 2021 due to clarity on fiscal and legal framework for the oil and gas industry in Nigeria. This has increased investors' confidence to commit funds towards long-term investments in the industry.

# **1.3.8 WELL DRILLING PROPOSALS**

A total of one hundred and forty (140) well drilling proposals were received, eighty-nine (89) were approved to twenty (20) companies across the different operational terrains.

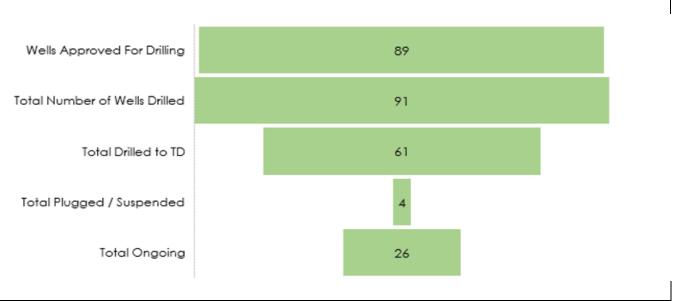


Figure 2.6: Status of Well Drilling Activities in Year 2023

# 1.3.9 Distribution of Wells Drilled on Terrain Basis in Year 2023

69.7% of well drilling locations were on land, 14.6% offshore, 7.8% swamp and 7.8% deep offshore.

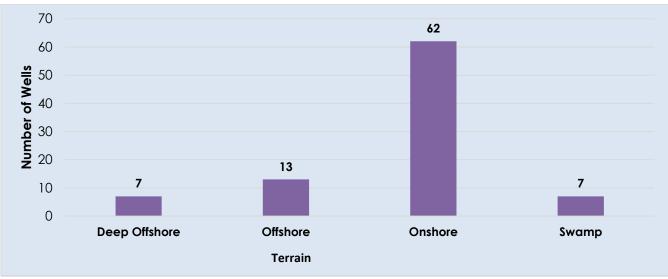


Figure 2.7 Distribution of Wells Drilled on Terrain Basis in Year 2023

## 1.3.9.1 Gas Development Wells

Seven (7) gas well proposals were received and five (5) were approved (3 for SPDC ,1 for NAOC, and 1 for Seplat). The wells are expected to develop an estimated volume of **730.52Bscf** of gas at a projected initial daily offtake of **280.15MMscf/d**.

## **1.4 WELL RE-ENTRY**

Five Hundred and Nineteen (519) applications were received for re-entry activities targeted at restoring existing wells to production from International Oil Companies (IOCs). Three hundred and nineteen (319) were approved representing 72% of the total applications.

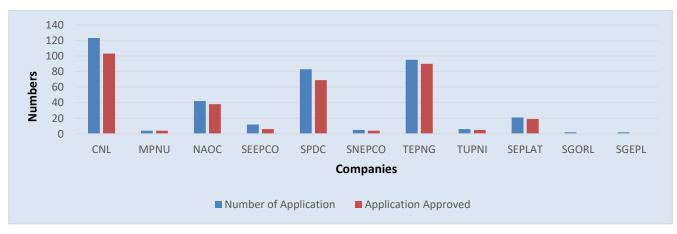


Figure 2.8 Well Re-entry Approved International Oil Companies in 2023

One hundred and twenty-three (123) re-entry approvals were granted to twentyone (21) Indigenous operators to conduct re-entry operations out of a total of one hundred and forty-five (145) applications received, this signifies an approval performance of eighty-five percent (85%).

Some of the new PPL awardees notably; Ibom Upstream Coy Limited, Ingentia Energies Ltd. were granted approvals to re-enter some wells within their portfolio, with the primary objectives of adequate data gathering to guide development of the field and restore production. The approvals granted to indigenous players aimed to enable value addition via the development to unlock 1032 MMstb of oil reserves with production addition of about 171kbopd.

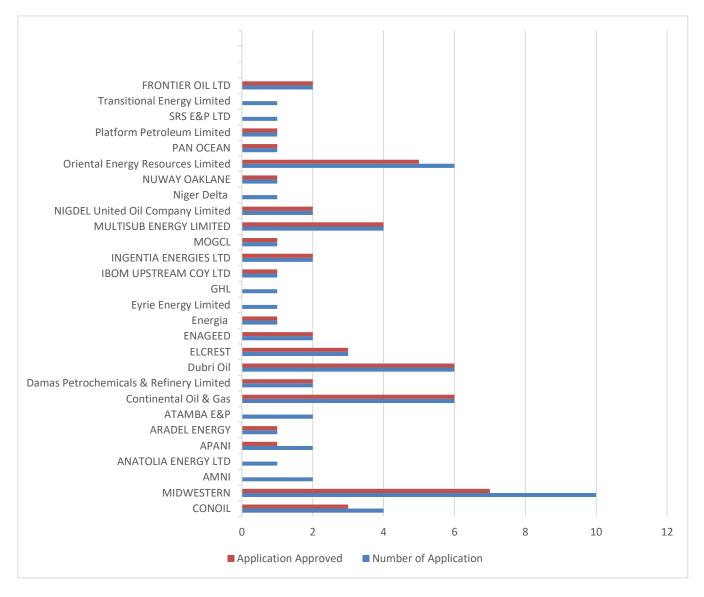


Figure 2.9 Status of Well Drilling Applications Received in Year 2023 on Company Basis

Ninety-One (91) wells were drilled, with Sixty-One (61) reaching the desired targets, four (4) wells were plugged/suspended while twenty-six (26) drilling activities are ongoing.

# 1.4.1 COST BENCHMARKING FOR OIL WELLS

Drilling cost of all wells approved in year 2023 were benchmarked against each other in terms of well type and the terrain of operation.

The estimated average cost of all wells drilled across the different terrains (Land, Deep offshore, offshore and swamp. Using this approach, the outliers are identified for further scrutiny to ensure that all drilling cost of same well types within the same terrain converge within tolerable cost ranges in line with the commercial regulation mandate of the Commission.

5/N	TERRAIN	NO. BLOCKS (OPL/OML)	AVG. AFE/COST (Million USD)				
1	Land	38	12.02				
2	Swamp	7	119.2				
3	Offshore	13	22.26				
4	Deep offshore	7	33.75				

Table 2.3 WELL DRILLED AND AVERAGE ASSOCIATED COST BY TERRAIN

# 1.4.2 Rigs/Vessel Licensing

Rig disposition for 2023 shows that Seventy (70) drilling rigs were monitored incountry. Twenty-eight (28) active rigs were licensed for operations with different operating companies and in different terrains. Forty-two (42) rigs were on standby & stacked positions at various times in 2023, while fifteen (15) vessels, hoists & barges operated in-country as shown in table below.

Table 2.4: 2023 Rig & Vessel Disposition Status

S/N	<b>RIG NAME</b>	<b>RIG TYPE</b>	OPERATIONAL STATUS
1	Durga-11	Land Rig	Active (Completion)
2	Durga-15	Land Rig	Active (Drilling)
3	Durga-3	Land	Active (Drilling)
4	Durga-4	Land	Active (Wireline logging)
5	Durga-7	Land Rig	Active (Waiting for EWT)
6	Durga-8	Land	Active (Drilling)
7	Ensco DS-10	)eep Offshore (Drill Ship)	Active (P& A)
8	Hilong-19	Land Rig	Active (Initial Completion)

9	Hilong-29	Land Rig	Active
10	HPEB 120	Land Rig	Active
11	lkenga-101	Land Rig	Active
12	Ng Resurgence	Offshore (Jackup rig)	Active
13	Noble-Gerry De Souza	)eep Offshore (Drill Ship)	Active (Drilling)
14	OES Respect	Swamp Rig	Active (Drilling)
15	Oritsetimeyin	Jack-up	Active (Completion)
16	Trident-8	Offshore (Jackup)	Active (Initial Completion)
17	Hilong-27	Land Rig	Active
18	Durga-2	Land	Active (Drilling)
19	Durga-9	Land Rig	Active (Drilling)
20	Durga-13	Land Rig	Active (Drilling)
21	Durga-5	Land	Active (Drilling)
22	Durga-14	Land Rig	Active (Drilling)
23	Shelf Drilling Mentor (SDM)	Jack-up	Active (Drilling)
24	Adriatic-1	Offshore (Jackup)	Active (Initial Completion)
25	Discovery-202	Land Rig	Active (Drilling)
26	Hilong-7	Land	Active (Drilling)
27	Durga-1	Land	Active (Drilling)
28	Shelf Drilling Scepter (SDS)	Offshore (Jackup)	Cement Bond logging

# **1.5 FACILITY ENGINEERING**

The Commission provided regulatory oversight to thirty-four (34) active projects in 2023. These projects add to hydrocarbon volume and increase oil production of the nation. The projects have a crude oil and gas handling capacity of 680 kbopd and 2398 MMscf/d respectively. Different approvals were issued in 2023, table below depicts the numbers and approval types issued.

	APPROVALS GRANTED													
S/N	Approval Type	Jan	Feb	Mar	April	May	June	Jul	Aug	Sept	Oct	Nov	Dec	<b>[</b> otal
1	Conceptual Design Approval (CDA)/ FEED	3	0	2	2	0	3	10	4	2	1	2	0	29
2	Permit to Survey (PTS)	0	0	0	0	0	0	3	0	1	0	0	0	4
3	Right of Way Permit (ROWP)	0	0	0	0	0	0	0	0	0	0	0	0	0
4	il Pipeline License (OPLL)	0	0	0	0	0	9	0	0	4	4	1	0	18

#### Table 2.5. Approvals issued by the Facilities Engineering 2023

5	Detailed Engineering Design/Approval to Construct	0	0	2	2	2	3	4	5	5	2	0	0	25
6	e-commission/Approval introduce hydrocarbon		2	1	1	1	0	2	0	0	0	0	0	7
7	License to Operate	0	0	0	0	0	113	107	0	18	61	10	0	309
	otal Approval Granted for Year 2023	3	2	5	5	3	128	126	9	30	68	13	0	392

S/N	Type of Facilities	LTO Issued
1.	Flowstation	184
2.	FPSO /FSO/EPF	11
3.	Terminals	3
4.	Production Platforms	19
5.	Wellheads	18
6.	Accommodation Platforms	2
7.	Gas Handling Facilities	12

# **1.5.1 DEPLOYMENT OF NEW TECHNOLOGY AND INNOVATION**

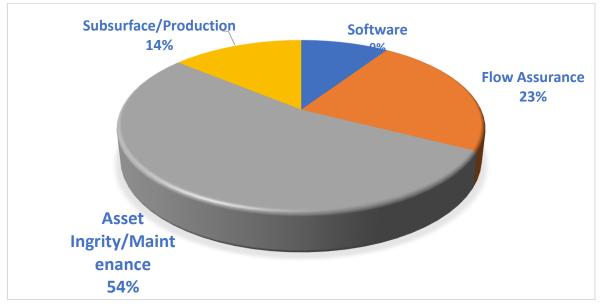
The Technology Adaptation Unit is saddled with the regulatory mandate of qualification, approval and deployment of upstream novel technologies that aim to reduce the unit cost of production, improve production efficiency, provide assurance of hydrocarbon delivery through transport infrastructures and accurate measurement and accountability of produced hydrocarbon.

Table 2.5.2: Status of Novel Technology Applications

Applications	Jan-December 2023
Received	67
Pilot/Validation Approvals	23
Final/Full Approvals	7
Rejected	8
Ongoing Pilot activities	XX
Processed/Processing	XX

# 1.5.2 High Impact Technologies

- Condition Monitoring and Predictive maintenance solution by Ogab Engineering.
- PSV maintenance with In-situ testing by Enerbul Limited.
- Organic Oil Recovery technology by Petrolog Limited
- LLC Remote Scanning Exploration technology by BSD Global.



## Figure 2.9.1: Field of Technology Deployment

Majority (54%) of the New Technologies deployed are in the Asset integrity/maintenance followed by Flow Assurance, Production optimisation and software.

# 1.5.3 DECOMMISSINING AND ABANDONMENT (D&A)

In compliance with section 233(4)(a) of the PIA 2021 that mandates all companies to submit a Decommissioning and Abandonment (D&A) plan for all existing fields or field currently under development, a total of twenty-nine (29) companies had made submissions.

## Table 2.5.3: D&A Plan Submission Status

Number of identified operators/concessionaires (OMLs, PMLs, Marginal Fields)	77
Operators yet to submit D& A plans	48
Operators who have submitted D&A plans	29

# 1.5.4 CURTAILMENT

a. Production Curtailment meeting transition committee inaugurated, and the committee commenced work immediately.

b. Monthly curtailment meetings held to resolve oil companies concerns as regards crude oil lifting and issuance of export permit.

## 1.5.6 LACT Units/Small Volume Provers, Crude Storage Tanks

Forty-eight (48) measurement facilities were calibrated and recertified to ensure accuracy of measurement systems.

## 1.5.7 Gas Meter Inventory Administration

There are 160 flare sites, with 199 flare points, from 49 companies.179 flare meters were installed, representing 90% compliance to Section 106 (1) and (2) of the Petroleum Industry Act, 2021.

Summary of Flare Meter Inventory		
Total Flare Sites	160	
Total Flare Points	199	
Total Meters Installed	179	
Total % Compliance	90%	
Total No. of Companies	49	
Companies that Submitted Current Flare Meter Details	23	
Companies yet to Submit Current Flare Meter Details	26	
Number of NGFCP Sites Listed		
Flare Points with Meters		
Flare ints without Meters		

#### Table 2.5.4: 2023 Inventory of Flare Metres Installation

## 1.6 Decade of Gas

To forestall the identified gas supply gap of about 3BSCFD by 2030, the Commission engaged with gas producing companies with the aim of unravelling the impediments and required enablers that would facilitate final investment decisions (FIDs) for critical projects that can bring production to close the gas supply gap within the decade. Companies engaged include SPDC, SEPLAT, NEPL, SUNLINK, CHEVRON, AMNI, ESSO, TOTALENERGIES. Impediments, including legacy debts, domestic base price of gas, local content and contracting requirements were identified as major impediments that need to be clarified/enabled to bring certainty to the industry. The Commission's unlock responsibility is to facilitate "Early Lease Renewal" for certain projects.

# 1.6.1 Uncommitted Gas Reserves Monetisation Programmes

Pursuant to Section 6 (c) and (h) which mandate the Commission to "promote an enabling environment for investment in upstream petroleum operations" and "ensure achievement of optimal government revenues"; the Commission established a monetisation pathway for uncommitted gas reserves in the country.

The evaluation of unmonetized gas reserves and pathways for monetisation was carried out. A robust implementation framework is being developed.

# 1.7 ASSET INTEGRITY MANAGEMENT

# 1.7.1 Conformity Assessment Audit Verification

Annual Conformity Assessment exercise was conducted for all oil and gas production facilities.

Facilities Inspected	147
Conformity Assessment Certificates issued.	124
Conformity Assessment Certificates under process	23

# **1.8 PRODUCTION SURVEILANCE & AUDIT**

# 1.8.1 STATUS OF WELL STRINGS

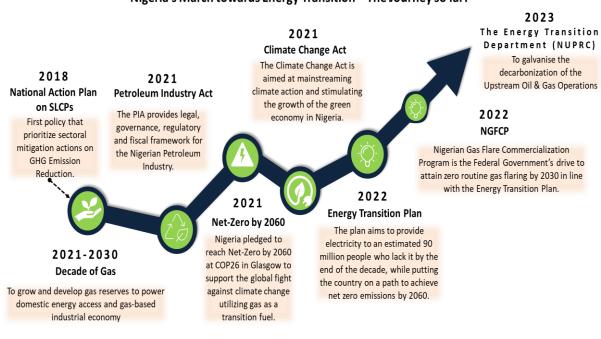
The number of shut – in (SI) strings in-country was **2,649** while the number of producing strings was **2,530**. NEPL, SPDC, Mobil, Chevron and Aiteo had the highest number of SI wells.

It was estimated that the reactivation of the wells will add approximately 900,000bopd but some of the constraints were increased OPEX, non -availability rig/intervention units, evacuation etc. as reported by the operators.

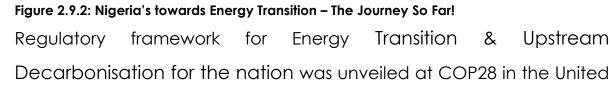
# 1.9 Energy Transition and Decarbonization

# 1.9.1 Energy Transition and Carbon Monetization (ET &CM)

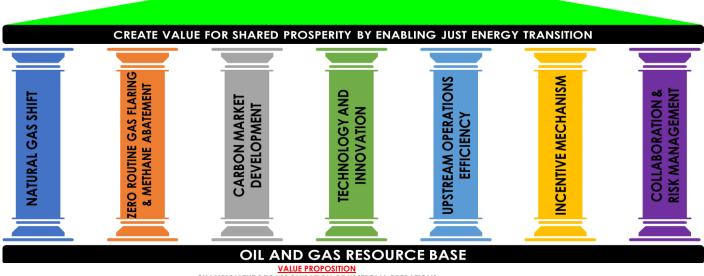
ET&CM division was created under D&P department with the mandate to enhance clean mechanisms in field development and promote the decarbonization of upstream operations in line with global best practices and to align with the Nation's commitment towards global emission targets; the Net-Zero 2060 pledge by the Federal Government of Nigeria.



#### Nigeria's March towards Energy Transition – The Journey so far!



Arab Emirates by the Commission.



VALUE PROPOSITION CHAMPION THE DECARBONISATION OF UPSTREAM OPERATIONS TO SUSTAIN INVESTMENTS IN OIL & GAS RESOURCE DEVELOPMENT FOR NATIONAL ENERGY SECURITY AND ECONOMIC DEVELOPMENT

Figure 2.9.3: Regulatory Framework for Energy Transition & Upstream Decarbonisation

## Africa Carbon Markets Initiative

There is an established partnership with the Africa Carbon Market Initiative (ACMI). The collaboration has allowed for better understanding of emissions trading tools and mechanisms applicable to the upstream petroleum sector, enabling the adoption of market-driven approaches to carbon reduction in the upstream petroleum sector.

## African Petroleum Regulators Forum (AFRIPERF) Concept Note:

NUPRC has developed a concept note for the establishment of the African Petroleum Regulators Forum (AFRIPERF). The initiative aim is to facilitate regional cooperation and knowledge sharing on regulatory best practices including energy transition and carbon monetization.

## Collaboration with US DOE and Net Zero World Initiative:

NUPRC has established collaborative ties with the United States Department of Energy (US DOE) and the Net Zero World Initiative. The partnerships will enhance access to global expertise and resources, facilitate the exchange of ideas and best practices.

# Carbon Capture, Utilisation and Storage Project with Schlumberger:

Commission has initiated processes with Schlumberger (SLB) for pilot test on Carbon Capture, Utilization, and Storage (CCUS) in Nigeria. This represents a significant step towards reducing carbon emissions in the upstream petroleum sector, terms of agreement are being reviewed by the Legal unit.

## ACHIEVEMENT

• Successfully designed and implemented the requirements, payments, and approval process for the Coastal Vessel License Applications for vessels engaged in Upstream Oil and Gas operations.

- Additionally, successfully Digitalized application process for the issuance of Coastal Vessel License in line with the CCE's digitalization campaign.
- Coastal Vessel License Applications for vessels engaged in Upstream Oil and Gas operations were received and processed.

• Concluded draft of Technology Adaptation Process Guidelines and Technology Plan.

• Increased Oil Discovery and Production via the deployment of qualified State of the Art Technology.

- Reduced cost of Pipeline Maintenance and Integrity threshold Improved Metering accounting Technology.
- Automation Technology of Facilities and Production Platforms Improved Safety and Health standards through deployment of qualified high-end security and safety solutions.

## 2.0 EXPLORATION AND ACREAGE MANAGEMENT

- Six (6) applications for seiemic data acquisition were approved. A total 357.279sq.km of 3D and 545.1sqkm of 4D seismic data was acquired by four (4) companies.
- 2. Eight (8) geotechnical surveys approvals were issued.
- 3. Eight (8) licenses to operate geophysical/geotechnical vessels within Nigerian territorial waters were granted.
- 4. Five (5) data processing/reprocessing requests were approved.
- 5. Two (2) geophysical/geotechnical data for export under specialized category were approved.
- 6. One (1) geophysical data acquisition revalidation was approved.
- Eleven (11) wells were drilled; nine (9) drilled to total depth (TD) while two
   (2) are ongoing.
- 8. Four (4) field name registrations were approved.
- 9. Two (2) core samples acquisition were processed.
- 10. One (1) core sample export was approved.
- 11. Four (4) core sample analysis were processed and approved.
- 12. Ten (10) fluid data acquisition were approved.
- 13. Seven (7) fluid data analyses were approved.
- 14. Granted first (1st) Petroleum Exploration Licence (PEL) to TGS-Petrodata Offshore Services Ltd. (TGS-PD).
- 15. Reprocessed about 11,000 sq.km of multi-client 3D Seismic datasets offshore Nigeria through PGS.
- TGS-PD PEL offshore Nigeria was awarded data acquisition of about 5,900 sq.km 3D seismic data in Nigeria offshore.
- 17. Award of 11,000 sqkm of 3D seismic data to PGS Geophysical Nig. Ltd. to carry out PGS Vision project (Processing to Depth Migration).

- Up to date transmission of monthly crude oil and gas production statistics to RMAFC (Nov. 2022 – Oct. 2023) for 13% derivative to the producing states.
- 19. Performance review of minimum work programme for 44 PPL's was carried out.

## 2.1 Geophysical Data Acquisition

Five (5) companies employed the services of three (3) seismic contractors, namely NNPC ENSERV/BGP, PGS and Ato Geophysical for acquisition of 3D and 4D Seismic data respectively. However, four companies' data acquisition were completed in 2023.

A total of **357.279sq.km** of 3D and **545.1sq.km** of 4D seismic data were acquired in 2023.

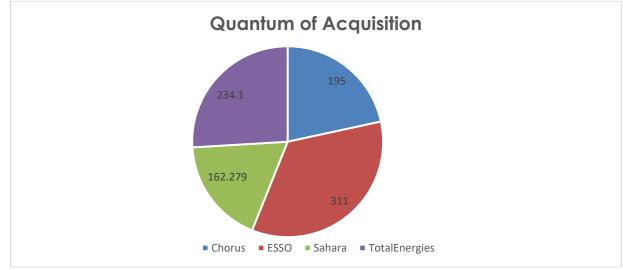


Fig. 3.0: Quantum Acquisition

Offshore acquisition;4D by Esso and TotalEnergies were the highest followed by Chorus Energy OML 56 which was acquired from an onshore concessions.

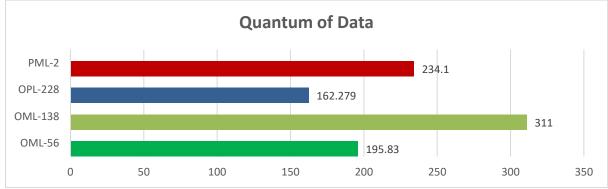


Fig.3.1: Quantum of Data

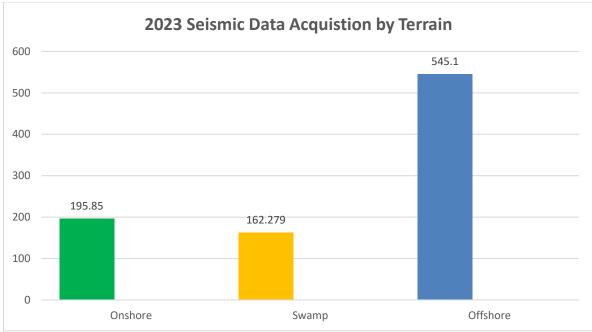


Fig. 3.1.1: Quantum Acquired Base on Terrain

YEAR	4D- sq.km	3D-sq.km	2D- sq.k m	GFT
2016		222.7055		
2017		2,495.34		
2018`		1,101.10		
2019		4500.865		
2020		2234.608		
2021		689.792		
2022		1178		15,096.16- line km
2023	545.1	357.279		

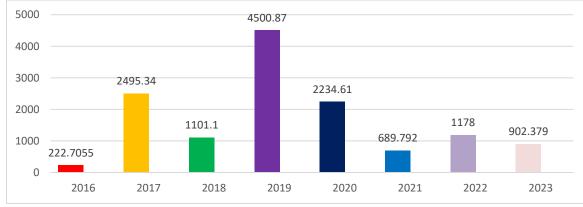


Figure 3.1.2: 2016-2023 Geophysical Data Acquisition(3D sq.km)

The above chart represent a summary of seismic data acquisition in the past seven years. Data acquisition from 2017 through 2020 was

encouraging with highest recorded in the year 2019. Low acquisition figures were recorded in 2016 and 2021.

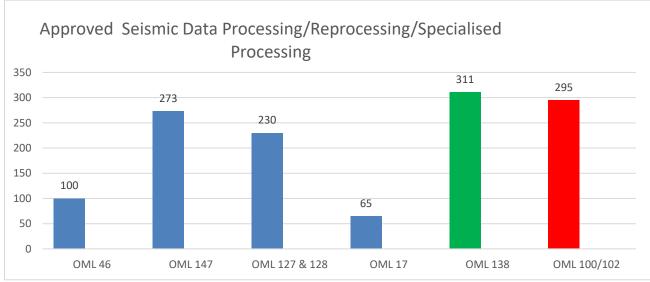


Figure 3.1.3 : Quantum Approved on Concession Basis Green bars represent approvals and quantum granted for processing. Blue bars represent approvals and quantum granted for reprocessing. Red bar represents approval and quantum granted for specialised

processing.

# 2.2 Academic Data

Thirty-three (33) academic data requests were received from twenty-four (24) universities and forwarded to twelve (12) Exploration and Production Companies to provide the relevant research materials. Three (3) out of the thirty-three (33) requests received were from foreign universities, twenty-one (21) were from universities within Nigeria, while two (2) are from the Army Resource Centre and Defence Academy

# 2.2.1 Plugback, Side-track and Abandonment

Five (5) wells suspension were approved, two (2) plugback and sidetrack were approved.

# 2.2.2 Re-classification

Ntonkon-3 reclassification for Totalenergies was approved.

# 2.2.3 Core Analysis

Ten (10) core analysis were carried out; seven (7) were inconclusive due to funding.

# 2.2.4 Fluid Data Acquisition

Ten (10) fluid data acquisition were approved.

# 2.2.5 Fluid Data Analysis

Seven (7) fluid data analyses were processed and approved.

## 2.2.6 Fluid Export

Two (2) fluid samples were exported by TEPNG for fluid analysis.

# 2.3 FRONTIER EXPLORATION ACTIVITIES

#### 2.3.1 Well Proposals

Two (2) well proposals were processed and approved in the frontier basin.

## 2.3.2 Drilling Activities

Two (2) wells were drilled in the frontier basins.

## 2.3.3 Frontier Exploration Fund Regulation

Frontier Exploration Fund Regulations was gazetted.

# 2.4 ACREAGE MANAGEMENT

## 2.4.1 Hydrocarbon Attribution

Monthly Crude Oil/Condensate and Gas Production Attribution on field by field and state by state basis for November 2022 to October 2023 was collated and forwarded to Revenue Mobilization Allocation and Fiscal Commission (RMAFC) as directed by the Presidency on monthly basis.

		Crude Oil/Condensate (Total)	
S/N	State	Bbls	Gas (Total) Mscf
			481,107,059
1	Delta	131,024,513	
			36,558,160
2	Ondo	12,203,686	
			137,349,881
3	Edo	10,963,822	
			462,245,379
4	Rivers	56,989,883	
			452,584,273
5	Bayelsa	60,191,895	
			313,885,811
6	Akwa ibom	80,194,887	

			9,794,733
7	lmo	5,346,476	
			5,132,200
8	Abia	2,475,461	
			0
9	Lagos	0	
			7,170,930
10	Anambra	3,991,017	
	Total	363,381,639	1,905,828,426

#### Table 2.5.7: Crude Oil/Condensate & Gas Production for Deepwater Fields

		Crude Oil/Condensate	
S/N	Fields	(Total) Bbls	Gas (Total) Mscf
			140,865,788
1	Agbami	32,008,749	
			86,664,289
2	Erha	22,661,436	
			10,307,000
3	Abo	2,676,530	
			151,778,394
4	Akpo	26,769,987	
			41,806,597
5	Usan	11,932,840	
			33,300,150
6	Egina	35,030,070	
			43,487,634
7	Bonga	43,166,238	
			0
8	Оуо	0	
	Total	174,245,850	508,209,852

#### 2.4.2 Concession Mapping & GIS

- Collated and transmitted the coordinates of crude oil and gas wells drilled from 2017 to 2023 to RMAFC.
- The Commission, in conjunction with the National Boundary Commission (NBC), participated in the determination of coastline communities along the Gulf of Guinea for the operationalization of littoral Host Community Development Trusts (HCDTs).

• Charting and Harmonization renewal Agreement between NUPRC and Daimler was approved. Legal Department to firm up the execution of the agreement.

# 2.4.3 Outstanding Boundary

As at end of 2023, some issues due to block re-coordination, re-sizing or boundary alignment were yet to be resolved as enumerated below:

1. **Igbomotoru Main:** SPDC and BAP Energy yet to align on the delineated boundary for the Igbomotoru Main field.

2. **Korolei:** SPDC and Korolei Energy Limited yet to align on the delineated boundary for the Korolei field.

# 2.5 ACREAGE ADMINISTRATION

# 2.5.1 Lease and License Administration

The nation has a total of 456 Blocks. Number of Oil Prospecting Licences (OPL) and Oil Mining Leases (OML) are 60 and 114 respectively, and others are depicted in the table below. There are 219 open blocks across the seven basins, covering onshore, shallow water, deep water terrains, for which significant investments are required to unlock value.

GEOLOGICAL	OPLs	OMLs	PPLs	PMLs	OPEN	TOTAL
TERRAIN/LOCATION						
Deep Offshore	21	16	0	3	59	99
Continental Shelf	12	34	0	0	7	53
Onshore Niger	11	61	59	1	8	140
Delta						
Anambra Basin	4	2	0	0	13	19
Benin Basin	4	1	0	0	7	12
Benue Trough	2	0	0	0	41	43
Bida Basin	0	0	0	0	16	16
Chad Basin	6	0	0	0	40	46
Sokoto Basin	0	0	0	0	28	28
TOTAL	60	114	59	4	219	456

### Table 2.5.8: Summary of Acreage Situation

Table 2.5.9: Summary of Activities in Lease/License Administration

S/N	Activities	No.
1	Concession Grant	9
2	Lease Renewals	1
3	Conversion from OPL to PPL	1
4	Conversion from OPL to PML	0
5	Conversion from OML to PML	4
6	Conversion from OML to PPL	3
7	Conversion from Marginal Field to PML	22
8	Assignment of Interests	17
9	Allocation of PPLs	50
10	Muti -client data brokerage projects	2

# 2.6 Acreage Management Achievements

1. Granted the first Petroleum Exploration Licence (PEL) to TGS-PD.

2. Concluded action on the collation of Crude oil and gas production figure/statistics on state basis for the month of November 2022 - October 2023.

3. Promotion of Nigeria Multi-client data at Africa Oil Week and Africa Energy Week conferences in South Africa.

4. Promotion of Nigeria Assets (On-going Bid Round) and Multi-client data at Africa Energy Summit in London, UK.

# 2.6.1 Challenges

- 1. Reluctance of Companies to cooperate on the delineation of assets in line with the PIA, 2021.
- 2. Delay in response by Licence holders in respect to Minimum Work Commitment Performance Evaluation and review engagements.
- 3. The changes of the address by the license holders' is hindering communication with some companies.

# 2.6.2 Concession situation as at January 2024 (Provisional)

The concession situation is in Appendix.

#### 3.0 2023 FINANCIAL PERFORMANCE

#### 3.1 COMPARISON OF INCOME FOR 2022 & 2023

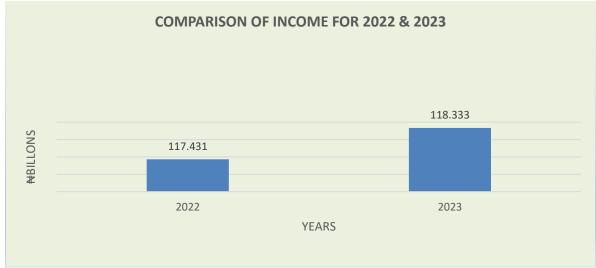


Figure 3.1.4: Comparison of income for 2022 & 2023

There is an increase of 0.768% in 2023 when compared with 2022 income.

REVENUE HEAD	2022 ₦	2023 ₦
Cost of Revenue Collection (CORC)	114,380,013,073.55	114,837,562,110.20
Internally Generated Revenue (IGR)	3,051,740,310.68	3,495,446,383.21
TOTAL	117,431,753,384.23	118,333,008,493.41

### 3.2 EXPENDITURE FROM JANUARY TO DECEMBER 2023

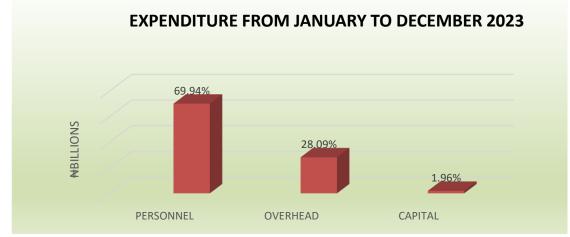


Fig. 3.1.5: Expenditure from January to December 2023

 Personnel cost:
 82.353 billion Naira (69.94%)

 Overhead cost:
 33.076 billion Naira (28.09%)

 Capital cost:
 2.311 billion Naira (1.96%)

 Total expenditure:
 117,742,398,736.23

 Operating surplus:
 1,757,506,114.61

#### **4.0 REVENUE GENERATION**

#### 4.1 2023 REVENUE PERFORMANCE

NUPRC revenue performance for January to December 2023 was 114.65%. The breakdown by revenue heads is as shown below:

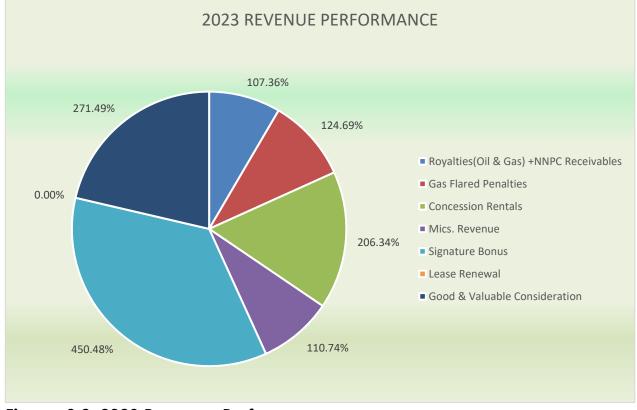


Figure. 3.2: 2023 Revenue Performance

Total revenue generated in 2023 increased by14.89% in comparison with 2022.

#### Table 2.6.1: 2023 Budgeted Revenue, Actual Collection & Performance

REVENUE TYPE	ANNUAL BUDGET	ACTUAL COLLECTION (JAN-DEC 2023)	VARIANCE	% PERFORMANCE
Royalties (Oil &				
Gas)+ NNPCL	3,498,968,340,230.99	3,756,455,736,932.09	257,487,396,701.10	
Receivables				107.36
Gas Flared Penalty	112,713,114,450.10	140,542,799,981.78	27,829,685,531.69	124.69
Concession Rentals	4,951,329,491.89	10,216,458,225.76	5,265,128,733.87	206.34
Misc. Oil Revenue	14,790,535,323.92	16,378,599,446.27	1,588,064,122.35	110.74
FAAC TOTAL	3,631,423,319,496.90	3,923,593,594,585.90	292,170,275,089.00	108.05
Signature Bonus	57,048,776,004.49	256,992,218,005.85	199,943,442,001.36	450.48
Lease Renewal	40,311,616,358.78	0.00	-40,311,616,358.78	-
Good and Valuable Consideration	60,273,276,062.51	163,634,556,149.05	103,361,280,086.54	271.49
Grand Total	3,789,056,987,922.68	4,344,220,368,740.80	555,163,380,818.12	114.65

#### Table 2.6.2: 2021 VS 2022 & 2023 REVENUE PERFORMANCE

REVENUE TYPE			
	2021 N	2022 N	2023 <del>N</del>
OIL & GAS ROYALTIES	2,383,324,441,612.17	3,343,138,976.56	3, 756, 455, 736, 932.09
GAS FLARED PENALTIES	98,548,237,009.00	70,422,698,758.57	140,542,799,981.78
CONCESSION RENTALS	3,739,012,324.00	6,223,801,170.38	10,216,458,225.76
MISC. REVENUE	22,500,620,015.00	13,416,309755.36	16,378,599,446.27
SIGNATURE BONUS	377,331,204,653.00	132,013,296,530.16	256,992,218,005.85
LEASE RENEWAL	436,092,422.00	166,218,190,236.70	00.00
GOOD & VALUABLE CONSIDERATION	15,370,800,000.00	49, 501,007410.00	163,634,556,149.05
TOTAL	2, 900,250,408,035.17	3,781,643,444,861.73	4,344,220,368,740.80

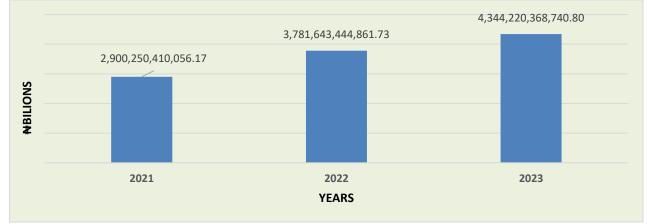


Figure 3.2.1: 2021vs 2022 & 2023 Revenue Performance.

Revenue performance increased by 30.80% in 2022 when compared with 2021 and 14.89% in 2023 when compared with 2022.

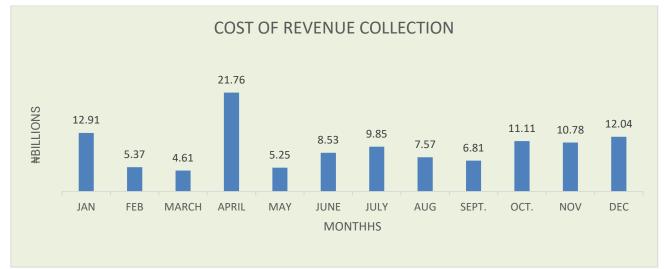
## 4.2 4% CORC COLLECTION REPORT- JANUARY TO DECEMBER 2023

Approved 2023 budget for the Commission was N 152,400,227,633.04.

The sum of NGN116,558,256,692.66 was paid to the Commission as Cost of Revenue Collection in 2023. This is inclusive of CORC arrears arising from Government Priority Projects (GPP), NNPC Limited Royalty Receivables and Exchange Rate Harmonization in May 2023. Furthermore, the sum of NGN21,762,659,593.73 paid to the Commission in April 2023 is inclusive of 4% CORC for Signature Bonus/Lease Renewal and Good and Valuable Consideration collected between December 2021 to November 2022.

MONTH	CORC for the Month (NGN)	CORC Arrears (NGN)	Total CORC Paid (NGN)
JANUARY	12,909,404,691.41	0.00	12,909,404,691.41
FEBRUARY	5,368,050,204.38	0.00	5,368,050,204.38
MARCH	4,610,698,635.17	0.00	4,610,698,635.17
APRIL	21,762,659,593.73	0.00	21,762,659,593.73
MAY	5,224,565,388.61	0.00	5,224,565,388.61
JUNE	5,573,268,366.98	2,952,771,383.33	8,526,039,750.31
JULY	5,340,592,341.23	4,514,212,241.82	9,854,804,583.05
AUGUST	4,612,610,929.13	2,952,771,383.22	7,565,382,312.35
SEPTEMBER	3,695,185,280.86	3,112,025,107.69	6,807,210,388.55
OCTOBER	8,158,845,515.66	2,952,771,383.22	11,111,616,898.88
NOVEMBER	7,823,590,066.55	2,952,771,383.22	10,776,361,449.77
DECEMBER	9,088,691,413.23	2,952,771,383.22	12,041,462,796.45
TOTAL	94,168,162,426.94	22,390,094,265.72	116,558,256,692.66

Table 2.6.2: Cost Of Revenue Collection from Januar	v – December 2023
Tuble 2.0.2. Cost of Revenue Concellon north Januar	



#### Figure 3.2.2: Cost Of Revenue Collection from January – December 2023

Figure 3.2.2 shows the Cost of Revenue Collection from January to December 2023. The month of April has the highest CORC for the year. This however do not include the Internally Generated Revenue

### 5.0 HEALTH, SAFETY, ENVIRONMENT AND COMMUNITY

#### 5.1 ENVIRONMENT

#### 5.1.1 ENVIRONMENTAL INCIDENT MANAGEMENT

571 oil spill incidents were reported. 59.01% of the spills was a result of sabotage.

#### Table 2.6.3: Environmental Incident Management

Cause Of Spill	No. Of Spills Reported
Blow out	1
Corrosion	7
Equipment failure	16
Mystery	5
Operational/Maintenance Error	11
Sabotage	337
Not Yet Determined	194
TOTAL	571

#### 5.1.2 Waste Management

- 103 Waste Management companies were accredited.
- 139 Effluent/ Waste Discharge Permits (EWDP)were Issued for new wells and workover.
- 32 Point sources (solid, liquid, and gaseous) were registered.

#### 5.1.3 Environmental Assessment

- 38 Environmental Screening Report (ESR) and Preliminary Impact assessment Report (PIAR) approvals were issued.
- 92 Terms of Reference (TOR) and Scope of Work (SOW) approvals issued.
- 82 Environmental Impact Assessment (EIA) approvals were issued.
- 11 Environmental Management Plans (EMP) were approved.
- 83 Environmental Evaluation Studies (EES) were approved.
- 27 Environment Baseline Study (EBS) and Environmental Seabed Survey were approved.
- 24 EIA waivers issued.
- 20 Extension of EIA/EES validity were issued.

### 5.1.4 Laboratory Services

- Forty-one (41) laboratories were accredited.
- Three Hundred and eight six (386) oilfield chemicals were approved.
- Fifty-one (51) chemicals inventory reports were submitted.

### 5.1.5 Compliance and Enforcement

- Twenty-nine (29) Biological Monitoring Studies (BMS) were approved.
- Thirty-six (36) Environmental Compliance Monitoring Report (ECM) were submitted.

# 5.1.6 Climate Change Activities (Sustainability ESG and CCUS)

- Fourteen (14) Greenhouse Gas Emission Management (GHGEMP) reports were received and reviewed.
- Thirty-five (35) Greenhouse Gas (GHG)Emission Inventory reports were received and reviewed.
- Sixteen (16) Leak Detection and Repair (LDAR) and GHG Management Consultancy Services were granted.

# 5.2 SAFETY CONTROL

### 5.2.1 Accident/ Incident Management

Total number of thirty-one (31) incidents were recorded in 2023.

### 5.2.2 Offshore Safety Permit (OSP)

- Total Registered 23,057
- New permit issued -6228 (out of which 26 were VIP flyers)
- Total renewal 16,829

### 5.2.3 Radiation Safety Permit (RSP)

• 186 Radiation Safety Permits were issued.

### 5.2.4 Safety and Emergency Training Centres (SETC)

• Six (6) Safety Training Centres were inspected and re – accredited.

### 5.3 Host Community

### 5.3.1 Host Community Development Administration (HCDA)

- Total Number of applications to incorporate HCDT: 136
- Number of Approvals by NUPRC for HCDT incorporation: 115
- Number of HCDTs Incorporated by CAC: 87

### 5.3.2 Host Community Project Management

- Total Number of Fund Managers Approved: 25
- Number of Legacy Projects: 25
- Total Remittance of 3% OPEX:

Remittances	NGN	USD (\$)
2022	4,630,354,113	14,834,653
2023	3,815,454,704	6,918,000
TOTAL	8,445,808,817	21,752,653

# 5.3.3 HostComply Digital Portal

The hostcomply digital portal is partly operational. Usernames and passcodes for pre-existing settlors have been configured to work on the new portal. Some of the modules that were yet to be operational are fund managers, conflicts and resolution management, fines and penalties, records and archives, OPEX module (calculation, posting and distribution), fund distribution matrix module, workflow approval.

# 5.4 Challenges

- Delay in getting feedback responses from companies.
- Non-compliance with PDDC payment from some operators.
- Short notice of spudding date for EWDP applications.
- Low compliance in quarterly submission of Greenhouse Gases (GHG) Emission Inventory
- Many of the operators are yet to submit their greenhouse Gas Management plan of their operation for review and approval.
- Operators not complying with submission format.
- Petitions and litigations stall incorporation of HCDT and set up of governance structures.
- Delayed deployment of hostcomply portal for NUPRC HCDA team use, and for other stakeholders.
- Staff disposition in the regional office affects our ability to fully undertake our oversight functions. Redeployment of HSEC Headquarters staff to other SBUs without recourse to HSEC Management. Four (4) staff were moved from HSEC this month.
- Stalled automation of HSEC works process.
- The process safety branch only handles RSP applications as all other jobs (Safety Case, Asset Integrity, Risk Base Inspection) are still domiciled in the D & P despite CCE's earlier intervention.
- Training and Capacity building for staff.
- HostComply Portal is still not fully functional.