



Gas Transportation: The Bridge between the Gas Source and the Market

by

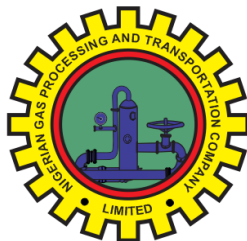
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5th June 2018



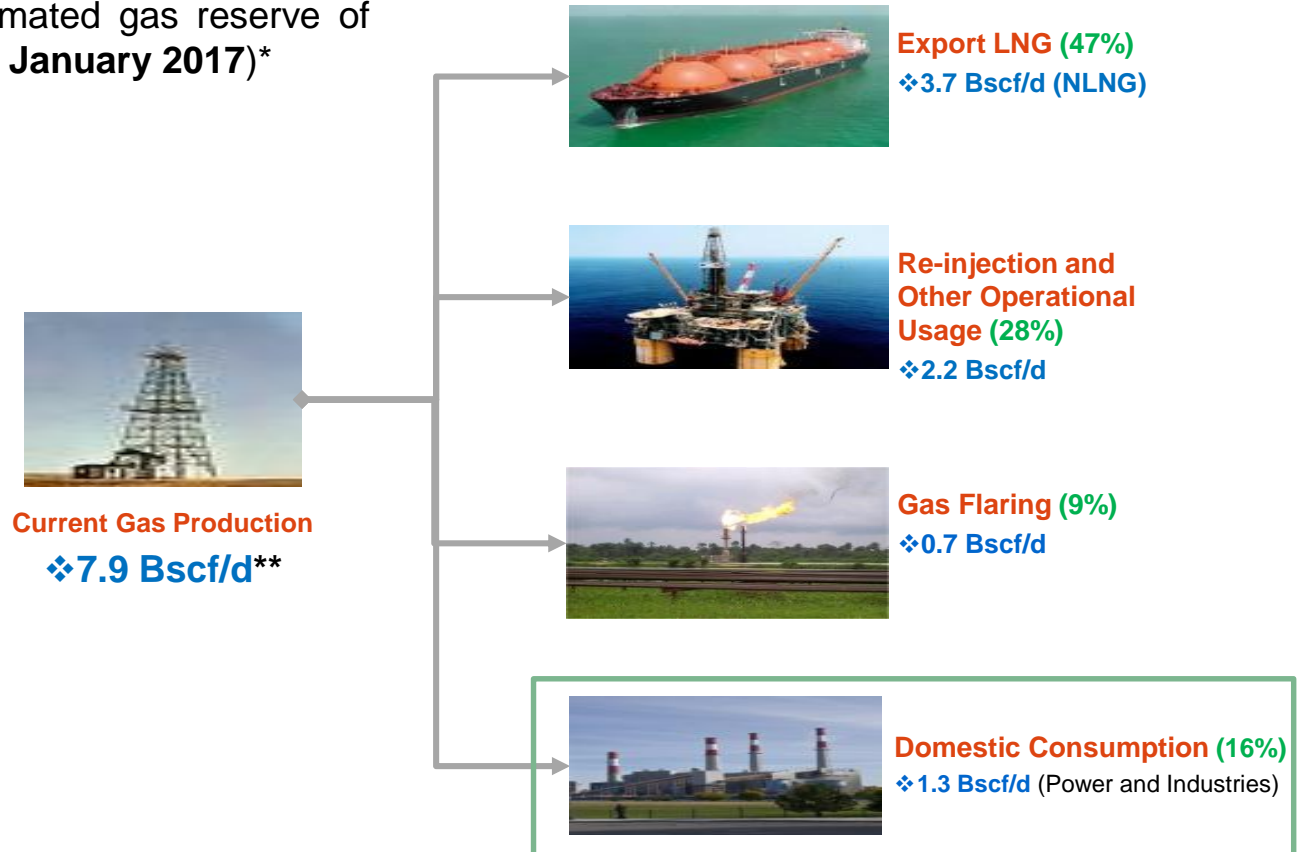
Outline

- The Nigerian Natural Gas Industry
- Industrial Hubs: Existing and Proposed/Potential
- Gas Transportation Infrastructure: Bridge for Gas Supply to Industrial hubs
- Developing a Backbone Gas Transportation Network
- Existing & Proposed Gas Transportation Infrastructure
- Conclusion



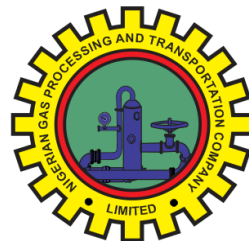
The Nigerian Natural Gas Industry

- Nigeria has an estimated gas reserve of 198.74Tcf (as at 1st January 2017)*



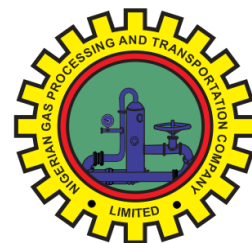
*Estimate obtained from Annual Reserve & Production Report (ARPR) - 2017.

**Figures are as at 12th May, 2018.

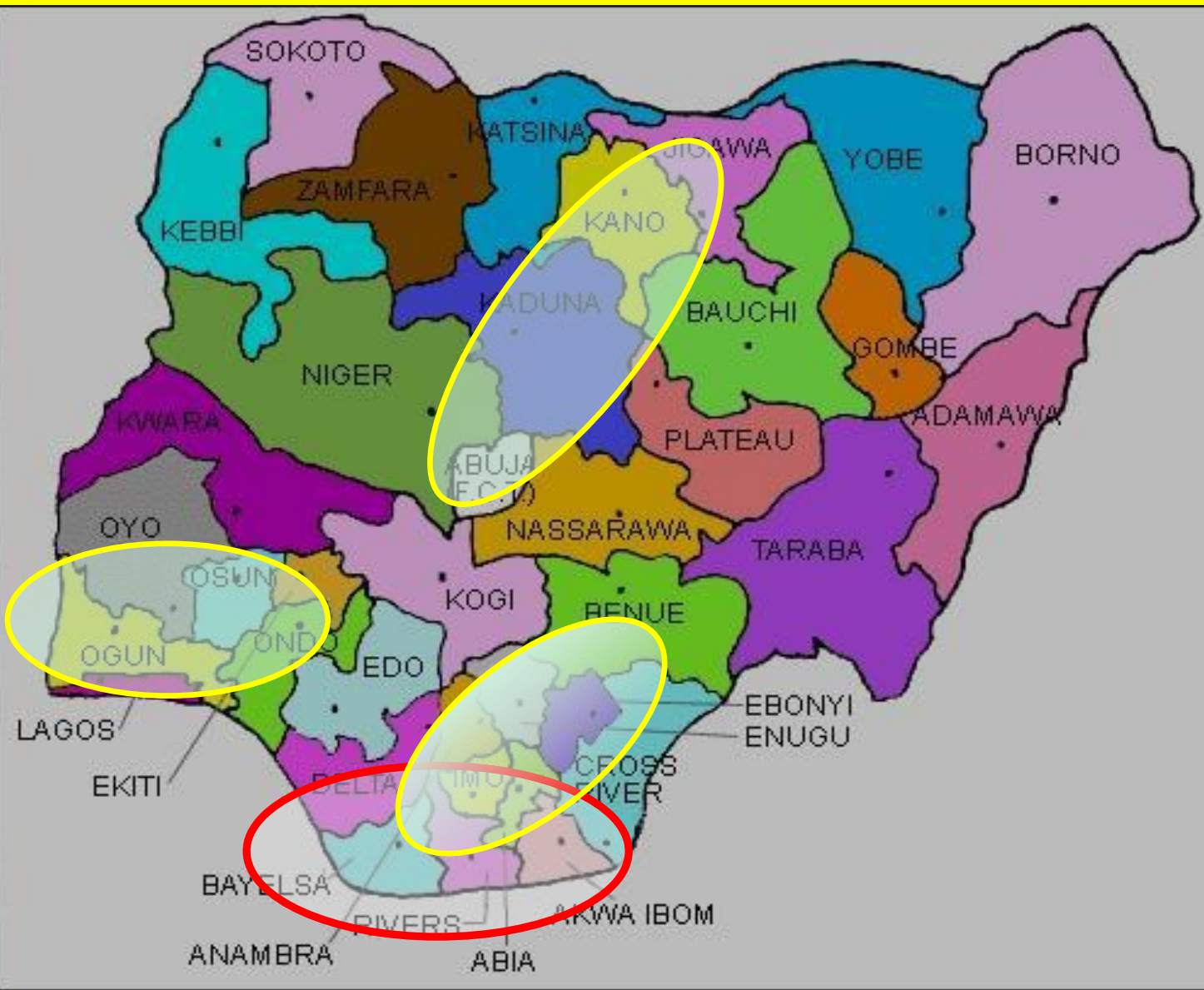




Industrial Hubs: Existing and Proposed/Potential

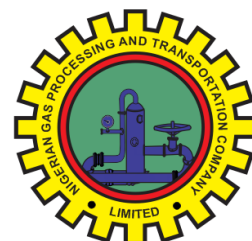
Existing	Proposed/Potential
West	
Lagos, Ibafo – Sagamu Interchange, Agbara-Ota, Ikorodu, Ogijo, Abeokuta, Lekki, etc.	Ijebu-Ode, Omotosho, Ibadan, etc.
East/South-South	
Aba, Onitsha, Nnewi, Port Harcourt, etc.	Calabar, Enugu, Ogidigben, etc.
North	
Kano, Kaduna, Ajaokuta, etc.	Abuja, Gboko, etc.



Industrial Hubs: Existing and Proposed/Potential

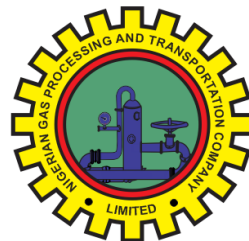


-  Industrial Hubs
-  Gas Sources



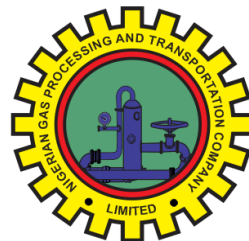
Gas Transportation Infrastructure: Bridge for Gas Supply to Industrial hubs

- Most of Nigeria's gas resource is located in the Niger Delta region and the East while the markets are spread across the country.
- A robust gas transportation network is required to deliver gas to the existing and proposed industrial hubs.
- Clearly, the presence of gas supply infrastructure supports the development of industrial hubs, bringing cleaner, cheaper and more environmentally friendly fuel to the markets.



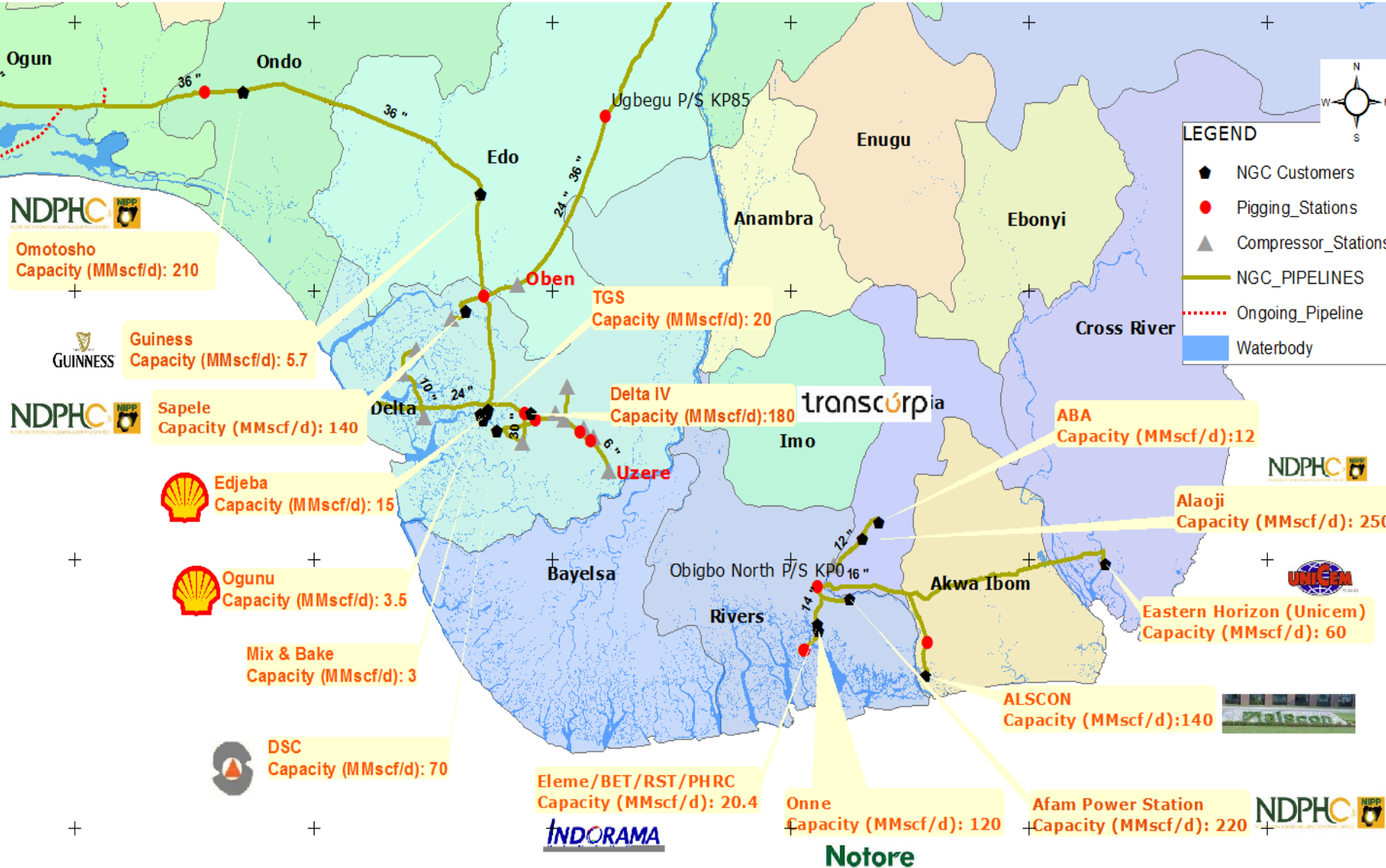
Developing a Backbone Gas Transportation Network

- One of the main goals of the Gas Master Plan was to develop a backbone gas transportation network to make gas available to existing and potential industrial hubs across the country.
- While this may not have been fully realized, a lot of progress has been made with required modifications to the initial proposal where necessary.



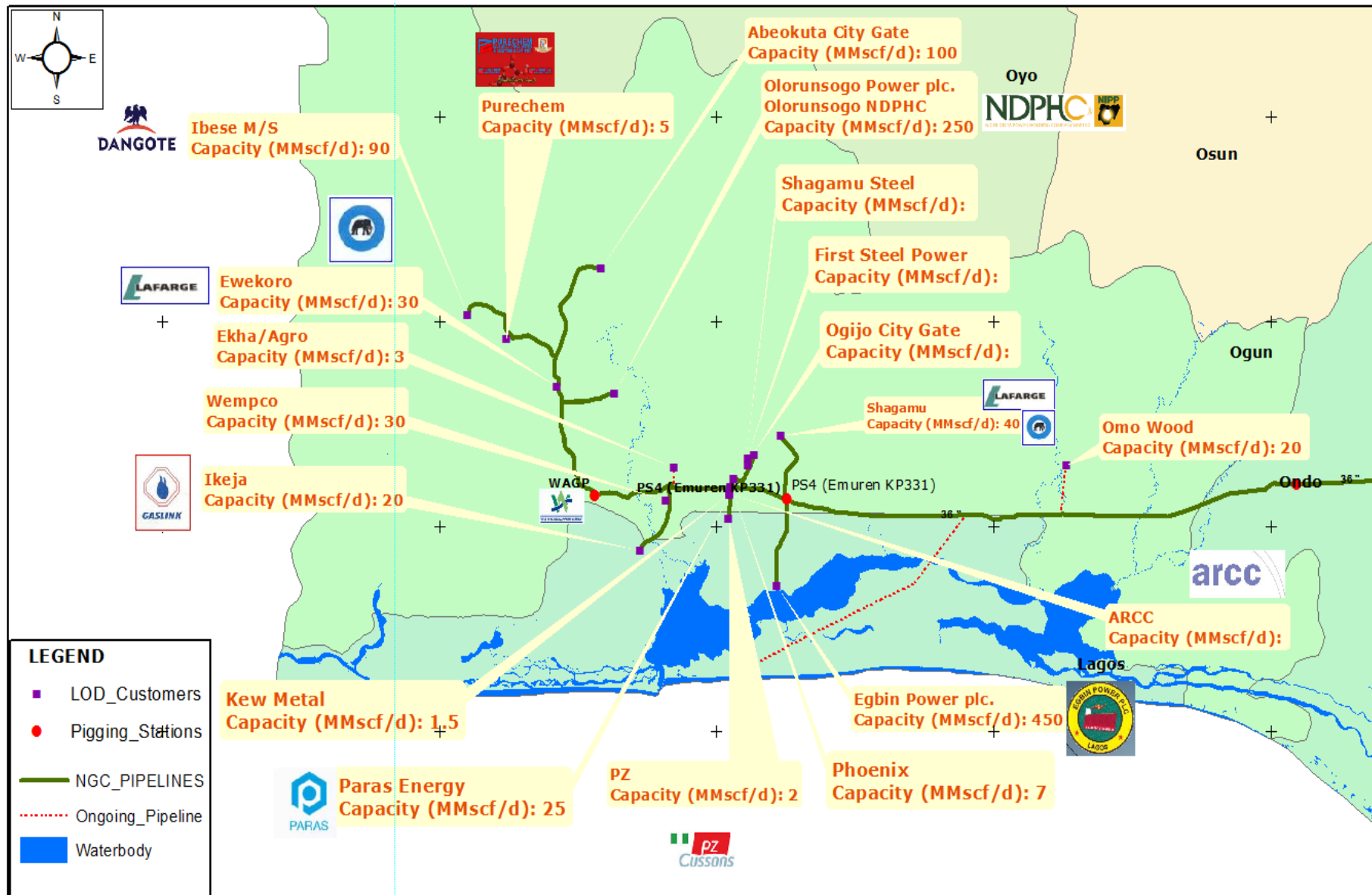
Existing & Proposed Gas Transportation Infrastructure

Western and Eastern Gas Pipeline Networks - Existing



Existing & Proposed Gas Transportation Infrastructure

Western Gas Pipeline Network - Existing

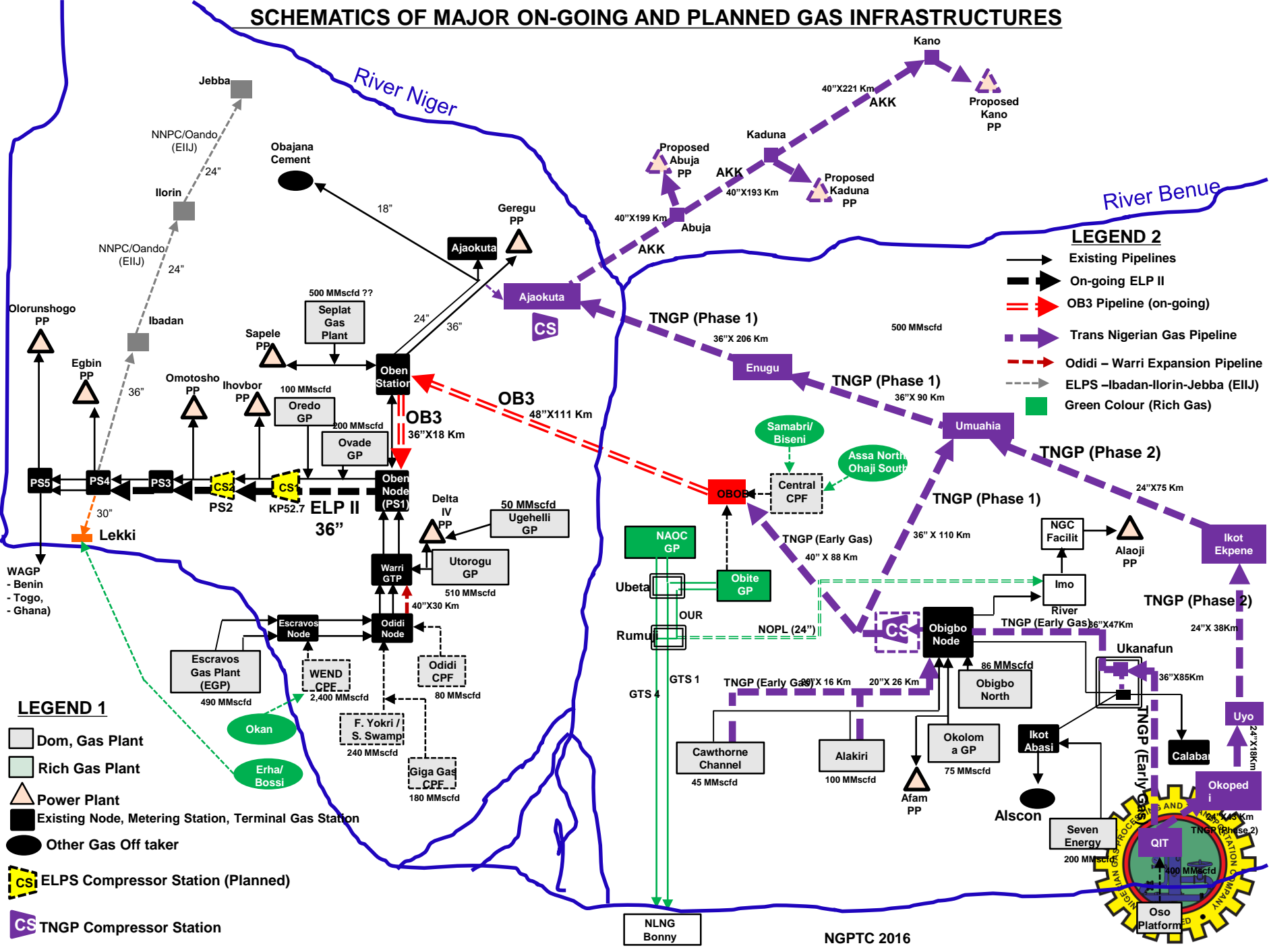


Existing & Proposed Gas Transportation Infrastructure

Northern Gas Pipeline Network - Existing



SCHEMATICS OF MAJOR ON-GOING AND PLANNED GAS INFRASTRUCTURES



Existing & Proposed Gas Transportation Infrastructure

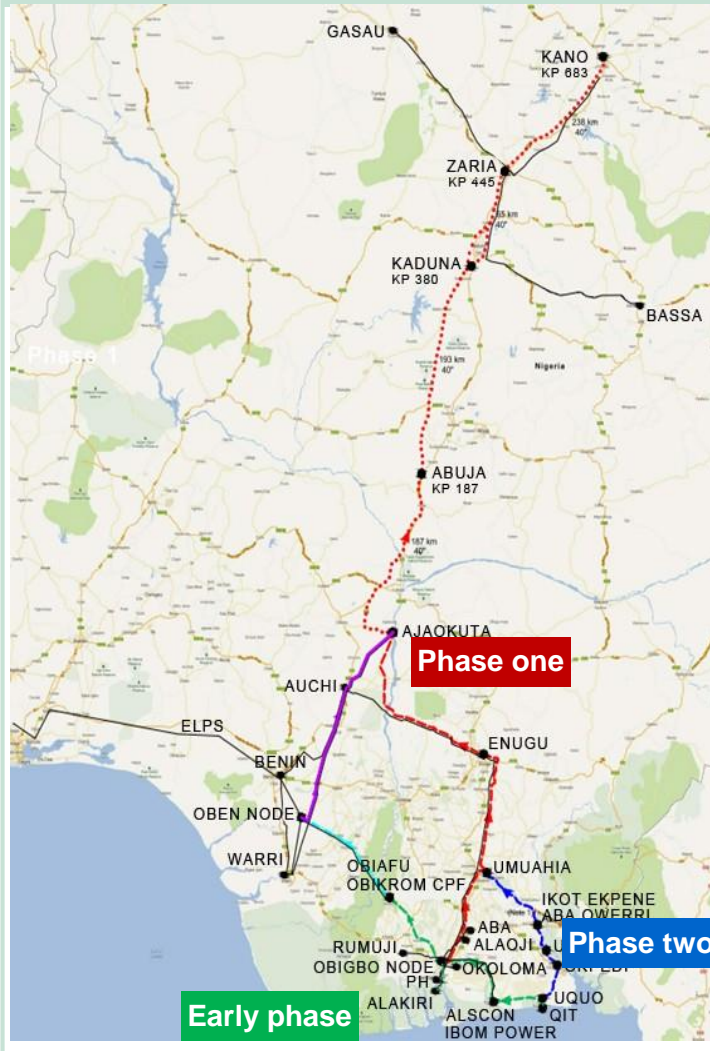
•On-going Gas Infrastructure Projects

S/N	Gas Pipeline		Status
1	Obiafu-Obrikom-Oben (OB3) Pipeline (East-West interconnection, to link Gas sources in the East to Western and Northern markets)		On-going Completion: Q4 2018
2	ELPS II Pipeline (ELPS Expansion) (From Gas source to customers: Capacity increase)		On-going Completion: Q4 2018
3	ELPS-Lekki Pipeline (Linking gas demand centre)		Under construction Completion: Q4 2018
4	Trans-Nigeria Gas Pipeline (TNGP) (Extending pipeline network footprints in the East and North)		
	Early Gas Phase	- QIT- Obigbo - Obiafu/Obrikom	Tendering stage
		- Cawthorne Channel – Alakiri – Obigbo	Tendering stage
	Phase 1	- Ajaokuta – Abuja – Kaduna - Kano (AKK)	Awarded
		- Obigbo – Umuahia – Enugu - Ajaokuta (OUA)	Tendering stage
5	Odidi-Warri Gas Pipeline Expansion Project (OWEP) (Linking gas source to network - capacity increase)		EPC awarded
6	Assa North/Ohaji South (ANOH) – OB3 Pipeline (Linking gas source to network)		EPC award stage

Existing & Proposed Gas Transportation Infrastructure

•The Trans-Nigeria Gas Pipeline Project

Map view



Phases

QIT – OB/OB

- 261 km x 20/36 inches pipeline from QIT-Ikot Abasi-Ukanafun-Obigbo-Ob/Ob
- Artery to connect gas supply to feed the Ajaokuta-Kano line and the ELPS via OB3 pipeline

AKK

- 614 km x 40 inches pipeline from Obigbo-Umuahia-Enugu-Ajaokuta; 683 km x 40 inches pipeline from Ajaokuta – Abuja – Kaduna – Kano
- Connects gas supply from SPDC/CNL's Assa North development via the Eastern axis through AKK, further reinforcing supply to the East and to AKK

Phase Two

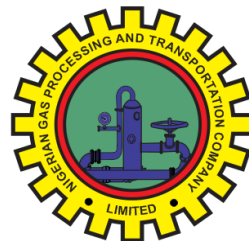
- 174 km x 24 inches pipeline from QIT axis, traversing Calabar-Ikot-Ekpene-Umuahia



Front End Engineering Design has been completed.

Conclusion

- Development of a robust gas transportation network is critical for the development of gas industrial hubs across the country.
- Major pipeline projects are being developed to realize this.
- All stakeholders across the natural gas value chain (gas suppliers, gas transporters, LDCs, etc.) must work together to catalyze the development of gas industrial hubs.
- Synergy among stakeholders reduces costs, increases profits, minimizes business risks and serves the customer better.



*Thank
You*

