

# ANOH GAS HUB — A BLUEPRINT FOR NIGERIA'S FUTURE



The ANOH gas development at OML 53 will drive the next phase of growth for the gas business. Seplat's involvement positions it at the heart of one of the largest greenfield gas and condensate developments in the Niger Delta, and positions the Company to be the leading long-term gas supplier of choice for Nigeria.

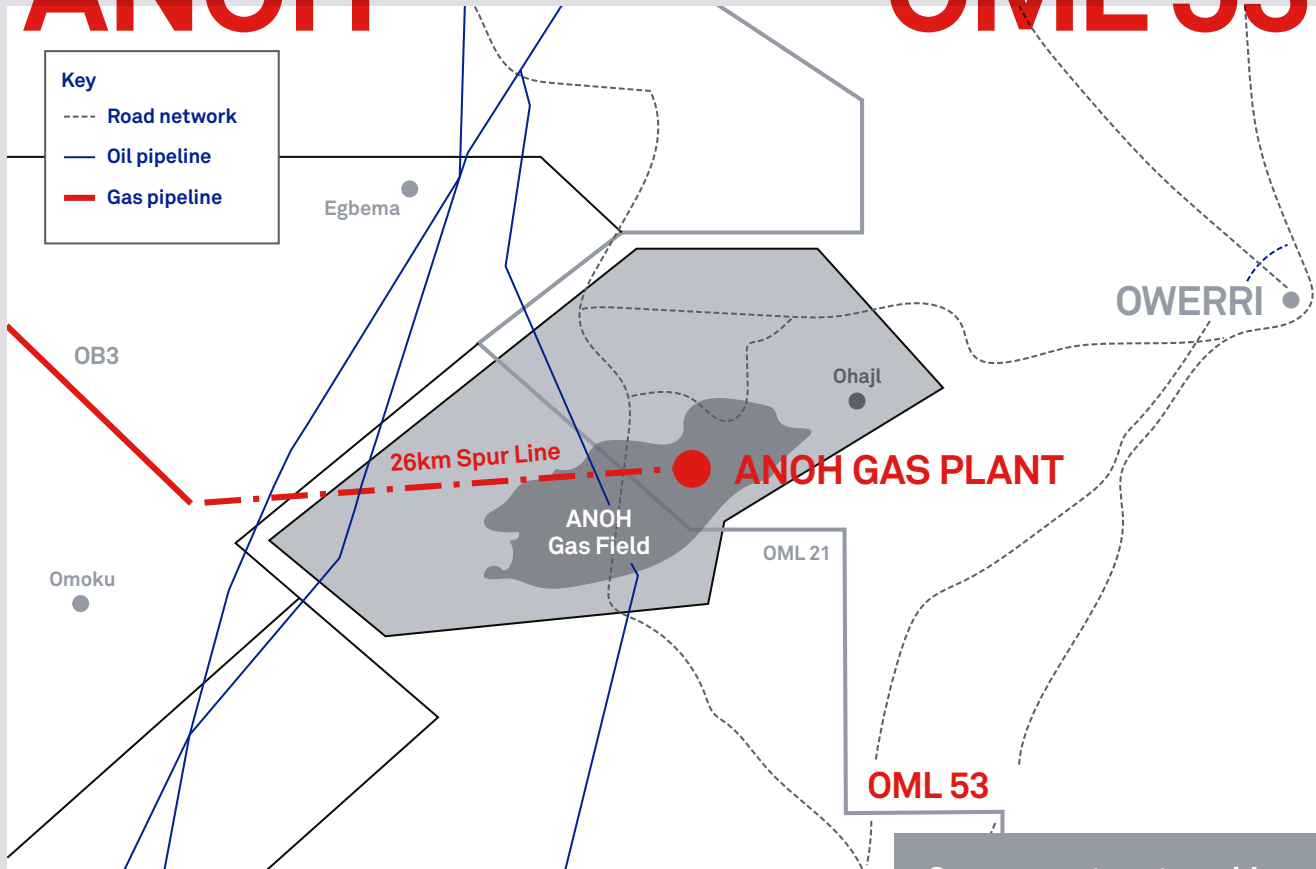
### What is ANOH?

The Assa North / Ohaji South gas development at OML 53 (and adjacent OML 21 with which the upstream project is unitised) will incorporate, in Phase 1, a 300 MMscfd midstream gas processing plant distributed through the Obiafu-Obrikom-Oben (OB3) pipeline network. Shell Petroleum Development Company (SPDC) is operator of the unitised upstream development which is expected to manage the upstream operations to produce 600 MMscfd of wet gas, 300 MMscfd of which will be processed at a new SPDC JV processing plant and the other 300 MMscfd processed by AGPC (Seplat and NGC JV) at the company's gas processing plant.

Seplat is well positioned to leverage the experience gained at the Oben gas processing hub, where it expanded gas processing capacity over two phases from 150 MMscfd to 465 MMscfd, to incorporate operational and cost efficiencies. Seplat took the Final Investment Decision ("FID") to proceed with the ANOH project in March 2019 and first gas is targeted for 2021.

# ANOH

# OML 53



## The importance of ANOH

The ANOH gas development project, which is aimed at producing around 300 MMscfd, is one of the 7 Critical Gas Development Projects (7CGDP) in Nigeria. 7CGDP is a Government programme aimed at improving gas production and infrastructure development for the country.

ANOH is one of the largest greenfield gas and condensate developments in Nigeria which will supply much needed gas volumes for a growing domestic market. As a critical gas supply hub in Nigeria’s burgeoning gas-infrastructure network, ANOH is designed to provide supply to the Eastern, Western and Northern gas pipeline systems. Delivery of the ANOH project will be a major contributor to the Nigerian government’s aspiration for increased power generation and diverse industrial and economic growth. This would in turn be a significant contributor to GDP growth across Nigeria, as the gas produced will be utilised in-country across diverse industries, while providing economic opportunities for local communities.

## \$US700m

Estimated total project cost

## 300 MMscfd

Gas processing plant

## Government partnership

Seplat and the Nigerian government are delivering the midstream development through the ANOH Gas Processing Company (“AGPC”), an incorporated joint venture owned 50:50 by Seplat and the Nigerian Gas Company (“NGC”), a wholly owned subsidiary of Nigerian National Petroleum Corporation (“NNPC”).

The project is the most advanced project of the 7CGDP initiative led by the Ministry of Petroleum and the Nigerian National Petroleum Corporation (NNPC).

It is premier amongst the 7 Critical Gas Development Projects initiative led by the Ministry of Petroleum and the Nigerian National Petroleum Corporation.

## ANOH in numbers

<b>6</b>	<b>Upstream</b> Six wells to be drilled in the project area
<b>87</b>	<b>Location</b> 87 hectare plot, accommodating access roads, rights of way, flowlines, gas plant, field logistics base (FLB), LPG loading, utilities and additional accommodation space for future expansion
<b>300</b>	<b>Plant specification</b> 2x150 MMscfd Thompson Trains with 50% turndown capacity with automated operations
<b>22,500</b>	22,500 bbl/d two train condensate handling plant
<b>1,200</b>	1,200 bbl/d LPG recovery
<b>200,000</b>	<b>Ancillary facilities</b> 2 x 100,000 bbl condensate storage tanks
<b>50,000</b>	1 x 50,000 bbl produced water tank
<b>200</b>	1 x 200 bbl diesel tank
<b>12,000</b>	8 x 1,500 bbl LPG storage bullets
<b>80</b>	<b>Workforce</b> 80 persons field logistics base, administration and maintenance blocks



## Key events

- Transfer of 40% interest and operatorship of OML 53 to Seplat in January 2016
- FEED completed August 2017
- Gas plant area land acquisition completed in March 2018
- Shareholder & commercial agreement signed in August 2018
- Site clearing and earthworks commenced in November 2018
- FID taken in February 2019
- Site clearing completed in May 2019
- Key contracts to supply process modules and specialist equipment awarded by June 2019
- Awarded integration detailed engineering design in July 2019
- 30% Model and Design review of gas process modules October 2019
- Equity of US\$300 million committed (50:50 between Seplat and NGC) by October 2019
- Safety (HAZOP) and 60% Model review of integrated Vendor packages December 2019
- 1st Steel Cutting / commencement of Gas Process Modules achieved December 2019
- Award of Civil foundations, plant roads and drainages scheduled for December 2019.



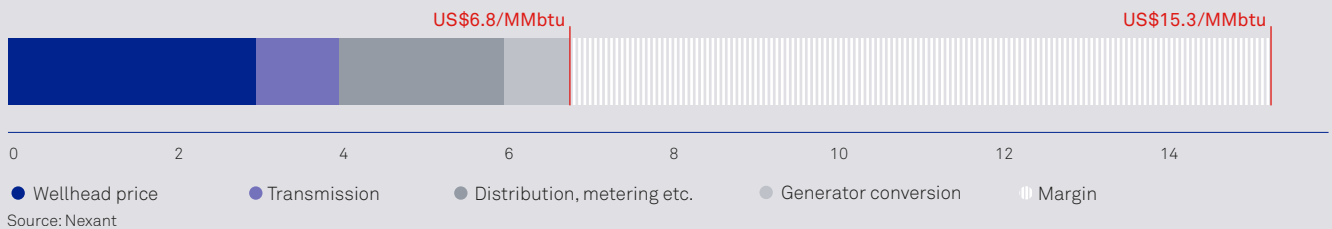
# ANOH – The Assa North / Ohaji South Gas Processing Project

## Benefits and outcomes

### Energy replacement

The economics are compelling of switching from the estimated 25GW diesel generated power to gas fired power generation. Gas is a cheaper and more efficient fuel for energy generation with lower carbon emissions. It also has the added advantage of helping to preserve Nigeria's foreign exchange reserves because unlike imported diesel, gas is paid for in Naira.

The estimated equivalent cost of generating power through burning diesel is in excess of US\$15/MMbtu (US\$14.6/MMscfd at a conversion factor of 0.9756).



# 9,300

In-country tonnage

### Local content

At Seplat, we have consciously put in place practices to promote local business competencies and they continue to play a key role in our operations. Through close engagement and collaboration with the Nigerian Content Development and Monitoring Board (NCDMB), local contractors and vendors are growing capacity. Seplat has consistently purchased locally manufactured goods through our in-sourcing strategy, ensuring local participation throughout our supply chain.

### Adopting the 'Seplat Model' for community engagement

AGPC adopted the tested structures and community engagement strategy set up by Seplat. This model promotes partnership and proactive engagement with host communities and other stakeholders. It also ensures an effective community relations governance structure. AGPC is progressing with a needs assessment to determine specific CSR initiatives that reflect the ANOH community aspirations. Whilst this is ongoing, low hanging opportunities that impact the immediate communities are being addressed.

Leading indigenous E&P committed to developing the local oil and gas service industry.

WBS activity	Status	Design	Procurement & Fabrication	Commissioning & Installation	Operations	Inspection Maintenance & Repair
1 Process units – modules		GPS	GPS	MEIC (TBD)	AGPC	AGPC
2 Power gen rotating equipment		BAKER HUGHES/ GE	BAKER HUGHES/ GE	BAKER HUGHES/ GE	AGPC	BAKER HUGHES/ GE
3 Tanks & blending		GPS	MEIC (TBD)	MEIC (TBD)	AGPC	AGPC
4 Civils		GPS	KENONO-MENA	KENONO-MENA	N/A	N/A
		IESL/DORIS	ZEROCK	ZEROCK		
5 Pipelines		IESL/DORIS	(TBD)	(TBD)		
6 Detailed design - study		IESL/DORIS	N/A	N/A	N/A	N/A
7 Mechanical electrical and installation hook-up		N/A	MEIC (TBD)	MEIC (TBD)		

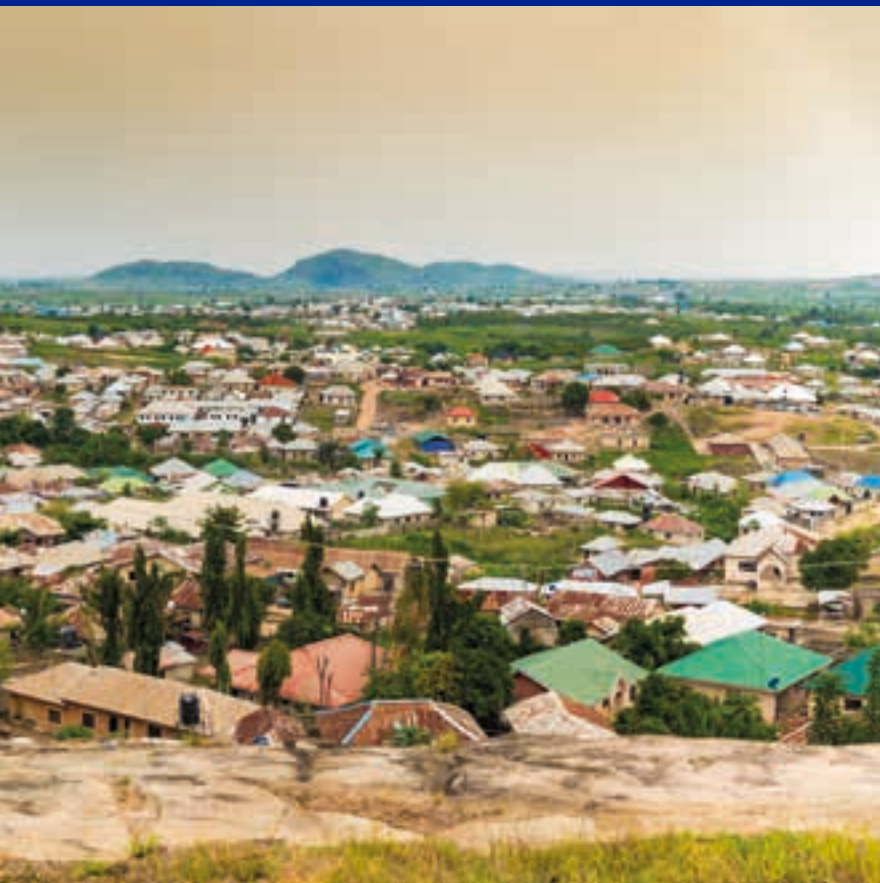
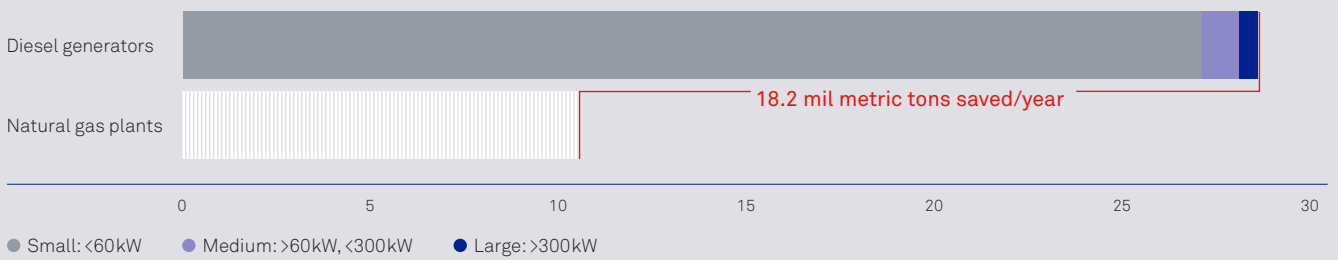
### Environmental benefits

In addition to being a domestically abundant and secure energy source for Nigeria, the use of gas also offers a number of environmental benefits over other sources of energy, particularly coal and diesel. For example, the combustion of natural gas emits around 45% less carbon dioxide (CO<sub>2</sub>) and 60% fewer greenhouse gases (GHG) than coal; and around 30% less CO<sub>2</sub> and 50% less GHG than diesel.

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### Generator vs grid emissions in Nigeria

Millions metric tons CO<sub>2</sub>



### Delivering growth for Seplat, Nigeria and shareholders

The long-term outlook for gas in Nigeria and the regional market remains positive and Seplat is leading the charge to grow domestic capacity in the country's midstream gas processing potential; as Nigeria begins to shift from gas being a rental revenue earner to being a source of energy security that drives wider economic growth. Seplat's gas reserves and processing capacity connected to the main demand centres position it to be the leading long-term gas supplier of choice.

An expert team drawing on past experience and repeatability gains to deliver value.