Project O

CONFIDENTIAL INFORMATION MEMORANDUM

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1 EXECUTIVE SUMMARY

Nigeria is the largest economy in Africa and 22nd globally. The Nigerian economy has continued to perform below its potential over the past few years. The crash in crude oil prices, exchange rate volatility, weak infrastructure, rising inflation, policy inconsistencies and many more are some of the major challenges that has plagued the country in the past. However, the new government led by Buhari, has taken major steps to combat macroeconomic challenges such as increasing interest rates, diversification to non-oil sectors, eradicating corruption and bureaucracy in the oil sector and free floating the Nigerian currency among others.

Nigeria's oil and gas industry has been majorly hit by operational challenges such as low refinery capacity utilization, which is below commercial threshold due to prolonged Turn-Around-Maintenance (TAM) issues, pipeline vandalism, and product losses. These developments have put the government entities in a disadvantaged market position. However, it also proves to be an investment opportunity for the foreign investors as the demand for refined products continues to be high as compared to supply.

With a combined refining capacity of 445,000 barrels per day (XXXd), Nigerian refineries are currently operating at less than 15.0% of their installed capacity. This has made Nigeria highly dependent on imported refined petroleum products to satisfy the growing consumption of over 407,100 XXXd in 2015.

The Opportunity:
XXX is a part of an import substitution project of a 100kXXXd brownfield refinery relocation to Nigeria. XXX is currently in the process of raising equity capital from a select group of local investors for the engineering, refurbishment, procurement, reconstruction and integration of the refinery relocation and collocation project. This project will have significant social and economic impact on Nigeria, considering that the key objective of the project is to increase local refining capacity, save foreign exchange presently allocated for refined petroleum products as well as create jobs for increased economic growth.

The 100kXXXd refinery, which XXX plans to relocate to Nigeria is the only 100kXXXd dismantled refinery, and currently in storage in Cyprus and is ready for shipment to Nigeria. This unique competitive advantage provides a minimum of three year head start over other Brownfield solutions that will require parties to first negotiate the acquisition of an existing refinery before they can initiate the meticulous dismantling process of the refinery within very strict environmental regulations and constraints.

The refinery will operate a joint venture with XXX Corporation ("XXX") wherein it will receive crude oil feedstock from XXX and supply refined petroleum products to the XXX Company ("KKRT") as well as utilize the storage facilities, utilities and infrastructure of XXX Company Limited ("XXX"). Cyclicality and financial risk of the project is lower than most other refineries because of a sustainable higher refining margin considering competitive feedstock cost advantage and low overcapacity risk because most of the refined products consumed in Nigeria and the broader region are presently imported.

Project cost is estimated at $XXX million ($XXXX per barrel of refining capacity), with a capital structure of XX% in debt and XX% in equity, this gives the project a significant cost advantage when compared to a Greenfield build which typically averages between $18,000 to $25,000 per barrel of refining capacity.

Investing in the equity of this project is expected to yield an IRR of xx.xx% and provide an MOIC of x.xx over a period of xx years. These returns would further get magnified using crude oil/refined products swap agreements with XXX. The improving macroeconomic conditions and the projects unique advantages will further amplify equity returns.

2 NIGERIAN ECONOMY IN REVIEW

Nigeria is the largest economy in Africa with a GDP (constant 2010 US$) of US $464.0 billion (2015) and is one of the fastest growing economies in the world. As the world's 7th most populous country, Nigeria is home to about 182 million[1] people and is Africa's largest market, with a young, growing and vibrant population.

Global developments resulting in the precipitous fall in oil prices is impinging greatly on the Nigeria's key macroeconomic variables. These variables include the exchange rate, capital flows, current account balance, inflation, and growth prospects. It is obvious that the macroeconomic challenges facing the economy are far from over and are exerting ripple effects on macroeconomic variables.

Due to such macroeconomic conditions, the Central Bank of Nigeria (CBN) had intervened by employing tight monetary policies to cushion the impact on the wider economy. Among these interventions were the devaluation of the Naira, closure of rDAS/wDAS[2] forex window and restriction on the amount of US dollar accessible by businesses and investors from the banks. This had put a strain on foreign portfolio investors' participation in the economy and equally led to capital flight. Despite the challenges, the Nigerian economy remains central to the World economy and will be the key catalyst for the revival of Sub-Sahara African economy.

2.1 Gross Domestic Product

Nigeria's economy grew by 2.7% yoy in 2015 as shown in the figure below, which represents the slowest growth in the past five years, much lower than the 5-year real GDP average of 4.8%[3] yoy due to contraction in growth across industries and moderation in the services sector.

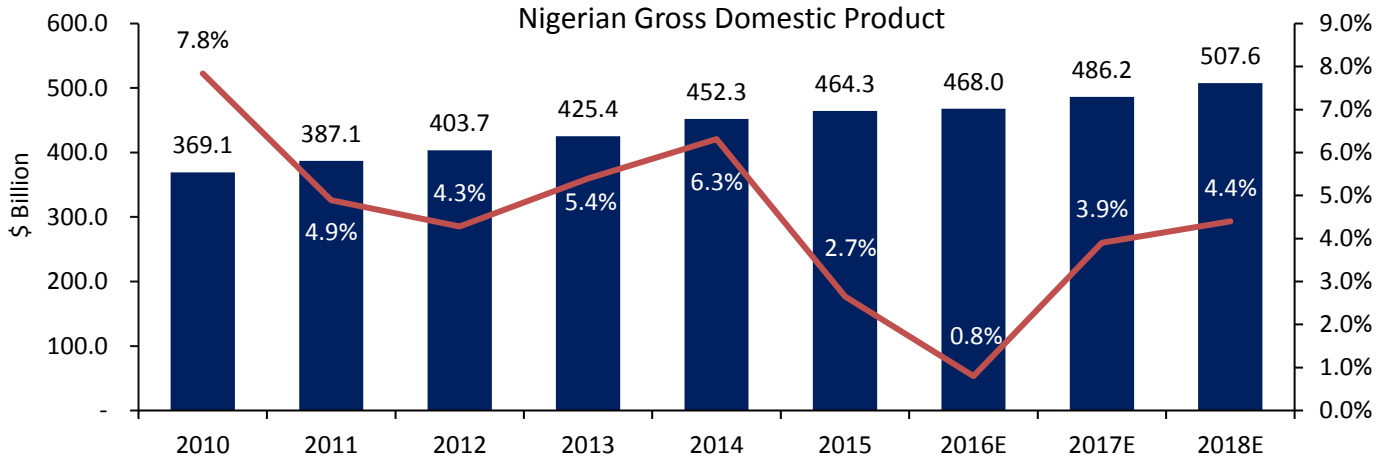


Figure 1: Nigerian Gross Domestic Product (Source: World Bank, 2016)

Despite slowing significantly, Nigeria's economy remains driven by the non-oil sector which recorded growth of 3.7% yoy (2014: 7.1% yoy) as the oil sector continues to underperform. Real growth in the crude petroleum and natural gas sector was (5.4%) yoy in 2015, even as oil exports declined by ~49.0% yoy in 2015. New Government's reform agenda and policy direction will play a role in restoring confidence in the economy. The government has started to implement import substitution programmes for lower average oil prices in 2016. Overall, economic growth will remain relatively low in the first half of 2016 and will pick up significantly in 2017 and 2018.

[1] World Bank, 2015
[2] Retail Dutch Auction System (rDAS), Wholesale Dutch Auction System (wDAS)
[3] Economic Alert: Nigeria 2015 GDP; PwC; March, 2016

2.2 Exchange Rate

Nigeria experienced protracted pressures in foreign exchange (FX) market in 2015. This was intensified by fall in global prices of crude oil and limited CBN's ability to pursue its mandate on price stability with lean foreign reserves account.

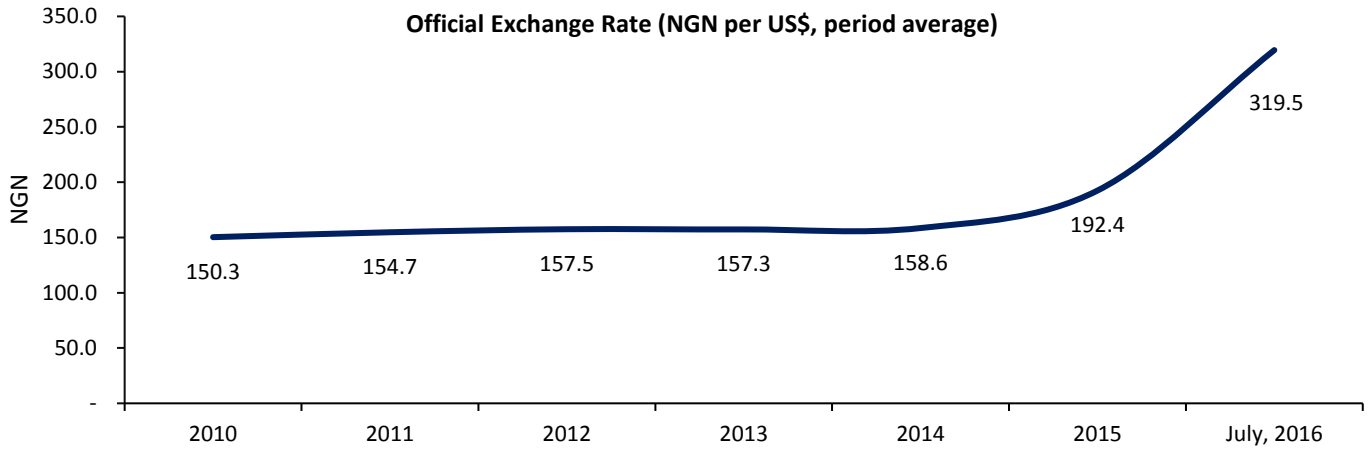


Figure 2: Official Exchange Rate (Source: World Bank)

A parallel market for foreign exchange has been in existence since the exchange control era. In February 2016, Naira went on a free fall in the parallel market when the CBN stopped the weekly sale to Bureau de Changes with dollars. NGN depreciated to 385.0[1] for a US dollar in the parallel market, and the interbank rates were at NGN 199.3/USD.

Given the structural deficiencies of the Nigerian economy (huge import bill, and lack of proper diversification), the monetary policy authority has adopted drastic short-term initiative of abandoning its 16-month-old dollar peg, allowing the Naira trade freely in a bid to lure foreign investors who fled both the equities and bond markets.

A shift from the dollar pegged regime is considered positive for the economy and markets because it will provide a liquid market for price discovery as the exchange rate will be market determined rather than managed. It will also promote investor confidence to invest in Nigeria.

2.3 Inflation

The Consumer Price Index (CPI) was within single digit all through 2015. However, rising inflation became a significant concern to monetary policy administrators and economists as inflation breached the Central Bank's tolerance limit of 9.0% to reach 9.2% in June 2015. This was a worrying sign for business owners and the populace because of rising price levels of goods and services that prevailed for most parts of the year. The latest inflation figure is more concerning as June 2016 inflation stood at 16.5%, representing a growth of 90 basis points over 15.6% in May 2016.

[1] Article "Naira on a Free Fall: US $ now NGN 385, £ now NGN 505 in Black Market"; February, 2016

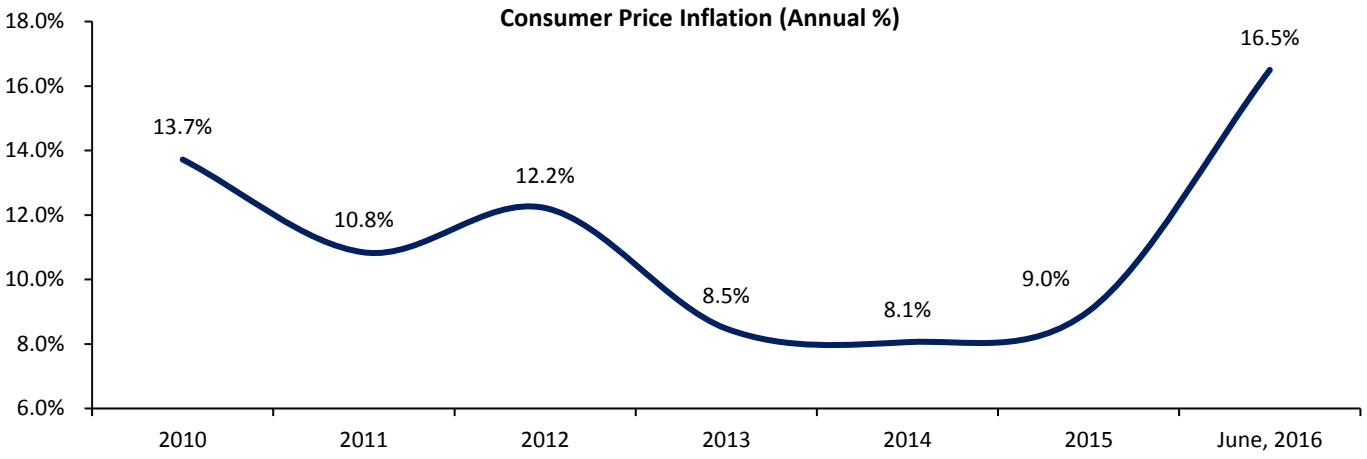


Figure 3: CPI (Source: World Bank, 2015)

CBN's restrictive policies on imported goods, the scarcity of FX and surge of food prices contributed to the high level of inflation in 2015. The upward trend is likely to continue as there is no respite for its two main drivers, namely, rising food prices as a result of late rainfall and weaker exchange rate. The third driver is rising transport costs resulting from incessant petrol shortage as a result of an impasse over outstanding fuel subsidy payments between the government and fuel marketers. CBN has taken measures like increasing the monetary policy rate (MPR) from 12.0% to 14.0% in a bid to stem the tide of spiralling inflation in July, 2016 and is confident of bringing down inflation in future.

2.4 Interest Rates

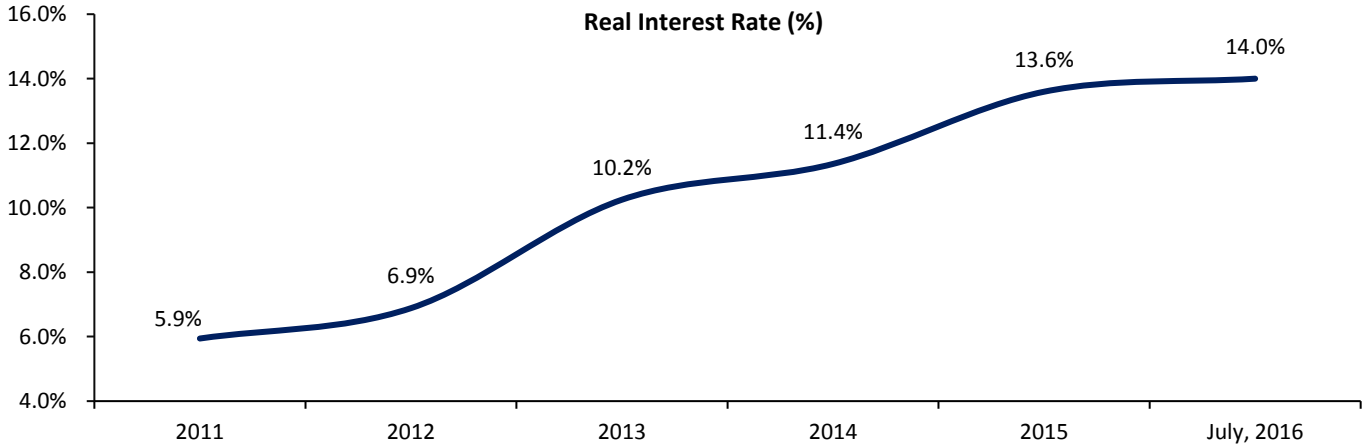


Figure 4: Real Interest Rate (Source: World Bank, 2015)

Interest rates in Nigeria increased to 14.0% in July 2016 as the cost of gasoline and food surged due to higher import prices caused by dollar shortages blamed on a 15-month currency peg. It has risen sharply from 13.6% in 2015 mainly due to the fall of the Naira, high energy cost and high transportation cost/import restrictions. The government has expressed its intention to drive interest rates consciously down to single digit levels. Although the woes from declining oil prices, FX scarcity and security threats continues to affect the Nigerian economy, new government is moving towards more stable political environment and increase in infrastructural spending is expected to aid significant growth in 2016. New administration has renewed vigour for governance, strong anti-corruption drive, as well as the seemingly stronger political will to push through reforms necessary to navigate current macroeconomic challenges.

3 NIGERIA OIL AND GAS INDUSTRY OVERVIEW

3.1 Global Trends

Global primary energy consumption increased by just 0.8% in 2015, the weakest since 2009. This marked a decline compared to previous year's growth (2014; +0.9%)[1] and well below the 10-year average of 2.1%. Apart from nuclear power that grew at an above average rate, every other fuel experienced slowed growth in 2015. Oil remained the world's leading fuel accounting for 32.6% of global energy consumption but lost market share for the sixteenth consecutive year as renewables sneaked up the pecking order. The price of Brent averaged $48.91 per barrel in 2015, a decline of $50.04 per barrel from the 2014 level.

Crude oil prices showed recovery signs in the second quarter of 2015 in the face of continued large supply disruptions, but remained low later in the year due to strong non-OPEC production growth combined with weaker consumption (relative to 2014) and OPEC's decision to defend market share.

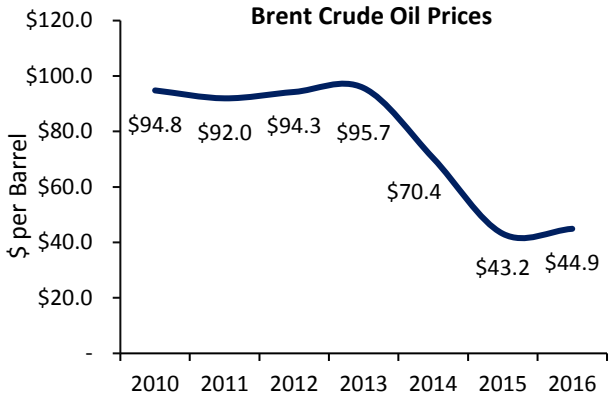


Figure 5: Brent Crude Oil Prices (Source: Bloomberg)

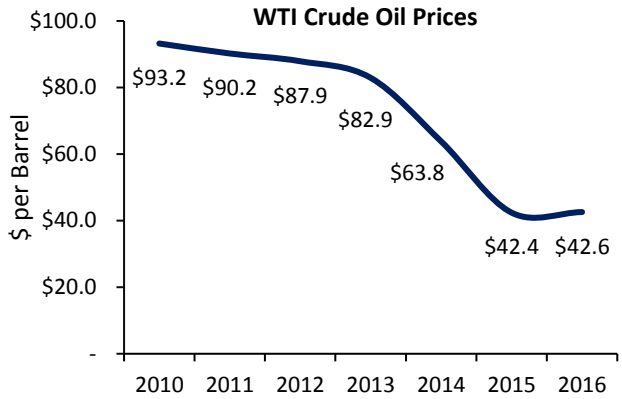


Figure 6: WTI Crude Oil Prices (Source: Bloomberg)

3.2 Nigeria Oil and Gas Industry Introduction

XXX is the state oil corporation which was established on April 1, 1977. In addition to its exploration activities, the Corporation was given powers and operational interests in refining, petrochemicals and products transportation as well as marketing. Between 1978 and 1989, XXX constructed refineries in Warri, Kaduna and Port Harcourt and took over the 35,000-barrel Shell Refinery established in Port Harcourt in 1965.

The downstream industry in Nigeria is well established. XXX has four refineries, two in Port Harcourt (XXX), and one each in Kaduna (KRPC) and Warri (WRPC). The refineries have a combined installed capacity of 445,000 XXXd. A comprehensive network of pipelines and depots strategically located throughout Nigeria links these refineries.

The XXX is made up of two refineries, located at Alesa Eleme near Port Harcourt with a jetty (for product import and export). In 1983, the Port Harcourt refinery with 60,000 XXXd name plate CDU capacity and the tankage facilities were acquired by XXX from SHELL. Subsequently, a new 150,000 XXXd export refinery was built in 1988 and commissioned in 1989. Therefore, the current combined installed capacity of XXX is 210,000 XXXd[2]. The installed capacities of KRPC and WRPC are 110,000 XXXd and 125,000 XXXd respectively.

[1] GTI Research, January 2016
[2] NNPC Monthly Report, 2016

XXX, through its subsidiary, the XXX Company (KKRT), supplies only to bulk customers. They, in turn, meet the needs of millions of customers across the country for products ranging from gasoline and jet fuel to diesel, fuel oil and liquefied petroleum gas.

3.2.1 Nigerian Oil and Gas Downstream Industry

Oil is a pillar of the Nigerian economy, helping the country garner large foreign reserves, a relatively healthy current account position and low foreign debt (the country paid off much of its debt in 2006). Nigeria's demand for oil and gas increased overall during the years 2011-2015, but prices fell steeply.

Due to maintenance issues and macroeconomic challenges, there is a major mis-match in the supply and demand for the refined products. Previously, the XXX had supported Offshore Processing Arrangement (OPA) wherein crude oil was swapped for the refined products from offshore refineries. However, the XXX recently has discontinued the OPA and has replaced it with Direct Sale-Direct Purchase (DSDP) programme[1]. XXX, in a statement by its Group General Manager, Group Public Affairs Division, Mr. Ohi Alegbe, stated that replacement of the OPA with the more efficient DSDP was aimed at improving transparency and eliminating the activities of middlemen in the crude oil exchange for product matrix.

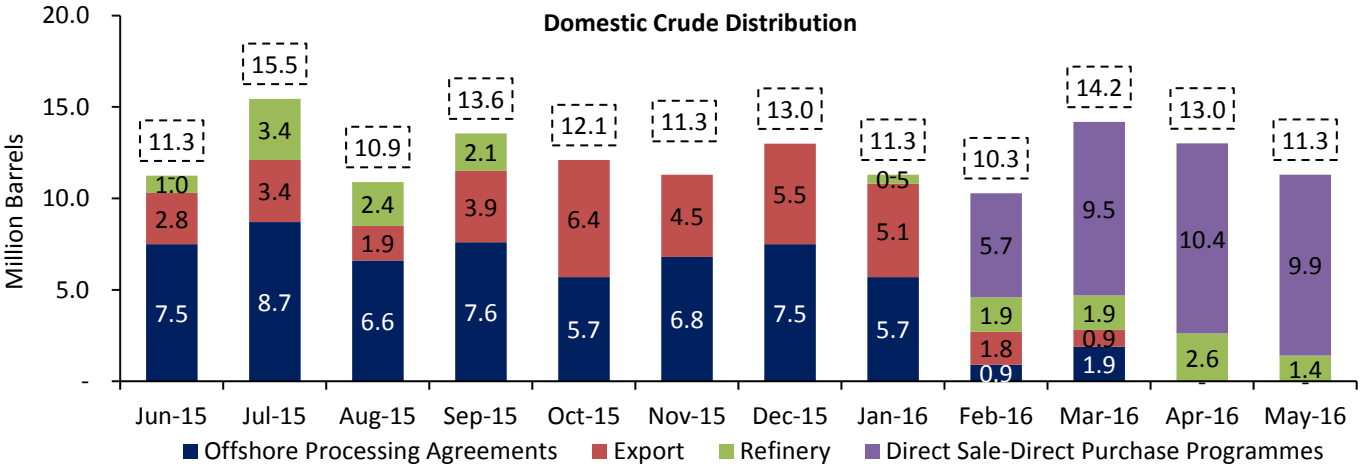


Figure 7: Domestic Crude Distribution (Source: NNPC Monthly Report, June 2016)

Crude Oil input to the refineries has remained low over the last 12 months and has not been impacted by the structural shift from OPA to DSDP. Though DSDP has completely replaced OPAs and Exports, the input to refineries will only improve with an increased capacity utilization of the domestic refineries. New domestic refineries can decrease the dependency of XXX on DSDP programs. The new refineries will have to overcome the challenges faced by the current refineries such as under-maintenance, operational failures and poor corporate governance.

[1] NNPC Monthly Report; June, 2016

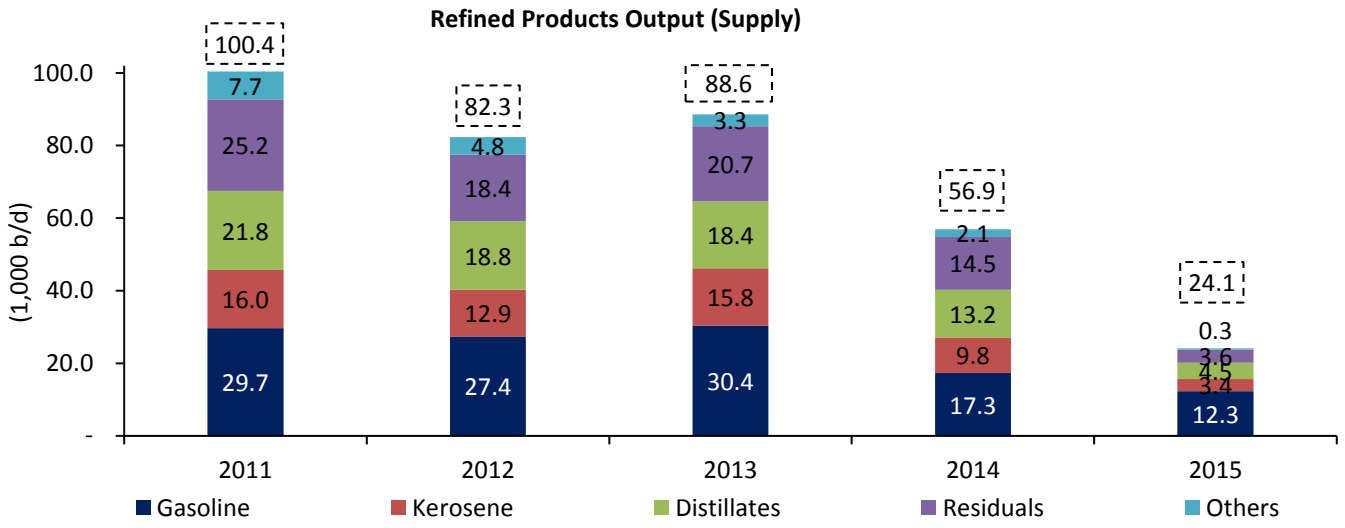


Figure 8: Refined Products Output, (Source: OPEC Annual Statistics Bulletin, 2016)

The output of refined products in Nigeria was 24.1 kXXXd in 2015 as shown in the figure above. However, the demand for the same continues to grow as consumption increases. Low refinery output is mainly due to the lack of active maintenance of the refineries and macroeconomic effects in Nigeria, paving the way for a foreign investor to seek the opportunity in this market.

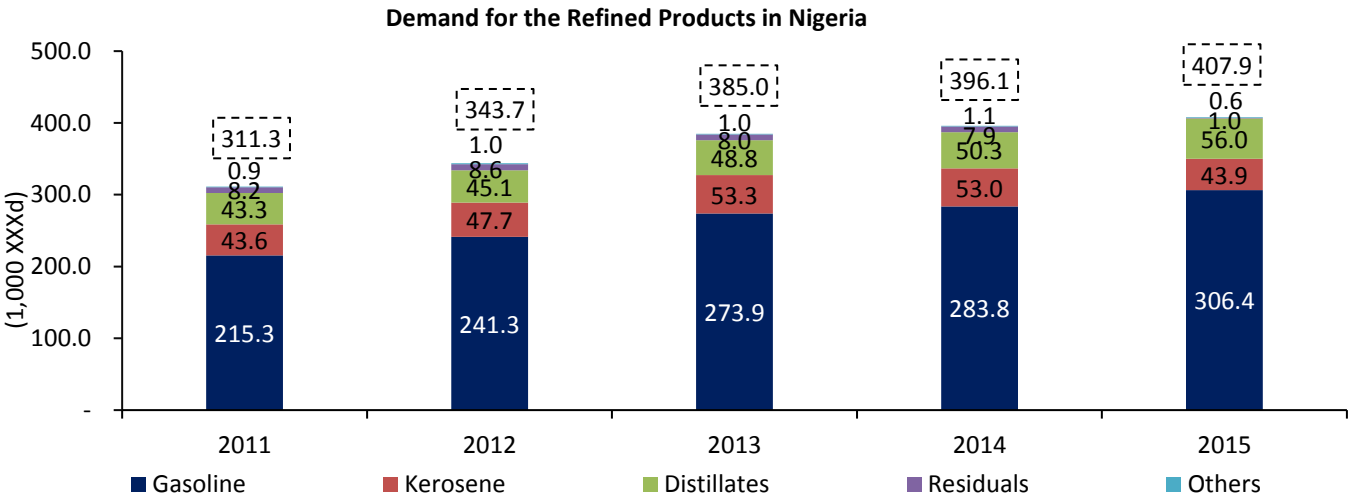


Figure 9: Demand for the Refined Products in Nigeria (Source: OPEC Annual Statistics Bulletin, 2016)

3.2.2 Challenges in Nigerian Oil and Gas Downstream Industry

The downstream sector has gone through major changes and challenges in 2015, with the major headwind being the persistent strikes by petroleum product marketers, which led to the scarcity of petrol. These strikes were due to the delayed payment of the $2.0[1] bn subsidy owed to the marketers by the federal government.

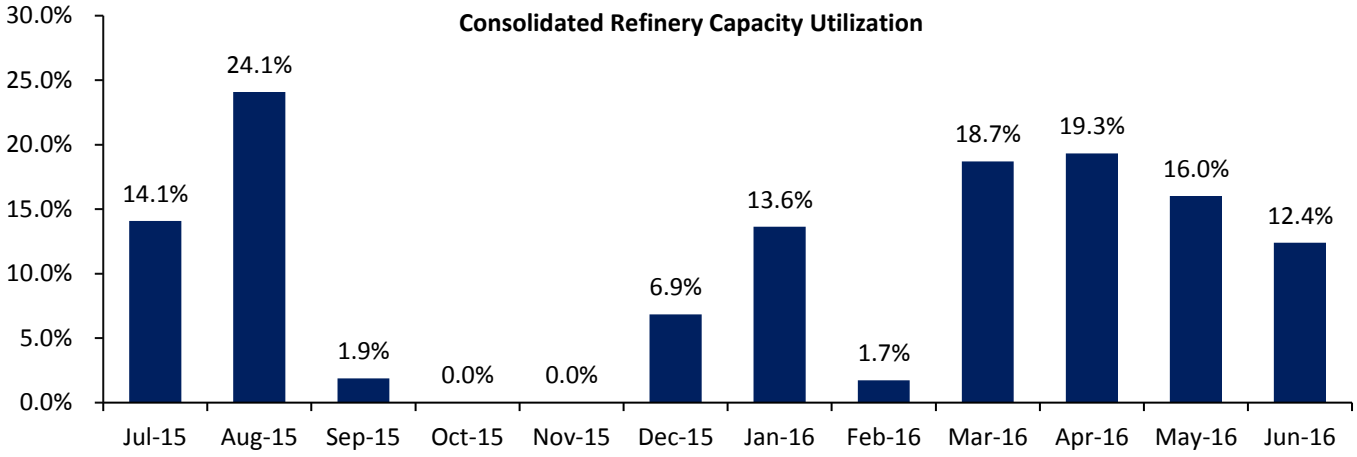


Figure 10: Consolidated Utilization Capacity (Source: NNPC Monthly Report, June 2016)

Local operational challenges such as refinery capacity utilization, which is below commercial threshold due to prolonged Turn-Around-Maintenance (TAM) issues, pipeline vandalism, and products losses, have continued to cost XXX large sums. These developments have put the corporation in a disadvantaged market position.

Nigeria's refineries are not fully operational regarding their capacity utilization. Factors like **inadequate funding and autonomy, lack of proactive governance, poor maintenance of the refineries, failure to monitor and timely corrections to minor operational deficiencies** in equipment and systems to ensure continuous satisfactory performance, inability to make necessary improvements or innovate as necessary, frequent emergency shutdowns of units or entire refineries due to thermal shocks caused to equipment, especially those operated at high temperatures or metallurgical stress failures were all common causes which lead to loss of production.

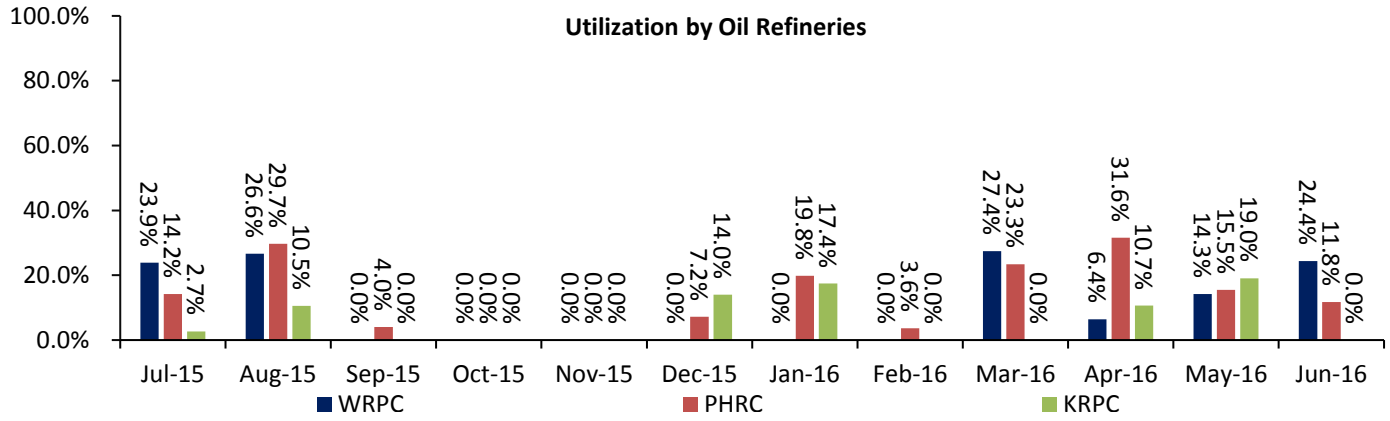


Figure 11: Capacity Utilization by Oil Refineries (Source: NNPC Monthly Report, June 2016)

[1] Downstream oil & gas: How far down are we; Renaissance Capital; February, 2016

Pipeline vandalism is a persistent challenge for Nigeria's oil and gas sector. A total of 3,120 vandalized points have been recorded between July 2015 and June 2016. Based on the XXX report, products valued at NGN 56.7 bn were lost between January and November 2015, owing to vandalism.

Reduction in vandalism will indeed unlock several industry upsides which include improved upstream oil production due to reduced pipeline disruptions, improved refinery utilization due to increased crude oil feed from restored pipelines, and reduction of crude/product losses.

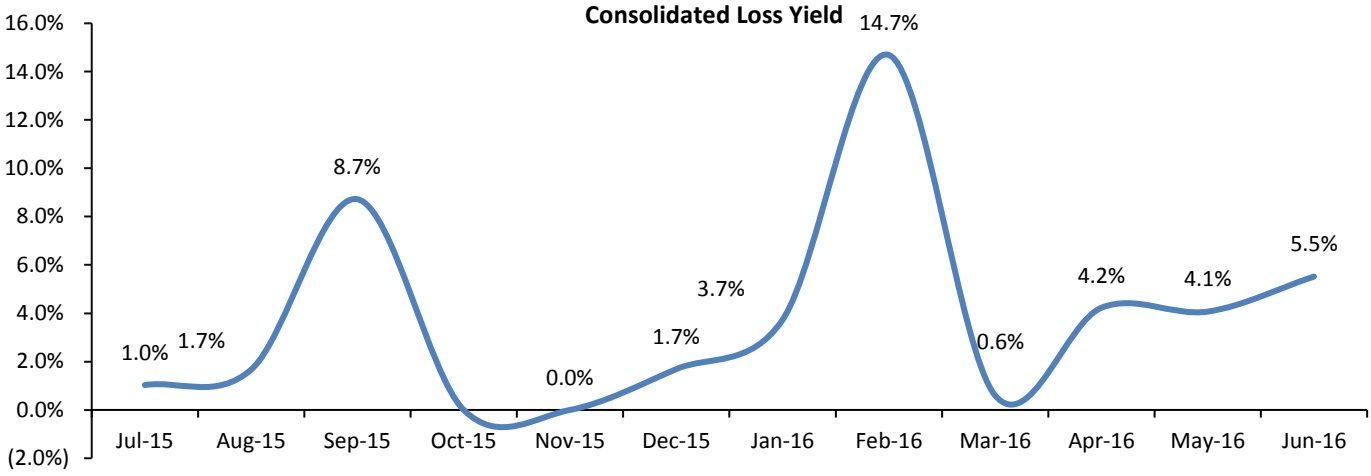


Figure 13: Losses due to operational inefficiency (Source: NNPC Monthly Report, June 2016)

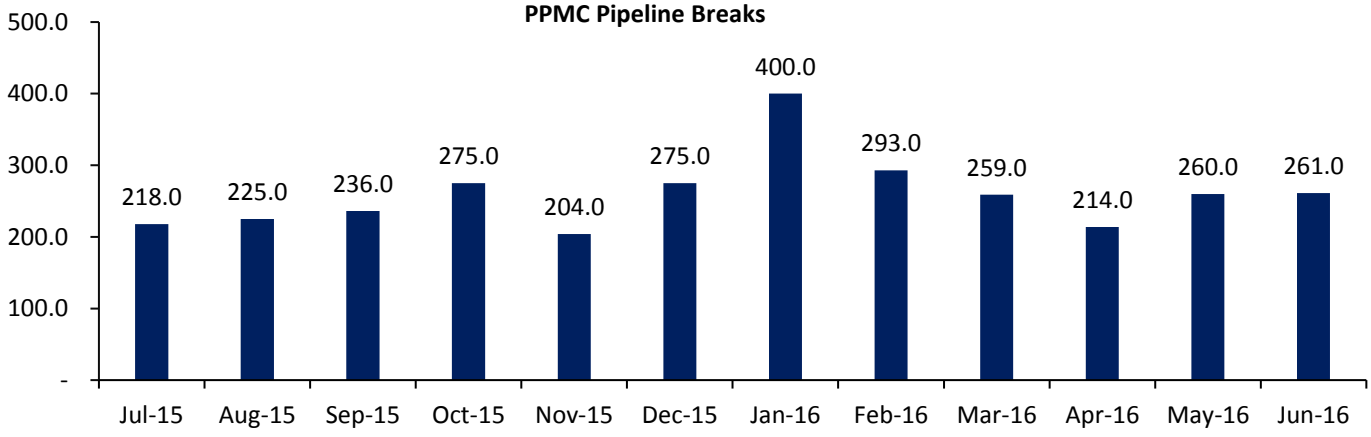


Figure 12: Pipeline Breakouts (Source: NNPC Monthly Report, June 2016)

Another major issue relates to **FX challenges and naira devaluation**. Devaluation of the naira will affect the landing cost of petroleum products, thus increasing the subsidy the government will have to pay on the products if retail prices are not moved.

- For regulated products such as petrol, there will be no impact on marketers as the government bears the exchange rate risk
- However, for non-regulated products such as diesel and lubricants, consumers and marketers will feel the impact
- The marketers may increase prices to reflect the new landing cost of the petroleum product and in some cases margins may be reduced as the marketers bear some of the cost. To help the marketers, XXX has started selling dollars to the marketers at the interbank rate

XXX's recent effort to address the nation's fuel situation as per the XXX Monthly Report, June 2016 are as follows:

"In an effort to combat the national fuel situation, XXX has re-commissioned the Escravos-Warri-Kaduna pipeline, Warri and Kaduna refineries had started receiving crude oil once again simultaneously for the first time in many years. The three refineries are going to work simultaneously and it will help in a great deal with the issue of fuel supply and distribution across the country and will go a long way to manage the fuel crisis. In a related effort to ensure fuel sufficiency the corporation has launched a competitive tendering process to find partners to overhaul its ailing refineries"

3.3 Macroeconomic SWOT Analysis

STRENGTHS

- Nigeria has considerable oil reserves. Hence, crude oil can be obtained at lower than the competitive prices
- Nigeria's taxes are comparatively low, which improves the competitiveness of firms operating in the country
- Relatively high internet penetration rates improve the ease of doing business
- External debt of Nigeria is very low which backs the economic conditions in Nigeria

WEAKNESSES

- Heavy bureaucracy and high levels of corruption a key obstacle to private sector development
- Unemployment rate has not improved with GDP growth and remains widespread
- A deficient power sector weighs heavily on productivity
- Vulnerability to Dutch Disease has left the economy highly dependent on oil revenues
- The number of international workers that can be employed by businesses is limited due to an expatriate quota
- Terrorism is a major threat due to the prevalence of organised terrorist groups including Boko Haram, Ansaru and MEND

OPPORTUNITIES

- Refineries are operating with less than the threshold capacity, hence creating a scarcity of refined products in the market
- Planned privatisation deals look set to increase revenues and boost the private sector
- The corruption record is improving slowly: Nigeria's score with Transparency International has climbed in recent years
- Nigeria's stock market is liquid and well capitalised, creating opportunities for portfolio investors as well as companies looking to raise capital
- Investment in the railway network will reduce the reliance on Nigeria's road network and provide some diversification options

THREATS

- Niger Delta militancy could mean oil production remains under capacity, threatening export and fiscal revenues
- Economic policy remains personality focussed and this poses a threat to investor certainty. Niger Delta militancy could well resume in the medium term, as the monetary rewards for militancy remain high and a speedy end to the region's poverty is highly unlikely
- High oil revenues have not fed through to the population and 90.8% of Nigerians are living on less than US $2.0 a day, creating the conditions for civil unrest
- Weak enforcement of intellectual property laws, contractual agreements and court rulings, can lead to significant losses

4 COMPANY OVERVIEW

The company, XYZ, is a 100,000 XXXd brownfield refinery currently in the process of relocation to Nigeria. The relocation process includes engineering, refurbishment, procurement, reconstruction and integration of the refinery. The 100 kXXXd Refinery was originally owned and operated by XXX ("XX") in Mersin, Turkey until 2014. XXX was the original design, construction, testing, and commissioning team for proper documentation of the process for reconstructing the refinery subsequently.

The company will operate as a joint venture with XXX which will provide crude oil feedstock; the refined products will be supplied to XXX and utilize the storage facilities, utilities and infrastructure of XXX.

XXX has made significant progress in the development of the collocation project with its stellar outing in the recent XXX public tender for collocation of refineries which closed 31 March 2016. XXX expects to negotiate and finalise a Memorandum of Agreement with the Federal Government of Nigeria in the coming weeks.

4.1 Asset (Refinery) Overview

This 100kXXXd refinery is the only completely dismantled and certified refinery in the world, originally operated by XXX till 2014. It has a remaining useful life of 20 – 25 years, which can be extended once it commences operations. The refinery currently has been successfully dismantled and is currently in storage in XXX.

The technology was originally designed and implemented by XXX, whereas the construction was handled by XXX. Relocation is the only feasible solution to guarantee an operating refinery with a pragmatic capital expenditure budget and project timeline of about 24 months. Previous XXX technical and managerial personnel, as well as the refinery's original maintenance contractors, are available for active participation in the refurbishment and reconstruction.

This arrangement results in an attractive equity valuation for early stage investor with sufficient equity coverage for structured finance facilities when compared to other Greenfield projects with longer timelines and significant construction risk.

Raw materials include Brent/WTI Crude Oil and output product pool includes Auto Diesel and Petrol @ EURO 3/4 specification as well as Jet Fuel, LPG, Kerosene, Low Sulphur Fuel Oil ("LSFO") and Flaked Sulphur. The refinery operated at an average utilisation rate of 91.0% before decommissioning in 2014.

Various parts of the refinery were designed, constructed and revamped in different years in late 1990's. Details of such are mentioned in the figure below.

Refinery Configuration				
Units	**Capacities (XXXd)**	**Licensor**	**Designer / contractor**	**Year**
Crude	100,000	Socony Mobil Oil	Foster Wheeler	1997(revamped)
NCHD (Naphtha)	24,000	Socony Mobil Oil	Foster Wheeler	1998(revamped)
Platinum Reformer (PtR)	14,000	Socony Mobil Oil	Foster Wheeler	1996(revamped)
KCHD (Kerosene)	12,000	Socony Mobil Oil	Foster Wheeler	1999(revamped)
LPG	4,000	Socony Mobil Oil	Lumnus	1980/1998
SRU (Sulphur)	20 tons/day	Snamprogetti	Snamprogetti	1995
AMU (Amine)	18,500 m3/h	Snamprogetti	Snamprogetti	1995
FCC (for Expansion)	17,000	UOP	Foster Wheeler	1985

Asset Valuation:

As indicated in the table below, a select group of refinery sale transactions have been conducted at an average asset valuation of US$1,053 per barrel of refining capacity. In line with this metric, the refinery has been valued at US$105 million (based on an installed capacity of 100,000 XXXD). Conservatively priced asset gives the investor an immediate upside upon execution of the XXX MOA with a further kick upon commencement of the refinery refurbishment works. The valuation of $1,053 per barrel of refining capacity compares favourably to the $1,582 per barrel of refining capacity realised from the sale of refinery assets with similar construction years.

Owner/Seller	**Buyer**	**Location**	**Capacity (kXXXd)**	**Sale and Purchase Year**	**Price**		**Construction Year**
					US 'mm	US$/bbl.	
Exxon	Tosco	Bayway, NJ	250	1993	175	700	1950
BP	Tosco	Fendale, WA	91	1993	125	1,374	1958
Basic	Valero	TX, LA	310	1997	285	919	1954
BHP	Tesoro	South Pacific, HI	95	1998	275	2,895	1967
Equilon	Frontier	El Dorado, KS	109	1999	170	1,560	1949
EL Paso	Valero	Corpus Christi, TX	115	2001	331	2,878	1956
EL Paso	Sunoco	Eagle Point, NJ	150	2003	130	867	1965
Sunoco	Holly	Tulsa, OK	85	2009	65	765	1968
BP	Marathon Petroleum	Texas City, TX	451	2012	148	328	1948
ConocoPhillips	Delta Airlines	Trainer, PA	185	2012	150	811	1952
ConocoPhillips	Suncor	Denver, CO	62	2003	150	2,419	1960
Total			**1,903**		**2,004**		
Average						**1,053**	

4.2 Project Development Overview

Project cost is estimated at $XX million ($XX per barrel of refining capacity), with a capital structure of XX% in debt and XX% in equity, this gives the project a significant cost advantage when compared to a greenfield build which typically averages between $XX to $XX per barrel of refining capacity.

To ensure a successful implementation of the project, XXX has assembled a diverse technical team made up of global engineering specialists and EPC Contractors such as XXX, XXX, XXX, XXX, XXX and more importantly, the XXX Management team that operated and also participated in the decommissioning of the refinery. XXX has also assembled a local project implementation team comprising of XXX, a subsidiary of XXX, XXX and XXX, which has storage and mechanical fabrication facilities that will be used by XXX for asset refurbishment and re-certification in accordance to the ASME and API standards.

The following terms have been proposed in a Memorandum of Agreement between XXX and XXX:

- XXX to set up a Technical Steering committee as well as an Operational committee to oversee project implementation
- XXX intends to complete the project in a 24 – 31 month time frame
- XXX will provide land within the XXX facility
- XXX will secure Licenses and Permits including approval of EIA and all other local permits. XXX will provide support and Existing EIAs to fast track the addendum for the upgraded capacity
- XXX to guarantee feedstock supply required for the 100,000 XXXd refinery
- Crude oil refined products swaps for up to 40% of the refined petroleum products for local consumption
- Commence pilot phase for Crude oil refined products swaps as soon as refinery equipment arrives in Nigeria
- XXX will work in conjunction with NETCO on the engineering and re-design of the infrastructure of the relocated refinery
- XXX will commit to the provision of relevant local information, data and other details that would enhance the speedy commencement of the relocated refinery

Low project costs are mainly driven by favourably priced refinery assets, co-location with existing facilities and low engineering, procurement and construction (EPC) costs

Use of Funds	US$
Refinery Acquisition Costs	XXX
Transportation and Import Duties	XXX
Front End Engineering and Design (FEED)	XXX
Project Development Costs	XXX
Refinery Refurbishment Costs	XXX
Refinery Onsite Construction & Erection	XXX
Contingency Provision	XXX
Capitalized Interest	XXX
Total Uses	**XXX**
Sources of Funds	**US$**
Equity Funding	XXX
Debt Funding	XXX
Total Source	**XXX**

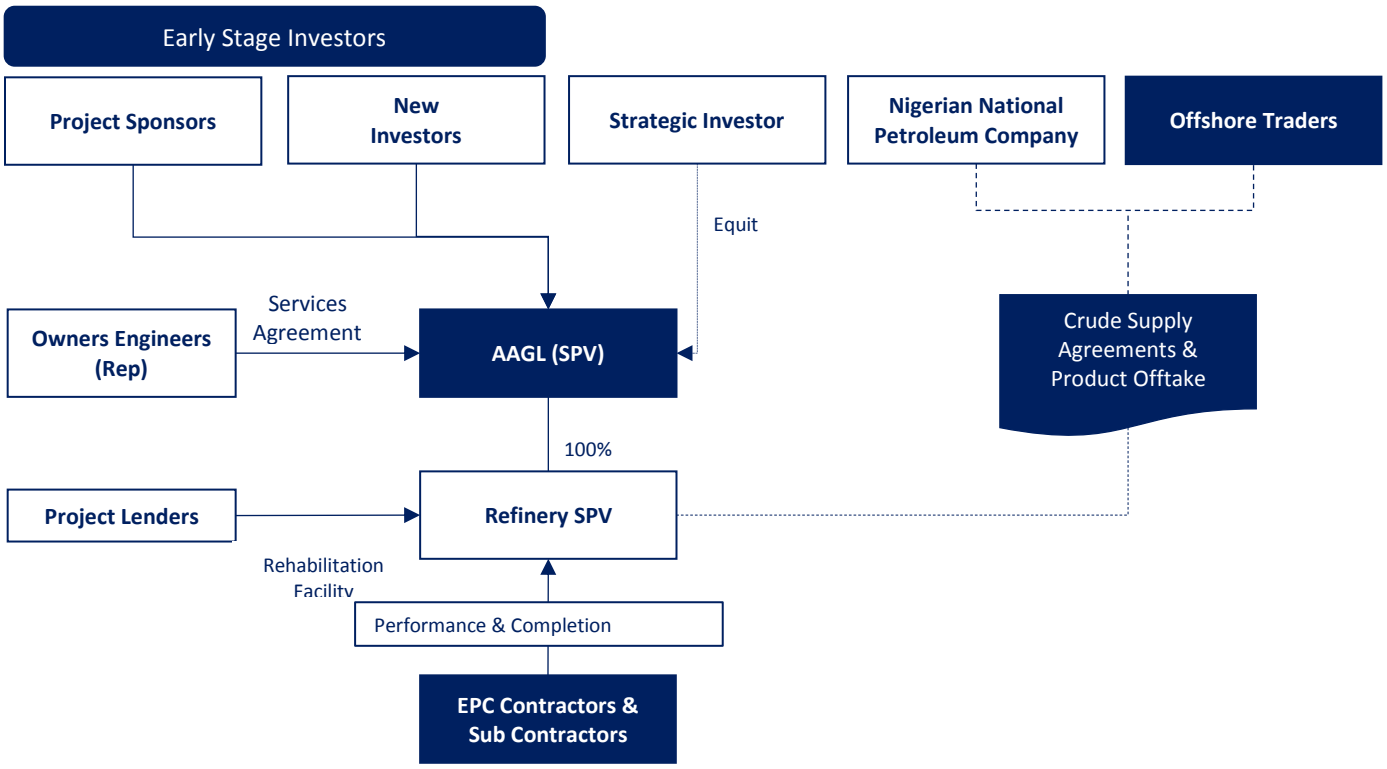
4.2.1 Project Timeline

Project streams will run concurrently to ensure a faster process. EPC contractors will be responsible for delivering on timelines and task.

Stage / Task	Month From Project Commencement																												
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Front End Engineering and Design (FEED)																															
Refinery Licenses and Permits																															
Refurbishment of Dismantled Refinery																															
Refinery Onsite Construction and Re-Erection																															

4.2.2 Project Structure

A project finance structure will be put in place with the necessary guarantees required to ensure the bankability of the project
XXX has begun negotiations with world class financial institutions in order to secure financing for the project



5 BUSINESS MODEL ANALYSIS

5.1 SWOT Analysis

STRENGTHS

- Extremely high demand for the refined products in Nigeria due to operational inefficiencies from the current refineries
- Low overcapacity risk due to high demand of the end products
- Joint venture with NNPC to receive crude oil feedstock and supply products to the PPMC as well as utilize the storage facilities, utilities and infrastructure of PHRC
- Minimum of 3 year head start over other Brownfield solutions which requires negotiations and dismantling process of the refinery within very strict environmental regulations and constraints
- Substantial savings on the construction costs and land costs as compared to the Greenfield projects
- Better operational efficiency than other refineries

WEAKNESSES

- Heavy bureaucracy and high levels of corruption a key obstacle to private sector development
- Current macroeconomic backdrop like rising inflation, high interest rates, weaker Nigerian currency, etc. can lead to service issues
- Sensitive to the prices of raw material and refined products

OPPORTUNITIES

- Nigeria has considerable crude reserves, hence competitive feedstock cost advantage
- Refineries are operating with less than the threshold capacity, hence creating a scarcity of refined products in the market
- Planned privatisation deals look set to increase revenues and boost the private sector

THREATS

- Niger Delta militancy could mean oil production remains under capacity, threatening export and fiscal revenues
- Pipeline Vandalism
- DSDP output might be competing with the domestic output of the refineries

5.2 Key Assumptions

5.2.1 Construction Assumptions

Construction Assumptions	
Total Construction	
Total Construction Period	
Start Month	
End Month	
Front End Engineering and Design (FEED)	
FEED Period	
Starting Month	
Ending Month	
Refinery Licenses and Permits	
License and Permit Time Required	
Starting Month	
Ending Month	
Refurbishment of Dismantled Refinery	
Total Time Required	
Starting Month	
Ending Month	
Refinery Onsite Construction and Re-Erection	
Total Time Required	
Starting Month	
Ending Month	
Contingency Provision and Capitalised Interest Metrics	
Year 1	
Year 2	

5.2.2 Financial Assumptions

Financing Assumptions	
Include PIK Interest?	
PIK Interest Rate (Annual)	
Cash Interest rate (Annual)	
Mandatory Paydown?	
Annual Debt Amortization Rate	
Optional Payment?	
% of FCF to be used for optional payment	
DSRA Multiple	
Minimum Cash	
Interest Rate on Revolver (Annual)	
Interest Rate on Cash (Annual)	

5.2.3 Operational Assumptions

Operating Assumptions	
Total Capacity (kbpd)	
Refinery Yield (%)	
Refinery Loss (%)	
Conversion bpd to Gallon per day	
Barrel per day to Metric ton per day	
Operating Capacity (Year 1)	
Operating Capacity (Year 2)	
Operating Capacity (Year 3 and onwards)	
Premium to Future Prices	
LPG	
Gasoline	
Jet Fuel/Kerosene	
Diesel	
LPFO	
Crude Oil	
Swap Inputs	
COGS (Crude Oil) Waiver	
Refined Products Giveaway	
Dividends Payout as a % of remaining Cash Flows	
Nigeria Tax Rate	

- The 100kXXXd refinery will become operational once the construction period ends. Total refinery yield will be 94.3% out of the 100 kXXXd capacity, which will remain constant for the next 10 years. Total refinery yield by final refined products is given in the figure below (constant for next 10 years)

Refined Products	Output
LPG	
Gasoline	
Jet Fuel/Kerosene	
Diesel	
LPFO	
Total	

5.3 Key Financials

5.3.1 Income Statement

($ mn, ex. per share data)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
Revenues	-	-	-	1,131.1	1,843.6	2,159.8	2,328.7	2,421.3	2,525.1	2,620.3	2,727.2	2,839.6	2,965.5	3,081.5	3,211.7	3,348.6	3,501.8	3,643.6	3,802.6	3,969.9	4,157.0	4,330.9	4,525.7	4,730.7	4,959.9	5,173.8	5,413.1	5,665.2	5,946.7	6,210.5	6,505.3
Growth	NA	NA	NA	NA	63.0%	17.1%	7.8%	4.0%	4.3%	3.8%	4.1%	4.1%	4.4%	3.9%	4.2%	4.3%	4.6%	4.0%	4.4%	4.4%	4.7%	4.2%	4.5%	4.5%	4.8%	4.3%	4.6%	4.7%	5.0%	4.4%	4.7%
COGS (Crude Oil)	-	-	-	(1,110.2)	(1,873.7)	(2,181.7)	(2,332.3)	(2,377.5)	(2,412.7)	(2,435.1)	(2,464.5)	(2,494.2)	(2,531.2)	(2,554.8)	(2,585.6)	(2,668.7)	(2,807.2)	(2,937.0)	(3,081.1)	(3,232.3)	(3,400.0)	(3,557.3)	(3,731.9)	(3,915.0)	(4,118.2)	(4,308.6)	(4,520.1)	(4,741.9)	(4,987.9)	(5,218.7)	(5,474.7)
Gross Profit	**-**	**-**	**-**	**21.0**	**(30.0)**	**(21.9)**	**(3.6)**	**43.7**	**112.5**	**185.1**	**262.7**	**345.3**	**434.3**	**526.7**	**626.1**	**679.9**	**694.7**	**706.6**	**721.5**	**737.6**	**756.9**	**773.6**	**793.8**	**815.7**	**841.7**	**865.2**	**893.0**	**923.3**	**958.7**	**991.8**	**1,030.6**
Margin	NA	NA	NA	*1.9%*	*(1.6%)*	*(1.0%)*	*(0.2%)*	*1.8%*	*4.5%*	*7.1%*	*9.6%*	*12.2%*	*14.6%*	*17.1%*	*19.5%*	*20.3%*	*19.8%*	*19.4%*	*19.0%*	*18.6%*	*18.2%*	*17.9%*	*17.5%*	*17.2%*	*17.0%*	*16.7%*	*16.5%*	*16.3%*	*16.1%*	*16.0%*	*15.8%*
Operational Costs																															
Personnel Expense	-	-	-	(17.0)	(27.7)	(32.4)	(34.9)	(36.3)	(37.9)	(39.3)	(40.9)	(42.6)	(44.5)	(46.2)	(48.2)	(50.2)	(52.5)	(54.7)	(57.0)	(59.5)	(62.4)	(65.0)	(67.9)	(71.0)	(74.4)	(77.6)	(81.2)	(85.0)	(89.2)	(93.2)	(97.6)
As a % of Revenue	NA	NA	NA	*(1.5%)*	*(1.5%)*	*(1.5%)*	*(1.5%)*	*(1.5%)*	*(1.5%)*	*(1.5%)*	*(1.5%)*	*(1.5%)*	*(1.5%)*	*(1.5%)*	*(1.5%)*	*(1.5%)*	*(1.5%)*	*(1.5%)*	*(1.5%)*	*(1.5%)*	*(1.5%)*	*(1.5%)*	*(1.5%)*	*(1.5%)*	*(1.5%)*	*(1.5%)*	*(1.5%)*	*(1.5%)*	*(1.5%)*	*(1.5%)*	*(1.5%)*	*(1.5%)*
Other Expense	-	-	-	(33.9)	(55.3)	(64.8)	(69.9)	(72.6)	(75.8)	(78.6)	(81.8)	(85.2)	(89.0)	(92.4)	(96.4)	(100.5)	(105.1)	(109.3)	(114.1)	(119.1)	(124.7)	(129.9)	(135.8)	(141.9)	(148.8)	(155.2)	(162.4)	(170.0)	(178.4)	(186.3)	(195.2)
As a % of Revenue	NA	NA	NA	*(3.0%)*	*(3.0%)*	*(3.0%)*	*(3.0%)*	*(3.0%)*	*(3.0%)*	*(3.0%)*	*(3.0%)*	*(3.0%)*	*(3.0%)*	*(3.0%)*	*(3.0%)*	*(3.0%)*	*(3.0%)*	*(3.0%)*	*(3.0%)*	*(3.0%)*	*(3.0%)*	*(3.0%)*	*(3.0%)*	*(3.0%)*	*(3.0%)*	*(3.0%)*	*(3.0%)*	*(3.0%)*	*(3.0%)*	*(3.0%)*	*(3.0%)*	*(3.0%)*
Total Operating Expenses	-	-	-	(50.9)	(83.0)	(97.2)	(104.8)	(109.0)	(113.6)	(117.9)	(122.7)	(127.8)	(133.4)	(138.7)	(144.5)	(150.7)	(157.6)	(164.0)	(171.1)	(178.6)	(187.1)	(194.9)	(203.7)	(212.9)	(223.2)	(232.8)	(243.6)	(254.9)	(267.6)	(279.5)	(292.7)
EBITDA	**-**	**-**	**-**	**(29.9)**	**(113.0)**	**(119.1)**	**(108.4)**	**(65.2)**	**(1.1)**	**67.2**	**140.0**	**217.5**	**300.9**	**388.0**	**481.6**	**529.2**	**537.1**	**542.7**	**550.4**	**558.9**	**569.9**	**578.7**	**590.2**	**602.8**	**618.5**	**632.3**	**649.4**	**668.4**	**691.1**	**712.3**	**737.8**
EBITDA Margin	NA	NA	NA	*(2.6%)*	*(6.1%)*	*(5.5%)*	*(4.7%)*	*(2.7%)*	*(0.0%)*	*2.6%*	*5.1%*	*7.7%*	*10.1%*	*12.6%*	*15.0%*	*15.8%*	*15.3%*	*14.9%*	*14.5%*	*14.1%*	*13.7%*	*13.4%*	*13.0%*	*12.7%*	*12.5%*	*12.2%*	*12.0%*	*11.8%*	*11.6%*	*11.5%*	*11.3%*
EBIT	-	-	-	(44.0)	(134.3)	(140.8)	(130.3)	(87.5)	(23.8)	44.2	116.6	193.7	276.6	363.4	456.5	503.6	511.0	516.1	523.3	531.3	541.6	549.8	560.7	572.7	587.7	600.7	617.1	635.2	657.1	677.5	702.1
EBIT Margin	NA	NA	NA	*(3.9%)*	*(7.3%)*	*(6.5%)*	*(5.6%)*	*(3.6%)*	*(0.9%)*	*1.7%*	*4.3%*	*6.8%*	*9.3%*	*11.8%*	*14.2%*	*15.0%*	*14.6%*	*14.2%*	*13.8%*	*13.4%*	*13.0%*	*12.7%*	*12.4%*	*12.1%*	*11.8%*	*11.6%*	*11.4%*	*11.2%*	*11.1%*	*10.9%*	*10.8%*
Net Income	**0.2**	**0.5**	**0.2**	**(64.0)**	**(168.2)**	**(180.4)**	**(176.0)**	**(138.4)**	**(77.7)**	**(11.6)**	**45.2**	**103.0**	**167.2**	**236.5**	**310.4**	**351.6**	**357.7**	**361.3**	**366.3**	**371.9**	**379.1**	**384.9**	**392.5**	**400.9**	**411.4**	**420.5**	**432.0**	**444.7**	**460.0**	**474.2**	**491.4**
Net Income Margin	NA	NA	NA	*(5.7%)*	*(9.1%)*	*(8.4%)*	*(7.6%)*	*(5.7%)*	*(3.1%)*	*(0.4%)*	*1.7%*	*3.6%*	*5.6%*	*7.7%*	*9.7%*	*10.5%*	*10.2%*	*9.9%*	*9.6%*	*9.4%*	*9.1%*	*8.9%*	*8.7%*	*8.5%*	*8.3%*	*8.1%*	*8.0%*	*7.8%*	*7.7%*	*7.6%*	*7.6%*
Dividends	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(194.3)	(369.8)	(373.3)	(378.2)	(383.7)	(390.8)	(396.4)	(403.9)	(412.1)	(422.4)	(431.4)	(442.7)	(455.1)	(470.2)	(484.3)	(501.2)

5.3.2 Balance Sheet

($ mn, ex. per share data)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
Balance Sheet																															
Cash	458.7	245.9	49.5	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Gross Assets	126.5	339.8	536.4	589.5	596.9	605.5	614.9	624.5	634.6	645.1	656.0	667.4	679.2	691.6	704.4	717.8	731.8	746.4	761.6	777.5	794.1	811.4	829.5	848.5	868.3	889.0	910.7	933.3	957.1	981.9	1,008.0
Less: Accumulated Dep.	-	-	-	(14.1)	(35.4)	(57.1)	(79.0)	(101.3)	(123.9)	(147.0)	(170.4)	(194.2)	(218.4)	(243.0)	(268.1)	(293.7)	(319.8)	(346.4)	(373.5)	(401.2)	(429.4)	(458.3)	(487.8)	(518.0)	(548.9)	(580.4)	(612.8)	(646.0)	(679.9)	(714.8)	(750.6)
Net Assets	126.5	339.8	536.4	575.4	561.5	548.5	535.8	523.2	510.7	498.2	485.7	473.2	460.9	448.5	436.3	424.1	412.0	400.0	388.1	376.3	364.7	353.1	341.7	330.5	319.5	308.6	297.8	287.4	277.2	267.1	257.4
Total Assets	**585.2**	**585.7**	**585.9**	**588.6**	**575.6**	**563.6**	**551.9**	**540.0**	**527.8**	**515.1**	**502.0**	**488.4**	**474.3**	**456.8**	**442.4**	**429.1**	**417.0**	**405.0**	**393.1**	**381.3**	**369.7**	**358.1**	**346.7**	**335.5**	**324.5**	**313.6**	**302.8**	**292.4**	**282.2**	**272.1**	**262.4**
Total Debt	360.1	360.1	360.1	348.1	330.1	312.1	294.1	276.1	258.1	239.4	205.3	147.8	64.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Equity	225.1	225.6	225.8	161.8	(6.4)	(186.8)	(362.9)	(501.3)	(579.0)	(590.5)	(545.4)	(442.4)	(275.1)	(38.6)	271.8	429.1	417.0	405.0	393.1	381.3	369.7	358.1	346.7	335.5	324.5	313.6	302.8	292.4	282.2	272.1	262.4
Total Liabilities and Equity	**585.2**	**585.7**	**585.9**	**588.6**	**575.6**	**563.6**	**551.9**	**540.0**	**527.8**	**515.1**	**502.0**	**488.4**	**474.3**	**456.8**	**442.4**	**429.1**	**417.0**	**405.0**	**393.1**	**381.3**	**369.7**	**358.1**	**346.7**	**335.5**	**324.5**	**313.6**	**302.8**	**292.4**	**282.2**	**272.1**	**262.4**
Ratios																															
Net Debt	(98.6)	114.2	310.6	421.8	577.0	745.4	909.8	1,036.3	1,101.8	1,100.7	1,042.4	925.8	744.4	490.4	165.6	(5.0)	(5.0)	(5.0)	(5.0)	(5.0)	(5.0)	(5.0)	(5.0)	(5.0)	(5.0)	(5.0)	(5.0)	(5.0)	(5.0)	(5.0)	(5.0)
Total Debt / EBITDA - Annualized	NM	NM	NM	NM	NM	NM	NM	NM	NM	16.4x	7.5x	4.3x	2.5x	1.3x	0.4x	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Debt / EBITDA - Annualized	NM	NM	NM	NM	NM	NM	NM	NM	NM	16.4x	7.4x	4.3x	2.5x	1.3x	0.3x	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Debt Service Coverage Ratio	NM	NM	NM	(0.9x)	(2.2x)	(2.1x)	(1.7x)	(0.9x)	(0.0x)	0.9x	1.1x	1.1x	1.0x	1.0x	1.0x	2.2x	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
EBITDA/Interest Expense	NM	NM	NM	(1.5x)	(3.3x)	(3.0x)	(2.4x)	(1.3x)	(0.0x)	1.2x	2.7x	4.7x	8.0x	15.2x	36.9x	392.5x	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM

6 INVESTMENT RECOMMENDATION

The opportunity to invest in the project provides significant upside potential. A favorable capital structure of XX% in debt and XX% in equity will ensure a decent leverage for the equity holders to amplify their returns over the period of the investment. Returns will also increase considerably upon deploying the crude oil/refined products swaps and ensure an earlier return of capital as well as an increased return on capital.

For the debt holders, they will have an option to increase their returns using the PIK interest options. To ensure an early return of principal, they can include favorable debt covenents for an early optional paydown. Debt holders are also protected against possible windfalls in cash flows with the provision of a Debt Service Reserve Account (DSRA).

Investing in the project is **highly recommended** for both equity and debt holders and will result in long term returns.

Returns Analysis:

Equity Returns Analysis (Without Swap)		
	IRR	**MOIC**
Optimistic Case	21.0%	19.98x
Base Case	14.6%	11.33x
Worst Case	9.8%	6.03x

Equity Returns Analysis (With Swap)		
	IRR	**MOIC**
Optimistic Case	44.9%	39.24x
Base Case	39.1%	33.19x
Worst Case	34.9%	28.98x

7 Appendix

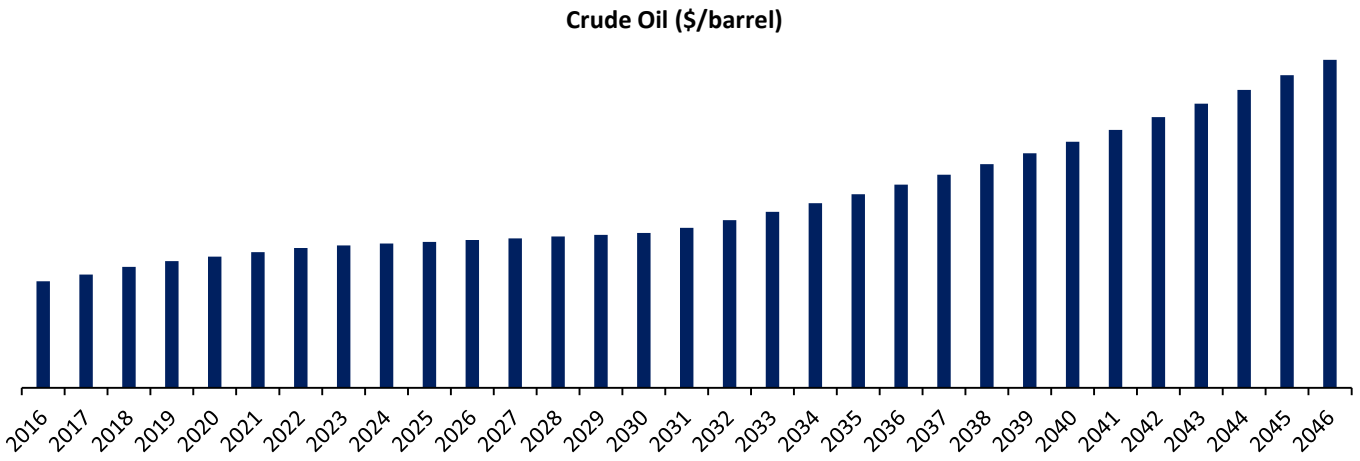
7.1 Drivers

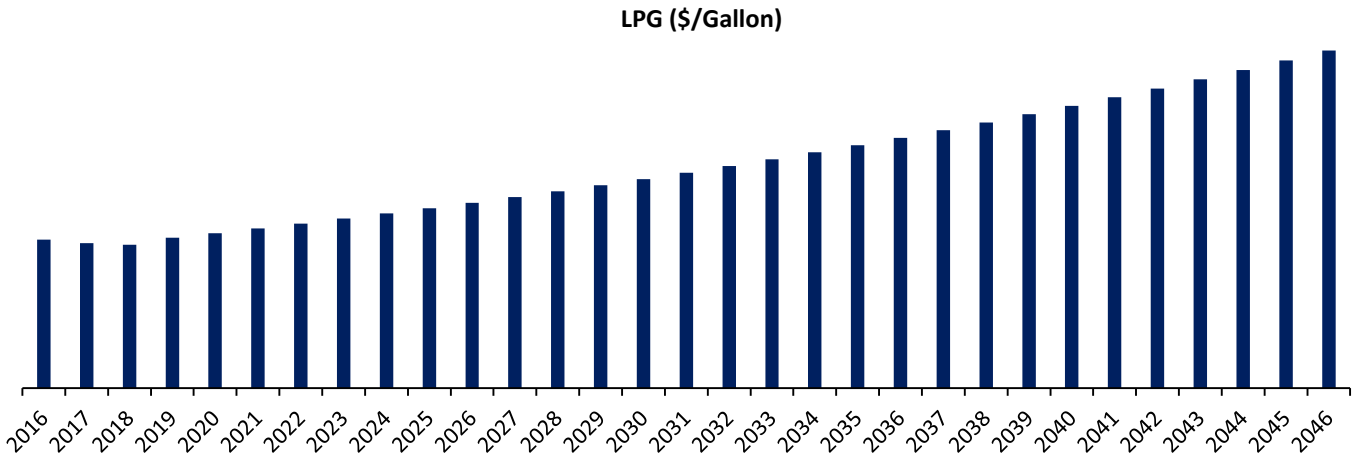
7.1.1 Detailed Project Costs

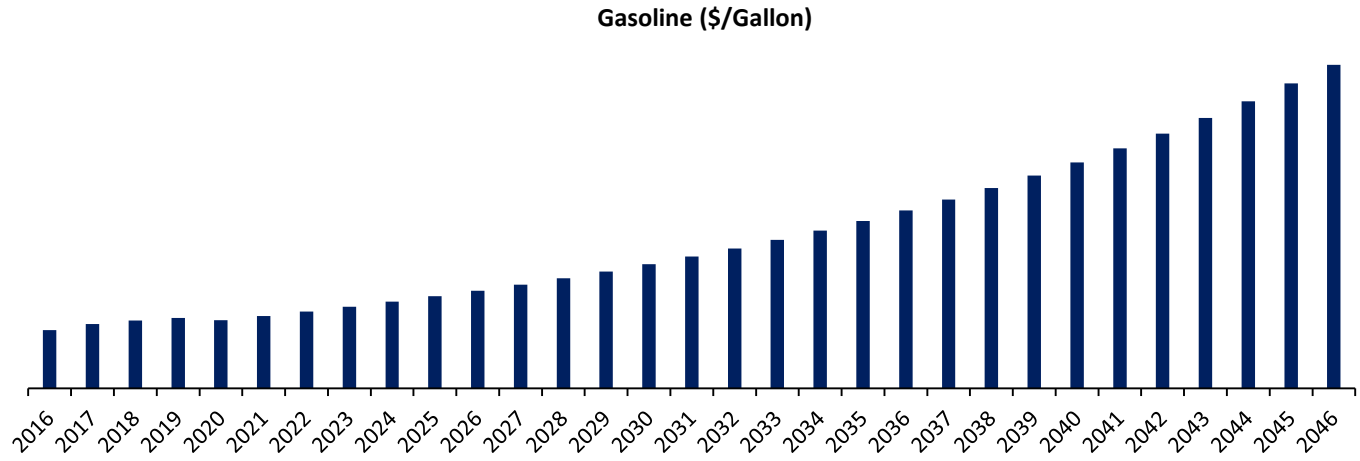
Item	% of Total Cost	(USD'000)
Refinery Acquisition		
Asset Acquisition & Storage	17.95%	105,000
Asset Relocation		
Transportation & Import Duties	1.28%	7,500
Engineering & Design		
Front End Engineering & Design & 3rd	0.85%	5,000
Project Development Activities		
Financial Advisory & Capital Raising Fees	2.00%	11,720
Legal Fees	0.09%	500
Environmental & Social Impact	0.02%	100
Bank Advisers Fees (Technical & Legal)	0.03%	200
Technical Advisory Fees	0.05%	300
Insurance Consultant	0.01%	60
Working Capital Requirements	0.27%	1,560
Tax Advisory Fees	0.01%	60
Financing Costs (Bank Fees, Stamp Duties)	0.14%	800
Miscellaneous	0.17%	1,000
Total Project Development Costs	**2.79%**	**16,300**
Refinery Refurbishment and Upgrade		
Administrative Costs		
Free Zone Rental Areas for Refurbishment	0.17%	1000
Site Offices and Workshop for	0.02%	100
Machinery, Equipment, Cranes	0.05%	300
Site Modification Works	0.02%	100
Total Admin Costs	**0.26%**	**1,500**
Personnel Costs		
1 Manager (10k USD)	0.03%	200
1 Site Supervisor (8k USD)	0.03%	160
2 Mech Engineers (6k USD)	0.04%	240
2 Metal Foremen (4k USD)	0.03%	160
2 Mechanical Foremen (4k USD)	0.03%	160
40 Labourers (2.5k USD)	0.34%	2000
Meals, services, accommodation, etc.	0.10%	600
Total Personnel Costs	**0.60%**	**3,520**

Refurbishment Activities		
G-300 (Recycle Gas Compr) Overhaul and	0.45%	2,652
Additional Cracker unit refurb	6.04%	35,362
D-102 (ATM Tower) Overhaul - Internals	0.30%	1,768
New Catalyst	1.81%	10,609
Scaffolding materials	0.05%	265
Heat Exchangers overhaul - test	0.45%	2,652
Pumps, Turbines, Compressors Overhaul	0.45%	2,652
Towers, vessels, drums Overhaul	0.45%	2,652
Fin fans Overhaul (new hoods)	0.38%	2,210
Reactors Overhaul	0.15%	884
PWHT Costs	0.08%	442
Hydrotesting costs	0.08%	442
Scaffolding materials	0.02%	88
Total Refurbishment Activities	**11.57%**	**67,700**
Total Refurbishment, Personnel & AdmIn		**72,720**
Civil Works and Refinery Re-Erection		
Infrastructure, Foundations, Paving, U/G	7.28%	42,600
New Process Furnaces (with T-91 alloy	12.82%	75,000
New Instrumentation (DCS, CV's, JB's,	2.56%	15,000
New Electrical System (Transformers,	5.98%	35,000
Buildings (PCR, Substations) Steel	4.27%	25,000
New Piping, Valves, Fittings	11.11%	65,000
D-102 Atm TowerRe-welding, Erection,	0.34%	2,000
Utility services (air, steam, nitrogen,	0.85%	5,000
FW System	4.27%	25,000
New Flare incl. Tip, Molecular Seal and	0.17%	1,000
PWHT works in situ	0.17%	1,000
Total Civil Works and Refinery Re-Erection	**49.82%**	**291,600**
Financing Costs		
Capitalised Interest	**6.65%**	**38,917**
Total Before Contingencies	**91.80%**	**537,037**
Contingency Provision	**8.20%**	**47,963**
Total Cost	**100.00%**	**585,000**

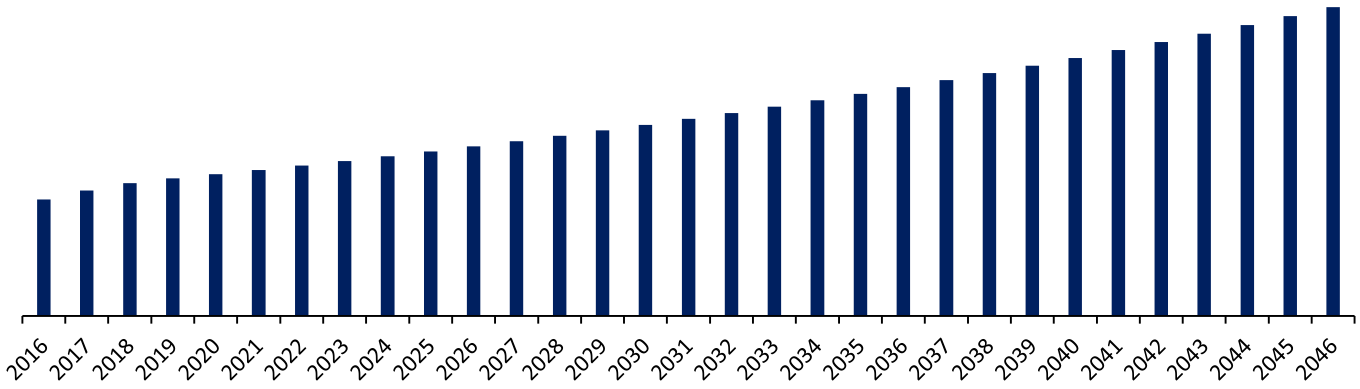
7.1.2 Crude Oil and Refined Products Prices



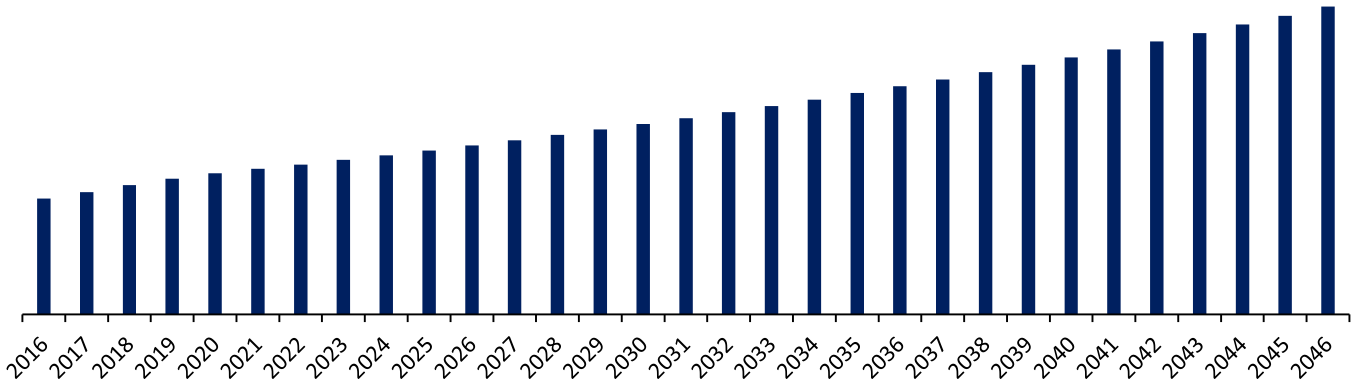




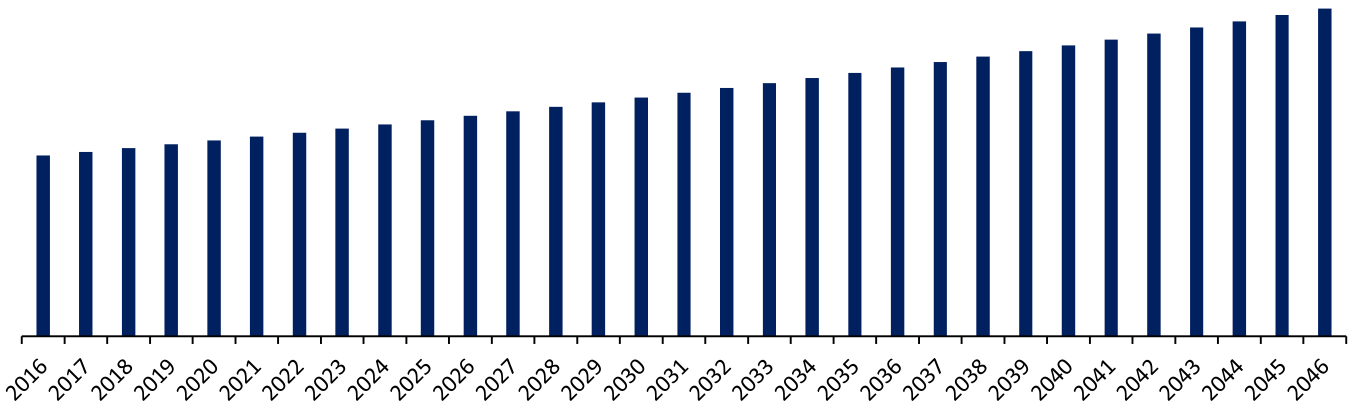
Jet Fuel/Kerosene ($/Gallon)



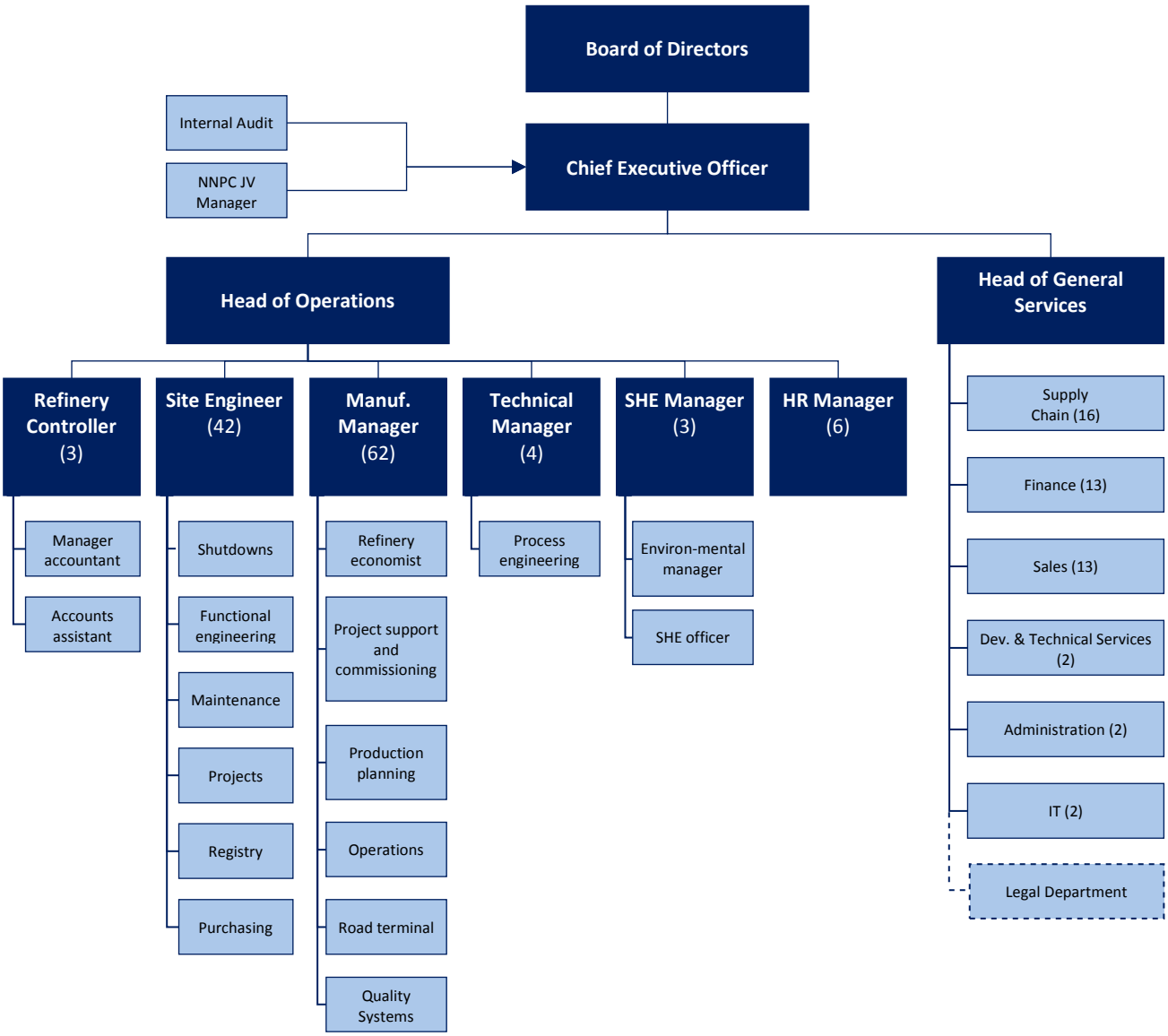
Diesel ($/Gallon)



LPFO ($/Barrel)



7.2 Organization Structure



7.3 Management

7.3.1 Supervisory Board

Name	Experience
ABC	ABC is the Chairman of XXX which is a Specialized Engineering and Logistics Company focused on the coordination of refinery asset dismantling, refurbishment and relocation. He is also Basic Equipment's ("Basic") Business Development Representative for the Middle East and Turkey and Executive Vice President of International Marketing and Special Projects across the Middle East Europe and Africa
ABC	He is the Managing Director of XXX. He is an Electrical Engineer by profession with over 25 years of management experience cutting across civil/construction engineering, water/borehole engineering, electrical engineering, quarry management and downstream oil and gas in Nigeria. He has been involved in business re-engineering, academics and market research and due to the nature of his profession; he has worked in all the geological areas of Nigeria
ABC	He is a Founding Partner of XXX, a project development and financial advisory service company set up to develop infrastructure and large capital projects across West Africa and a Director at XXX – JV with XXX and Old Mutual to raise a Nigerian Infrastructure Investment Fund.
ABC	ABC is a Founding Partner of XXX, with over 15 years of financial services experience, expertise in financial modelling, project management, due diligence, valuation and capital raising

7.3.2 Key Personnel Management

Name	Experience
ABC	ABC is a Mechanical Engineer with vast experience in machinery maintenance, construction, oil refinery fixed equipment maintenance, contract coordination and supply chain management. His Engineering degree was acquired from DU, and his career started in 1987. He has held roles in XXX, XXX, and XXX, XXX, the consultants to XX for the dismantling of XXX and relocation to Bulgaria.
ABC	ABC is a Chemical Engineering graduate of XXX, and has 26 years relevant experience as a Process, Production and Planning Engineer in different roles at XXX, XXX, and at XXX as Onshore & Offshore Operations Terminal Manager.
ABC	ABC is a chemical engineer with 29 years' experience in works and operations in the refinery and oil industry. He has worked with, XXX, XXX, XXX, XXX, XXX, XXX, and XXX. He is currently a Consultant-Project Head working freelance on refinery and other oil industry projects. He has a BSc in Chemical Engineering from the XXX.
ABC	ABC is a mechanical engineer with over 25 years' experience in maintenance works, design works and demolition works. He has worked with XXX, XXX, XXX, XXX and XXX. He has a M.Sc. Mechanical Engineering and a B.Sc. Mechanical Engineering from XXX
ABC	ABC is an instrument technician, has vast experience of over 25 years in field and design works on instrumentation. He has worked with XXX in Turkey from 1990 to date in various positions and is currently the Instrument Group lead man
ABC	ABC is an electrical technician with 40 years' experience in field and design works as an electrical and instrument expert. He has worked with XXX, XXX, XXXX, XXXX, XXX and is currently the Instrument Foreman at XXX
ABC	ABC served as a Military Mechanical Engineer and has over 40 years' experience in design works and steel structure. He has worked with XXX, XXX, XXX, XXX, has a self-owned company – XXX which is into steel construction, electrical cranes, water treatment, fire systems and mechanical works. He is currently with XXX who have refinery projects. Mr. ABC has an M.Sc. and B.SC in Mechanical Engineering from the XXX

Name	Experience
ABC	ABC holds a degree in Electrical Engineering from the XXX. He is highly experienced especially in management, operation and protection of petroleum and gas installations and instrumentations. He has held critical roles in companies that include XXX, XXX, XXX, XXX, and XXX from 1977 to date in roles that include inspection, instrument, commissioning and electrical engineer
ABC	ABC is an Electrical & Electronics Engineer who graduated from XXX in 1987. He has over 28 year's professional experience in spanning several roles in companies such as XXX, XXX, XXX, and XXX, a company he founded and has managed since 2006. Other key roles he has

	held in the course of his career include Senior Electrical Systems Project/Maintenance Calibration Engineer, and Deputy Technical Manager at XXX
ABC	ABC is a Chemical Engineer and Ph.D. Candidate at XXX with over 30 years professional experience in the field. A multilingual with proficiency in at least six (6) international languages, his major roles have been as a Project or Process Engineer with reputable companies such as XXX, XXX, and XXX