

## **OVERVIEW OF THE EFFECT OF COVID-19 ON NIGERIA'S ENERGY SECTOR**

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### **ABSTRACT**

The Covid-19 (Coronavirus) outbreak has had a global impact on the World Economy. The Energy Sector is in deep crises and oil-dependent Mono-Economies, like Nigeria are not the most. The impact of the virus on the Energy Sector is still evolving, thereby requiring constant reviewing of events and developing strategies to revive the sector and economy as a whole. This non-technical article provides an overview of events, the effects on Nigeria's Energy Sector and expectations.

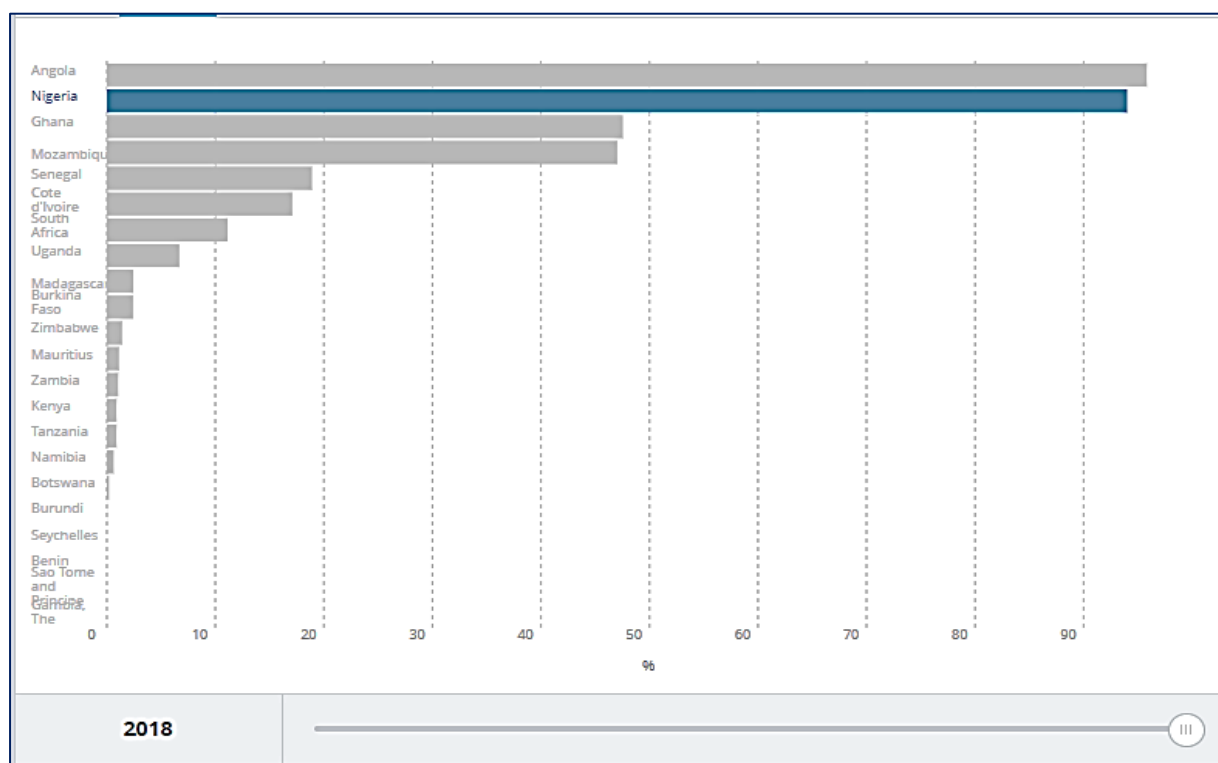
## INTRODUCTION

The Outbreak of Covid-19 has had a great impact on the Energy Sector. The lockdown in major cities and restrictions in movement across the globe has caused a halt in the operations of many Energy Organizations and huge revenue loss for both the Public and Private sectors. The restrictions have led to a global collapse in energy demand and consumption which has resulted in a fall in oil, gas and other commodity prices.

The Nigerian Energy Sector is made up of primary and secondary sources and is a mix of renewable and non-renewable energy. These include; crude oil, natural gas, coal, hydro, solar, wind, and nuclear. Based on Energy Utilization the Energy Sector is broadly categorized into the following;

1. a. Oil [Primary & Non-Renewable]
- b. Natural Gas [Primary & Non-Renewable]
2. Renewable/Alternative Energy [Primary & Renewable]
3. Power and Electricity [Secondary & Mixed]

Oil and Gas is Nigeria's most important Energy source. It accounts for over 90% of the country's total export and 70% of the foreign exchange earnings and Revenue.



**Figure 1: FUEL EXPORTS (% OF MERCHANDISE EXPORTS)**

**SOURCE: TheWorldBankGroup|2020**

The effects Covid-19 has had on the Nigerian Energy sector would be discussed in the sections that follow.

## SHORT TERM EFFECT OF COVID-19 ON THE ENERGY SECTOR

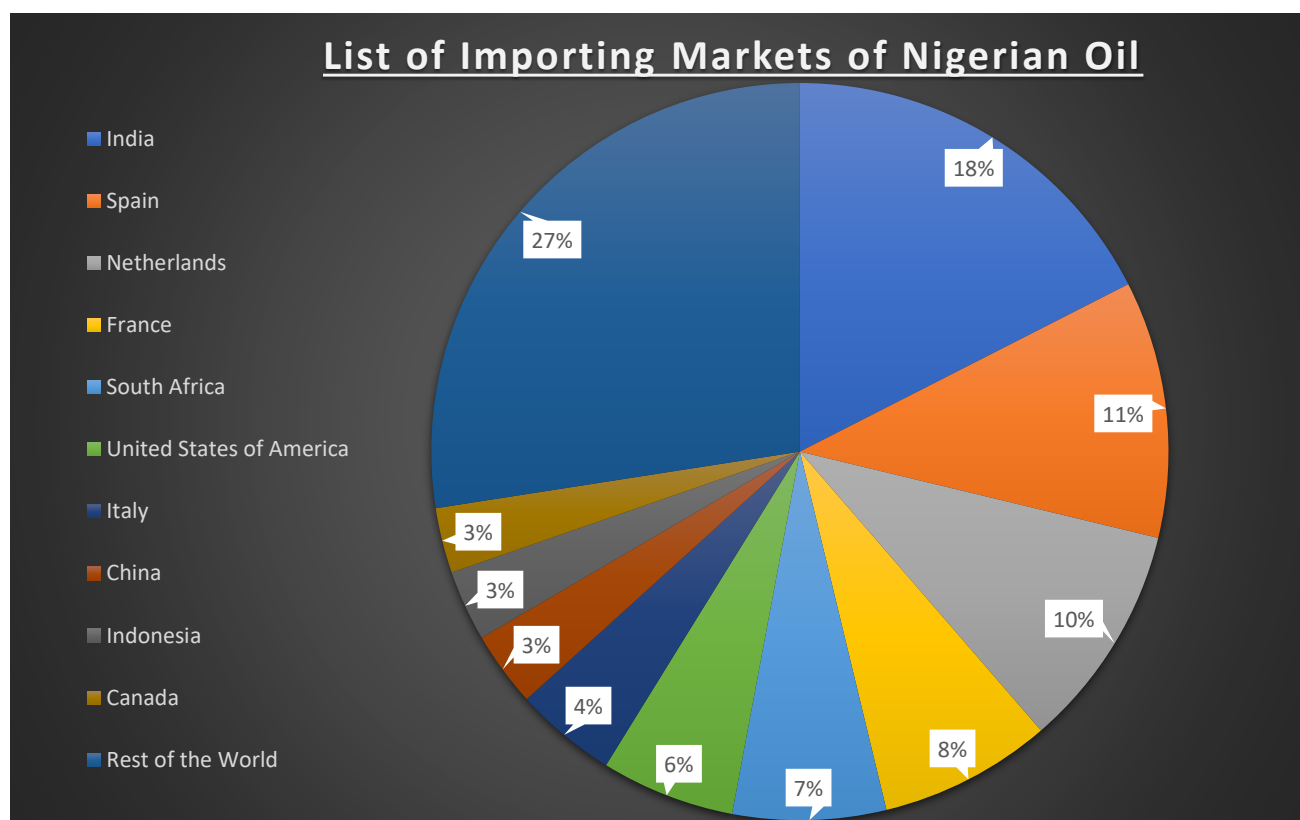
The Energy sector is highly sensitive to the Macroeconomic performance of the Oil and Gas Industry and the volatility of demand, price and supply on the Global market. The impact on each industry in the sector is discussed below.

### OIL AND GAS INDUSTRY

#### 1. Decline in Oil Demand:

##### a. External Demand

The top importers of Nigerian oil<sup>1</sup> which account for over 70% of Nigeria's Oil export's destinations for April 2020 are listed below.



**Figure 2: List of Importing Markets of Nigerian Oil**

Source: Author [Data: International Trade Center|2020]

Nigeria's oil trade partners as listed above have experienced a decline in their internal consumption and external demand for oil. The table below provides data on the declining demand;

<sup>1</sup>International Trade Center (2020)

**OIL DEMAND OF NIGERIA'S OIL EXPORTING PARTNERS<sup>2</sup>**

COUNTRY	OIL DEMAND DECLINE		
India	70%	-3.1 million bpd (*a)	↓
Spain	23% (*c)		↓
France	80% (*e)		↓
United States of America	30%	-14.4 million bpd (*f)	↓
Italy	85% (*b)		↓
China	20%	-3 million bpd (*d)	↓

**Figure 3: Oil Demand of Nigeria's Oil Exporting Partners**

Source: Author [Data: Multiple sources. See footnotes]

The cumulative decline in consumption and demand of Nigeria's trading partners has resulted in a decline in the external demand of Nigeria's Oil.

**b. Internal Demand**

Nigeria's petroleum demand and consumption as at January 2020 was 532 thousand bpd.<sup>3</sup> This has also experienced a huge decline due to the shutdown of manufacturing plants and restrictions in movement. The current internal demand is driven by households demand for PMS and DPK which is only about 13% as many rural households use bio fuels as their energy source.<sup>4</sup>

- 2. Cut in Crude Oil Supply and Oversupply;** the agreement of OPEC+ nations to cut oil production by 9.7million bpd<sup>5</sup> and the decline in demand of Nigeria's Oil has resulted in a cut in exploration and production. The effect is evidenced by the decision of the government to cut down its projected oil (and condensate) production of 2.18million bpd to 1.712million bpd.<sup>6</sup> The restrictions in the supply chain of oil, has also contributed to the decline in imported refined oil and quantity available for domestic supply. If local demand was to pick up unexpectedly, there could be a fuel shortage. The Oil industry currently has excess supply of oil. About 17% of March's crude (50 cargoes) is yet to be sold and this has overlapped into April.<sup>7</sup> The excess supply problem has crunched the expected profits from oil sales and is further compounded by the lack of sufficient storage capacity.

<sup>2</sup> a Sundria, S. and Chakraborty, D. (2020).

<sup>b</sup> Wittels, J. (2020).

<sup>c</sup> Bloomberg (2020), How oil demand has fallen around the world, The Straits Times

<sup>d</sup> Cang A., Blas, J., and Cho, S. (2020).

<sup>e</sup> Reuters (2020).

<sup>f</sup> Sell, C. (2020)

<sup>3</sup> Knoema.com (2020).

<sup>4</sup> U.S. EIA [2016].

<sup>5</sup> OPEC (2020).

<sup>6</sup> CSL Stockbrokers (2020).

<sup>7</sup> Lehane, B. and Cheong, S. (2020).

- 3. Decline in Oil Price, Reserves Value and Financial Consequences;** Bonny Light, Nigeria's premium oil is trading at \$21.31 per barrel.<sup>8</sup> This is a significant drop from \$69.98 a barrel in January,<sup>9</sup> resulting in billions of US dollars lost in National Revenue and contracts which were pegged at an oil price of \$57 a barrel. The price fall also means that Nigeria's oil reserve of about 36,972 million barrels<sup>10</sup> has dropped by half its value.

A few of the immediate financial consequences of the price drop include;

- a. The Nigerian 2020 Budget would be cut by ₦1.5trillion, which would include the ₦457billion spent on fuel importation (PMS under-recovery).<sup>11</sup>
- b. The official exchange rate of Naira to the dollar has been devalued from ₦306/1\$ to ₦360/\$1 thereby causing a shift in the autonomous market rate from about ₦360/\$1 to about ₦415/\$1<sup>12</sup> and the Central Bank of Nigeria gave a directive that oil companies should no longer trade foreign exchange (FX) with the Nigerian National Petroleum Company (NNPC) to enable the Bank shore up its FX supply and make FX available to the health sector<sup>13</sup>.
- c. Standards & Poors and Fitch Rating Agency downgraded Nigeria's credit rating.<sup>14</sup>
- d. The oil pump prices crashed from ₦145/liter to ₦123.5/liter and the subsidy on Petrol (PMS) has been removed.<sup>15</sup>

- 4. Cut in Oil and Gas Operations;** The Department of Petroleum Resources (DPR) instructed all oil and gas firms to reduce their workforce on all offshore platforms and project sites.<sup>16</sup> IOC's like Chevron, Shell, Total, ExxonMobil have decided the cut down on their costs of operations globally. ExxonMobil decided to trim its 2020 capex by 30% and its opex by 15%. Chevron decided to cut one-fifth of its capex. Total decided to cut capex, opex and share buybacks throughout 2020. Shell is cutting costs in addition to No share buybacks.<sup>17</sup> The conclusion of the ongoing construction of the Dangote Refinery and Polypropylene plant has been delayed.

There has been a decline in FDI's and delays/postponements on projects yet to reach Final Investment Decision in Nigeria. Some of these projects which cumulatively amount to about \$58.4billion, include; ExxonMobil's \$6.2billion Bosi (126,784 bpd), Chevron's \$8.2billion Nsiko (95,685 bpd), ExxonMobil's \$8.2billion Owowo West (138,301 bpd), ExxonMobil's \$6.1billion, Uge-Orso (99,532bpd) and Nigerian Agip Exploration Limited's \$9.2billion Zabazaba (146,739 bpd).<sup>18</sup>

<sup>8</sup> Oilprice.com (2020).

<sup>9</sup> Ibid.

<sup>10</sup> OPEC (2019).

<sup>11</sup> Economic Confidential (2020)

<sup>12</sup> Munshi, N. and Pilling, D. (2020).

<sup>13</sup> Ore, M. (2020).

<sup>14</sup> Munshi, N. and Pilling, D. (2020).

<sup>15</sup> Ibid.

<sup>16</sup> DPR (2020).

<sup>17</sup> Krauss, C. (2020).

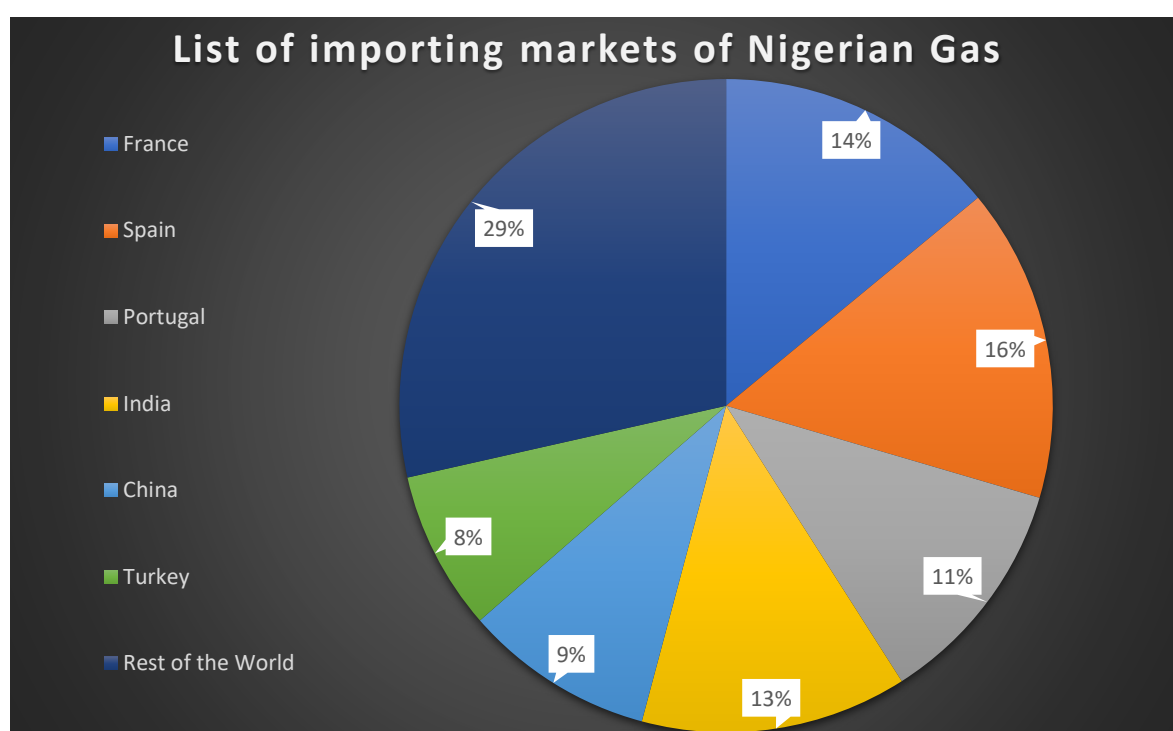
<sup>18</sup> Economic Confidential (2019).

The Ministry of Finance has said there would be about 25% cut in the federally-funded upstream projects.<sup>19</sup>

The documentation process required to commence the Nigeria LNG Train 7 Project would not be affected, however, construction may be delayed till there's a lift on the lockdown and necessary health precautions are put in place for the construction workers. Other construction projects in the gas sub-sector that are affected include; the construction of the 614km Ajaokuta-Kaduna-Kano (AKK) natural gas pipeline and the 5,660km Nigeria-Morocco Gas Pipeline (NMGP) project.

## 5. Impact on Gas Subsector

Gas is the Second most used fuel for power generation in Africa. Nigeria is one of the top 10 exporters of Natural Gas (LNG) in the world. The top importers of Nigerian Gas which account for over 70% of Nigeria's Gas exports are listed below.<sup>20</sup>



**Figure 4: List of Importing Markets of Nigerian Gas**  
Source: Author [Data: International Trade Center|2020]

The Covid-19 outbreak has resulted in a cut in oil and gas operations as identified above. Other effects of the virus outbreak on the Gas subsector are;

- a. **A drop in demand and supply;** the Global Demand for Natural Gas has declined with about 8% of global LNG demand being at risk (more than 25 MTPA) in the short run.<sup>21</sup> Nigeria's top two importers, France and Spain would take the biggest hit in Europe with

<sup>19</sup> Economic Confidential (2020).

<sup>20</sup> International Trade Center (2020)

<sup>21</sup> Dewar, A. et al (2020).

absolute volumes.<sup>22</sup> Also, India's lock down extension has reduced its demand for LNG and hampered its trade flows. The decline in Global demand (especially of Nigeria's top trading partners) and the lack of industrial activity (feedstock, boilers, heating, etc) as a result of the lockdown in Nigeria has caused a reduction in the foreign and local demand of Nigerian Natural Gas (LNG, LPG and Condensate). On the supply side, the decline in supply is caused by the inability of the E&P companies and transmission companies to operate.

- b. A drop in Price;** the global Gas sector had been experiencing decreasing prices pre-Covid-19 due to new players entering the market, climate factors, drop in demand, oversupply, etc. However, the decline in oil price (as a result of the Covid-19 outbreak) added to the woes of the Natural Gas sector as oil-indexed gas contracts which account for over 65% of Gas contracts dropped in price. LNG spot prices have crashed to record-lows of under \$2 per MMBtu at the start of April. This has a direct impact on Nigerian gas price because its Natural Gas is benchmarked against the international price index. The current cost of exploration and transmission by Energy companies is higher than revenue from sale due to the drop in price and some major Gas construction projects will have to be delayed (as mentioned in point 4 above).
- c. Increase in Domestic LPG Consumption;** Households are the major drivers of domestic LPG consumption in Nigeria. The lockdown has caused household use of LPG to increase thereby leading to an increase in demand. These are used for cooking, power generation, etc. Organizations like restaurants and offices that use LPG are not operational at the moment, but the demand vacuum is offset by the organizations open to ensure essential goods are produced and available for purchase/use. Domestic Consumption of LPG only accounts for about 45% of LPG produced whilst the rest is exported. Despite the increased consumption, the virus outbreak has crashed international prices and Nigeria's ability to export the LPG produced thereby impacting negatively on the LPG market.

## RENEWABLE/ALTERNATIVE ENERGY INDUSTRY

The Nigerian Renewable Energy Master Plan (REMP) articulated a transition plan for Nigeria to move from its overdependence on Hydrocarbons<sup>23</sup> to where Renewable Energy would account for over 10% of its energy consumption by 2025.

The National Renewable Energy and Energy Efficiency Policy for the electricity sector was approved by the Federal Executive Council to utilize the renewable energy sources available in Nigeria (solar, wind, biomass, hydro, geothermal, etc.) alongside the non-renewable sources to generate 20,000 MW<sup>24</sup> of power by 2020. The Solar contribution energy mix was to be 3%.<sup>25</sup>

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<sup>22</sup> Sertin, C. (2020).

<sup>23</sup> Akurul, U. and Okor, O. (2020)

<sup>24</sup> Nigeria Electricity Hub (2016)

<sup>25</sup> IFC (2017)

The goals set for the industry appear more achievable based on the resilience the industry has shown in the face of the Covid-19 outbreak. Despite the crises caused by Covid-19 and government illiquidity, we are seeing an increased wave of government involvement, philanthropic activities and private public partnerships to increase investments in the Renewable Energy industry. Examples include;

1. Cloud Energy, donated 100 Sunboxes (Solar Home Systems) and a hybrid Solar System to a hospital, to support the Lagos State Government's COVID-19 efforts.<sup>26</sup>
2. African Development Bank and the Nigerian Government launched a \$200 million National Electrification Project (NEP), to address energy access deficits by channeling private sector investments into mini grid and off-grid solutions.<sup>27</sup>
3. REA announced it will supply solar home systems and mini grids to primary healthcare and isolation centers across the country.<sup>28</sup>
4. All-On announced a 180 million covid-19 solar relief fund made available to four (Arnergy, Auxano, GVE, and Lumos) off-grid energy companies to power emergency health care in Nigeria.<sup>29</sup>
5. All On announced a postponement of all Q2 2020 interest payments on current interest-bearing investments.<sup>30</sup>
6. The Rural Electrification Agency (REA) signed grant agreements for 2 communities – Oloibiri and Akipelai Bayelsa State, with Renewvia Solar Nigeria under the Nigeria Electrification Project (NEP).<sup>31</sup>
7. Nigerian Postal Service (NIPOST) is partnering with Ukpa Hansa Energy Solutions Limited to deploy solar energy across the country.<sup>32</sup>
8. The Oyo State Ministry of Energy and Mineral Resources signed an MOU with the Finnish Consortium to establish an Energy Innovation Centre for Excellence in Oyo State.<sup>33</sup>
9. Access Bank has completed the listing of its N15bn green bond on the Luxembourg Stock Exchange.<sup>34</sup> etc.

Notwithstanding the growth in investments, some projects and tariff reduction negotiations in the industry will be delayed due to restrictions in operations, price and illiquidity. Some of these include;

1. Six 100 MW Solar projects backed by N.S.C Partners and others.<sup>35</sup>
2. 80 MW solar farm backed by Novia Scotia Power Development Company.<sup>36</sup>

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<sup>26</sup> Onwujekwe, I. (2020).

<sup>27</sup> African Development Bank Group (2020)

<sup>28</sup> Ugwuode, K. (2020).

<sup>29</sup> All-On (2020).

<sup>30</sup> Ibid.

<sup>31</sup> REA HQ (2020)

<sup>32</sup> Energy Mix Report (2020)

<sup>33</sup> Asu, F. (2020).

<sup>34</sup> Economic Confidential (2020).

<sup>35</sup> Tsagas, I. (2019).

<sup>36</sup> Ibid.



3. 75 MW proposal by Pan Africa Solar.<sup>37</sup>
4. 70 MW scheme financed by CT Cosmos.<sup>38</sup>
5. Five 50 MW facilities backed by Afrinergia Power and others.<sup>39</sup>

A further constraint experienced in the Alternative Energy Industry is increased investments cost due to the following;

1. **Finance Costs;** the current financial instability in the energy sector and existing risk exposure of the financial services sector to the energy sector has made the cost of financing Greenfield alternative energy projects higher. Asides Risk Exposure, the cost of fresh borrowing across sectors has generally increased due to the looming economic recession and the downgrade of Nigeria by S&P and Fitch rating agency.
2. **Trade Constraints;** trade limitations resulting from Global mobility restrictions, supply chain interruptions and reduced industrial activities, has created a shortage in green energy technologies/machinery and installation components like inverters and batteries, thereby pushing prices up.

The sector activity thus far, shows that the “Mobilization of Private Sector investments for The Power Sector Recovery Program: 2017 – 2021” which was approved by the Federal Executive Council in 2017 can reach an achievement landmark of at least 50%.<sup>40</sup>

## POWER AND ELECTRICITY INDUSTRY

The Natural Gas plants and hydroelectric power plants make approximately 85% and 15% of the grid-connected power respectively and the power generated is able to sustain the current supply of electricity but not the demand. The impact of the lockdown has increased household demand and decreased the demand by firms who are the largest consumers, thereby leading to an aggregate drop in the demand for electricity.

However, the domestic demand outweighs the current supply of about 150 kWh per capita<sup>41</sup> thereby creating a supply gap and increased focus on households by the DisCos during this period. The business of the GenCos and DisCos in the industry is impacted from the drop in industrial demand as a large portion of the revenue generated by these companies are from the industrial and commercial users in contrast to households.

The power industry as a result of the virus outbreak has received the following reactions from the government as detailed below;

1. The Nigerian Electricity Regulatory Commission has suspended the upward revision of Electricity tariffs for 2020. This though beneficial to the demand side (the people) is going

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<sup>37</sup> Ibid.

<sup>38</sup> Ibid.

<sup>39</sup> Ibid.

<sup>40</sup> The World Bank (2017).

<sup>41</sup> GET.invest (©2020)

to impact the poorly funded supply side (Distribution Companies) and cause further illiquidity in the sector.

2. The legislatures are deliberating on a draft bill to provide Nigerians with free electricity for two months.<sup>42</sup>
3. There have been increased investments in the Alternative Energy industry to improve access to power through on and off-grid solutions.

#### OTHER EFFECTS ON THE ENERGY SECTOR (Non-Industry Specific);

1. **Illiquidity:** there is less money to go around in the sector as evidenced by a lot of operational cuts. The Sector as a whole is facing increasing illiquidity and huge losses.
2. **Labor Force:** a halt or total shut down in operations as a result of the lockdown in major cities in Nigeria has diminished the active workforce. Job losses are expected to rise especially amongst contract staff, employees in maintenance/servicing functions and staff in the downstream sector for oil and gas companies.
3. **Contracts:** Nigerian Energy contracts (especially oil and gas contracts) are pegged against prices for profitability, and agreed production amounts require substantial demand. These contracts extend to maintenance and servicing contracts with companies providing support services to the industry. Due to falling oil prices, decline in global demand, restrictions in free movement, etc. there will be extensions, early terminations and defaults on contracts. Many energy companies are exploring amicable ways to review existing contracts in light of the current energy crises and global outlook.
4. **Litigation and Force Majeure:** the effect of the virus outbreak on contracts as envisaged above exposes energy companies to litigation. The extent to which the companies are protected against damages would be a function of whether their contracts provide for the suspension of obligations if unforeseen occurrences like pandemics, quarantines, etc. happen. This is usually found in the Force Majeure clause in the contracts. According to Ibebuike and Amadi a typical Energy sector contract has the Force Majeure clause drafted thus;

*“Any failure or delay on the part of either party in the performance of its obligations or duties under this Contract shall be excused to the extent attributable to force majeure. A force majeure situation includes ..., quarantine restrictions, epidemics... and, acts of or orders of government.”<sup>43</sup>*

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<sup>42</sup> Bungane, B. (2020).

<sup>43</sup> Ibebuike, D. and Amadi, J. (2020).

Ceteris Paribus the draft above protects the companies from litigation for non-performance of obligations that are hindered directly as a result of events attributable to Force Majeure. The governing law of the contract impacts the availability of a force majeure and the extent of enforceability. The exposure from termination of contracts extends to employment contracts as employees are protected under the Nigerian labor law. Depending on the circumstance or agreement upon termination, employees may take legal actions against their employers. In order to avoid lawsuits, we will see energy companies making payouts as severance packages.

5. **Debt**; Energy Companies are highly leveraged. The crisis has impacted on the liquidity and solvency of many Energy companies and has affected their ability to meet both short and long-term obligations. No Energy company in Nigeria has filed for bankruptcy as at today and the Central Bank of Nigeria is actively working to ensure that Energy Companies amongst other companies are able to restructure their debts and are given moratoriums on their debt obligations.<sup>44</sup> There are ongoing discussions between Energy companies and financial institutions for debt restructuring to prevent or reduce the impact of counterparty default.
6. **Human Capital Development**; The Sector engages in a lot of Human Capital exchange and development requiring constant travelling for conferences, trainings and importation of expertise. These have been halted due to global travel restrictions. However, this has opened up the opportunity for low cost learning as trainings, webinars, etc. are being conducted online whilst conferences have either been cancelled or postponed.
7. **Environmental Impact**; air pollution damage costs about 1 percentage of Gross National Income and about 94% of the Nigerian population is exposed to air pollution levels compared to 72% on average in Sub-Saharan Africa.<sup>45</sup> These levels exceed WHO guidelines.<sup>46</sup> There have also been several oil spills and hydrocarbon pollution in depths of at least 5m.<sup>47</sup> The climate effect of the reduction in oil spills, emission of greenhouse gasses and carbon, though as a result of the temporary lockdowns, is positive. Air quality has improved with reduced atmospheric CO<sub>2</sub> levels. Also, the Energy sector can boast of low greenhouse gas emissions, low pollution, and being environmentally responsible in their reports. Covid-19 has also by default aided Nigeria's planned contribution to reducing its annual greenhouse gas emissions under the Paris Agreement.

## **MEDIUM TERM EXPECTATIONS [2020-2025]**

The medium-term effect of Covid-19 on the Energy Sector is a function of how soon it is curtailed. Some expectations are mentioned below;

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<sup>44</sup> CBN Circular (2020)

<sup>45</sup> The World Bank (2015)

<sup>46</sup> World Health Organization (2005)

<sup>47</sup> Aljazeera news (2019).

- 1. Overlapping Short-Term Effects;** there will still be a few new cases of litigation, defaults on contracts and debt restructuring. However, the expectation is for these issues to be minimized and for Energy companies to lift force majeure on some contracts as they gradually scale up operations.
- 2. Reduced Oil Reliance and Deregulation;** as the government invests more in sectorial diversification to provide an economic safeguard to potential oil shocks, the prominence of oil reliance would reduce. There would be higher pressure to conclude the downstream sector deregulation. The automobile industry would contribute to the reduced reliance by introducing Gas and Electric Vehicles to the markets which would further diminish the need for fossil fuels upon market acceptance.
- 3. Natural Gas and Energy Transition;** the idea of Energy transition is to gradually phase into cleaner fossil fuels whilst increasing the amount of renewable energy in the Energy mix. This transition increases the projected lifespan of the non-renewable sources and creates a sustainable energy future. Gas is a cleaner and less Carbon-intensive fossil fuel which makes it a better alternative to oil and a flexible option for complementing the renewable energy industry.

*“Natural gas can contribute to a cleaner global energy system...” -Dr. Fatih Birol.<sup>48</sup>*

The NLNG Train 7 project is expected to continue once the gas market stabilizes, with increased investments in other Natural Gas infrastructure (trains, gas processing facilities, Pipelines & petrochemical plants), in line with the Nigerian Gas Master Plan or a variation thereof if updated and other expansion plans. The first phase of the 614km Ajaokuta-Kaduna-Kano (AKK) natural gas pipeline, covering the construction of a 200km-long segment between Ajaokuta and Abuja Terminal Gas Station is expected and advised to be concluded with commencement of the second phase before 2025. The DPR is expected and advised to conclude the first phase of awarding the identified flare sites to the successful bidders under the Nigerian Gas Flare Commercialisation Programme latest by 2021. The program should be supplemented by building demand for captured gas and imposing stricter measures to deter producers (e.g. increased fines, etc.) from flaring.

The use of Natural Gas is expected to surge in the transportation sector with the introduction of vehicles that run on gas and technologies for changing vehicle fuelling mechanism. It is worthy of note that the low-price environment may last another one to two years<sup>49</sup> but there are huge investment prospects in the sector.

- 4. Rise of Alternative Energy;** there is a heightened awareness of the volatility in oil markets, energy transition and increased efforts at moving to renewable energy. The suspended projects by International Organizations would be continued with more capital injections

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<sup>48</sup> Adekoya, F. (2020).

<sup>49</sup> Dewar, A., et al (2020).

from Nigeria's Global Energy partners. There would be New Projects and New Contracts (Power Purchase Agreements, procurement contracts, etc.) in the industry. The new Investments should be focused more on Impact rather than profits. The private sector would proactively increase its investments in alternative energy to create alternatives for power and this would contribute to the diversification of the Nigerian Energy sector. There would be increased demand for the importation of installation components, Solar panels, wind turbines, etc. which would be purchased at high costs driven by demand. The subsidy removed from the oil industry should be channeled into the alternative energy industry. Also, pressures from Climate Activists will increase, to ensure that the Energy sector invests in clean energy.

- 5. Digitization of the Sector;** there would be increased investments in digitizing the energy sector to ensure maximum efficiency with little or no human intervention.
- 6. Slow Oil Industry and Energy Sector Recovery;** the price of crude is expected to remain low due to the current over supply and constant low demand. The cut in production would only witness small price appreciations and the sector would recover gradually as demand builds, if the virus is curtailed soon. In the long run, as global demand begins to rise, the deep cut in oil production overtime would create enough scarcity for the sector to experience a rapid increase in price to about \$40<sup>50</sup> a barrel<sup>51</sup>. China's economic recovery would lead to an increased demand in Nigerian Oil. Nigeria's Energy Sector Recovery would be anchored on the assured provision of Energy Security which would reverse the declining FDI's. Upon passing of the Petroleum Industry Bill (PIB) into law, Investor confidence would be restored, providing a foundation for increased Energy Sector Investments. As the sector recovers, we expect to see some of the suspended projects reach Final Investment decision and also the completion of Dangote Refineries.
- 7. Human Capital Re-orientation;** a lot of new Human capital development in the Energy Sector would be on sustainable, affordable and renewable energy.
- 8. Collaborations, Mergers, Acquisitions and Sector Partnerships;** at a global level we see the collaboration between the US, OPEC+ and the G20. We also expect to see this form of Top-level collaboration in the Nigerian Energy Sector where the Stakeholders collaborate on strategies to stabilize the sector and hedge against the impact of a future shock. Also, if the economic climate does not improve soon enough, there is expected to be a consolidation of distressed assets through acquisitions by companies with stronger balance sheets, which survive the pandemic.
- 9. Health Risk Management and Policies (COVID-19);** special attention would be made to Health risk management and policies in the work place with particular attention to Covid-19. The requirement for Physical Distancing once the lockdown is relaxed would change

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<sup>50</sup> EIA (2020)

<sup>51</sup> I expect the price to start building momentum by mid-2021 if the virus is curtailed this year.

the style of work and the need to reduce health risk exposure. These policies would cover workers on-site, third party contractors, rig operators, etc.

**10. Climate Commitments;** more attention would be paid to reduce the environmental impacts of oil exploration and the adherence of Nigeria to its Nationally Determined Contributions to the Paris Agreement. This would entail technological investments to reduce the amount of greenhouse gasses (CO<sub>2</sub>) emitted from the sector, Pro-Active Energy transition, political will etc. The Department of Climate Change in the Federal Ministry of Environment is expected to drive initiatives, programs and policies that would ensure the Energy Sector is more environmentally responsible.

## CONCLUSION

There is no doubt that the Energy sector has been impacted by the Outbreak of Covid-19 and there is need to take proactive steps to strengthen and create a sustainable energy future. Energy diversification and transition to clean energy would prove the most sustainable route. Clean Energy requires a shift of focus from oil to gas as the primary fossil fuel. The future of energy is green and there is no time more opportune than now for the Nigerian Energy Sector to go green. This is not only sustainable but also an affordable option in the long run. It is important that more capital allocation goes into Green energy technologies and other Renewable Energy investments. It would improve the electrification access which currently stands at 45%. There needs to be a strong regulatory framework put in place and sector specific human capital development to achieve this. Every stakeholder in the Energy Sector needs to come together and create a unified front to tackle Nigeria's energy future. Doing nothing is unacceptable!

*“A strong Energy Sector is the foundation for a strong economy and A green Economy is an Economy of the future.” -Benjamin Bolutiwi BABATOPE*

**Start Clean and Go Green!**

**KEYWORDS:** Energy, Oil&Gas, Covid-19, Gas, Renewable Energy, Power, Electricity, Green Energy, Clean Energy, Nigeria.

## DEFINITIONS

**Bpd:** means Barrels per day. This is a measure of oil output, represented by the number of barrels of oil produced in a single day<sup>52</sup>.

**Capex:** means Capital Expenditure. These are funds used by a company to acquire, upgrade, and maintain physical assets such as property, buildings, an industrial plant, technology, or equipment<sup>53</sup>.

**Covid-19:** is a respiratory infectious disease caused by the coronavirus.<sup>54</sup>

**DisCo:** means Distribution Company. The Disco distributes electricity to consumers from the electricity grid and is responsible for billing the consumers and revenue collection.

**FDI:** Foreign direct investment (FDI) is an investment from a party in a country into a business or corporation in another country with the intention of establishing a lasting interest.<sup>55</sup>

**GenCo:** means Generation Company. This is a company responsible for power generation.

**IOC:** means International Oil Company. This is an oil company that trades oil or oil related products internationally.<sup>56</sup>

**LDC:** means Local Distributing Company.

**LNG:** means Liquefied Natural Gas. This is natural gas that has been cooled to liquid form for ease of transportation and storage.

**LPG:** means Liquid Petroleum Gas. This is a mixture of petroleum gases that has been pressured to a liquid form.

**MMBTU:** means Million Metric British Thermal Units. This is a measure of the energy content in fuel. 1,000 cu.ft. of gas is comparable to 1 MBTU and 1000 MBTU= 1MMBTU.

**MTPA:** Million Tonnes per annum. This is a weight-based production and facility capacity measurement in liquefied natural gas (LNG) markets.

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<sup>52</sup> Kenton, W. (2019)

<sup>53</sup> Kenton, W. (2020)

<sup>54</sup> World Health Organization (2020)

<sup>55</sup> Corporate Finance Institute (2020)

<sup>56</sup> The PD (2015)

**Naira (₦):** Naira is the monetary unit of Nigeria. The symbol ‘₦’ is the Naira Sign. One naira is equal to 100 kobo. The exchange rate to the dollar is ₦360/\$1.<sup>57</sup>

**Opex:** means Operating Expenses. This is an expense a business incurs carrying out its day-to-day activities which includes rent, marketing, payroll, insurance, etc.

**Physical Distancing:** means maintaining space (at least 6 feet) between yourself and other people outside your house.

**Renewable Energy:** Renewable energy is energy from sources that are naturally replenishing but flow-limited.<sup>58</sup>

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<sup>57</sup> CBN, Home (2020)

<sup>58</sup> EIA (2019)



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