



March 2012

# AfDB

Chief Economist Complex

## CONTENT

Introduction 1

1 African trend in the energy sector is deregulation 1

2 The case study of Nigeria 3

3 Recommendations 5

### Mthuli Ncube

Chief Economist and Vice President (ECON)

[m.ncube@afdb.org](mailto:m.ncube@afdb.org)  
+216 7110 2062

### Charles Leyeka Lufumpa

Director  
Statistics Department (ESTA)

[c.lufumpa@afdb.org](mailto:c.lufumpa@afdb.org)  
+216 7110 2175

### Steve Kayizzi-Mugerwa

Director  
Development Research Department (EDRE)

[s.kayizzi-mugerwa@afdb.org](mailto:s.kayizzi-mugerwa@afdb.org)  
+216 7110 2064

### Victor Murinde

Director  
African Development Institute

[v.murinde@afdb.org](mailto:v.murinde@afdb.org)  
+216 7110 2075

# Reforming the energy sector in Africa: The case study of Nigeria

Richard Schiere<sup>a</sup>

## Introduction

Many African countries are deregulating their energy sector and this often leads to increases in retail fuel prices. Following this trend, in January 2012 Nigeria abruptly eliminated fuel subsidies and this caused a spike in fuel prices from N65 (US\$ 0.42) to N138 (US\$ 0.89) per liter, the highest single jump in the country's history. The sudden increase triggered eight days of national strikes that was supported by a wide range of civil society organizations, including the Nigerian Labour Congress (NLC), Trade Union Congress (TUC), Nigeria Bar Association and Committee for Defense of Human Rights. After negotiations with civil society organizations, the Nigerian Government agreed to reduce the fuel price to N97 (US\$.063) per liter.

This brief first discusses the deregulation trends in the energy sector in Africa and then focuses on the case study of Nigeria. The key message is that a holistic approach to liberalizing the energy sector is needed and removing fuel subsidies is just one element of a broader reform agenda. These reforms should also encompass improvements in regulatory framework, increase transparency and ensure visible

results to the wider public. It is equally important to remove fuel subsidies gradually and ideally when there is strong economic growth, so that consumers and businesses can adapt their fuel consumption overtime without major economic disruptions. Such a comprehensive approach is critical in the post "Arab Spring" world which demonstrated that citizens can claim their economic and political destiny if reforms are considered unfair.

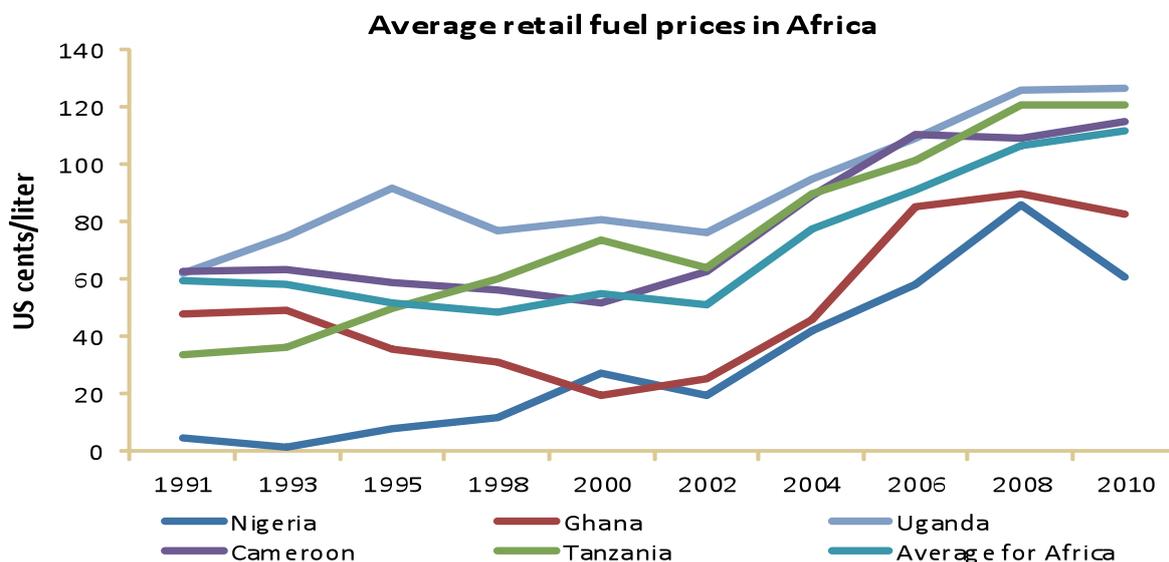
## 1 The African trend in the energy sector is deregulation

Many African countries are liberalizing their energy sectors, which not only encompass the reduction of fuel subsidies, but also the wider oil and power generating sectors. Fuel subsidies is the most contentious issue to address and this can trigger national strikes and civil strife. Although all countries are different, it should be emphasized that many African countries tax retail fuel and this is a major source of fiscal revenues, while others provide implicit fuel subsidies through tax breaks so that rising international fuel prices are not translated into increases in domestic fuel prices (International Energy Agency, 2011). Only a few oil pro-

<sup>a</sup> Richard Schiere: Economist and assistant to the Chief Economist and Vice-President. This brief benefitted from background information and data provided by the Nigerian Field Office.

The findings of this brief reflect the opinion of the author and not those of the African Development Bank, its Board of Directors or the countries they represent.

**Graph 1 The energy trend in Africa is to reduce fuel subsidies**



Source: International fuel prices surveys of 2011/2010 & 2009 provided by GTZ.

ducing Sub-Saharan African countries explicitly provide fuel subsidies which are Angola, Nigeria and Ghana. The continuous increase in the fiscal costs of providing implicit and explicit fuel subsidies is clearly a push factor in the reform process of the energy sector in Africa. This is also the reason why the retail fuel prices have steadily increased over the course of the last decade in Africa, which is equally in line with the rise in international oil prices, see graph above.

Of the African countries presented in the graph, only Ghana and Nigeria subsidize retail fuel. Other African countries such as Cameroon, Tanzania and Uganda tax retail fuel and their energy reforms focused mainly on liberalizing the electricity and power generation sectors, which consumes a lot of fossil fuels. For end-users, this often means an increase in electricity prices as they will be charged market prices and production costs. The ob-

jective of these reforms is encouraging additional private sector investments in the energy sector, while at the same time providing incentives for efficient use of energy by consumers, which is equally in line with the green growth agenda of the continent. Moreover, the benefits of gasoline subsidies are regressively distributed, with over 80

percent of total benefits accruing to the richest 40 percent of households (IMF, 2010). Despite this fact, the increases in electricity or fuel prices often triggered demonstration and civil strife in many countries. Ghana is one of the few countries that successfully reduced fuel subsidies over the last few years.

**Box The case of Ghana demonstrates that engaging the public is the key to success**

Ghana is one of the few sub-Saharan African countries the subsidize retail fuel along with Nigeria and Angola. In 2004 it was evident that international oil prices would remain high and continuing to provide fuel subsidies would be fiscally unsustainable for Ghana. The first step was to prepare the public for the reduction of fuel subsidies by undertaking a Poverty and Social Impact Assessment (PSIA) study which would reveal that the rich benefited more from subsidies than the poor. The results of this study were widely disseminated and discussed, which created broad based political support for removing fuel subsidies. A year later the government announced plans to increase fuel prices by 50% and this would coincide with an targeted anti-poverty programme. Moreover, it was equally important to demonstrate visible results of removing fuel subsidies to the wider public by eliminating school fees. Other areas of immediate improvements include the expansion of the public transportation network. Although trade union resisted the reduction of fuel subsidies, the public accepted the necessity of these reforms as there was a thorough debate in society and the results were immediately visible evident.

Reforming the energy market in general, and removing fuel subsidies in particular, is politically sensitive and engaging the public is critical to buy-in the public and civil society organizations such as trade unions. This debate could focus on the inefficiencies of providing fuel subsidies as a means to improve equity and social welfare. Such a dialogue would strengthen the trust between Government and its citizens. Other key lessons are that liberalizing energy sectors in Africa should be undertaken gradually so that consumers can adapt to new electricity and fuel prices without major distortions. Moreover, these reforms are easier to implement if a country has strong economic growth that mitigates the negative impact on household income of

increases in fuel prices. For example, Ghana's economy is predicted to grow at 13.5 percent in 2012. Such high growth rates make it easier for consumers and businesses to adapt their fuel consumption without major disruptions.

## 2 The case study of Nigeria

### *The paradox of exporting crude oil and importing refined fuel products*

The paradox of Nigeria is that this country is the six largest oil exporter of the world and produces 2.3 million barrels of crude oil a day, while at the same time it needs to import fuel for domestic consumption. The reason for this pa-

adox is related to chronic underinvestment and mismanagement in the oil industry. Investing in the oil sector is further hampered by a rigid pricing system and the current refineries are only running at 40% of their original capacity. From a fiscal perspective, the importation of refined fuel has two negative ramifications. Firstly, foreign exchange reserves will be used to finance imports of refined fuel. Secondly, international fuel prices tend to be highly volatile which means that the costs of fuel subsidies also fluctuate rapidly and this hampers prudent financial management. Moreover, providing fuel subsidies also leads to exponential growth in domestic consumption and consequently the fiscal cost of subsidizing fuel, as indicated in the table below:

**Table 1 The growing cost of providing fuel subsidies in Nigeria**

Year	Average Crude Oil	Total cost of Subsidy (billions of US\$)	Yearly Growth Rate
2006	67.03	1.96	-
2007	74.68	2.26	15.34%
2008	101.78	5.17	128.92%
2009	63.02	3.01	-41.72%
2010	81.25	4.31	42.90%
2011	113.98	9.30	97.24%

Source: Ministry of Economy and Finance of Nigeria (December 2011).

The cost of providing fuel subsidies doubled and is estimated at US\$ 9.3 billion in 2011. This represented about 30% of the total federal government expenditure and 4.18% of GDP. The jump

in the fiscal costs of subsidies in 2011 was related to the upswing in the international price of oil. This fuel subsidies also lead to rent-seeking opportunities as the cost of retail diesel and gasoline

are substantially lower in Nigeria compared to neighboring and other African countries, as indicated in table 2 below:

**Table 2 Nigeria is subsidizing fuel for the region (fuel prices in US\$ cents per liter in 2010)**

Countries	Retail prices of diesel	Retail price of gasoline
Nigeria	77	44
Niger	116	107
Chad	131	132
Cameroon	110	120
Benin	121	104
Average for Africa	105	119

Source: International fuel prices surveys of 2011/2010 & 2009 provided by GTZ.

The substantial difference in retail prices for both diesel and gasoline provides incentives for illegal exports of Nigeria fuel to other countries. In short, Nigeria is subsidizing fuel for the region and the costs reduces the fiscal space for additional capital expenditures to priority sectors such as security, Niger Delta, infrastructure development, land reform and food security. These investments are needed to strengthen the legitimacy of the State beyond providing cheap fuel as well as to diversify economic activities and encourage broad-based economic growth.

#### *Broader challenges and ongoing energy sector reform initiatives*

The eight day strike in Nigeria was not only triggered by the sudden increase in retail fuel prices, but also caused by the general underperformance of the energy sector over the last two decades, including the unreliable supply of electricity. This has mainly been caused by mismanagement, overregulation and possible corruption. Liberalizing the oil sector is long overdue and the Nigerian Government has taken a holistic approach by launching several initiatives. Firstly, the Nigerian Sovereign Wealth Fund was launched in 2011, with the initial seed capital of US\$ 1 billion. The main purpose of this fund is to ensure that some of Nigeria's oil wealth is saved for future generations and used to finance strategic infrastructure projects. To ensure professional management and avoid political interference, this fund is managed by KPMG.

Secondly, the government is increasing the refining capacity in Nigeria by building three Greenfield refineries in Lagos state, Bayelsa and Kogi with a combined capacity of 750,000 barrels per

day. These refineries are built with the financial and technical support of China. In this arrangement, Chinese companies are expected to source 80 per cent of contractors and financing from the China Export and Credit Insurance Corporation (SINOSURE), while Nigerian National Petroleum Corporation (NNPC) will source the remaining 20 per cent. However, it will take about a decade before these refineries will become fully operational and therefore this will not have an impact in the short-term.

Thirdly, the government is improving governance and transparency through the Petroleum Industry Bill, which is currently being debated by Parliament. This legislation would combine over ten different petrol and administrative laws in a single piece of legislation that governs the petrol industry. As such, this bill will provide a comprehensive legal and regulatory framework as well as establish the necessary institutions for the Nigerian petroleum industry. Moreover, the bill will require transparency by removing confidentiality from all procedures, contracts and payments.

Finally, the Subsidies Reinvestment and Empowerment (SURE) programme has been established by the Government, and this initiative has the objective of mitigating the immediate impact on consumers of the removal of fuel subsidies for a transition period of 3 to 4 years. The SURE programme is a wide ranging initiative that focusses on increasing infrastructure investments, developing a national safety net programme that targets the poor, improving health services as well as expanding vocational training schemes. The SURE programme also aims at improving rural and urban water supply and at increasing oil refining capacities.

The above mentioned initiatives demonstrate that Nigeria has adopted a holistic approach in reforming the oil sector, which encompasses improvements in governance and transparency in the oil sector as well as mitigation measures to compensate for the negative impact for consumers and businesses. This holistic approach could be complemented by a more consultative process with civil society organizations on the need to reduce fuel subsidies as well as to demonstrate visible results to the wider public once subsidies are reduced. An example of this could be the abolishment of school fees as was the case in Ghana. The key is to convince the general public that fiscal space created by reducing fuel subsidies will improve the livelihoods of people, and is not "captured" by specific interest groups.

#### *Distributional impact and political economy of the Big Bang approach*

Nigeria, just like many other developing countries, is reluctant to pass on international fuel prices to domestic consumers due to the immediate impact on household income. This includes the direct impact (i.e. increase in costs of personal transportation, kerosene for cooking, electricity generation, etc.) and indirect impact (i.e. increase in costs of staple food, consumer goods, etc.). As the middle class and rich have a consumption basket that is relatively more energy intensive than the poor, the former will be more affected by the reduction of fuel subsidies than the latter.

Based on international estimates that an average of US\$ 0.25 cents decrease of fuel subsidy per liter results in a decrease of 6 percent income for an average household (Granado et al, 2010)<sup>1</sup>,

this would mean that the recent price increase in Nigeria of US\$ 0.21 would lead to a decrease of about 5 percent in the income of an average household. Another negative impact of the reduction of fuel subsidies will be to increase production costs and this creates cost-push inflation, which is also referred to as supply-shock inflation. In this regard, the Central Bank of Nigeria estimates that the removal of the fuel subsidy will cause inflation to increase by 15% in January 2012. This jump in inflation would have a negative impact on real wages.

From an economic perspective it would make more sense to gradually reduce fuel subsidies as it would provide time for consumers and businesses to adapt their fuel consumption. However, such a gradual approach would create political opportunities to resist every individual price increase. This is the most likely reason for the adoption of the “Big Bang” approach by the Government as it anticipated political resistance to the removal of fuel subsidies. Indeed, Nigeria has a historical track-record of attempting to reduce fuel subsidies that triggered national demonstrations and civil strife.

### 3 Recommendations

Many African countries have embarked on ambitious reforms in the

energy sector, including addressing implicit and explicit fuel subsidies. These reforms will never be easy and should be tailor made for individual countries. This brief provides the following three recommendations that could be taken into consideration by African policymakers.

Firstly, the Nigerian case study reveals that a holistic approach to liberalizing the energy sector is critical and removing fuel subsidies is only one element in this reform process. This holistic approach should not only include introducing measures to mitigate the immediate impact of removing fuel subsidies on households, but also to increase transparency, improve regulatory framework and promote good governance in the energy industry such as by establishing the Nigerian Sovereign Wealth Fund and the future approval of the Petroleum Industry Bill. In the long term these initiatives would strengthen the legitimacy of the State.

Secondly, although some political resistance is inevitable, it is important to building broad based political support by discussing with the general public on the necessity of reducing fuel subsidies. To facilitate an evidence based discussion, the Government could launch a national poverty assessment that would demonstrate the inefficiencies of providing fuel subsidies as a

means to improve equity and social welfare. Moreover, the reduction of fuel subsidies should coincide with initiatives that demonstrate visible results and have high social returns such as the abolishment of school fees for primary education and expansion of the public transport system.

Thirdly, liberalizing the energy sector in general, and removing fuel subsidies in particular, is political sensitive as it has an immediate impact on household income. A gradual reform approach would therefore provide the opportunity for consumers and businesses to adapt their energy consumption without major disruptions. Political resistance to such unpopular measures would be further limited if these reforms were implemented when the economy is growth strongly as this will mitigate the negative impact on household incomes.

Finally, it should be emphasized that political sensitive reforms in the energy sector, and in particular the reduction of fuel subsidies, should be managed transparently and through a dialogue with civil society organization and the wider public. Such an inclusive approach is critical in the post “Arab Spring” world that demonstrated that citizens can claim their economic rights if reforms are considered unjust and unnecessary.

<sup>1</sup> These estimates are based on a global average and are not Nigerian specific.



## References

African Development Bank and the African Union (2009). Oil and Gas In Africa, supplement to the African Development Report, Oxford University Press.

Granado J., Coady D. and Gillingham R. (2010). The Unequal Benefits of Fuel Subsidies: A Review of Evidence for Developing Countries, IMF Working

Paper (WP/10/202), International Monetary Fund.

German Technical Cooperation (2011). International Fuel Prices 2010/2011, GTZ website: <http://www.giz.de/en/>.

German Technical Cooperation (2009). International Fuel Prices 2009, GTZ website: <http://www.giz.de/en/>.

Okigbo P.O. and Enekebe D. (2011),

Nigeria: Fuel Subsidies Removal Achieving the optimal solution, Policy Brief, Nextier Advisory.

International Energy Agency (2011), World Energy Outlook 2011, International Energy Agency, website: [www.worldenergyoutlook.org](http://www.worldenergyoutlook.org).

IMF (2010). Petroleum Product Subsidies: Costly, Inequitable, and Rising, IMF Staff Position Note (SPN/10/05).

