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**Recent developments and major challenges in the energy  
sector and its implications for Africa**

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The views expressed are those of the author and do not necessarily reflect  
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# RECENT DEVELOPMENTS AND MAJOR CHALLENGES IN ENERGY SECTOR AND ITS IMPLICATIONS FOR AFRICA.

BY

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## Presentation Outline

**1. Preamble**

**2. Africa in Global Energy Context: Key Facts and Figures**

**3. Recent Developments in Global Energy Market and Africa**

**4. Challenges for Africa of Recent Developments in the Global Energy Market**

**5. Suggested Policy Response to the Challenges**

**6. Concluding Remarks**

# 1. Preamble

- Sub-Saharan Africa's growth is projected to slow in 2015 to 4 percent, before picking up moderately in 2016. Slower expansion of economic activity largely reflects the region's vulnerability to falling commodity prices, since it is a net exporter of oil and other commodities.
- The initial terms-of-trade deterioration is estimated at 18.3 percent for the region, with declines of about 40 percent for oil-exporting countries. The drop in terms-of-trade is 0.6 percent for countries exporting agricultural goods, while exporters of metals and minerals show a modest gain of 1.2 percent. Fourteen African countries are more vulnerable, that is, with terms-of-trade decline greater than 10 percent, to the slide in commodity prices; 22 countries are less vulnerable, that is, with a negative movement in the terms of trade of less than 10 percent; and 12 countries are more resilient.
- Lower commodity prices will weigh heavily on exporters of these commodities, putting pressure on current account and fiscal balances. Countries that stand to lose the most are the less diversified oil exporters.
- The region's oil exporters, which accounted for nearly half of the region's GDP in 2014, have been especially hard hit by weakening terms of trade. Their economies depend heavily on oil for export receipts and fiscal revenues and are especially vulnerable to oil price movements



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## 2. Africa in Global Energy Context: Key Facts and Figures

According to the 2015 BP Statistical Review of World Energy, Africa in the context of global energy reveals the following key facts and figures:

Africa's share of global energy consumption	3.2%
Growth in Africa's energy consumption	+2.8%
Africa's share of global energy production	5.8%
Growth in Africa's energy production	-2.3%

Energy consumption grew slower than GDP (3.5%) resulting in a 0.6% decline in energy intensity (the amount of energy used per unit of GDP). This was smaller than the ten-year average annual decline of 1.8%.

## 2. Africa in Global Energy Context (Contd)

- Oil consumption grew by 4.2%, consumption of natural gas fell by 0.1%, coal grew by 2%, and non-fossil fuels grew strongly with above trend growth in hydro (+4.4%), nuclear (+8.2%), and renewables in power (+58%).
- Oil (43% of total Africa's consumption) remains the leading fuel followed by gas (26%), coal (23%), hydro (7%), nuclear (1%), and renewables in power (1%).
- Natural gas production declined by 1% (-2.1bcm), while coal output grew by 1.2%, well above its long term average. Overall, Africa's energy production fell by 2.3% reaching the lowest level since 2004.
- Africa's oil exports fell by 350Kb/d to 6.2Mb/d, which is 24% below the 2007 peak. Exports of natural gas dropped by 2.2% (-1.9bcm).
- The region's electricity generation grew by 1.7%, well below the average of 3.1%. Non-fossil fuels accounted for 21% of total generation.
- Africa's CO2 emissions from energy use increased by 2.5% in 2014. The region accounted for 3.4% of global emissions in 2014.



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**Figure 1: Major energy infrastructure & main hydrocarbon basins**



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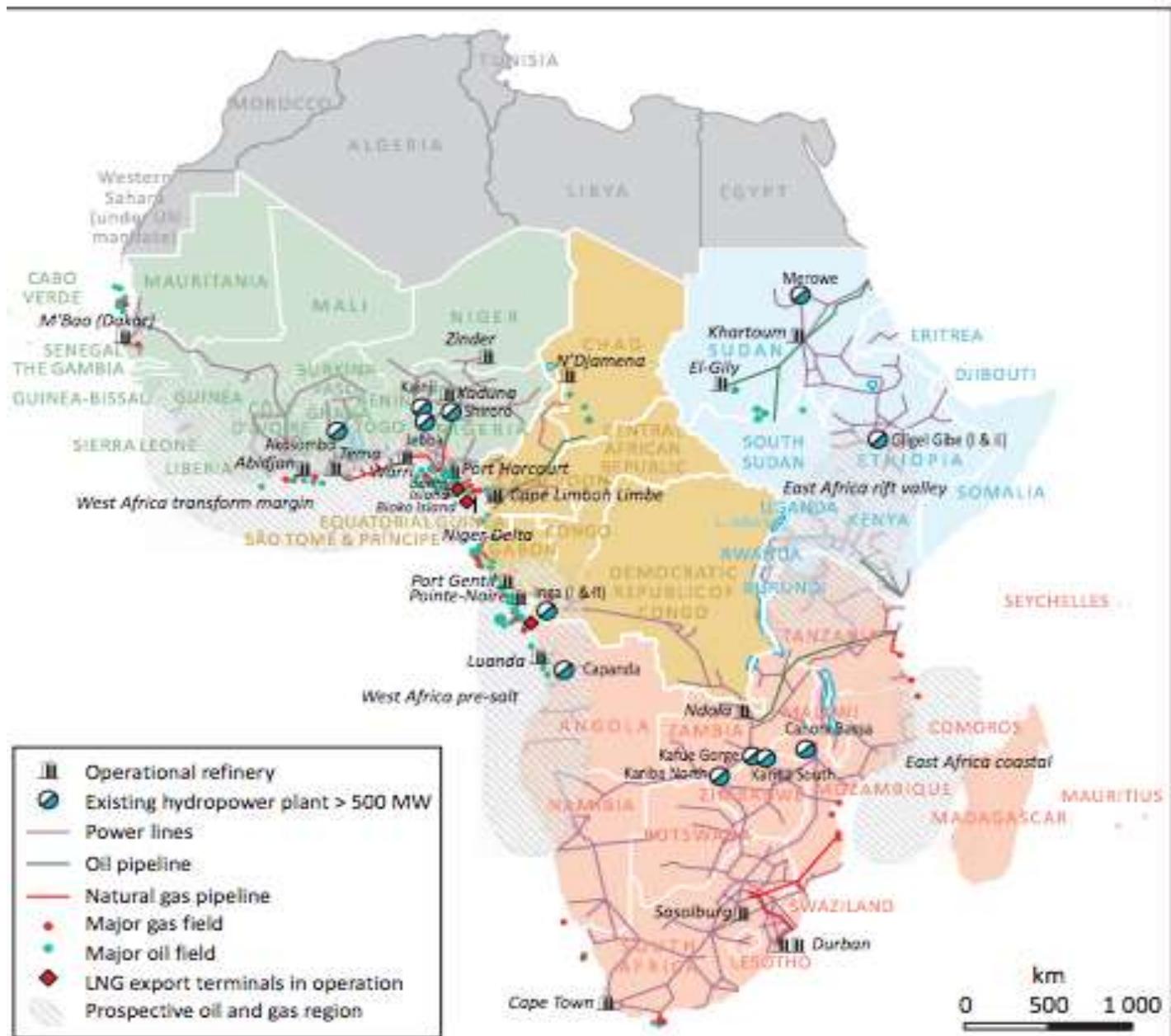
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This map is without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

### 3. Recent Developments in Global Energy Market and Africa

Recent key developments in the global energy market that have profound implications for Africa include:

- Supply and Demand dynamics
- Steep fall in energy prices, particularly oil
- Shale oil and gas technology development
- Shifting direction of global energy trade
- Supply of Renewable energy
- Search for Reduction in Carbon Emissions



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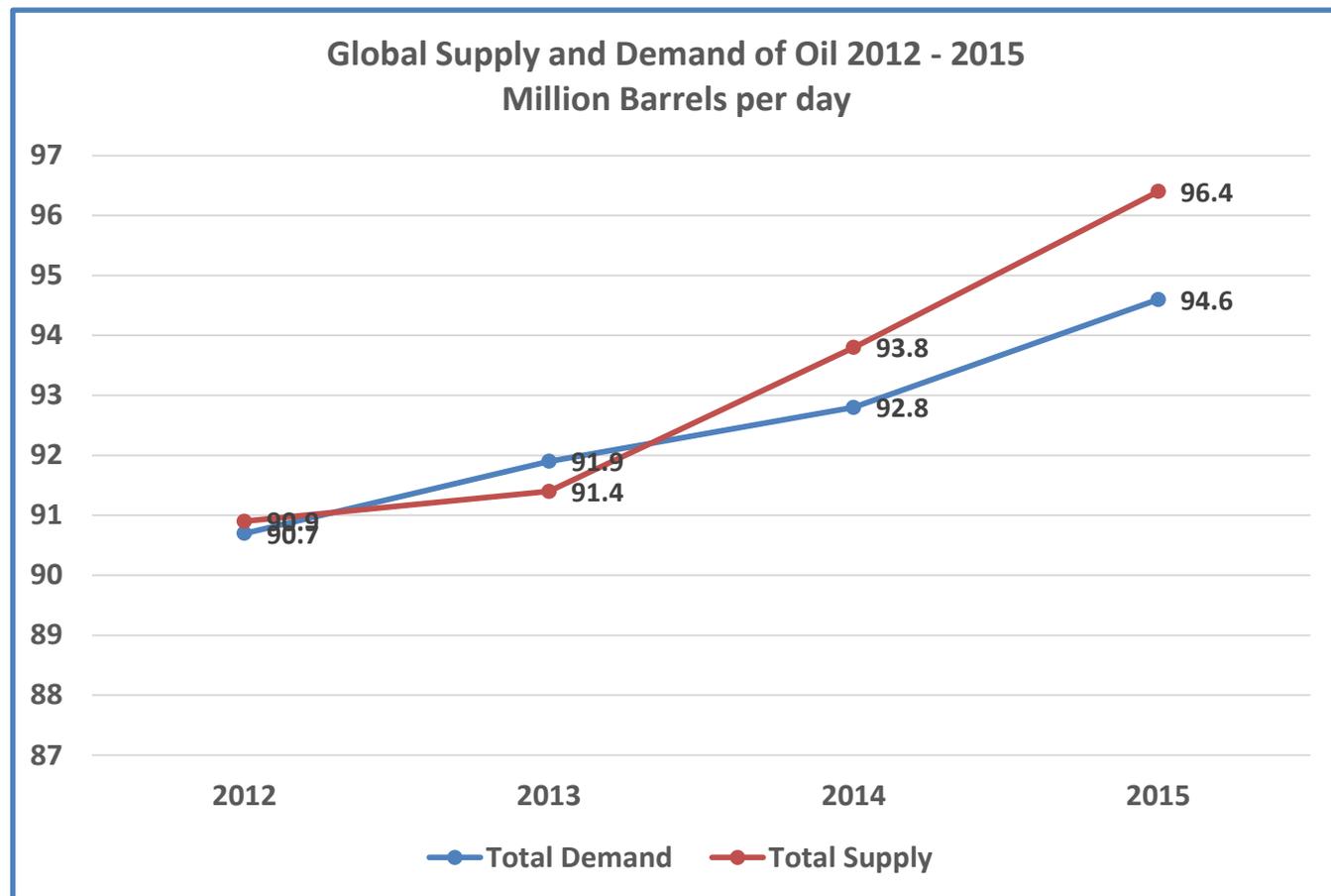
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## 3.1 Global Supply and Demand Dynamics



Source: EIA: Oil Market Report, March, 2016



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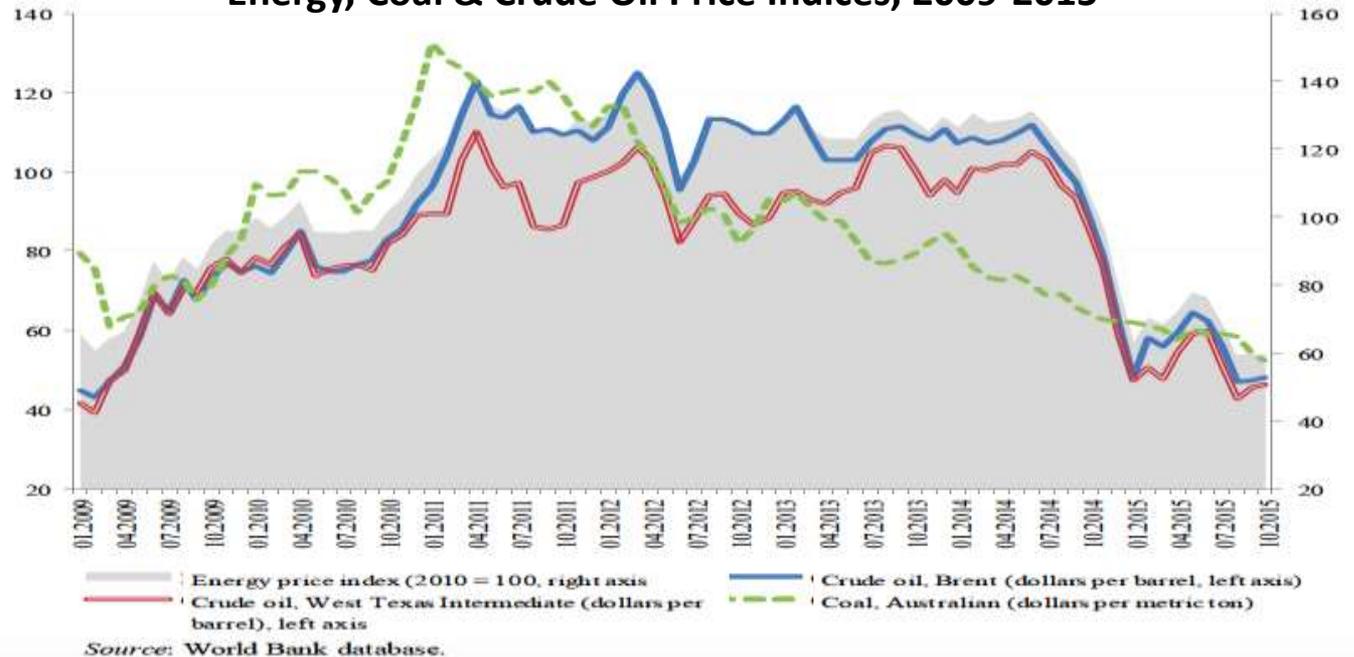
# 3.2 Recent Decline in Global Energy Prices



### Commodity Prices, Dec. 2013 – Jan. 2015



### Energy, Coal & Crude Oil Price Indices, 2009-2015



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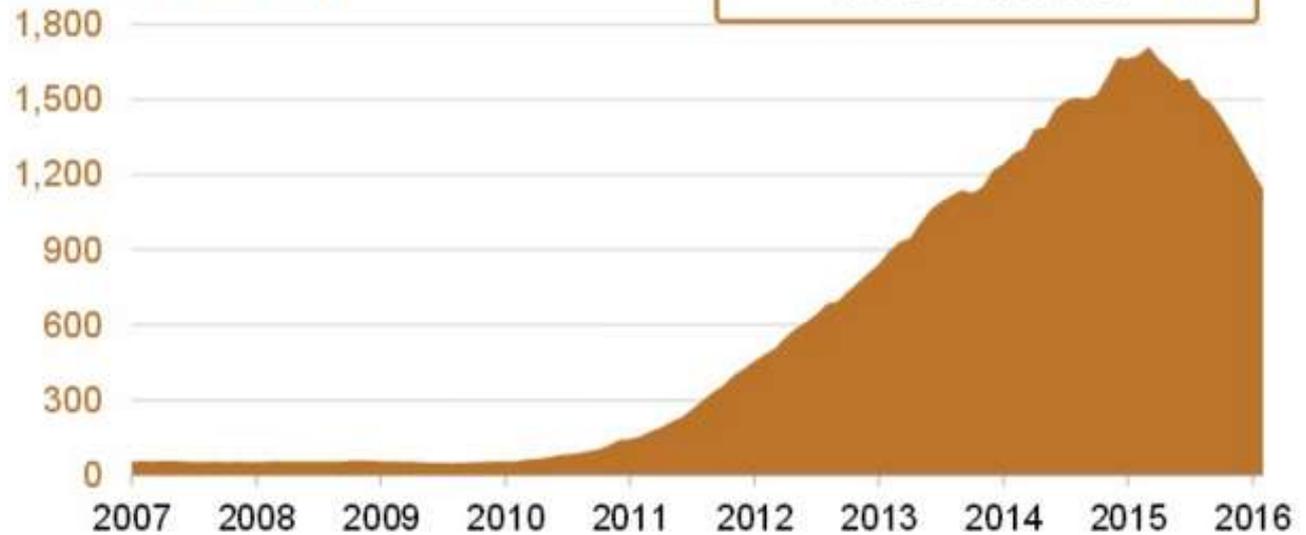
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### 3.3 Shale oil and gas technology development

The recent advances in shale oil and gas technology in USA have paved the way for a revolution in the global energy power balance, that is shifting back to North America, as well as in the global mix of primary energy sources. This is fuelling the decline of oil price and a geographical redistribution of the international energy trade.

#### Eagle Ford Region Oil production

thousand barrels/day



U. S. Energy Information Administration | Drilling Productivity Report



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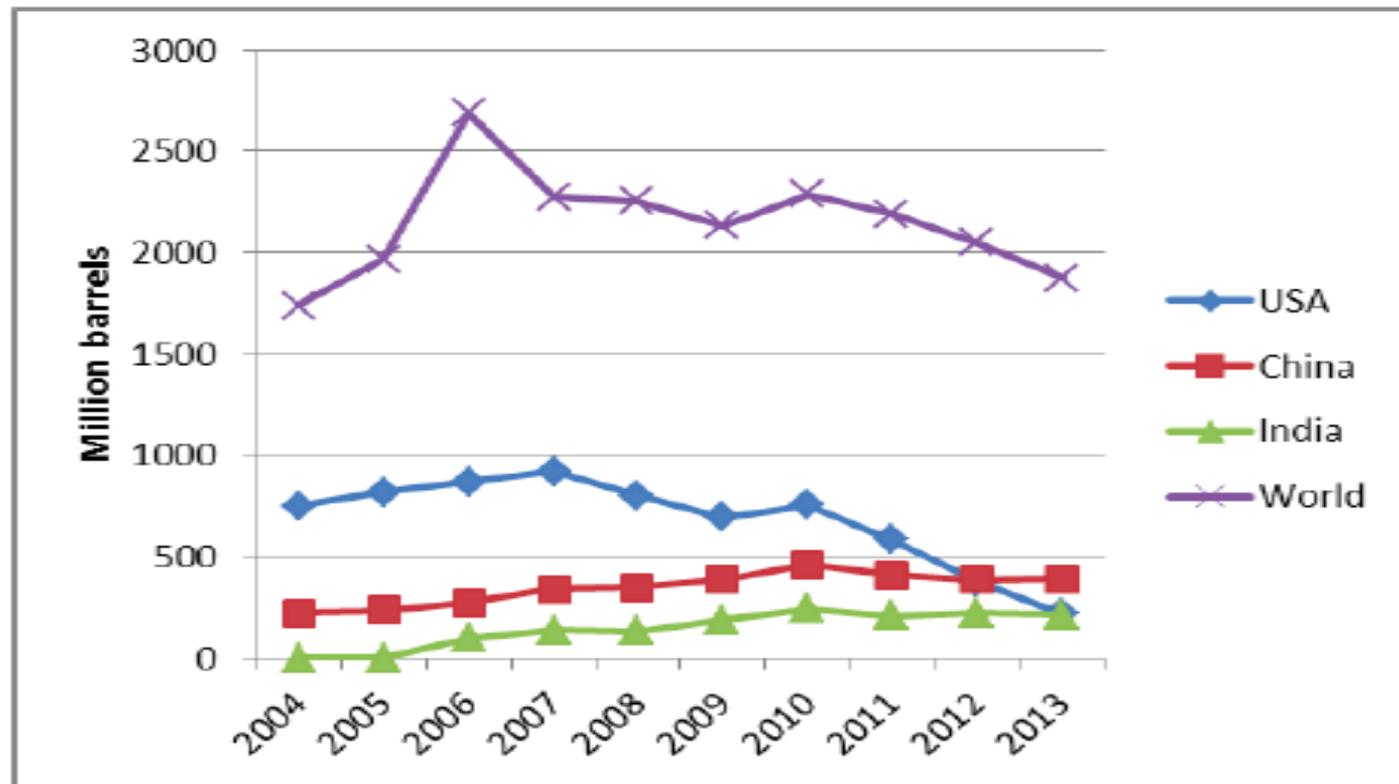
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### 3.4 Shifting Pattern of global energy trade

The traditional markets for Africa's crude oil exports were United States, China, and India, jointly accounting for 50.4% of total African exports in 2013. The volume of African's exports of crude oil to the U.S. market dropped by nearly 70% from 2004 to 2013 while Africa's crude oil exports to China and India increased significantly from 2004 to 2010.



Source: World Integrated Trade Solutions



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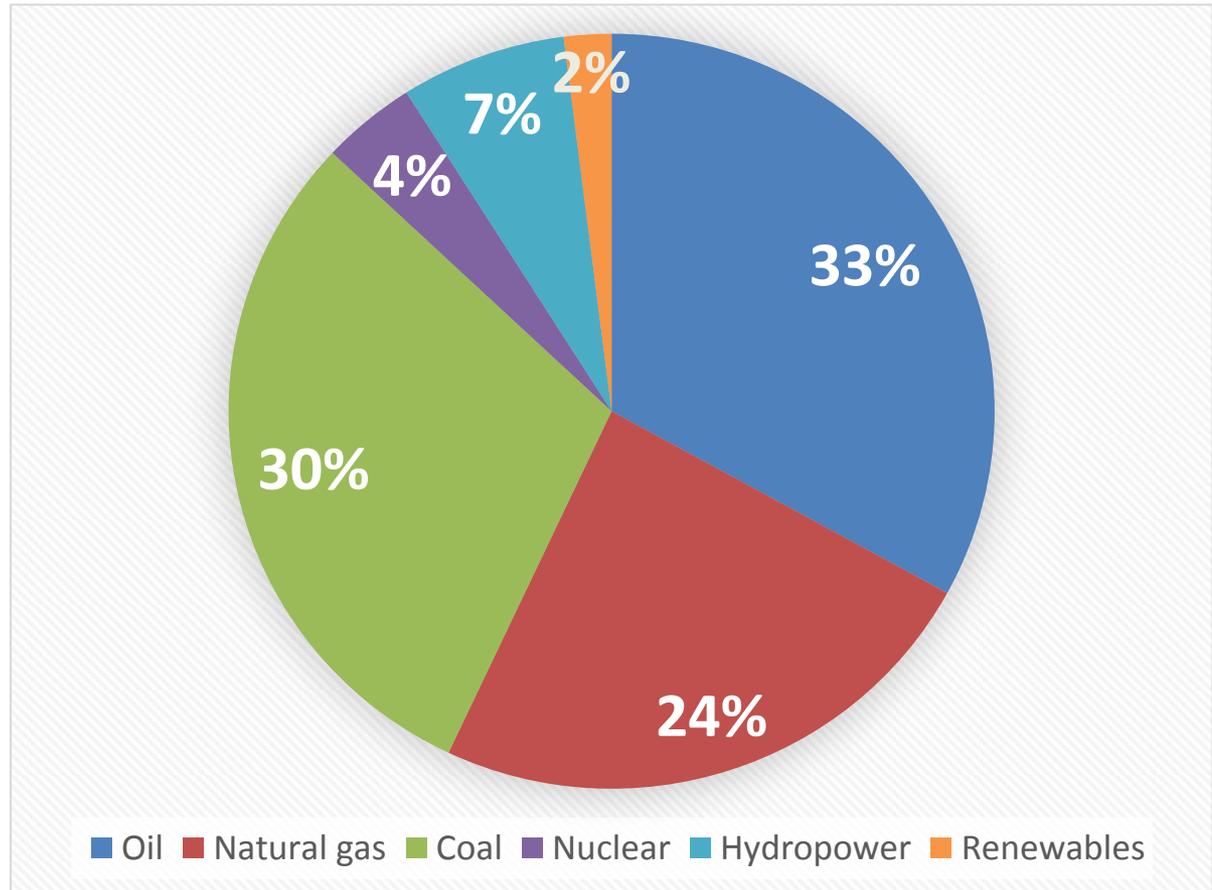
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### 3.5 Supply of Renewables

The advances in the market of renewable or green energy (wind or solar power, biofuels), the fastest growing subsector in the global energy mix, show good prospects for the expansion of the supply and demand of alternative energy, being also encouraged by the increasing concerns about environment protection, energy security and independence.



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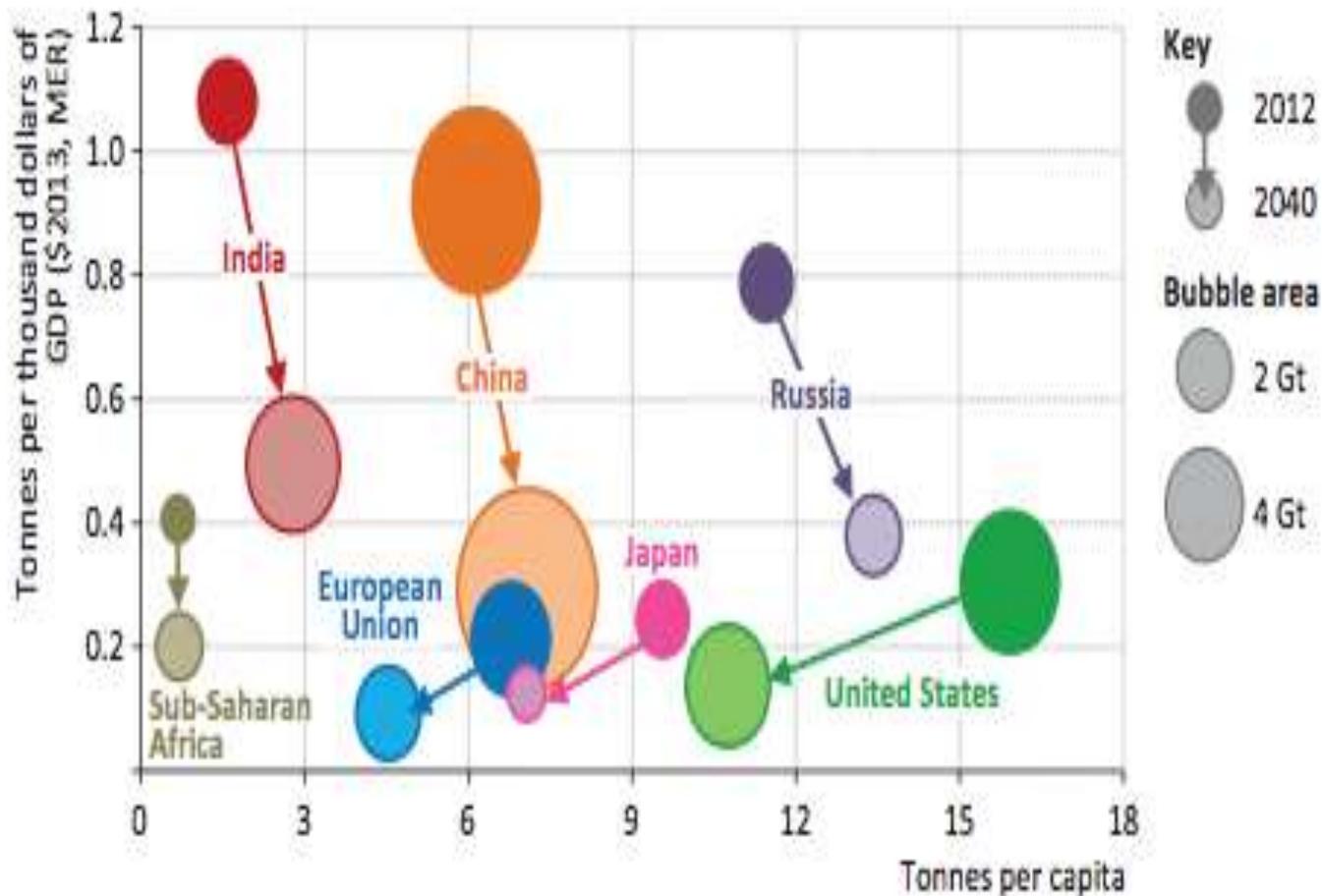
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### 3.6 Search for Reduction in Carbon Emissions



Note: GDP is presented in year-2013 dollars at market exchange rates (MER).

Source: International Energy Agency



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#### 4. Recent Developments in the Energy Market: Challenges to Africa

The challenges posed by the recent developments in the energy market to Africa include:

- Efficient Management of resources and revenues for sustainable economic performance and development
- Developing national and regional energy markets to create an African market for energy products
- Local content development in the energy sector to reduce foreign exchange leakages and create industrial and technological capacity building
- Economic diversification to broaden the sources of internal revenues and create employment opportunities
- Appropriate regulatory and Policy environment that promotes private investment and foreign financial flows



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## 5. Suggested Policy Response to Energy Market Challenges

The impact of the recent developments on the sustained economic performance of African countries, particularly the energy dependent ones will depend on appropriate policy response.

- Commodity exporters need to implement fiscal discipline, effective monetary and exchange rate policies aimed at adjusting public spending to the lower commodity prices and protect current account balances.
- Lower commodity prices should serve as opportunity for commodity exporters to diversify their economies through local value addition rather than the export of primary commodities. This will no doubt, require the implementation of structural reforms that will encourage private sector activity and improve the business environment.
- Fiscal consolidation should involve a shift in spending from inefficient uses such as subsidy payments and bloated bureaucracies to activities that supports both the efficiency of public expenditures and long-term growth.
- Apart from reducing the burden on government budgets, liberalizing the energy market can also correct the allocative inefficiencies in the use of energy in some countries.
- Regional integration through the implementation of structural reforms across all sectors that will facilitate intra-regional trade and investment in Africa can promote productivity and economic growth.



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## 6. Concluding Remarks

No doubt, recent developments in global commodity markets, particularly, in the energy market has thrown up new challenges for Sub-Saharan African countries. To reduce the effect of lower energy prices, shifting energy trade patterns, increase sources of alternative energy on economic performance and welfare of the people, there is the need for government, particularly of commodity dependent countries that are more vulnerable to the recent developments, to implement bold fiscal, monetary and exchange rate reforms that will enable them to diversify their economies, promote regional integration to develop domestic national and regional markets that will lessen their vulnerability to global commodity price shocks and other economic vicissitudes.

I will like to conclude with this statement from Wharton:

***“From a small shift to a sea change, transformation is taking place around the world. Some countries will win; others won’t be so successful. But for those who persevere, the payoff will be big”*** - Wharton Special Report on Growth Strategies in a global Economy, April, 2016.

The recent developments in commodity markets call for African countries to persevere in adopting appropriate strategies.



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THANK YOU.

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