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**The rising Profile of China's Energy consumption  
Trends and Implications for Africa's Oil and Gas Industry**

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## **Abstract**

With a population of more than 1.3 billion people, the People's Republic of China is the world's most populous nation and the second largest energy consumer after the United States. Since the beginning of China's economic reform agenda in 1978, the nation's economy has grown tremendously, averaging about 10 per cent per annum in the past 25 years. The rapid rise in China's economy has been accompanied by its remarkable transformation, becoming the fourth largest economy in the world, measured by nominal Gross Domestic Product. China's rapid economic growth has also been accompanied by a dramatic rise in its energy profile, becoming the world's largest consumer of energy, after the United States. However, China's primary energy resources are unable to keep pace with the nation's thirst for energy. The nation had 18.3 billion barrels of proven oil reserves in 2006, a level that remained unchanged from the previous year. Rapid economic growth in China has also spurred its consumption of crude oil in recent times. The nation consumed 7.4 million barrels of crude oil per day in 2006, representing about half a million barrels per day increase from 2005. The heightened demand for crude oil in China in 2006 represents 38 per cent of the total increase in world demand. This is in line with projections in China's energy demand into the foreseeable future. It is therefore China's heightened demand for energy that has driven its contemporary economic relationships with African oil producers. This development is a manifestation of the rise in the profile of Africa's oil and gas industry. The region's energy profile is being transformed into a major centre for the World's oil and gas industry. Its phenomenal rise as a major hub of the global oil and gas industry stems from recent developments, including substantial onshore/offshore discoveries, the commissioning of numerous fields and the development of critical infrastructure in some of the oil producing countries. The continent holds substantial oil and gas reserves estimated at 9.5 per cent of crude oil and 8 per cent of natural gas reserves in the world. Despite the region's considerable endowment in hydrocarbons, however, oil and gas resources are concentrated in a relatively few number of countries and sub-regions (North and Western Africa). The major oil producing countries in the region are Nigeria, Algeria and Angola. Other producers include Egypt, Sudan, Equatorial Guinea, Congo Republic, Chad, Gabon, Tunisia and Cameroon. China's heightened demand for energy has also spurred its efforts to seek oil imports from various African producers as a strategy to foster energy security. The nation's major companies have become partners in some African Countries, particularly on oil exploration projects and infrastructure, as part of an emergent policy framework aimed at ensuring its future energy security. In view of the considerable challenges accompanied by China's thirst for energy, as well as opportunities posed by this development for Africa's oil producers, this paper presents recommendations that can ensure the sustainability of China's rising energy demand. It also presents market friendly strategies that may enhance the capacity of Africa's oil and gas industry to grow and become a reliable source of energy for the world's major energy consuming nations.

**THE RISING PROFILE OF CHINA'S ENERGY CONSUMPTION  
TRENDS AND IMPLICATIONS FOR AFRICA'S OIL AND GAS  
INDUSTRY**

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## **1.0 AN OVERVIEW OF CHINA'S CONTEMPORARY ECONOMY**

### **1.1 Emergence of Accelerated Growth**

With a population of more than 1.3 billion people, the People's Republic of China is the world's most populous country and the second largest energy consumer (after the United States). Since the beginning of China's economic reforms in 1978, the nation's economy has grown tremendously, averaging about 10 per cent per annum in the past 25 years. The rapid rise in China's economy has been accompanied by its remarkable transformation, becoming the fourth largest economy in the world, measured by nominal Gross Domestic Product (GDP) (Wang, 2005; World Bank, 2007).

China's contemporary economic growth is against the backdrop of the nation's centrally-planned economic framework, which was subjected to a comprehensive reform agenda beginning from the late 1970s. China's reforms were aimed at transforming its economy from a Soviet-styled, centrally planned economy to a market-oriented one. The reform agenda has grown steadily within the political framework provided by the Communist Party of China, producing a mixed economy, with elements of central planning and market framework. Emergent economic reforms in China have produced dramatic results, particularly in the past couple of decades. While China's GDP grew at a paltry 17 per cent in the 1960s, rising to 70 per cent in the 1970s; it has registered a remarkable growth of 63 per cent in the 1980s, peaking with a growth of 175 per cent in the 1990s. China's enviable economic performance has helped to lift millions out of the vicious circle of poverty. The rate of impoverishment has been reduced in China from 53 per cent of the population in 1981 to 8 per cent in 2001.

China's economic performance has continued unabated since the turn of the new Millennium, growing by 7.3 per cent in 2001, in a development that is driven by foreign direct investments and the nation's foreign trade. In 2004 alone, China's trade with the rest of the world grew by about 35 per cent, reaching US\$1.15 trillion. China was also the second-largest recipient of foreign direct investment in 2004, after the United States, attracting a total of over \$60 billion (Wang, 2005). This has contributed largely to China's huge foreign exchange reserves, which stood at \$600 billion in 2004. The foreign exchange reserves have ballooned to more than \$1 trillion in 2006. Table 1 shows China's recent economic indicators. They are characterized by robust economic performance.

**Table 1: China: Selected Economic Indicators, 2006**

<b>Indicator</b>	<b>Value</b>
Nominal GDP	\$2.68 trillion
GDP @ Purchasing Price Parity (PPP)	\$10 trillion
Nominal GDP per capita	\$2,034
GDP per capita (PPP)	\$7,503
GDP growth rate	10.7%

**Source: World Bank, 2007**

China's phenomenal growth in 2006, measured at 10.7 per cent, is an improvement over the performance of 2005, revised at 10.4 per cent. China's export-driven policy has accounted for the huge current account surplus in 2006, overtaking Japan to become the world's largest.

## **1.2 China's Economic Performance and the Global Economy**

China's rapid economic growth has ramifications for the global economy. The nation's consistent trade surplus with major trading partners is a source of concern to many countries. This is even more so following China's entry into the World Trade Organization (WTO) in 2001. In order to allay the fears of China's trading partners, the Chinese government has made a number of specific commitments to trade and investment liberalization which have the potential to open the Chinese economy to foreign firms.

Although China's current account surplus remains a concern to some of its trading partners, the state of China's economy should be placed in a proper perspective. China's economy is still about one-seventh that of the United States; one-third that of Japan and about the size of the British economy. Also, not all of China's trading partners worry about the consequences of the country's rapid economic growth. Its Asian neighbours have benefited from the transformation of China's economy. China has effectively become a major link in Asia's regional supply chain, particularly in low-end manufactured products, such as textiles, toys and shoes. This is followed by China's production of high technology manufactures, including electronic and electrical appliances. The attraction of China as a manufacturing base for Asian neighbours was manifested in the 1980s, when investors in Hong Kong moved to the mainland to reduce relative cost of production. This trend has accounted for 70 per cent of foreign direct investment in China. In the light of this development, Taiwan, Singapore, South Korea and Japan have equally moved more of their factories to the Chinese mainland, accounting for about 60 per cent of China's total exports and about 75 per cent of its higher-end manufacturing exports to the west. Consequently, China has

helped to sustain Asia's economic growth, providing relatively inexpensive land and labour to drive production of manufactures for the more developed economies in the region.

Despite the tension that accompanies Sino-American trade relations, China is, by far, the fastest growing market for the United States. United States Commerce Department data indicate that exports to China increased by 80 per cent in the three years after China joined WTO in 2001. U.S. exports to China also grew by 22 per cent in 2004, particularly in agricultural chemicals and higher-technology manufactures, becoming America's fifth-largest export market in the world.

The dramatic rise in China's economy in the past three decades has fuelled demand for energy, much of which have had to be imported. This development has crated challenges and opportunities for China and several nations rich in energy around the world.

## **2.0 CHINA'S RISING ENERGY PROFILE**

### **2.1 China's Primary Energy Endowment**

China's rapid economic growth has been accompanied by a dramatic rise in its energy profile, becoming the world's largest consumer of energy, after the United States. However, China's primary energy resources are unable to keep pace with the nation's rising energy demand. The nation had 18.3 billion barrels of proven oil reserves in 2006, a level that remained unchanged from the previous year (EIA, 2006).

Apart from crude oil, natural gas is a source of primary energy in China. Although natural gas has not been a major fuel in China until now, its share in the nation's energy mix is

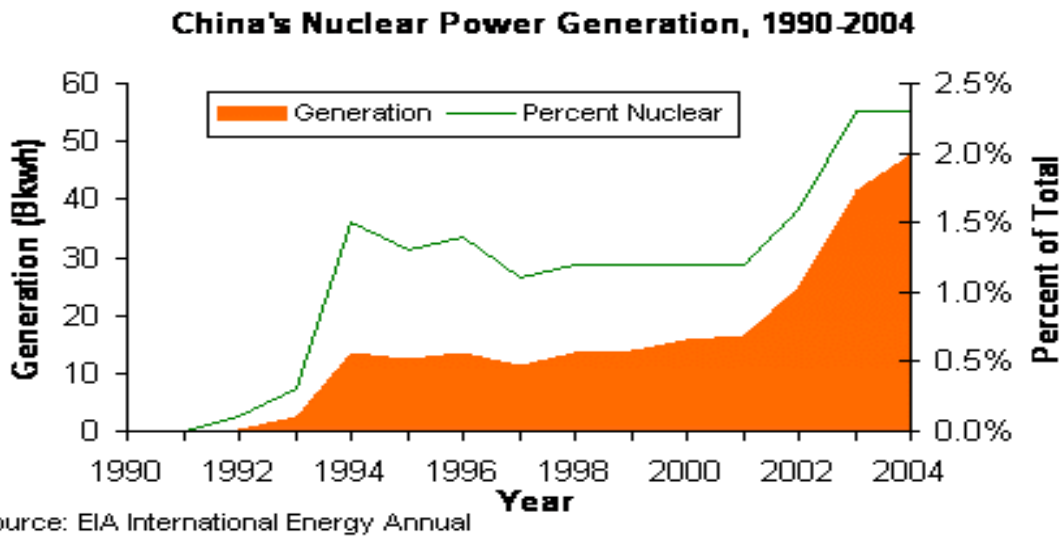
rising. Estimates of China's proven natural gas reserves stood at 53.3 trillion cubic feet (Tcf) in 2006, with other estimates standing as high as 83 Tcf.

Unlike natural gas, coal is a major component of primary energy endowment in China. Estimates indicate that China holds an estimated 126.2 billion short tons of recoverable coal reserves, the third-largest in the world, behind the United States and Russia. Northern China, particularly Shanxi Province, contains most of China's accessible coal, where all of the large state-owned mines are located.

Hydroelectric power in China is a significant source of primary energy, ranked as the second-largest in the world, behind Canada. In 2006, China generated 323 billion kilowatt hours of electricity from hydroelectric sources, representing 15.8 per cent of its total generation. The trend is likely to increase with the number and scope of large-scale hydroelectric projects planned or under construction in China. The largest power project under construction is the Three Gorges Dam, which will include 26 separate 70 – Megawatts (MW) generators, for a total of 18.2 Gigawatts (GW). When completed by 2009, it promises to be the largest hydro-electric dam in the world. Electricity demand is therefore poised to play higher roles in China's energy mix (Von Hirschhausen and Andres, 2000).

China's nuclear power programme is an important element of the nation's energy security framework. Although it comprises only a small fraction of the nation's installed generating capacity, developments are unfolding rapidly in the sector. Arrangements are under way to add between 15 and 30 GW of new nuclear energy capacity by 2020, representing between 2.5 and 4.5 per cent of total installed generating capacity. As at 2006, China had eight new

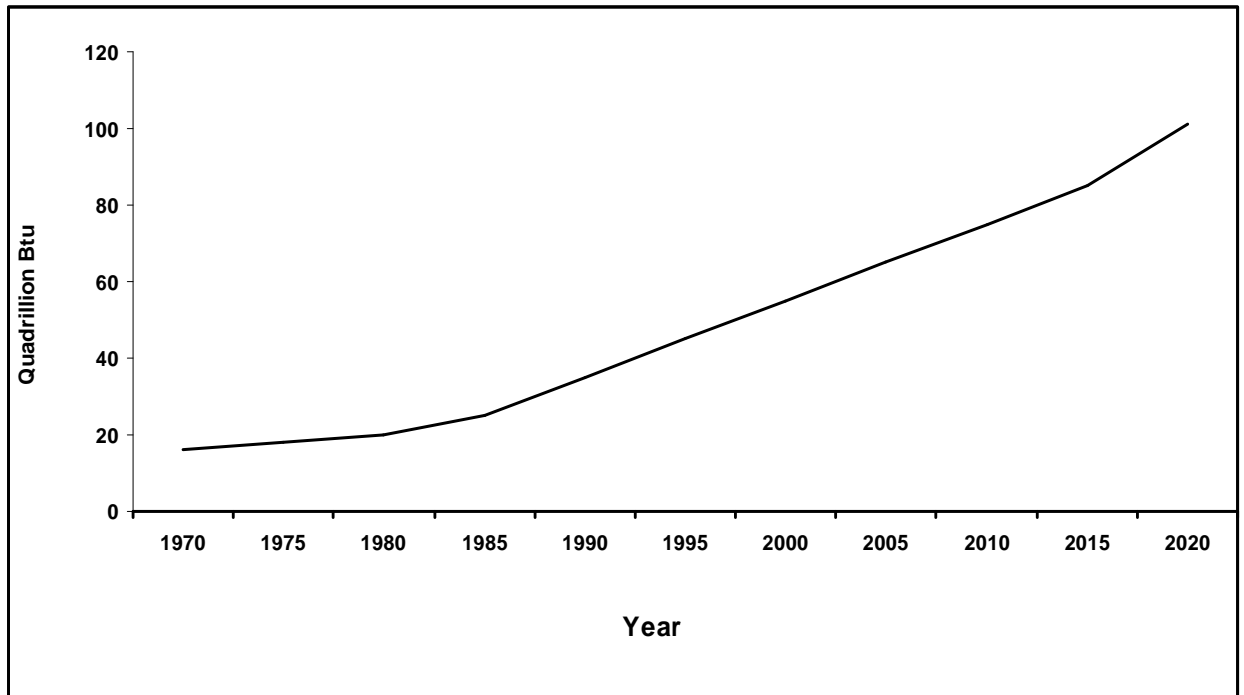
nuclear power plants under construction. The biggest of these is a 6-GW nuclear power plant at Yangjiang in Guangdong province, set to come on stream by 2010. Fig 1 shows the scope of nuclear power generation in China between 1990 and 2004. It shows a steady rise in nuclear power generation, which has accelerated in the past few years.



**Figure 1: China's Nuclear Power Generation, 1990-2004**

## 2.2 China's Crude Oil Production and Consumption Trend

China's energy security is a contemporary issue, against the backdrop of the dramatic rise in the nation's economic growth, which is sustained by heightened energy demand. Emergent trend reveals a widening gap between energy production and consumption, creating a deep concern for China's policy makers. China's energy consumption has increased steadily, rising from less than 18 quadrillion British Thermal Units (Btu) in 1980 to 37.1 quadrillion Btu in 1996. Projections reveal that energy consumption in China will reach 98.3 quadrillion Btu by 2020, as illustrated in Figure 2. The projection features a dramatic increase in China's energy consumption, which may equal that of the United States by 2020.



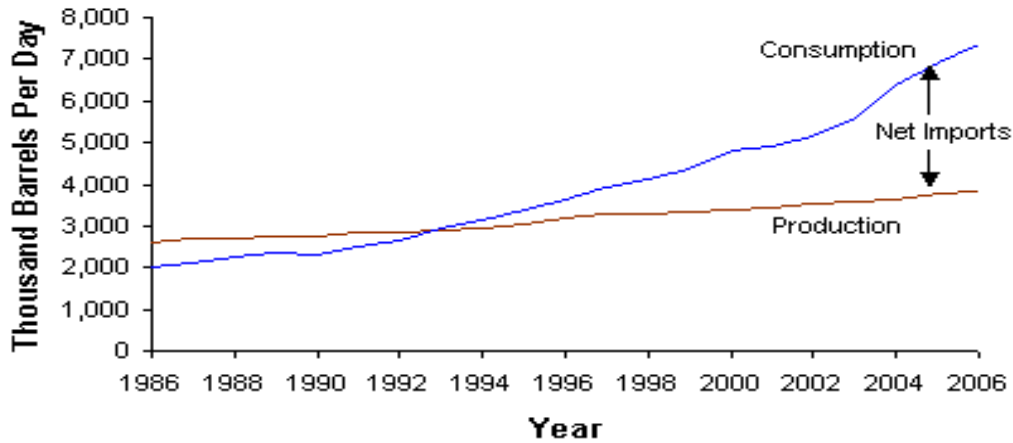
**Figure 2: China's Total Primary Energy Consumption, 1970-2020**

**Source: World Bank, 1997.**

Rapid economic growth in China has spurred consumption of crude oil in recent times. The nation consumed 7.4 million barrels of crude oil per day in 2006, representing about half a million barrels per day increase from 2005. The heightened demand for crude oil in China in 2006 represents 38 per cent of the total increase in world demand. This is in line with projections in China's energy demand into the foreseeable future (IEA, 2007).

Although China's crude oil production has also risen in line with demand, it has been unable to match consumption since the early 1990s, as figure 3 shows. It reveals production trends lagging behind consumption since 1993, necessitating augmentation through massive importation of crude oil.

### China's Oil Production and Consumption, 1986-2006\*



Source: EIA *International Petroleum*

\*2006 is Jan-Aug only

**Figure 3: China's Crude Oil Production and Consumption, 1996- 2006.**

**Note: \* 2006 is January – August only.**

China's crude oil production was 3.8 million barrels per day in 2006, slightly higher than the previous year. About 85 per cent of China's crude oil production capacity is located on-shore. The nation's largest oil production field (Daqing field) is located in north eastern China, accounting for more than 900,000 barrels of oil per day, or a quarter of China's total crude oil production. However, several other new fields have been discovered, making Shengli, China's second-largest oil producing field, supplying more than 500,000 barrels of crude oil per day. Table 2 shows China's major crude oil fields in 2006. It reveals that most of the nation's domestic crude oil production is located on shore. It also shows China National Offshore Oil Corporation produces more than 500,000 barrels of oil per day from its offshore fields in the Bohai bay and South China Sea.

**Table 2: Major Crude Oil Fields in China, by Production, 2006.**

<b>Field</b>	<b>Production (barrels per day)</b>
<b>China National Petroleum Corporation (CNPC)/ PetroChina</b>	
Daqing	929,268
Liaohe	256,991
Xinjiang	222,524
Changqing	162,422
<b>China Petroleum and Chemical Corporation (Sinopec)</b>	
Shengli	535,531
Sinopec Star	78,567
Zhongyuan	67,092
<b>China National Offshore Oil Corporation (CNOOC)</b>	
Total Offshore	519,108

**Source: Oil and Gas Journal**

China became a net importer of crude oil since 1993 and in 2003 it became the second largest oil consumer in the world after the United States. This is a manifestation of the country's rising energy profile, fuelled by rapid economic growth. In view of China's emergent dependence on oil imports, the country's policy makers have increased concerted efforts aimed at acquiring interests in exploration and production abroad. Consequently, CNPC has acquired exploration and production interests in twenty-one countries spanning four continents. In 2005, CNPC announced its intentions to invest a further \$18 billion in

foreign oil and gas assets between 2005 and 2020, including the purchase of Petrokazakhstan, whose assets include 11 oil fields and licenses to seven exploration blocks.

The Petrokazakhstan purchase was complemented by the completion of the 600-mile Sino-Kazakh oil pipeline that will deliver 200,000 barrels per day of crude oil to China by 2007. Other CNPC's recent overseas investments include oil and gas assets in Ecuador and Syria.

Sinopec has also increased its oil and gas investments overseas, acquiring a 97 per cent stake in Udmurtneft, a unit of British Petroleum (BP's) Russia Vehicle TNK-BP, for \$3.5 billion in 2006. Udmurtneft produces 120,000 barrels of crude oil per day and holds 1 billion barrels of proven reserves in Russia. Sinopec has also acquired a 40 per cent stake in Syneneco Energy's \$4.5 billion Northern Lights oil sands projects in Canada. The company projects a production of 100,000 barrels of synthetic crude oil in 2010, when commercial operations are to come on stream.

CNOOC is another Chinese firm increasing its foreign oil and gas stakes. In 2005, the firm purchased Repsol-YPF's oil field interests in Indonesia, making it the largest operator in the offshore Indonesian oil sector. The flurry of foreign oil and gas acquisitions by China's major oil firms is beginning to show significant contributions to China's oil imports. By 2005, these foreign acquisitions contributed about 300,000 barrels of oil per day or 8.5 per cent of total oil imports for that year.

### **3.0 CHINA'S RISING ENERGY DEMAND AND AFRICA'S OIL AND GAS INDUSTRY.**

#### **3.1 The State of Africa's Oil and Gas Industry**

Africa's energy profile is being transformed into a major centre for the World's oil and gas industry. The region's rapid rise as a major hub of the global oil and gas industry stems from recent developments, including substantial onshore/offshore discoveries, the commissioning of numerous fields and the development of critical infrastructure in some of the oil producing countries (Conne, 2005). The continent holds substantial oil and gas reserves estimated at 9.5 per cent of crude oil and 8 per cent of natural gas reserves in the world (AfDB, 2006). However, African oil producing countries account for 12 per cent of crude oil and 5.9 per cent of natural gas production in the world. Despite the region's considerable endowment in hydrocarbons, oil and gas resources are concentrated in a relatively few number of countries and sub-regions (North and Western Africa). The major oil producing countries include Nigeria, Algeria Libya and Angola. Other producers include Egypt, Sudan Equatorial Guinea, Congo Republic, Chad, Gabon, Tunisia and Cameroon. The profile of some important African oil producers are presented hereunder (Pan, 2007).

Nigeria:

- ❖ A member of Organization of Petroleum Exporting Countries (OPEC), Nigeria is the largest oil producer in Africa and the eleventh-largest producer in the world, becoming a major hub for oil and gas in the Atlantic Basin. The country produces 2.5 million barrels of oil per day and its crude oil reserves are estimated at 35 billion barrels. Recent significant hydro carbon discoveries, particularly in the country's

deep water offshore basin has spurred government's aspirations to increase daily production to 4 million barrels by 2010 (Imoudu and Igbatayo, 2005).

- ❖ Angola: The second-largest oil producer in sub-Saharan Africa after Nigeria, Angola's rising energy profile has attracted global investors into the nation's oil and gas industry, estimated at \$20 billion in foreign direct investment since 2003. The nation's crude oil production is rising rapidly and expected to reach 2 million barrels per day by 2008. The country also has considerable natural gas resources in its offshore basin.
- ❖ Sudan: Oil Production and exports from Sudan have risen rapidly in the past few years, with 500,000 barrels of crude oil production per day in 2005. This accomplishment is against the backdrop of disruptive internal conflict in Southern Sudan and the northern region of Darfur, attracting considerable global attention in the past few years. Sudan's proven oil reserves are estimated 563 million barrels of oil, with potential for more in regions of the country made inaccessible by conflict.
- ❖ Equatorial Guinea: The tiny West African country's total proven oil reserves are estimated at 1.28 billion barrels. The nation has a daily oil production, which averaged 371,710 barrels of oil per day in 2004.
- ❖ Gabon: The small African nation has proven oil reserves estimated at 2.5 billion barrels, with a daily production put at 230,000 barrels of crude oil. This represents a 37 per cent decline since its peak production levels in 1997.
- ❖ Republic of Congo: As Sub-Saharan Africa's fifth largest oil producer, the Republic of Congo has 1.5 billion barrels in proven reserves and averaged 235,000 barrels of crude oil production per day in 2004.

The rising profile of Africa's oil and gas industry poses serious challenges to the region's policy makers and development partners. Management of revenues that accompanies the oil and gas sector is a difficult issue, given the lack of transparency and accountability, as well as plundering of resources that are rampant in the industry across the continent. Effective management of revenues that accrue from the petroleum sector remains a key issue in Africa's oil producing countries, as the sector is set to play a more prominent role in the economies of these countries.

Table 4 shows a comparative profile of oil and gas resources in Africa and other regions of the world. The table shows that Africa has considerable oil and gas resources that have the potential to make the region a major player in the global oil and gas industry.

**Table 3: Comparative Energy and Economic Statistics: Africa and other Regions of the world, 2005.**

	Proved Reserves % share of World	Oil		Proved Reserves % share of World	Natural Gas		Per Capita Energy Consumption	Per Capita Income
		Production % share of World	Consumption % share of World		Production % share of World	Consumption % share of World	toe/capita	GNI/Capita
Africa	9.5	12.0	3.4	8.0	5.9	2.6	0.36	745.0
Middle East	61.9	31.0	7.1	40.1	27.2	9.1	2.75	2241.0
Asia Pacific	3.4	9.8	29.1	8.3	13.0	14.8	0.96	1627.0
South and Central America	8.6	9.0	5.8	3.9	4.7	4.5	1.13	4008.0
Europe and Eurasia	11.7	21.7	25.1	35.6	38.4	40.8	3.42	4113.0
North America	5.0	16.5	29.5	4.1	27.2	28.2	6.50	38170.0
OECD	6.7	23.8	59.2	8.3	39.1	51.8	n.a	35131.0
USA	2.4	8.0	24.6	3.0	19.0	23.0	7.97	43740.0
WORLD	1200.7*	81.1**	82.5*	179.8*	266.4*	266.0*	1.65	6987.0

Sources: Columns 1 to 6 from BP Statistical Review of World Energy, 2006

Columns 7 Primary energy consumption data is from BP (2006) and Population data is from Energy Information Administration, Department of Energy. USA.

Gross National Income per Capita in Column 8 is from World Bank's World Development Review 2006.

\* in million metric tons of oil equivalent.

\*\* in billion cubic meters.

n.a. not available.

### **3.2 China's Rising Profile in Africa's Oil and Gas Industry**

China's heightened demand for energy has driven the country's foray into Africa's emerging oil and gas industry. Available data show that China accounted for 40 per cent of total growth in global oil demand in the last four years. This development has led to concerted efforts in China to seek oil imports from such African countries as Nigeria, Angola, Sudan, Chad, Algeria, Equatorial Guinea, and the Republic of Congo. China's major companies have recently invested \$175 million in some African Countries, particularly on oil exploration projects and infrastructure. In 2006, CNOOC announced its intention to purchase 45 per cent stake in an offshore oil field in Nigeria for \$2.27 billion. China has also increased its presence in Sudan, accounting for 64 per cent of Sudan's oil exports. CNPC, a Chinese exploration and production firm, has invested more than \$8 billion in Sudan's oil sector, including investments in a 900 – mile pipeline to the Red sea (CI, 2006).

China's activities in Angola have risen phenomenally, with the country surpassing Saudi Arabia as China's largest source of crude oil imports in 2006. And by May 2006, China imported 750,000 barrels of crude oil per day from Angola, a 70 per cent increase from a year earlier, in a development that underscores the intensity of China's foray into Africa's oil and gas industry.

China's thirst for energy lies at the heart of Sino-African economic relationships. In 2005, the trade volume between Africa and China stood at \$20 billion or 50.6 per cent of total Africa-China trade for that year. This development has created a strategic imperative for the countries concerned. While African countries stand to gain from the emergent economic opportunities posed by this relationship, there are worries about potential conflicts with other regional interests, particularly the industrialized economies.

## **4.0 SUMMARY, RECOMMENDATIONS AND CONCLUSION**

### **4.1 Summary**

China's rapid economic growth placed at about 10 per cent per annum over the past quarter-century accounts for the nation's heightened demand for energy. Although China has considerable endowment in primary energy there is an emergent energy shortfall in the nation's economy over the past couple of decades. This trend has placed China as a net importer of crude oil since 1993. In 2003, China overtook Japan and has emerged as the second-largest importer of crude oil in the world, after the United States. China's enormous thirst for oil had driven its entry into the African oil and gas market, dominated by such oil producers as Nigeria, Algeria and Angola. The continent's emergent oil and gas industry promises to become a regional hub for the global oil and gas industry. This has prompted China to engage several African countries in lucrative oil and gas projects, providing an opportunity to foster energy security for its booming economy. The emergent Sino-African economic relationship is therefore driven by China's rising demand for oil (DFID, 2005). This development is accompanied by challenges and opportunities for China, as well as its African trading partners.

### **4.2 Recommendations**

This section presents recommendations that can ensure the sustainability of China's rising energy demand. It also proffers suggestions that may enhance the capacity of Africa's oil and gas industry to grow and become a reliable source of energy for the world's consuming nation's, including China. The recommendations are as follows

- ❖ **Embrace sustainable Energy:** The phenomenal rise in China's energy consumption, particularly in the past few decades calls for a radical shift in the nation's energy policy framework. There is need to diversify China's energy mix away from fossil

fuels in view of rising costs and diminishing reserves in some of the world's major oil producing regions. Also political instability in the Middle East, which holds a major proportion of global crude oil reserves, poses security concerns for the world's largest crude oil importers, including China. Therefore, China needs to adopt a comprehensive energy policy framework that embraces sustainable energy. Renewable sources of energy, including wind, solar, hydro power, bio fuels, as well as synthetic fuels are viable options open to Chinese policy makers. These options require considerable investments in research and development, which should receive priority attention from the nation's policy makers.

❖ **Harness Natural Gas Resources:** Although China's consumption of natural gas is rising in recent times, there is need to harness the resource in China and augment demand shortfall with imports through pipelines from Asian neighbours. Also, China should accelerate importation of liquefied natural gas (LNG), which has emerged as an alternative energy source in recent times. The markets for LNG have increased considerably in the last decade, fuelled by lower production costs and the emergence of purpose-built tankers that transport the product around the world. The attraction of natural gas lies in its cost effectiveness as well as its burning qualities, which make it the preferred energy of the future. Therefore, China should consider importing LNG from such African oil producers as Algeria, Nigeria and Angola that produce LNG for export markets.

❖ **Support Investments in Africa's Oil and Gas Industry:** Africa's oil and gas industry has witnessed a rise in its profile, particularly in the past decade. For example, the Gulf of Guinea in West Africa has been discovered to hold substantial oil and gas reserves, attracting global investors into the region. This development offers China's policy makers the investment opportunity to foster energy security for the

country's booming economy. Therefore, the Chinese government should accelerate its concerted efforts and enter into partnerships with oil producing African states to boost exports of oil and gas to China. This includes long-term exploration and production activities, as well as such special projects as LNG, Gas-to-Liquids (GTL), etc.

- ❖ **Adopt Market Liberalization:** In order to maximize benefits derivable from Africa's oil and gas industry, the sector needs a free market orientation, accompanied by transparency and accountability. Liberalization of the sector provides the best approach to economic prosperity and sustainability of Africa's oil and gas industry. The process requires minimal government control as well as provision of an enabling environment for both indigenous and foreign investors to provide capital for the development of the sector. Oil producing states in Africa should provide both financial and administrative incentives to investors, including tax breaks and the freedom to repatriate profits. The process will also provide China with the opportunity to become one of the important players in Africa's oil and gas industry.

### **4.3 Concluding Remarks**

The phenomenal rise in China's economic growth, particularly since the beginning of its economic reform agenda in 1978, has profound consequences for the global economy. The process has been reinforced by China's entry into the World Trade Organization in 2006, presenting its trading partners with both opportunities and challenges. A major consequence of China's economic growth is the nation's heightened demand for energy projected to surpass that of the United States as the world's largest importer of crude oil by 2020. China's thirst for energy is at the heart of its emergent relationship with oil-rich African countries. In recent times this relationship has witnessed massive investments by

China's oil companies in oil and gas activities across the African continent. This development has affirmed the potential of Africa's oil and gas Industry in becoming a hub of the global petroleum industry.

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