



REGULATORY AND COMPETITION RELATED REFORMS IN KENYA'S POWER AND PETROLEUM SECTORS

BACKGROUND

Kenya, like other developing economies, requires substantial supply of affordable energy in order to sustain high levels of economic growth and development. Self sufficiency and sustainability in energy supply guarantees competitiveness of domestic industries and therefore central to the attainment of the objectives of the Kenya vision 2030. This however requires an effective and credible regulatory environment which is transparent and accountable in order to attract adequate private investment in the sector.

In order to attract private sector investments in the energy sector, certain reforms have been implemented which have generally aimed at introducing competition in the commercial segments of electricity and petroleum sub-sectors. There were high expectations that the newly introduced regulatory mechanisms would provide more powerful incentives for regulated firms to reduce costs and improve service quality, stimulate introduction of new products and services and trigger competitive pricing and access to energy services.

However, while much progress has been made in market opening, there still exist persistent limitations in the generation and supply capacities as well as incentives for private investments into the sector. For instance, as at end of June 2008 the national electric power system had an installed capacity of 1,310 MW with a maximum output of 1,267 MW under normal operating conditions (KPLC Annual Report 2009). Total system peak demand during the period was 1,044 MW implying a

near zero reserve margin without the Emergency Power Producers (EPPs).

Vulnerability is further increased by over-reliance on hydro power which accounts for about 54.6% amidst shrinking water towers. On the other hand, the thermal and geothermal generations whose production costs are relatively uncompetitive accounts for 45.4%, while generation of wind power and other alternative energy sources remain rather minimal.

Table 1: Electricity Generation by Source

| SOURCE (GWH) | 2004 | 2005 | 2006 | 2007 | 2008* |
|--------------|--------------|--------------|--------------|--------------|--------------|
| Hydro | 3,169 | 3,039 | 3,025 | 3,592 | 3,272 |
| Thermal oil | 1,038 | 1,506 | 1,819 | 1,736 | 2,145 |
| Geothermal | 987 | 1,002 | 1,046 | 989 | 1,039 |
| Cogeneration | - | - | 5.6 | 8.3 | 4.0 |
| Wind | 0.4 | 0.3 | 0.3 | 0.1 | 0.2 |
| Imports | 161.9 | 27.9 | 10.8 | 22.5 | - |
| Total | 5,357 | 5,575 | 5,906 | 6,325 | 6,460 |

Source: Economic Survey, 2009

Private Investment in power generation has remained inadequate despite government efforts to open up generation of power and private investments. For instance, the Kenya Electricity Generation Company (KenGen) which is largely government-owned accounts for about 76.6% of effective production capacity, while EPPs and Independent Power Producers (IPPs) account for only about 11.5% and 11.3%, respectively.

In addition, electric power tariffs have remained high amidst continued market

domination of both liberalised and non-liberalised segments. On average, the unit cost of electricity has been increasing over the years i.e. from Ksh. 5.92 per Kwh in 2003 to Ksh 8.13 per Kwh in 2008. Likewise, the petroleum market portrays oligopolistic tendencies and oil marketing companies rarely pass on cost reductions to consumers when international oil prices are on a downward spiral. For instance, when the load port price of murban crude oil dropped from a record high of US\$ 137.35 per barrel in July 2008 to US\$ 42.10 per barrel (69.9% drop) in December 2008, the pump prices of super petrol dropped from Ksh. 110.00 per litre to Ksh. 78 per litre (29.1%) over the same period.

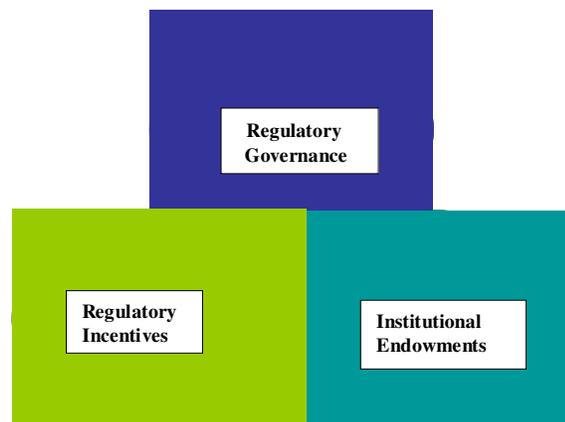
Consequently, the above have constrained access to energy products hence, impacting negatively on economic development. For instance, per capita consumption of electricity in Kenya currently stands at about 121 kilowatt-hours (KWH), which is one of the lowest in the worlds. Further, only 15% of the population has access to power compared to an average of 32% in developing countries.

Under the circumstances, the regulatory design and institutional framework in the sector is deemed to play a central role in so far as pricing of energy products, enforcement of laws and regulations and eventual attainment of tangible benefits are concerned. Assessing the regulatory framework within the energy sector under this study aimed at informing on-going reforms in the sector that will make it possible for greater private sector participation in provision of energy-related services eventually leading to greater efficiency, competitiveness and enhancement of consumer welfare. The assessment was based on the standard regulatory design focusing on three main aspects namely, a) the Regulatory Governance, 2) Regulatory incentives and 3) institutional endowments.

SCOPE OF REGULATORY AND COMPETITION-RELATED REFORMS

Structural and regulatory reforms in the energy sector began in earnest after mid-1990's following the enactment of the Electric Power Act, 1997 and later the Energy Act 2006. These legislations laid the foundation for the separation of generation from transmission and distribution in the electricity sector and the liberalisation of the procurement, distribution and pricing of petroleum products in the country. The Electric Power Act, No. 11 of 1997 provided for unbundling of the power sub-sector from a vertically integrated structure to a horizontal integration framework in which the Kenya Electricity Generating Company (KenGen) assumed the responsibility of power generation while the Kenya Power and Lighting Company (KPLC) took the responsibility for power transmission and distribution. The Act also established the Electricity Regulatory Board (ERB) to set,

Figure 1: Framework for regulatory Design



Source: Adapted from Levy & Spillar (1994)

review, adjust consumer tariffs and promote competition among other responsibilities. Reforms in the petroleum sub-sector included; liberalisation of petroleum pricing and marketing, liberalisation of oil transportation modes and the tariffs, abolition of National Oil Corporation of Kenya 30% crude oil quarter, abolition of the white oil rule, introduction of a duty to protect the Kenya Petroleum Refineries

Limited (KPLR) and partial liberalisation of supply.

The climax of reforms in the energy sector was the enactment of the Energy Act 2006 which consolidated all laws relating to energy and provided for the establishment of the Energy Regulatory Commission (ERC) as a single sector regulatory agency with responsibility for economic and technical regulation of electric power, renewable energy and petroleum sub-sectors. These reforms were preceded by the enactment of the Restrictive Trade Practices, Monopolies and Price Control (RTPMPC) Act of 1989 which aimed at promoting competition and reducing direct control of prices in the entire economy.

KEY STUDY FINDINGS

The study on regulatory and competition-related reforms in the electricity and petroleum sub-sectors in Kenya identified a number of issues that affect the performance of the electricity and petroleum sub-sectors among other findings. These include:-

(1) Capacity for Implementation of Competition-Related Regulations

There are capacity constraints in both the Monopolies and Prices Commission (MPC) and the Energy Regulatory Commission (ERC) thereby affecting enforcement, development and responsiveness of the regulatory system. For instance, the MPC has a staff compliment of 32 employees out of which 21 are economists while 11 are support staff. On the other hand, ERC has 36 professional and non-professional staff against an establishment of 56, implying a shortage of about 21 positions. Although the existing staffs are highly qualified, the expert knowledge is locked up in a few key personnel. According to the ERC Strategic Plan 2008-2013, staff shortages are apparently attributed to competition in professional staff recruitment from other existing public utilities, consultancy firms and other-related bodies who may be able to offer more attractive compensation packages and opportunities. In addition, MPC presently has no specialised energy sector experts while

ERC equally has no specialised competition-related experts. The technical capacities of the two regulatory institutions compares poorly with similar institutions elsewhere. For instance, Brazil's National Agency of Electrical Energy has no less than 325 employees, the Public Utilities Board of Singapore has 101 employees while the United Kingdom's OFGEM has 252 employees.

(2) Regulatory Independence and Enforcement

The RTPMPC Act refers to four enforcement institutions namely the Office of the Minister of Finance, the Office of the Commission for Monopolies and Prices, the Restrictive Trade Practices Tribunal and the High Court of Kenya. Currently, the independence or autonomy of the MPC is not assured as it falls under the authority of the central government. The actual appointment of the Commissioner is not provided for under the Act hence assumed to be done within the general civil service conditions like the other staff. The proposed Competition Bill, 2009, seeks to establish an Authority which shall be independent and shall perform its functions and exercise its powers independently and impartially without fear or favor. Under sections 12 of the bill, the Authority shall be headed by a Director General to be appointed by the Authority from persons having knowledge and experience in competition matters. Thus, the bill falls short of stipulating specific qualifications and experience e.g. economics, law, law, industry etc as well as specific time-frames for appointment to the position of the Director General. In addition, neither the current nor proposed laws contain explicit provisions for execution and enforcement of orders by the Competition Commission/Authority. For instance, section 64 of the Competition Act 2001 of South Africa stipulates that any decision, judgment or order of the Competition Commission or Competition Tribunal may be served, executed and enforced as if it were an order of the High Court.

Likewise, Section 4(3) of the Energy Act 2006 stipulates that the ERC shall be independent in

the performance of its functions and duties and exercise of its powers and shall not be subject to the direction or control of any person or authority. However, section 3 of the State Corporations Act makes provision for the control and regulation of state corporations and in this case under the general guidance of the Minister for Energy, thereby undermining the independence of the ERC in decision making. Thus, the extent of ministerial involvement in decision making and appointment of commissioners grossly undermine the independence of the energy sector regulator.

(3) Financing of Regulatory Institutions

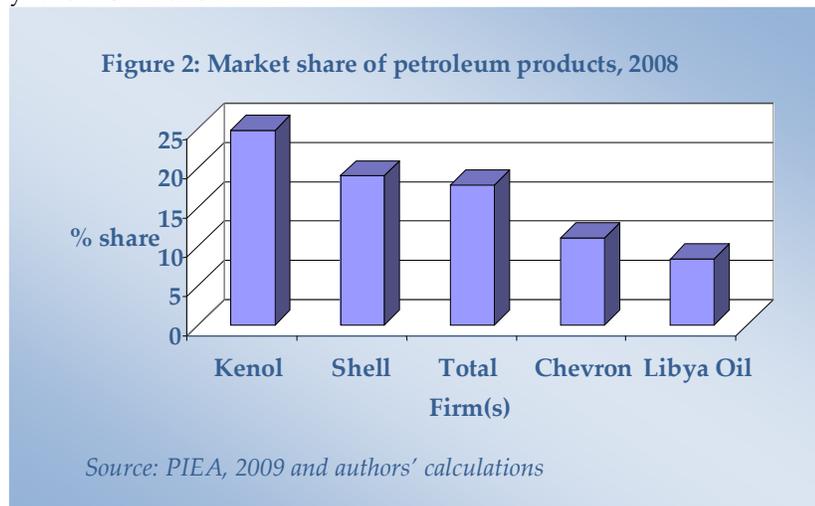
The MPC fully relies on the exchequer to finance its activities unlike other autonomous Competition Authorities in the region. It has no powers to raise alternative funds e.g. through borrowing or charging fees for the services it renders. Section 78 of the Competition Bill 2009 however expands the financial sources of the proposed Authority. On the contrary, ERC has a strong degree of fiscal independence to the extent that there currently are no financial transfers to the Commission from government. Thus, about 99% of incomes are collected from electricity (52.7%) and petroleum (46.3%) levies while the remaining are generated from interests and penalties in line with recommended best practices.

(4) Market Structure and Performance

The hydro power accounts for about 54.6% while thermal and geothermal accounted for 45.4% of power. In addition, Independent Power Producers (IPPs) and Emergency Power Producers (EPPs) direct their investments towards thermal and geothermal power sources, unlike KenGen, which has invested in all the three sources of power i.e. hydro, thermal & geothermal and wind. The distribution of power produced by KenGen comprises 72.4% hydro, 27.5%

thermal/geothermal with minimal wind power. On the other hand, the IPPs and EPPs are engaged in 100% thermal power generation. By and large, there are huge potentials for exploiting wind power generation by both KenGen and the private power producers.

On the other hand, the petroleum market in Kenya is largely oligopolistic despite the incorporation of numerous small independent oil companies. Prior to liberalisation, multinational firms accounted for over 90% of all petroleum products imported into the country and virtually all retail businesses. By the year 2005, activities by independent petroleum dealers were still limited to the extent that four of the major petroleum market players (Total, Shell BP, Caltex, Mobil & Kenol/Kobil) controlled about 85.3% of the market (GoK, 2006). During 2008, the market Concentration Ratio was 76.7% controlled by Kenol (24.8%), Shell (20.9%), Total (19.5%) and Chevron (11.1%). In addition, the Herfindahl-Hirschman Index was estimated at 1649.16.



(5). Weak Provisions for Sanctions, Fines and Penalties

There are feelings that existing sanctions are rather soft and do not deter offenders or would-be offenders for engaging in anti-competitive practices. For instance, the fines contained in section 21(2) and (3) are in the range of U\$ 1,500 and U\$ 3,000. The policy objective is to impose penalties on infringing undertakings which reflect the seriousness of infringement and

ensure that the threat of penalties will deter undertakings from engaging in anti-competitive practices.

(6). Uncoordinated enforcement of competition-related regulations

Both the Energy Act 2006 and the Monopolies and Price Control Act, Cap 504 empower the ERC and MPC to implement and promote competition within the electricity. While the latter has the overall responsibility for all sectors, the ERC mandate is specific to the energy sector. However, there is no clear demarcation of responsibilities or modalities for coordination of their activities in both the energy Act of 2006 and the current competition Act of 1989. Similarly, Article 3 of the Competition Bill, 2009 does not clearly spell out binding mechanisms for relating with other regulatory bodies beyond the identification and establishment of procedures for management of areas of concurrent jurisdictions. Although price controls were not repealed by the Parliament, the MPC did not invoke Part IV of the law. In this way, the Commission's activities and ability to protect consumers against monopoly abuses, anti-competitive practices such as cartelisation, etc are rather weak. However, Articles 50-55 of Part VI of the proposed Competition Bill, 2009 provides for protection of consumers from unfair and misleading market conduct. This notwithstanding, the Ministry of Trade also has the mandate to execute fair trade practices and consumer protection. Lack of clear guidelines regarding the coordination of these activities between the Commission/proposed Authority and Ministry of Finance on one hand and the Ministry of Trade on the other hand shall remain a challenge and will lead to duplication of efforts.

(7). Transparency, Advocacy and Awareness Creation

Awareness of competition related regulation is central to enhancing competition in any industry. The MPC has in the recent past been actively involved the members of public in decisions particularly in respect to the formulation of wholesale and retail prices. This is in tandem with the requirement of section 110 (3) of the Act which requires the

Commission to publish the proposed regulations for purposes of inviting proposals from the public before submitting such recommendations to the Minister. However, the survey results indicated that most of the respondents were of the opinion that ERC is not transparent enough in terms of making information, documents and procedures for decision making open to the public.

(8). Infrastructure development

Effective regulation requires appropriate infrastructure physical and telecommunication networks for both regulators and the regulated firms in order to facilitate information exchange and monitoring. While ERC may have good communication infrastructure, the quality of physical infrastructures to facilitate its monitoring activities especially in rural areas is wanting.

(9). Transmission network governance and pricing structures

The separation of transmission from distribution in Kenya is a welcome move and should facilitate balancing demand and supply of generation services. However, the clarity on the functions of the operator, what information it needs to perform its functions well, network operator ownership structure and how it should be regulated are major challenges. The other challenge is getting transmission pricing right in order to facilitate decentralisation of competitive generation supply decisions and management of network.

(10). Enforcement of standards and quality

The regulation of health and environmental standards in the petroleum sub-sector is shared among various statutory bodies including the Kenya Bureau of Standards, the Ministries of Health and the National Management Environmental Authority. The challenge is for these bodies to effectively monitor quality aspects yet ERC itself also does not have petroleum technical expertise to monitor industry players. Thus, adulterations, quantity measurements and related activities remain a challenge in the domestic industry.

(11). External factors

The performance of the domestic petroleum industry heavily relies on global economic phenomena and trends in international oil markets. These include the international oil prices, security-related issues and other economic performance indicators. The strong links with external factors with multinationals playing leading roles in exportation, distribution and supply makes it even more difficult to effectively regulate the sector. The cartel like behaviour of the multinational firms in the petroleum sector affects supply and retail prices.

CONCLUSION AND POLICY RECOMMENDATIONS

The findings of the study support the notion that there is need to strengthen the regulatory system in the energy sector in order to enhance private investments and improve competition and service delivery to consumers. Strengthening the competition and regulatory-based framework will support the intentions of the on-going energy sector reforms and ensure that the domestic market for energy contributes sustainability, competitiveness and security of supply of energy products to meet the country's increasing demand. In addition, priority should be given to monitoring & evaluation as well as accurate collection of data on the activities and capability of all services providers in regulated sectors as a basis for designing regulatory and liberalisation policies.

This study provides useful insights into possible mechanisms of promoting synergy and cooperation between the Competition Commission and Sector-Specific regulators with a view fostering efficiency and competitiveness in delivery of services. The following are the specific policy recommendations:-

1. Adoption of a regulatory model which combines technical and economic regulation model.

Such a model gives sector regulators competition law enforcement functions to be performed in coordination with the competition

authority. In addition, it would allow for maximization of competition enforcement actions and conclusion of binding agreements between the Competition Authority and the Energy Regulatory Commission as well as other sector-specific regulators for co-ordination and harmonization of competition matters.

2. Effective coordination of implementation of competition-related regulations

Effective implementation of competition-related regulations in the electricity and petroleum sub-sectors requires close coordination of enforcement of infringements related to pricing, fair trade practices and consumer protection by various agencies. Thus, the new competition act should provide clarity about the roles of the Ministries of Finance, Energy and Trade and other Government Agencies and regulatory bodies on the co-ordination, harmonization and the exercise of jurisdiction over competition matters within the energy sector or industry and to ensure the consistent application of the principles of competition and consumer protection.

3. Ensuring administrative and financial regulatory independence

Under ideal situations, regulatory agencies should be free from any forms of influence either within government cycles or the private sector in exercising its authority. These includes among others, interferences in appointments especially in management positions, dispute settlement and/or major regulatory decisions. It is also necessary that the regulatory agency should have authority to make final decisions within its statutory domain without having to obtain approval from any other agency of government. Regulatory independence facilitates prudent decision-making, enhances integrity and bestows confidence on regulatory management and decisions by regulated firms, potential investors and consumers at large. Autonomy of regulatory institutions led to sustainability and success of regulatory models such as in Latin America electricity reform movements as well those in the Asian utility industries. The latter's success was evident in their relative ability to respond effectively to

the Asian financial crisis. In addition, the Monopolies and Price Commission should diversify its revenue base and minimize or cease reliance on direct budgetary support from the Government.

In addition, effective regulation requires adequate technical staff in the regulatory bodies. This is necessary to attend to implementation of the laws as well as other requirements negotiating, writing, monitoring and enforcing the contracts. Recruitment and retention of specialised staff is necessary for a regulator to operate effectively.

4. Widening the scope for competitive power generation market

Currently, power generation in Kenya is dominated by KenGen, which is a public utility operator, with IPPS at the margin, often generating emergency supplies. There is need to deepen horizontal divestiture of generating facilities as a way of creating additional independent competitive suppliers in order to stimulate competitive price incentives under the existing regulatory framework. Enhanced competition will also address the 'perception' that IPPs are basically high cost producers of electric power.

5. Effective governance of transmission network and pricing structures

Following the establishment of a publicly-owned transmission company, appropriate governance and pricing structures should be established, particularly if the incumbent intends to retain ownership of existing transmission infrastructure. This is particularly due to the complex nature involved in controlling and coordinating generation schedules, balancing demand and supply

generation services flowing over the network as well as coordinating with neighbouring control areas. In addition, it is important to get the right transmission pricing to facilitate efficient decentralisation of competitive generation supply decisions over time.

6. Strengthening monitoring and data reporting

Accurate information about the activities and capabilities of both incumbent suppliers and new operators is of great value and will facilitate the design of regulatory and liberalisation policies. It will also enable identifying the services on which the incumbent can be afforded substantial flexibility in terms of pricing. Information about installed capacities of competitors is also crucial to assessment of the current and likely future intensity of market competition. There is therefore need to establish or formulate appropriate data reporting requirements to ensure timely and accurate availability of data i.e. what data must be reported, which entities, how often etc and this should not be frequently changed.

7. Enhancing transparency and awareness amongst stakeholders

There is need to enhance awareness about the competition-related issues and reporting and enforcement mechanisms amongst the general public. A wider knowledge amongst the public would make it easier for regulators to detect and take appropriate actions against anti-competitive trade practices thereby protect consumers and enhance efficiency in markets. Specific awareness programmes should be developed in tandem with the provisions of the proposed new competition laws.

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