STRATEGIC MANAGEMENT OF ENERGY INFRASTRUCTURE DEVELOPMENT IN ALBANIA

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Abstract
In this paper the focus will be on the Albanian government efforts on developing energy infrastructure, focused on electricity. One of the primary factors that need to be considered in strategic management related to energy infrastructure is the policy.

In reality, the government has to consider many factors when making policy decisions, especially those related to public infrastructure investment, such as: the establishment of a modern, efficient electricity sector that operates according to sound economic, commercial, and market principles, creating conditions that will attract private investment to fund necessary rehabilitation, expansion, and improvements to electricity facilities and the participation of strategic investors in the operation of the energy sector, and the development of the Albanian electricity market in a manner that is consistent with the European Union’s requirements for liberalizing the electricity sector (Directive 96/92/EC) and Albania’s commitments under the Thessaloniki Agreement regarding the development of a regional electricity market.

A strong need to build energy infrastructure can put pressure on policymakers to invest in infrastructure; hence to determine the need for new infrastructure or its rehabilitation, it is important to examine the condition of existing energy infrastructure, part of which is the electricity sector.

Key terms: Energy Infrastructure, development, policy, Albania

Introduction
Infrastructure is a key factor in driving a country’s growth and development. As public goods, availability of quality infrastructural facilities assists in mobilizing private investments by reducing the magnitude of required investments. Infrastructure development can also help in narrowing development gaps between different countries in the region. Infrastructure, especially transport and connectivity, is crucial for regional cooperation and integration. In the absence of efficient physical connectivity, any initiatives taken towards regional trade liberalization will remain ineffective.

The adequacy of infrastructure helps determine one country’s success and another’s failure – in diversifying production, expanding trade, coping with population growth, reducing poverty, or improving environmental conditions. Good infrastructure raises productivity and lower production costs, but it has to expand fast enough to accommodate growth. The precise linkages between infrastructure and development are still open to debate. However, infrastructure capacity grows step by step with economic output – a 1% increase in the stock of infrastructure is associated with a 1% increase in gross domestic product (GDP) across all countries (World Bank Report, 1994). And as countries develop, infrastructure must adapt to support changing patterns of demand, as the shares of power, roads, and telecommunications in the total stock of infrastructure increase relative to those of such basic services as water and irrigation.

In reality, the government has to consider many factors when making fiscal policy decisions, especially those related to public infrastructure investment. First, with a limited budget, it should use the money efficiently, keeping in mind the macroeconomic objectives of economic growth. Secondly, budget allocation, is jointly determined with the Parliament during budget formulation, and is, therefore, influenced by political agenda. A strong need to build infrastructure can put pressure on policymakers to invest in infrastructure; hence to determine the need for new infrastructure or its rehabilitation, it is important to examine the condition of existing infrastructure.

This paper therefore provides a brief description of the current condition of energy infrastructure in Albania, focused especially on electricity, followed by a definition of the problem and a description of the policies that the government has adopted. It concludes with identifying the major remaining issues and problems in energy infrastructure development in Albania.
Current situation of energy infrastructure development in Albania

Energy has always been critical for economic growth and social development. As economies develop, energy consumption grows more or less in parallel. An adequate and affordable energy supply is needed to meet the demands of industry, commerce and domestic users and to enable the movement of people and goods.

Energy is also closely linked to poverty reduction because it is central to practically all aspects of the core conditions of poverty – such as poor health, lack of access to water, sanitation, and education. Enhancing access to energy services to enable economic growth in a sustainable manner is a major challenge that countries must address. However, energy development also has a significant impact on the environment, locally and globally. The commercial energy sector is one of the main sources of greenhouse gas emissions, contributing to global warming. Traditional energy sources, such as biomass, used by people who lack access to modern energy supplies, can have an impact on local air quality due to the generally inefficient combustion process and frequency of exposure.

The energy in general and its security and sustainability of supply in particular are becoming more and more sensitive issue in national, regional and European level and big challenges to overcome. In this context Albania is facing difficulty to supply its consumers with electricity. Lack of primary energy resources, no network and gas resources, limited production and interconnection capacities and full dependence of its power production on hydro resources, are some of these difficulties. The demand of electricity is much higher than domestic generation, which means that Albania is one of net importer countries in the region. In case of Albania, is not only a question of costs to be faced, but much more it is a question of import capacities to be solved, in local and regional level.

The main characteristics of the energy systems including the renewable one in Albania could be summarized as follows;
• Almost 97% of the electricity produced in the country is generated by hydropower plants (large and small scale plants).
• As a recourse for the households especially in the rural areas and partly in the urban areas for ambient heating and for domestic hot water, mainly it is used the fuel wood.
• The use of solar energy is a new tendency which is developing very slowly in the last years, mostly by private people who construct new houses. Anyway the share of use of solar energy collectors mainly for water heating in the national energy balance is very small.
• Lack of policies and or production of energy from the agriculture sector,
• Lack of using the wind energy.

Analysing energy production and consumption in Albania and the region

As seen in Figure 1 energy production in Albania is in lower levels after 90s, then having almost the same trend in energy capacity production, while as seen in Figure 2 is noticed a sustainable growth in the level of energy consumption, in the last years in Albania, which is not correspondent to the production trend. Also, if we compare the level of energy consumption in Albania and in the region, it’s important to emphasize that Albania is ranked in the last place.

![Figure 1: Energy production in Albania (MW)](http://data.worldbank.org/indicator/EG.EGY.PROD.KT.OE/countries)

Problems of Energy Infrastructure development in Albania

The previous section shows that Albania faces energy infrastructure deficiencies. This paper identifies the problem of energy infrastructure development from three perspectives:

- Financial resources in regard to investment in infrastructure
- Regulations and institutional framework in regards to policy making
- Rules of investment and the decentralization issue in regard to changing responsibility of infrastructure development.

Financial resources in regard to investment in energy infrastructure

The level of energy infrastructure is influenced by how much the government invests in it. The deficiencies in Albanian energy infrastructure can be partly traced to the lower level of public expenditure on infrastructure and fiscal policy of Albania.

Regulations and institutional framework in regards to policy making

Despite the problem of the budget being negatively affected by the economic crisis, this paper argues that the problem does not arise merely from inadequate financial resources. While the government has recognized the need for infrastructure investment, at the same time it has fiscal constraints; therefore, one choice might be to seek private participation in infrastructure.

Table 1 has already established that the growth of investments in all infrastructure sectors with private participation is quite slow in telecommunication and energy sectors or quite inexisten in water and transport sectors. In this respect, the government faces the challenge of stimulating more private investment in infrastructure.

<table>
<thead>
<tr>
<th>Sector</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Telecommunication</td>
<td>102,00</td>
<td>63,00</td>
<td>118,00</td>
<td>95,00</td>
<td>186,00</td>
<td>5,000</td>
<td>31,00</td>
<td>236,00</td>
<td>64,00</td>
<td>339,00</td>
</tr>
<tr>
<td>Energy</td>
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<td>0</td>
<td>8,00</td>
<td>16,00</td>
<td>0</td>
<td>781,00</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>664,00</td>
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<tr>
<td>Transport</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>308,00</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Water and sanitation</td>
<td>0</td>
<td>0</td>
<td>8,00</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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</tr>
</tbody>
</table>

To attract private participation in investment in energy infrastructure, certain conditions have to be met, for which reforms are needed – reforms that would make infrastructure services more competitive and provide strong and independent economic regulation of natural monopolies. It is believed that bringing more private sector participation into the economy could improve the situation by creating competition. However, in the case of infrastructure industries, simply moving a monopoly from the public to the private sphere will not result in competitive behavior. A key requirement for the success of privatization then becomes the effectiveness of the regulatory regime in promoting competition or in controlling the anti-competitive behavior of dominant firms (Kirkpatrick, 2009).

Decentralization of responsibilities
Following the decentralization policy, there has also been a decentralization of responsibilities in energy infrastructure development. The central government has to share its authority and responsibilities for energy infrastructure development with local governments. This has become a new challenge that the government faces in infrastructure policy making. In a new era of decentralization, local governments play a greater role than before in regional infrastructure development and policy. However, the new system also creates new problems.

Conclusions and recommendations
The policies and efforts have been made by the government to tackle the problems in energy infrastructure development. Despite some achievements, there are a few lacunae. First, even though the need of building more infrastructure has been realized, the decision and finally construction of energy infrastructure is not easy. Even though, institutional coordination among government agencies has been arranged and regulatory reform launched, speeding up energy infrastructure decision has not automatically resulted. In this respect the paper argues that the decision making process with regards to energy infrastructure is getting more complex in the new environment with multi-actor involvement and balanced power, such as the case of KESH privatization.

Second, there is an imbalance in infrastructure growth among different regions in Albania. To this extent, the government has to pay more attention to developing infrastructure from the view of regional basis. Further, there is an important issue in relation to regional development policy and infrastructure policy. Special attention should be directed towards an interplay of spatial and infrastructure development policy.

Bibliography