Stockholm Energy Forum

PROMOTE INVESTMENTS TO MEET ENERGY NEEDS IN NIGER

Stockholm February 8, 2016

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Ⅰ. General Information

Location: South of Sahara, Western Africa.

Neighbours: Algeria, Libya, Chad, Nigeria, Benin, Burkina Faso and Mali.

Territory: 1.267.000 km²

Population: around 17 millions (2012 census)

II. NIGER AND THE ENERGY CHARTER

- Niger signed the Energy Charter (1991) in April 2015,
Consumption characterized by a prevalence of up to 80% biomass (Used for cooking food by households).

- petroleum products: 17%
- Electricity: 3%
- Renewable energies: < 1%
- Carbonized mineral coal (used for cooking purposes): < 1%
IV. FINAL ENERGY CONSUMPTION BY USE

- Final energy consumption: 2.57 million toe (2012)
- Consumption per capita: 0.15 toe/pers/year
  + Households: 83%
  + Transport: 13%
  + Industries: 4%
  + Trade and Services: <1%
  + Agriculture: > 1%
V. HYDROCARBON SUPPLY

- Until 2011, Niger was an importer of petroleum products,
- 28 November 2011, began the exploitation of Agadem oil fields and inauguration of the refinery in Zinder with a capacity of 20,000 barrels,
- Niger produces 20,000 barrels of crude oil per day and derivative products such as gasoline, diesel and LPG,
- National Consumption 7,000 barrels per day,
- Exports: 13,000 barrels per day.
- Operator: CNPC - Chinese
- Contract: Production Sharing Contract (PSC) - 25 years
VI. ELECTRICITY SUPPLY

Total installed capacity: 192 MW

- Niger Electricity company (NIGELEC): 126 MW consisting of diesel groups capacity between 100 kVA et 12 MW (available power < 50 %).
- Independent producer Aggreko (France): 30 MW consisting of diesels.
- Niger Coal Electricity Company (SONICCHAR) 2 x18 MW coal power plant. Provides power to the north localities and Uranium mining companies (80% availability).
- Over 70% of electricity is imported from Nigeria from four (4) interconnection lines:

<table>
<thead>
<tr>
<th>Name of interconnection line</th>
<th>Voltage (kV)</th>
<th>Capacity (MW)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birni N’Kebbi-Niamey</td>
<td>132</td>
<td>120</td>
</tr>
<tr>
<td>Katsina-Gazaoua</td>
<td>132</td>
<td>60</td>
</tr>
<tr>
<td>Damasak-Diffa</td>
<td>33</td>
<td>5</td>
</tr>
<tr>
<td>Kamba-Gaya</td>
<td>33</td>
<td>5</td>
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</tbody>
</table>

Total capacity of the five lines: 190 MW (availability 102 MW, line Birni N’Kebbi - Niamey provides only 52 MW).

National household rate access to electricity in 2014, 9.32% (50% in urban areas and less than 1% in rural areas)
Niger has a significant energy potential it wants to value to develop its energy sector and to boost its economy because energy plays a leading role in economic and social development.

**Uranium**: 450,000 tons (proved reserves)

**Mineral Coal**: 90 millions tons

**Crude Oil**: 1,18 billion barrels. Lightweight, density > 30°API

**Natural Gas**: 18,6 billions m³

**Hydroelectricity**: 286 MW

**Solar Power**: 6 to 7 kWh/m² per day
To develop energy resources, it is necessary to make big investments where the need to be open to foreign investors who have capital.

The arrival of investors in a country is subject not only to the creation of a favorable and attractive national legal framework but also a political commitment that ensures effective protection of investments that will be realized.

The Energy Charter Treaty represents the best international instrument which ensures investment protection.

The Energy Charter is also an excellent framework for cooperation in the field of energy which will enable Niger to strengthen cooperation with other countries which have expertise in the field.
Niger is a member country of the Economic Community West African Countries (ECOWAS) composed of fifteen (15) countries.

The ECOWAS Protocol on Energy is based on the principles of the Energy Charter Treaty.

Niger has ratified the ECOWAS Protocol on Energy since 2005. And in accordance with the convergence criteria, the Community texts are guidelines that each member country must adapt in its national policy documents.
Article 2 of the ECOWAS Protocol

“The Protocol establishes a legal framework to promote long-term cooperation in the energy field, based on complementarities and mutual benefits, and to increase investment in the energy sector and develop the energy trade in the West African region.”
X. INSTRUMENTS FOR INVESTMENT PROMOTING

- **Investment Code and other sectoral laws**: Ensure the investment protection, freedom of exercise and transfer of capital and profits for investors.

- **Adoption of a Public Private Partnership Policy (PPP) and Creating of a Support Unit** which is attached to the Office of the Prime Minister.

- **Creating of a High Commission for Investment in Niger** which is attached to the Office of the President of the Republic.

- **Oil Code**: Provides the option of two types of contract for the exploitation of oil resources in Niger (Concession Agreement or production-sharing contract-PSC).

- **Electricity Code**: Consecrate liberalization of the electrical energy generation segment to develop independent production. It is currently under review to make the framework more attractive and transparent.
X. INSTRUMENTS FOR INVESTMENT PROMOTING (Continue)

- **Code of OHADA** (Organization for Harmonization of Business Rights in Africa),

- **Creation of a regulatory organ for energy sector**: The law of creation is adopted in December 2015. The organ will be established sooner.


XI. INVESTMENT OPPORTUNITIES

- **Investment climate:**
  - Adoption of PPP (Public Private Partnership) promotion Policy;
  - Very incentive legal and fiscal frameworks;
  - Free transfer of investors capital and profits;
  - Creating of a regulatory energy sector organ.

- **Oil field:**
  - Significant energy potential to be exploited;
  - The oil cadastre consisted of 42 blocks (status July 2015) of which 22 blocks are still free.
  - Development of a butane gas (LPG) market for domestic use;
  - The proposed construction of a pipeline through Chad and Cameroon to export crude oil.
Electricité :

- Law of Electricity Code under revision,
- Ongoing Development of a Master Plan for Production and Transportation of electric power with the support of the World Bank;
- Strong energy demand in the extractive industries (oil, mining uranium, gold, iron, cement, ...);
- Electricity network interconnected to other countries in the sub region, where opportunities to export energy (to Nigeria for example);
- Construction project of a 600 MW coal power plant;
- Construction project of a coal thermal power plant of 2 x 25 MW by Company SONICCHAR. Project open to investors;
- Construction project of three hydroelectric power plants on the River Niger: 130 MW in Kandadji, 122 MW in Gambou and 90 MW in Namari Goungou. Projects open to investors;
- Construction project of an interconnection High Voltage transmission line 330 kV within the framework of the West African Power Pool project (WAPP).
- Development of a nuclear power program to use uranium for the production of electricity within the framework of ECOWAS. An organ called the “Niger High Authority Atomic Energy (HANE)” was created and set up for the implementation of the program.
Thank you for your attention