Country Presentation:
Supporting Schemes - A detailed look on systems in place

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General strategy of the supporting scheme

The regulatory framework applied is governed by the following texts:

- Law n° 2011/022 of December 24, 2011 governing the electricity sector in Cameroon (cf. articles 63 to 67);
- Law n° 2013/004 of April 18, 2013 fixing the incitations to private investment in Cameroon;
- 2012 finance law for solar photovoltaic and wind power (cf. article 128.17);
- Order n°00000193/AJMINEE of April 28, 2014 fixing the composition of the concession, license, authorization and declaration application files, as well as the related fees (cf. article 13);
General strategy of the supporting scheme

The institutional framework for the promotion of RE is organized around the following key actors:

- The Rural Electrification Agency;
- The Department of Renewable Energy and Energy Efficiency at the Ministry of Water and Energy;
- The Electricity Sector Regulatory Agency;
- The Decentralized local authorities;
- ENEO – Distributor Operator;
General strategy of the supporting scheme

The production of electricity from renewable sources benefits from incentives through:

- tax and customs benefits for products, goods, and services intended for the exploitation of renewable energies;
- the obligation of any public electricity service operator to connect to the network any producer, primarily or in excess of electricity from renewable sources;
- the setting of the volume and feed-in tariff;
- licensed operators benefit from a right of way over the public road domain and a right of way over parts of collective buildings and subdivisions assigned to common use, as well as over the sil and basement of unbuilt properties.
General strategy: Technological focus or prioritization

- Solar and small hydropower are prioritized technologies according to the target fixed by the President of the Republic at Paris COP21 for RES up to 25% of total generation at 2035.

<table>
<thead>
<tr>
<th>Indications</th>
<th>MW</th>
<th>Ratio (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL GENERATION</td>
<td>6 000</td>
<td>100 %</td>
</tr>
<tr>
<td>RENEWABLE ENERGY RESSOURCES</td>
<td>1 500</td>
<td>25 %</td>
</tr>
<tr>
<td>SMALL HYDRO PLANT (Less than 5 MW)</td>
<td>660</td>
<td>11 %</td>
</tr>
<tr>
<td>BIOMASS</td>
<td>420</td>
<td>7 %</td>
</tr>
<tr>
<td>SOLAR PV</td>
<td>360</td>
<td>6 %</td>
</tr>
<tr>
<td>WIND</td>
<td>60</td>
<td>1 %</td>
</tr>
</tbody>
</table>
General strategy : Key figures about

- Cameroun has considerable resources in hydropower, significant in renewable energies and modest in hydrocarbons :

- Second hydroelectric potential in Afrique Sub-saharian Africa with 19,7 GW of equipable technical potential for a production de 115 TWH/year, currently valued at less than 5%.

- Average solar isolation of 4.9 kWh/m²/d dont 5.8 kWh/m²/d in the northern part and 4 kWh/m²/d in the south, its use remains low.

- According to the latest studies, Cameroon's wind power potential is significant and economically exploitable in the West and Adamaoua Regions.
### General strategy: Key figures about...

<table>
<thead>
<tr>
<th>Indications</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MW</td>
<td>Ratio (%)</td>
<td>MW</td>
</tr>
<tr>
<td>HYDRO</td>
<td>985</td>
<td>64,02%</td>
<td>985</td>
</tr>
<tr>
<td>THEMAL</td>
<td>507</td>
<td>32,95%</td>
<td>507</td>
</tr>
<tr>
<td>SOLAR</td>
<td>29,65</td>
<td>1,93%</td>
<td>34,65</td>
</tr>
<tr>
<td>BIOMASS</td>
<td>14</td>
<td>0,91%</td>
<td>14</td>
</tr>
<tr>
<td>SHP</td>
<td>2,90</td>
<td>0,19%</td>
<td>4,80</td>
</tr>
<tr>
<td>WIND</td>
<td></td>
<td></td>
<td>40</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1538,55</td>
<td>100%</td>
<td>1545,45</td>
</tr>
<tr>
<td>RES</td>
<td>46,55</td>
<td>3,03%</td>
<td>53,45</td>
</tr>
</tbody>
</table>
Supporting system: Investment grants, feed-in-tariffs, etc.

- Investment grants doned by tax and customs benefits for products goods and services intended for the exploitation of renewable energies;
  - 2012 finance law for solar photovoltaic and wind power (cf. article 128. 17);
  - Law n° 2013/004 of april 18, 2013 fixing the incitations to private investment in Cameroon;
- Setting the volume and feed-in tariff;
  - Law n° 2011/022 of december 24, 2011 governing the electricity sector in Cameroon
The supporting system weaknesses is mainly caused by the delay in the implementation of the mechanisms for the promotion of renewable energies, especially:

- the administrative burden in the decision for the attribution of site and fiscal and customs dispense;
- the réticence of the of-taker for the negociation of PPA with promoters of RE;
- the issue of commercial risk guarantee in case of the default of payment by the off-taker;
- low awareness of technical and financial partners on the opportunities linked to the RE.
Supporting system: Strengths

- The strengths are:
  - the will for the Government to develop at least 03 solar projects in the Northern regions to supply the deficit of hydrology in the Benue Bassin;
  - the conclusion of negotiation of the of-taker for the negotiation of PPA with 03 promoters of RE;
  - the putting in place by the Regulator a platform of collaboration between the different stakeholders in order to reduce the time of instruction on licence applications.
Supporting system: Positive/negative impacts/results

- As consequence of the delay of development of RE in the northern grid, the utilization of thermal power plants as baseload in order to supply the deficit of hydrology in the Benue Bassin. Having consequences: increased charges in the sector (1 billion per week for fuel costs, impacts on GHG, deep shedding in the RIN).
Future aspects: Supporting scheme in the future

- Finalization of the regulatory framework by signing the texts for the application of the law;
- Establishment of a fund for the development of renewable energies, in particular for the guarantees required in projects;
- Capacities building of the stakeholder;
- Development of clear procedures.
Future aspects: Changes compared to existing system

➢ The feed-in tariff principle abandoned in profit of competition/auctions or MOU.

➢ One project (Maroua/Guider Solar selected through the procedure of tenders organized in 2018 (25 MW with a proposed tariff of 36 FCFA/kWh) also MBAKAOOUO carrier project (1.3 MW) after a public notice.

➢ Many projects through the MOU:
  ➢ JCM Mbalmayo (60 MW),
  ➢ GDS Orion Ngaoundere (40 MW),
  ➢ EB Solar Garoua Airport (30 MW),
  ➢ Solar Lagdo (20 MW).
Future aspects: Expectations

- RES lends itself to a modularity of financing actors:
  - Development of large capacities by the State in collaboration with development partners;
  - Realization of SHP by municipalities and local partners;
  - Development of small scale capacities (+ ou – run-of the-river facilities) by local operators with the support of local banks and microfinances.

- Innovative financing formulas must be found to allow the increase in RES intended for both the national and local market.

- The duo « Regulation & reform » is essential to optimize the viability of RES.
  - Statutory monitoring mission relating to the viability and proper functioning of the electricity sector.
Thank you for your attention