RES in Kosovo: what & how?

Institute for Development Policy
The energy sector continues to face problems, with no progress having been made on decommissioning the Kosovo A power plant or refurbishing Kosovo B, and very little progress made on renewable energy.
In 2014, according to the energy balance published by EUROSTAT, Kosovo achieved a 19.8% share of energy from renewable sources, which is below the second indicative trajectory of 20.7%.
NREAP 2011 – 2020 (pt.2)

NREAP sectorial targets

- 25.64 % of RES in gross final consumption of electricity
- 10 % of RES in final consumption of energy in transport
- 45.65 % of RES in gross final consumption for heating and cooling
Current primary energy sources

Figure 15: Primary energy sources available 2013

Figure 17: The ratio between the total electricity production and renewable energy 2000-2013
### Kosovo’s 2020 target to reach 25% RES generation

<table>
<thead>
<tr>
<th>Renewable energy type</th>
<th>Installed capacity (MW)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wind</td>
<td>150</td>
</tr>
<tr>
<td>Photovoltaic</td>
<td>10</td>
</tr>
<tr>
<td>Small hydroelectric plants</td>
<td>240</td>
</tr>
<tr>
<td>Biomass/gas</td>
<td>14</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>414</strong></td>
</tr>
</tbody>
</table>
While Kosovo’s renewable and energy efficiency action plan for 2013-2020 envisages a very ambitious 29.47% renewables share by 2020, it has now become very unlikely that Kosovo will meet even the mandatory target of a 25% share.
### Feed-in-tariff

**Kosovo’s applicable feed-in tariffs for renewable energy (2012)**

<table>
<thead>
<tr>
<th>Renewable energy type</th>
<th>€cnt/kWh</th>
<th>Contract length (in years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wind</td>
<td>8.5</td>
<td>10</td>
</tr>
<tr>
<td>Photovoltaics</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Small hydroelectric plants</td>
<td>6.33</td>
<td>10</td>
</tr>
<tr>
<td>Biomass/gas</td>
<td>7.13</td>
<td>10</td>
</tr>
</tbody>
</table>

**Kosovo’s applicable feed-in tariffs for renewable energy (2016)**

<table>
<thead>
<tr>
<th>Renewable energy type</th>
<th>€cnt/kWh</th>
<th>Contract length (in years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wind</td>
<td>8.5</td>
<td>12</td>
</tr>
<tr>
<td>Photovoltaics</td>
<td>13.64*</td>
<td>12</td>
</tr>
<tr>
<td>Small hydroelectric plants</td>
<td>6.73</td>
<td>10</td>
</tr>
<tr>
<td>Biomass/gas</td>
<td>7.13</td>
<td>10</td>
</tr>
</tbody>
</table>
Outcomes from the supporting scheme

- **Hydro** (Existing): 3 distribution HPPs and 1 HPP connected to transmission; HPP Zhuri?
- 2016, the construction of two new small HPP-s was finished: HPP Lumbardhi II (9.2+8.4) MW & HPP Albaniku III (4.3 MW).
- Small HPP: ERO issued the final permits of authorisation for 76 MW; preliminary permits of authorisation for 89.54 MW, and is in the process of reviewing requests for authorisation of 513 MW of new capacities

- **Wind**: 2009 first capacities of wind energy (1.35MW)
- Requests for investments in Artana, Dardana, Shtime, Rahovec (Zatriq), Suhareka (Budakovë) and Drenas
- ERO issued preliminary authorisation permits for a capacity of 87.75 MW and is in the process of authorisation for additional 51 MW.
Outcomes from the supporting scheme (2)

- **Solar:** During 2015 a capacity of 102 kv of photovoltaic energy was installed in the vicinity of Klina for commercial purposes.
- Solar collectors for heating of sanitary water have been installed in series of buildings such as the University Clinical Centre of Kosovo and the Student Centre in Pristina.
RES integration issues – rules of the game

- TSO and the DSO: mandated by law to give priority to electricity generated from RES (in line with the limits specified in the Grid Code) as well as priority dispatch.

- System operators establish and publish rules regarding the costs for technical adaptations required for the integration of RES into the system. These rules are approved of the Energy Regulatory Office (ERO).

- ERO ensures that transmission and distribution tariffs for RES generator are non-discriminatory, especially to those from peripheral regions.

- ERO is responsible for issuing certificates of origin for electricity generated from RES, which is responsibility defined in the Law on Electricity.

- An incentive measure for Renewable Energy is also the legal obligation that the public supplier of energy purchases the amount of energy generated from renewable sources with a regulated tariff as defined by ERO.

- Rather than the lack of grid capacity, connection and access to the transmission and distribution grids remain the main barriers for renewable energy producers due to the inability of the grid operators to deal with intermittent electricity production.
Other forms of support

The public energy supplier is obliged to pay a regulated tariff for the electricity generated from renewable energy sources.

The grid operator is obliged to connect to his system any energy generating plant meeting the conditions for connection.

No support budget – final consumer.
Key barriers and success factors

Simplifying authorization procedures for RES projects and harmonization of the legal requirements
One Stop Shops for RES
Implementation of measures for RES, set in the Paris Declaration

The inefficient regulatory framework (in particular lengthy administrative procedures in issuing different permits and licences)
Poor administrative capacity in managing renewables
Policy makers concerns about the potential impact of RES deployment on end-user electricity prices.
Poor capacity of the grid of the distribution system to manage inputs from renewables.
Amendments to the laws on energy, electricity and the energy regulator adopted in June 2016 in line with 3rd Energy Package requirements.
Opportunities

Technology neutral tenders for granting support should be introduced to comply with the State aid guidelines and to ensure Kosovo is on the right path to 2020.

A market based approach for cost-effective promotion of renewable energy and integration of renewable energy into the market will have to be introduced.

Possibilities for statistical transfer and joint support schemes between Kosovo and EU Member States.

The requirement for notification of generation schedules has to become as close as possible to real time. Currently, there is no full compliance with Article 16 of Directive 2009/28/EC.
THANK YOU!