Current status and the perspectives of development of RES in the Republic of Moldova

Leonid Belinschi

November 5, 2012
Primary Legislation

- Energy Efficiency Law (142/02.08.2010)
- Law on Energy (1525/19.02.1998)

Secondary Legislation: ANRE Regulations

- Regulation on guarantees of origin for electricity produced from renewable energy sources
- Methodology for the calculation of tariffs for electricity and biofuels produced from renewable energy sources
Developing a more efficient framework for Renewable Energy

- A draft law, amending the Renewable Energy Law is under development
- The existing support scheme for RE is to be redesigned, to ensure a more efficient support for the development of the RE sector
- The existing Law defines only principles and does not shape a market model for Renewable Energy
Developing a more efficient framework for Renewable Energy

- A “single buyer” model was considered as the most appropriate option
- One single supplier (the RE Supplier) will have the obligation to buy all the electricity produced from RES-E plants and from CHPs and resell at an average tariff to all suppliers and big customers that buy electricity generated from traditional sources
  - All electricity suppliers and big customers that buy electricity generated from traditional sources, will have the obligation to buy RES-E from the RE Supplier proportional to their market/consumption share at tariffs approved by the Agency.
Developing a more efficient framework for Renewable Energy

- RE Supplier shall be assigned by the Agency following a tendering procedure, organized under Power Market Rules
- **Balancing issues**: to be decided who will be responsible for buying the energy for balancing
- All RE generators shall have the obligation to forecast the production and report it to the RE supplier
  - Timeframe and frequency to be established
Developing a more efficient framework for Renewable Energy

- Capacity caps should be provided to limit the impact of new RE generation
- Queue procedure to be developed
- Eligibility conditions for beneficiaries of the FiT
- Option: auctioning the available capacity and grant the resulting FiTs to winners
Developing a more efficient framework for Renewable Energy

- Capacity caps were calculated taking into account the forecasted growth of electricity consumption until 2020 and the national RE target of 20% by 2020*

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total installed capacity</td>
<td>64</td>
<td>103</td>
<td>137</td>
<td>171</td>
<td>205</td>
<td>250</td>
<td>304</td>
<td>328</td>
</tr>
<tr>
<td>Wind</td>
<td>35</td>
<td>70</td>
<td>100</td>
<td>130</td>
<td>160</td>
<td>200</td>
<td>250</td>
<td>270</td>
</tr>
<tr>
<td>biogas</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>PV</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Biomass</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>Landfill gas</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td>New Hydro</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>
Developing a more efficient framework for Renewable Energy

* The national RE target is subject to discussions within the Energy Community Treaty
  – Premise of equivalent level of ambition in ECT Contracting Parties as EU 20% target
  – adaptation of the methodology used for EU Member States

Final target calculated by the ECS Consultant: 17% share of energy from RES in the national gross final energy consumption in 2020
Developing a more efficient framework for Renewable Energy

• The Feed-in Tariff scheme is to be established in the Law
• FiTs differentiated by technology and size of the plant
  – Due to limited hydro potential, the support for new hydro projects should be limited
  – Focus on efficient biomass cogeneration plants
• FiTs offered for a period of 15 years
Developing a more efficient framework for Renewable Energy

- FiTs calculated using the WACC
- FiTs shall be revised each 2-3 years
- Recalculated FiTs will be applied to new projects and not to existing or ongoing projects that had been granted the FiT
- FiTs will be adjusted to inflation and/or exchange rate
Developing a more efficient framework for Renewable Energy

<table>
<thead>
<tr>
<th>Technology</th>
<th>Capacity</th>
<th>Tariff ANRE, €c/kWh</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydro</td>
<td>≤ 1 MW</td>
<td>7,74</td>
</tr>
<tr>
<td>Wind</td>
<td></td>
<td>8,31</td>
</tr>
<tr>
<td>PV</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>≤ 50 kW</td>
<td>Scenario 1: 24,72</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Scenario 2: 18,07</td>
</tr>
<tr>
<td></td>
<td>&gt; 50 kW</td>
<td>18,26</td>
</tr>
<tr>
<td></td>
<td></td>
<td>14,90</td>
</tr>
<tr>
<td>Biomass (electricity)</td>
<td></td>
<td>10,7</td>
</tr>
<tr>
<td>Biomass (CHP)</td>
<td></td>
<td>10,48</td>
</tr>
<tr>
<td>Biogas</td>
<td>≤ 300kW</td>
<td>11,28</td>
</tr>
<tr>
<td></td>
<td>&gt; 300kW</td>
<td>8,78</td>
</tr>
<tr>
<td>Landfill gas</td>
<td></td>
<td>5,57</td>
</tr>
</tbody>
</table>
Developing a more efficient framework for Renewable Energy

• Other provisions
  – Net-metering
  – Incentives for production of biogas
  – Possibility to obtain the license before starting the construction of the power plant
  – Definition of biofuels: biodiesel and bioethanol
  – Clear conditions for obtaining the license for biofuel production
Developing a more efficient framework for Renewable Energy

- The Ministry of Economy hired a consultant to provide recommendations on the FIT structure and FIT level, impact assessment and propose amendments to existing legislation
Thank you!

Leonid Belinschi
Director, ANRE
E-mail: lbelinschi@anre.md
+373 2285 2905