PROMOTION OF THE USE OF RENEWABLE ENERGY IN THE REPUBLIC OF MOLDOVA

Ministry of Economy and Infrastructure
The Republic of Moldova is very poor interconnected with European power and gas transportation infrastructure, most of the energy resources being imported from a limited number of suppliers from Eastern Europe.

- 81% of country's electricity consumption is ensured from import
- 17% of domestic electricity consumption is being generated mainly by local Combined Heat and Power plants and only 2% from Renewable energy sources

The economy of the Republic of Moldova is very energy intensive with an energy intensity more than 3 times exceeding the EU average.
RENEWABLE ENERGY DEPLOYMENT

- 23.84% - share of RE in gross final energy consumption in 2019
- 17% - RE target by 2020
- Decade-long support for biomass in the heating sector
- New support mechanisms for RE in the power sector: auctions, feed-in tariffs, net metering

Installed renewable energy capacity, by source (as of 31 December 2020)

- Wind: 45.1 MW (62%)
- Hydro: 16.25 MW (22%)
- Biogas: 6.35 MW (9%)
- PV: 5.22 MW (7%)

72.92 MW

Dynamics of RE capacities growth
SECONDARY NORMATIVE FRAMEWORK ON PROMOTION OF USE OF RE (1)

- Law on the promotion of use of renewable energy sources*
  

**Law No.10 of 26.02.2016**

- Regulation on carrying out tenders for providing the status of eligible producer (available in RO and RU)
- GD on approving the limits of capacity, maximum rates and categories capacity in the field of electrical energy until 2020 (RO and RU)
- Regulation on qualification of RES equipment installers
- GD on assignment of central power supplier
- Regulation on the organization and operation of the Energy Efficiency Agency

MoEI Competence

*MoEI is currently analyzing the Clean Energy for all Europeans package with the aim to transpose it into national legislation*
SECONDARY NORMATIVE FRAMEWORK ON PROMOTION OF USE OF RE (2)

- Regulation on solid biofuels
- Regulation concerning **sustainability criteria** for biofuels, and the procedure for the verification of compliance with the sustainability criteria to biofuels production
- Regulation for the calculation of final **consumption of energy from renewable sources in transport**
- *Revision* of National Action Plan in the field of renewable energy 2013-2020**

*MoARDE* Competence

- Methodology for calculating the **impact of biofuels** on the emission of greenhouse gases

**MoEI and MARDE are currently developing the National Energy and Climate Plan /NECP/**
SECONDARY NORMATIVE FRAMEWORK ON PROMOTION OF USE OF RE (3)

- Methodology for determining the fixed tariffs and prices for electricity produced by eligible producers of renewable energy (RO and RU)

- Regulation on guarantees of origin for electricity produced from renewable energy sources

- Mandatory clauses of the contract for the purchase of electricity and thermal energy produced from renewable sources as well as biofuel (RO and RU)

- Regulation concerning the confirmation of the status of eligible producer (RO and RU)

- Decision on fixed prices (caps for tenders) and fixes tariffs (classic FiTs) (RO and RU)
NEW SUPPORTING SCHEMES FOR RE INVESTMENTS
ACCORDING TO THE NEW LAW ON PROMOTION OF THE USE OF RENEWABLE ENERGY

In order to increase the production and use of electricity from RES the following supporting scheme will be applied:

• fixed price (auctions) – for producers who holds or will hold power plants with a power greater than the cumulative capacity limit set by government

• fixed tariffs - for producers who holds or will hold power plants with cumulative power capacity not exceeding the limit set by the government, but not less than 10 kW

• NET metering for small RES investors who aim at covering their own electricity consumption

• The concept of Single Buyer will be applied
• Electric system operator/TSO/ and DSOs will give priority to RES-E producers
SUPORT SCHEMES IN FIELD OF RE PRODUCTION AND USE OF RE-E

Note: MoEI is currently publicly consulting a draft Government Decision (available [here](#)) which might amend the existing GD 689/2018
## RES-E GENERATION CAPACITIES
### ISSUED CAPACITIES

*limits of capacity, maximum rates and categories capacity*, established by G.D. no. 689/2018 (no longer in force)

<table>
<thead>
<tr>
<th>Type of technology</th>
<th>Applicable support scheme, MW</th>
<th>Capacity limits/quotas (for differentiation of small-scale investors and large, MW)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Classic feed-in tariff (fixed rate)</td>
<td>Auctions (flat rate)</td>
</tr>
<tr>
<td>Wind plant</td>
<td>20</td>
<td>80</td>
</tr>
<tr>
<td>Solar PV</td>
<td>15</td>
<td>25</td>
</tr>
<tr>
<td>Cogeneration plants, biogas</td>
<td>12</td>
<td>8</td>
</tr>
<tr>
<td>Biomass cogeneration plants</td>
<td>5</td>
<td>-</td>
</tr>
<tr>
<td>Small hydroelectric power plants</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>55</strong></td>
<td><strong>113</strong></td>
</tr>
</tbody>
</table>

- Allocated Capacities
## RES-E Generation Capacities
### Key Characteristics, Draft Government Decision

*Capacity limits, quotas and and RE categories* are established in the project G.D. / currently under public consultations; to be approved by the end of Q3, 2021/

<table>
<thead>
<tr>
<th>Type of technology</th>
<th>Capacity categories</th>
<th>Applicable support scheme, MW</th>
<th>Capacity limits (for differentiation of small- and big- and projects, MW)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>[MW]</td>
<td>Classic feed-in tariff (fixed rate)</td>
<td>Auctions</td>
</tr>
<tr>
<td>Wind plant</td>
<td>&lt; 4</td>
<td>25</td>
<td>80</td>
</tr>
<tr>
<td>Solar PV, total:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Out of which:</td>
<td>---</td>
<td>75</td>
<td>70</td>
</tr>
<tr>
<td>• PV installations mounted on the roofs of industrial and agricultural objectives, including the tertiary sector (services)</td>
<td>&lt; 0,05</td>
<td>20</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>0,051 – 0,2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0,201-1,0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• PV mounted on the roofs of residential buildings and public buildings</td>
<td>&lt; 0,05</td>
<td>10</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>0,051 – 0,2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0,201-1,0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Other PV</td>
<td></td>
<td>45</td>
<td>---</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td>100</td>
<td>150</td>
</tr>
</tbody>
</table>
## RES-E GENERATION CAPACITIES
### KEY CHARACTERISTICS, DRAFT GOVERNMENT DECISION

<table>
<thead>
<tr>
<th>Non-intermittent sources</th>
<th>Type of technology</th>
<th>Capacity categories [MW]</th>
<th>Applicable support scheme, MW</th>
<th>Capacity limits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Classic feed-in tariff</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Auctions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cogeneration on biogas, total: Out of which:</td>
<td>---</td>
<td>150</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>• Cogeneration on biogas produced by harnessing the energy potential of animal manure, livestock waste, agricultural waste, agricultural crops, energy plants, food industry waste, etc., including the mixture of those</td>
<td>---</td>
<td>50</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>• Cogeneration on biogas produced by harnessing the municipal solid waste</td>
<td>---</td>
<td>50</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>• Cogeneration on biogas produced by harnessing the municipal liquid waste/wastewater/</td>
<td>---</td>
<td>50</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>Cogeneration on singas(on slid biofuel, agricultural waste, including energy crops/plants)</td>
<td>---</td>
<td>15</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>Cogeneration on direct combustion (solid biofuel, agricultural waste, including energy crops/plants, municipal solid waste)</td>
<td>---</td>
<td>30</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>Hydro</td>
<td>---</td>
<td>5</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td>---</td>
<td>200</td>
<td>150</td>
</tr>
</tbody>
</table>
PRELIMINAR CALENDAR FOR THE RE TENDERING PREPARATION AND CARRYING OUT

MoEI and ANRE should start amending relevant acts, including the PPA, immediately after the law adoption.

The submission of the projects/offers will be open for 3 months, their evaluation starting immediately afterwards.

MoEI plans starting amending the Law 10/2016 in Q3, 2020, improving the business environment.

MoEI will invite all interested parties to comment on the Tendering Docs, providing 2-3 months for this exercise.
KEY ELEMENTS TO ENSURE A LEVEL PLYING FIELD IN THE RE-E SECTOR

1. Ammendments to be brought to the primary legislation, (MoEI view) shall include:
   - A mechanism to reduce the RES-E producers risks by providing additional financial „guarantees” to investors
     *Two options are analysed today, where i) the Government/ agency signs a tripartite agreement or ii) a financial offtaker with clear attributions is appointed/ selected*
   - the balancing standard responsability is better and clearer described
   - the curtailment and related financial implications are better and clearer described
   - aspects as „material adverse effect”, „change in law” and „termination payment” are provided
   - the PPA mandatory clauses are detailed
   - transfer to Contracts for difference is better described

2. The PPA shall be drafted according to international best practice

3. Tendering documentation will be publicly and in a transparent manner consulted with all interested parties

4. The Government shall thoroughly analyse additional modalities of increasing the number of bidders, as well as to clarify the issue of grid connection permits and agricultural land usage
FURTHER STEPS
TOWARDS A BIGGER USE OF RENEWABLE ENERGY
IN THE POST 2020 PERIOD

1. **Further improvement** of the sectorial legal framework
   - stringent and urgent improvements (to enable the framework needed for first RE tenders)
   - 2030 horizont RE sector targets setting
   - alignment of the Moldovan RE framework to Clean Energy for All Europeans Package

2. Organisation of the **first RE tenders** (wind and solar PV)

3. **Strengthening of the biomass sector**
   - development of a mid to long-term biomass sector development strategy/program
   - development of an action plan for the development of the energy crops industry
   - implementation of the above-mentioned strategic acts (with DevPart and IFIs support)
FURTHER STEPS
TOWARDS BIGGER USE OF RENEWABLE ENERGY
IN THE POST 2020 PERIOD

4. Creation and strengthening of the **biofuels sector**

5. **RE development** supporting activities
   - continuous research in the field of national grid’s penetration by intermittent sources
   - investments in power transmission lines
   - promotion of the distributed energy concept
   - „aggressive” promotion of the eco public and private EV transportation

6. Increasing the **public awareness** about RE and its benefits
THANK YOU