Progress report for REPUBLIC OF SERBIA
in the promotion of RES 2016-2017 and the next steps and
milestones in the proper implementation of the RES Directive
2009/28/EC

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Content

1) Progress report in the promotion of RES 2016-2017
2) Challenges with achieving existing RES target 2020
3) The next steps and milestones in the proper implementation of the RES Directive 2009/28/EC (including market based support schemes) envisaged during 2019-2020,
Progress report in the promotion of RES 2016-2017 (1/5)

The third progress report on NREAP implementation was submitted to the Secretariat of Energy community timely.

All calculations were made by using the RES SHARES tool downloaded from the European Commission website https://ec.europa.eu/eurostat/web/energy/data/shares

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<tbody>
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<td>Share</td>
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<tr>
<td>National overall RES share target (%)</td>
<td>21.2</td>
<td>17.8</td>
<td>19.3</td>
<td>19.7</td>
<td>20.9</td>
<td>21.8</td>
<td>23.1</td>
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<tr>
<td>Achieved RES Share (%)</td>
<td>21.2</td>
<td>20.27</td>
<td>19.10</td>
<td>22.73</td>
<td>21.00</td>
<td>20.98</td>
<td>20.60</td>
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The energy from wind energy is still not visible.
Progress report in the promotion of RES 2016-2017 (2/5)
Progress report in the promotion of RES 2016-2017 (3/5)

The gross final energy consumption in Serbia, in the period from 2000 to 2017 (Mtoe)

<table>
<thead>
<tr>
<th>Year</th>
<th>GFEC [Mtoe]</th>
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<tbody>
<tr>
<td>2000</td>
<td>7.9</td>
</tr>
<tr>
<td>2001</td>
<td>7.7</td>
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<tr>
<td>2002</td>
<td>8.3</td>
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<tr>
<td>2003</td>
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<td>9.1</td>
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<td>2016</td>
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<td>2017</td>
<td>9.6</td>
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- NREAP Expected GFEC in 2020 9.495 Mtoe
Progress report in the promotion of RES 2016-2017 (4/5)

Until the end of 2017 only two small wind farms were built and connected to the grid
1. WF Kula 9.9 MW and
2. WF La Piccolina 6.6 MW).

The large increase in production of RES energy are expected in two next year with finalization of building all other planning 500 (566) MW wind farms.

1. Mali bunar, 8 MW
2. Alibunar, 42 MW
3. Kosava, 68 MW
4. Cibuk 1, 158.5 MW
5. Kovačica 104.5 MW
6. Plandište 1, 102 MW

7. Wind farm in Kostolac (EPS) 66 MW
Progress report in the promotion of RES 2016-2017 (5/5)

NREAP:

- Expected GEC in 2020: 9.495 (Mtoe)
- Expected amount of energy from RES corresponding to the 2020 target: \(27\% \times 9.495 = 2.563\) (Mtoe)
- Amount of energy from RES in base 2009: 1.943 (Mtoe)
- Additional energy from RES (2009-2020): \(2.563 - 1.943 = 0.620\) Mtoe

**From electricity sector about 260 ktoe**

- 100 ktoe from 500 MW of wind;
- 90 ktoe from 250 MW of HPPs;
- 50 ktoe from 180 MW of SHPPs;
- 19 ktoe from 30 MW of biogass;

**From heating and cooling about 110 ktoe**

**From transport sector about 250 ktoe** (9.5 ktoe electricity in 2017)
Serbian RES policy – transposition and implementation of Directive 2009/28/EC

- In 2016 new Regulations on incentives for privileged power producers were adopted. The first effects have just started.
- In September 2017 Regulation on Guarantee of origin was adopted.
- EMS or TSO (Serbian National Transmission System Operator - TSO) is responsible to issue guarantee of origin.
- In 2018 issued 9 status for producer from RES with overall installed capacity of mostly HPP of EPS.
- All transaction with guarantee of origins are available at https://cmo.grexl.com/Lists/PublicPages/Statistics.aspx.
- It is expected TSO become member of Association of Issuing Bodies (AIB) in 2019.
- This means guarantee of origin from Serbia will be accepted within Members of AIB and opposite.
Where we failed?
In electricity sector

• The significant deviations from the Action Plan has noticed in electricity, in the part of medium and large hydropower plants with a total capacity of 250 MW (EPS Strategic development projects):
  - Srednja Drina river with about 100 MW
  - Ibar river about 100 MW and
  - Velika Morava river with about 150 MW
• These plants were to be built on the basis of signed agreements and memorandums of cooperation, therefore on a commercial basis and without special subsidies and incentives.
• However, due to the delay in the realization of these projects, the expected energy of 95 ktoe from these capacities for reaching the target until 2020 will not be available.
Where we failed?
In the heating and cooling sector

• We believe that we use **more biomass than it is not shown in Serbian energy balance**

• The conducted research shows significantly higher consumption of *biomass for heating households*

• **In the course of 2019 we plan to carry out a new survey in cooperation with the National Statistical Office and get the relevant data**

• Also, we know with certainty that in Serbia hundreds, even thousands of objects are **used geothermal energy**. Among them are large hotels, for example: Hilton Hotel n in Belgrade 1.2 MW, Grand Hotel on Kopaonik 2 MW ...
Where we failed?
In the heating and cooling sector

- The main challenge is to create reliable statistic data for geothermal heat pumps, solar heat collectors and biomass consumption in households
- **Help from Secretariat of EnC is needed!**
Where we failed?
In transport sector

• Target in transport is very ambitious (the same as for EU!) and was put for CPs without detail analysis and impact assessment. Directive 2009/28/EZ was not adapted in this part to both the institutional framework of the Energy Community and the specific situation of each of the Contracting Parties as it is envisaged by Article 3 of EnC Treaty.

• The main obstacles the working group has experienced were in related to the fact the EU legislation is written for the EU countries and is not clear what to do in situation which is not predicted by Directive.

• Working group have to find model to make fraud resistance system which will not lead to additional costs. This is not easy job. We believe we were solved it.
Measures planned to reach the 2020 targets
In electricity sector

• We are in the process of reforming the support scheme in order to be prepared for the case that the Government decides to increase quotas for the privileged produces electricity from solar and wind power plants

• EBRD provide analysis - what is best possible way to introduce auctions system for larger sun and wind power plants projects

• New the support scheme will not be fully in line the Environmental and Energy State Aid Guidelines (EEAG)

• For small projects we would keep on with feed-in tariffs in accordance with EEAG

• The EBRD study will be finished until April of 2019
Measures planned to reach the 2020 targets
In electricity sector

• In this moment, according to data of EMS (Serbian National Transmission System Operator), investors have submitted requests to get conditions for connection of more than 1200 MW new potential wind power plants.

• 28.02.2019. - at the 6th session of the Energy Committee of the Republic of Serbia and the Republic of Srpska, it was agreed the jointly projects of the construction of the HP Foča, HP Paunci and the HP Buk Bijela. The total installed power of these hydro power plants will be 180 MW.
Measures planned to reach the 2020 targets
In the heating and cooling sector

• To the end of 2019 we plan to carry out a new survey in cooperation with the National Statistical Office of consumption of biomass and using geothermal energy

• In the next two years we expect the results of the project „Promotion of Renewable Energies: Developing the Biomass Market in the Republic of Serbia“ KfW, SECO, I phase 27 mil EUR

• The main goal of this project is to transformation district heating system in as many town from using of fossil fuels (oil, coal, fuel oil and gas) on using of biomass as a source of energy (or other renewable energy sources)
Measures planned to reach the 2020 targets
In transport sector

We expect that the Government of RS adopt two regulations regulating the use of biofuels until the end of April 2019:
• Decree on the share of biofuels on the market
• Decree on sustainability criteria

The Ministry of Finance does not allow the adoption of the Decree on special support for the biofuel producer
Measures planned to reach the 2020 targets

The Ministry of Mining and Energy has requested the preparation of several studies that would enable a realistic view of the technical potential for the use of RES

- IPA project Cadaster of SHPP that examines the hydropotential for the construction of SHPP up to 10 MW
- The analysis of the potential of forest biomass for energy purposes - GIZ developed the study in 2018,
- The analysis of the electro-energy system possibility to accept the additional energy of the wind and the sun – analysis has been preparing in cooperation with EMS
- The analysis of the using small photovoltaic cells on the roofs with the possibility of reducing the electricity bills for citizens, introducing the concept of the so-called net-metering. USAID prepared the study in 2018.
Conclusions

• Legislation of EU need to be adapted to both the institutional framework of the Energy Community and the specific situation of each of the Contracting Parties (Article 3 of Treaty)

• Biofuels are the example, the legislation of EU was just copy without any adaptation to the Energy community context

• It is obviously that Contracting Parties of the EnC have not economical capacity to follow the very ambitions EU policy
  • the transition period for CPs is needed
  • some Additional Fond for RES will be

• Negative RES campaign in Serbia undermines the trust of RES investors and makes it difficult to raise the special fee for new RES projects
Thank you for your attention!