RES Policy in Albania

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RES-E power system performance profile, end of 2018

• **Domestic power generation** - 100% dependent on hydropower which is good/low-cost, bad/country vulnerable to droughts. Dependent on **energy imports** (between 30% and 40%). 2108 – net exporter!

• 171 **concessions** for constructing 527 medium and small HPPs.

• **Electricity Distribution** – 24 hours urban and rural; residential consumption is about 57% of total electricity consumption; about 1990KWh/per capita.

• **Distribution Losses** - total losses less than 23 %; 18% technical
RES profile, end of 2018

The Law 7/2017 was a new legal basis to Feed-in-Tariff support for 15-years fixed price of SHPP under 2MW. A high interests was showed by domestic investors.

Apart of 171 concession contracts for 2,105MW, 71 contracts were issued during 2017-2018, for 78 SHPP with total power 98MW.

This brought a considerable stock of HECV and, in total, 2,203 MW of contracted generation capacities were provided.

Thus on December 2018, the number of SHPP is increased on 527 units with a total number of 251 contracts.

1. On the end of 2018, 84% of SHPPs are realized according to the NREAP. About 100 MW are expected to be realized within 2020.
2. PVs are realized by 60%. About 48 MWp should be contracted within 2020.
3. Wind - 32 MW under construction without support and 9MW with FIT support. About 29MW should be contracted within 2020.
4. **Wood biomass for heating** is reduced to 170 ktoe out of 225 ktoe
5. **Biofuels** are reduced with 20.3 ktoe out of 61.3 ktoe in NREAP 2018-2020
### Albania – 2018 RES in figures

#### Additional technologies of RES to NREAP 2018-2020

<table>
<thead>
<tr>
<th>RES-E</th>
<th>Quantity ktoe</th>
<th>Generation GWh/y</th>
<th>Installations MW</th>
</tr>
</thead>
<tbody>
<tr>
<td>SHPP up to 15 MW</td>
<td>212.8</td>
<td>1,600</td>
<td>600</td>
</tr>
<tr>
<td>Wind (Wind)</td>
<td>28.0</td>
<td>70</td>
<td>41</td>
</tr>
<tr>
<td>PV (PV)</td>
<td>15.0</td>
<td>120</td>
<td>74</td>
</tr>
<tr>
<td>Waste to Energy</td>
<td>5.0</td>
<td>8</td>
<td>15</td>
</tr>
</tbody>
</table>

| Total 1 (ktoe) | 172 | 1,253 |
| NREAP 2020 Difference | 10 | 791 GWh |

<table>
<thead>
<tr>
<th>RES-E</th>
<th>Large HPP</th>
<th>366</th>
<th>4,483</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wood Biomass</td>
<td></td>
<td></td>
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</tbody>
</table>

| Total 2 (ktoe) | 210 |

<table>
<thead>
<tr>
<th>RES-T</th>
<th>Biofuels</th>
<th>61.8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total 3 (ktoe)</td>
<td>61.8</td>
<td></td>
</tr>
<tr>
<td>BER</td>
<td>809.8</td>
<td></td>
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<tr>
<td>Total 1+2+3+LHPP (ktoe)</td>
<td>809.8</td>
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</tr>
</tbody>
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| 2020 Difference | 72.5 kte | 843 GWh | 500 MWp |
| 2020 % GFEC (2120 ktoe) | 38% |

1. 3 contracts 3MW with FIT and 32 MW without support
2. 12 contracts 2MWp and 50 MWp auctions Akermi Vlore
3. Sharre (Tirane)
4. Financial support - not accepted by ERE yet

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### RES share 2009-2018

<table>
<thead>
<tr>
<th>RES-H&amp;C</th>
<th>RES-E</th>
<th>RES-T</th>
<th>RES Total</th>
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<tbody>
<tr>
<td>ktoe</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>219.7</td>
<td>408</td>
<td>627.6</td>
</tr>
<tr>
<td>2010</td>
<td>211.7</td>
<td>413.6</td>
<td>625.3</td>
</tr>
<tr>
<td>2011</td>
<td>219.7</td>
<td>337.6</td>
<td>557.3</td>
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<tr>
<td>2012</td>
<td>218.3</td>
<td>406.3</td>
<td>624.6</td>
</tr>
<tr>
<td>2013</td>
<td>213.4</td>
<td>598.2</td>
<td>819.7</td>
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<td>2014</td>
<td>205.3</td>
<td>390.5</td>
<td>606.3</td>
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<td>2015</td>
<td>204.3</td>
<td>507.1</td>
<td>734.8</td>
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<td>2016</td>
<td>189.8</td>
<td>473.6</td>
<td>685.4</td>
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<tr>
<td>2017</td>
<td>179.2</td>
<td>328.2</td>
<td>565.2</td>
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<tr>
<td>2018</td>
<td>170.5</td>
<td>13.7</td>
<td>737.3</td>
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<tr>
<td>2019</td>
<td>170.5</td>
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<tr>
<td>2020</td>
<td>170.5</td>
<td>0.351</td>
<td>800.3</td>
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<td>546.2</td>
<td>590</td>
<td>630</td>
</tr>
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<td>RES-T</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>8.1</td>
<td>10.5</td>
<td>11</td>
<td>8.2</td>
<td>13.7</td>
<td>20.3</td>
<td>20.3</td>
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1. RES-H&C, RES-E, RES-T and RES Total

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### Energy Diversification, Renewables and Energy Efficiency

12-13 June 2019, Tirana International Energy Charter Forum
Urgent need to revise the NREAP 2018-2020 to meet the target 38%
New RES policy – new law 7/2017

RES policy directions and necessary regulatory update

- New RES law :
  - Promote the RES investments both domestic and foreign.
  - Reduce GHG, protect the environment in compliance with NDC ratified in UNFCCC;
  - Promote the RES-E intervention on APEX market – REO establishment
  - Accommodate RES-E in the TSO/DSO network - Regional integration;
  - Accommodate Small and Medium HPP contracted so far and manage FIT
  - The FIT policy toward CfD support scheme and easy auction procedures
  - Increase the diversification of RES – promote medium and large PV (120 to 500 MWp)
  - PV deployment from 2017 (from 1MWp/2015 to 300 MWp on 2020)
RES policy directions and necessary regulatory framework update

- Early 2018 NREAP is finalized by MIE with DCM 27/2018
  - NREAP 2015-2020 is revised earlier of 2018 in order to meet the Target 38%
  - The STRATEGY 2018-2030 sets the new target 45%
  - The STRATEGY 2018-2030 follow the NDC target on GHG -11.5%
- New policy on RES deployment to promote investments on energy
  - Revise the application procedures on more direct auctions and hybrid auctions
  - Scan the SHPP development to reduce the risk on meeting the target of 2020
  - RRA – Renewable Readiness Assessment to be developed by IRENA end of 2019
  - Revise the NREAP 2018-2020 through RES diversification investment and type
  - PV self-consumption deployment very soon
New RES law - institutions

Agency responsible for RES

DUTIES and Responsibilities under MEI

- Creating, recording and updating the registry of POWER producers;
- Registering the energy balance of all RES energy producers;
- Drafting, submission and Monitoring the NREAP;
- Calculates and submits to the Ministry and ERE by the 1st of June of each year an evaluation of the share of RES.
New RES law - institutions

- **Renewable Energy Operator - REO**
  - responsible for the billing and the collection from RES-E Supplier, of the payments for all categories of priority producers
  - responsible for signing and managing CfD
  - REO has to ensure that detailed records regarding all measures involving the granting of aid are maintained
  - REO publishes each year details of calculations and payments under the Contract for Difference
Council of Ministers is authorized to adopt measures to promote the use of RES upon proposal of MEI – the strategy

- FIT promotion for Installations up to installed capacity of 2 MW PV and 3 MW Wind per generation unit

- Long contract for Renewable Power Producers issuing a PPA commissioned up to 2020

- FIP promotion for Installations up to and including an installed capacity more than 2 MW will get support under contracts for difference (CfD) - auction scheme
Support is based on a variable premium for prefixed price (the **strike price**) and **market price** for electricity - **reference price**

- **The strike price** has to be calculated in auction in a transparent way
- **The reference price** is based on APEX day ahead market price
- **To avoid overcompensation** RES by CfD Counterparty when the reference price exceeds the strike price
- **Final support under a contract for difference (CfD)** shall be determined via a competitive, non-discriminatory bidding process (**auction**)  
  
  - CfD’s will have a duration of 15 years
  - CfD Counterparty is the respective grid operator to which the installation is connected.
Illustration of Support mechanism - CFD
Access to the grids

RES-E have a priority on the access to the grid.

The TSO and the DSO guarantee access on their grid in accordance with the law no. 43/2015 “On Power sector”.

ERE will adopt appropriate grid and market-related operational measures in order to minimise the interruptions of electricity produced from renewable energy sources.

Connection to the grids

TSO and DSO take the appropriate steps to develop the T&D grid infrastructure, to accommodate the RES-E.
New RES Law – Net metering.

- **Article 15 - Net metering schemes**
  - A SME or a family consumer can install up to 500kW for the production of RES-E for their own needs and can inject the surplus energy produced into the distribution grid.
  - The consumers based on the net RES-E scheme, shall install on their own expenses a bidirectional meter.
  - The net balance and the billing is made on a monthly basis for each measuring unit.
  - The ministry shall approve a facilitated procedure of issuing authorisations for connecting small renewable energy projects to the grid.
Article 16 - Guarantee of origin

- Upon request, ERE issue a guarantee of origin for each RES-E.
  - standard 1 MWh and it shall specify:
    - The energy source,
    - the start and the end dates of the production;
    - The name, location, type and capacity of the installation where the energy was produced;
    - Whether and to what extent the producer has benefited from investment support and from other national support schemes;
    - Date of commissioning of the installation and when became operational;
    - The date, country of issuance of the guarantee and a unique identification number;
  - The guarantee of origin can be transferred.
  - ERE shall put in place an electronic register of guarantees of origin.
  - ERE shall monitor the issuance, transfer and cancellation of guarantees of origin.
  - Guarantees of origin shall only be issued if the producer provides all relevant information.
  - No support shall be granted to a producer when that producer receives a guarantee of origin for the same production of energy from renewable sources.
THANK YOU

Energy Diversification, Renewables and Energy Efficiency
12-13 June 2019, Tirana International Energy Charter Forum

Gjergji Simaku, Tirana Albania 13.06.2019