



## Energy Diversification, Renewables and Energy Efficiency

12-13 June 2019, Tirana International Energy Charter Forum

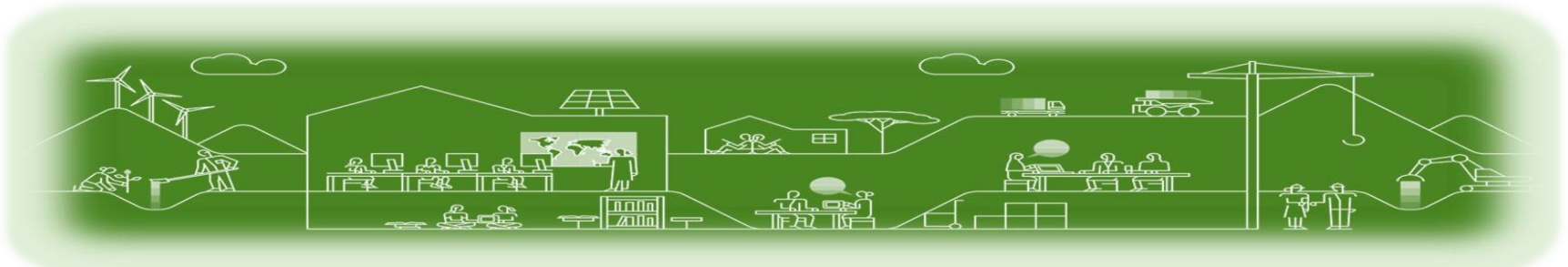


# RES Policy in Albania

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## RES-E power system performance profile, end of 2018

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- **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.

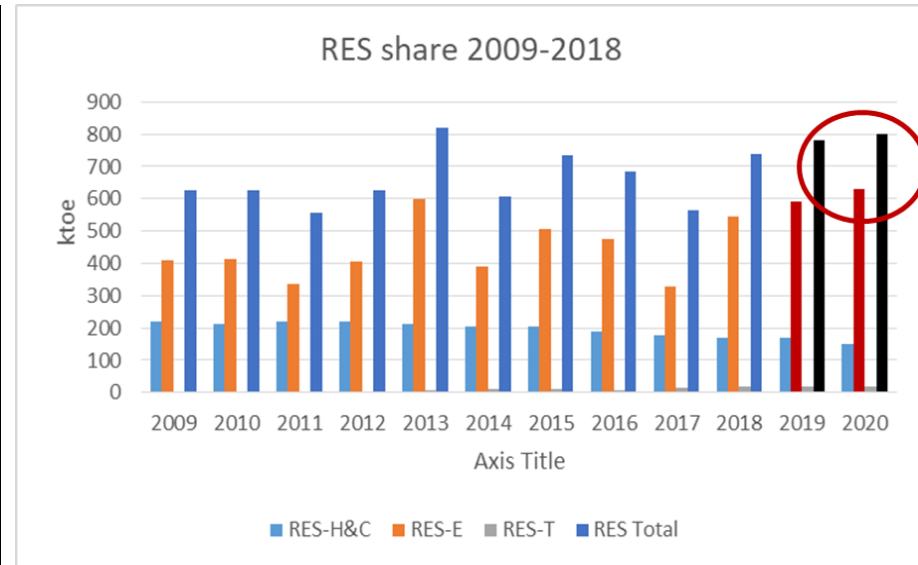
This brought a considerable stock of HECV and, in total, 2,203 MW of contracted generation capacities were provided.

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

December 31 <sup>st</sup> 2018		Quantity ktoe		Generation GWh/y		Installations MW	
<i>Additional technologies of RES to NREAP 2018-2020</i>		NREAP -Fact		NREAP -Fact		NREAP -Fact	
RES-E	SHPP up to 15 MW	212.8	126	1,600	947	600	507
	Wind (Wind)	28.0	20	210	147	70	41 <sup>1</sup>
	PV (PV)	15.0	12	174	111	120	74 <sup>2</sup>
	Waste to Energy	5.0	4	60	48	8	15 <sup>3</sup> +6 <sup>4</sup>
<i>Total 1 (ktoe)</i>		<u>172</u>	<u>162</u>	<u>2,044</u>	<u>1,253</u>	<u>798 MW</u>	<u>628MW</u>
<i>NREAP 2020 Difference</i>		10 ktoe		791 GWh		170 MW	
RES-E	Large HPP	<u>366</u>	<u>384.2</u>	<u>4,256</u>	<u>4,483</u>		<u>1,480</u>
RES-H&C	Wood Biomass						
<i>Total 2 (ktoe)</i>		<u>210</u>	<u>170.5</u>		↓↓↓		
RES-T	Biofuels						
<i>Total 3 (ktoe)</i>		<u>61.8</u>	<u>20.3</u>		↓↓↓↓		
BER	<i>Total 1+2+3+LHPP (ktoe)</i>	<u>809.8</u>	<u>737.3</u>				
<i>2020 Difference</i>		72.5 ktoe		843 GWh		500 MWp	
<b>2020 % GFEC</b> (2120ktoe)		<b>38%</b>	<b>35.1%</b>				



<sup>1</sup> 3 contracts 3MW with FIT and 32 MW without support

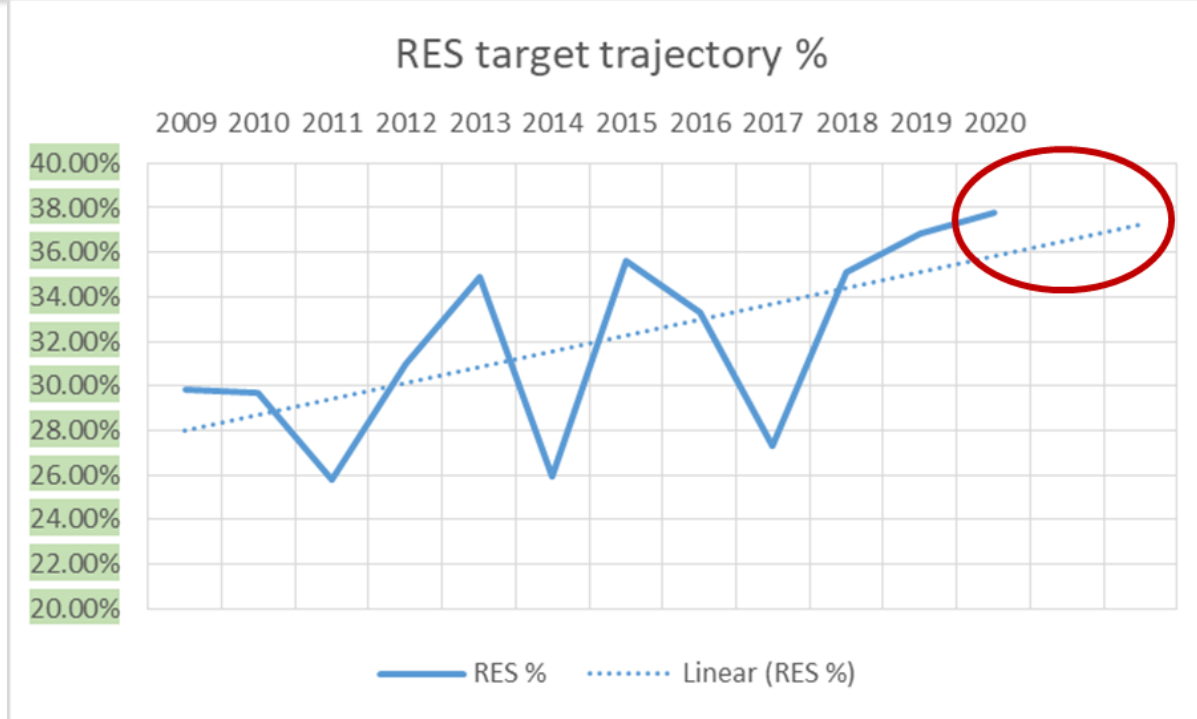
<sup>2</sup> 12 contracts 2MWp and 50 MWp auctions Akerni Vlore

<sup>3</sup> Sharre (Tirane)

<sup>4</sup> financial support - not accepted by ERE vet

ktoe	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
RES-H&C	219.7	211.7	219.7	218.3	213.4	205.3	204.3	189.8	179.2	170.5	170.5	150
RES-E	408	413.6	337.6	406.3	598.2	390.5	507.1	473.6	328.2	546.2	590	630
RES-T	-	-	-	-	8.1	10.5	11	8.2	13.7	20.3	20.3	20.3
<b>RES Total</b>	<b>627.6</b>	<b>625.3</b>	<b>557.3</b>	<b>624.6</b>	<b>819.7</b>	<b>606.3</b>	<b>734.8</b>	<b>685.4</b>	<b>565.2</b>	<b>737</b>	<b>780.8</b>	<b>800.3</b>
<b>KFBE</b>	2,103.90	2,105.50	2,161.80	2,014.20	2,345.90	1,994.2	2,065.3	2,056.3	2,070.2	2,100	2,120	2,120
<b>RES %</b>	<b>29.80%</b>	<b>29.70%</b>	<b>25.80%</b>	<b>31.00%</b>	<b>34.90%</b>	<b>25.90%</b>	<b>35.60%</b>	<b>33.30%</b>	<b>27.30%</b>	<b>0.351</b>	<b>37%</b>	<b>38%</b>

# RES trajectory & RES statement



**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)

# New RES policy – new law 7/2017

## 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 1<sup>st</sup> 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

## **New RES law - Support mechanism**

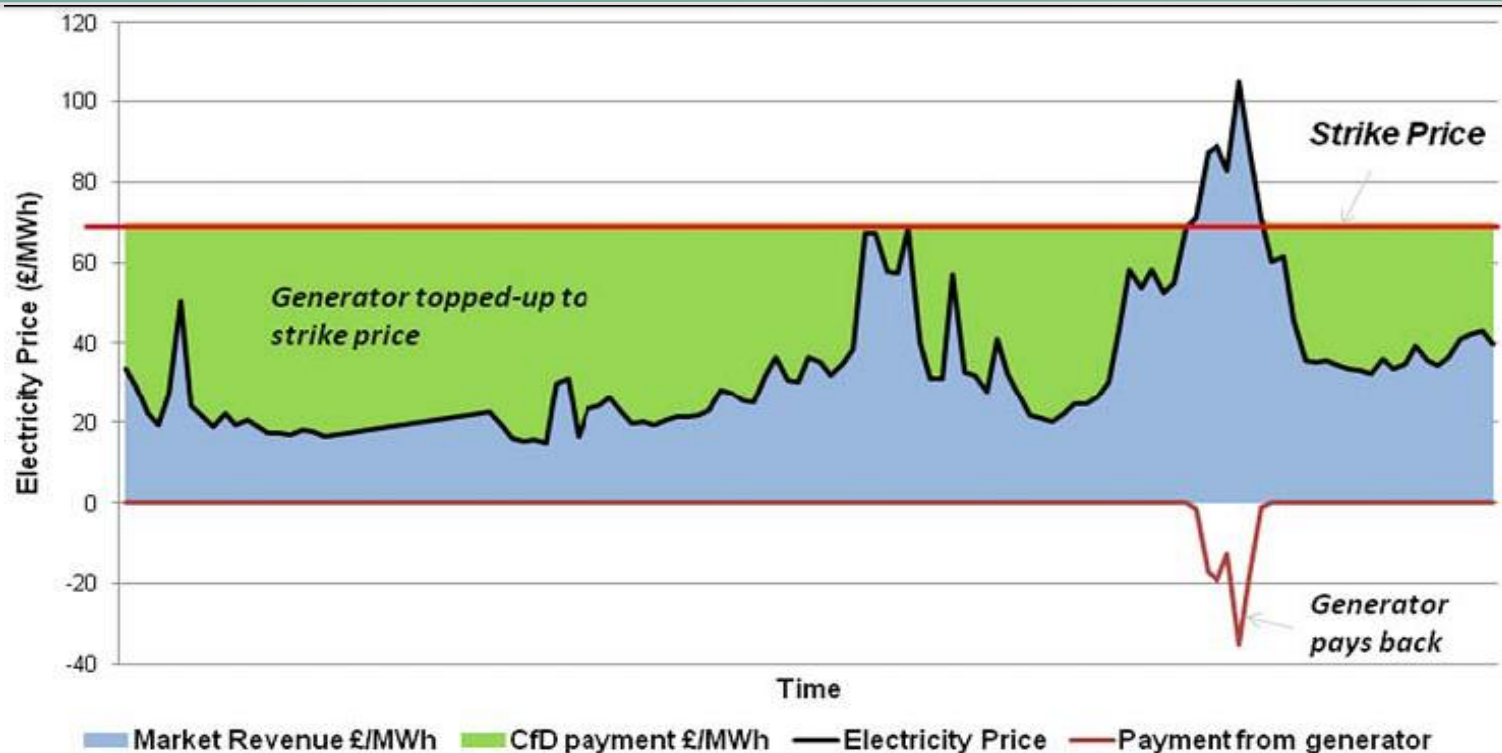
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- ▶ **Council of Ministers is authorized to adopt measures to promote the use of RES upon proposal of MEI – the strategy**
- ▶ **FIT promotion for Installations up to installed capacity of 2 MW PV and 3MW Wind per generation unit**
- ▶ **Long contract 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**

## New RES law - Contracts for Difference (CfD)

- 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



# New RES law – Access to the Grid

- ▶ **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 .

# New RES Law – certificates.

## 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

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## **Energy Diversification, Renewables and Energy Efficiency**

12-13 June 2019, Tirana International Energy Charter Forum

Gjergji Simaku, Tirana Albania 13.06.2019