RENEWABLE ENERGY SOURCES

REPUBLIKA E SHQIPËRISË
MINISTRIA E INFRASTRUKTURËS DHE ENERGJISË

RENEWABLE ENERGY SOURCES IN ALBANIA

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LEGAL FRAMEWORK

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- **ALBANIAN ENERGY STRATEGY 2018-2030,** Decision of Council of Ministers No.480, date 31.07.2018;
- **THE LAW No. 43/2015 "ON POWER SECTOR", Dated 30.04.2015;**
- **THE LAW No 7/2017 OF 2.02.2017 "ON PROMOTION OF THE USE OF ENERGY FROM RENEWABLE SOURCES";**
- **NCREAP(2019 - 2020), revised and consolidated with DCM. No. 580, dated 28.08.2019;**
- **THE DECISION OF COUNCIL OF MINISTERS No 349, dated 12.06.2018 (FOR AUCTION);**
- **DCM No. 822, dated 7.10.2015** "On the approval of the rules and procedures for the construction of new generation capacities of electricity, not subject to concession".

RES POWER GENERATION & PERFORMANCE

DOMESTIC POWER GENERATION

➢ 100% of electricity produced from RES (99.5 HPP's + 0.5 PV's) which is good/low-cost,bad/country vulnerable to droughts. Dependent on energy imports **(approximately 30%)**

➢ **The total installed capacity is 2216 MW**

- **1,350 MW** public HPP's in Drini River Cascade.
- **756 MW** private HPP's
- **98 MW** Vlora Thermopower Plant (Vlora TPP).
- **12 MW** **PV's**

➢ **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

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RES PROGRESS UP TO 2019

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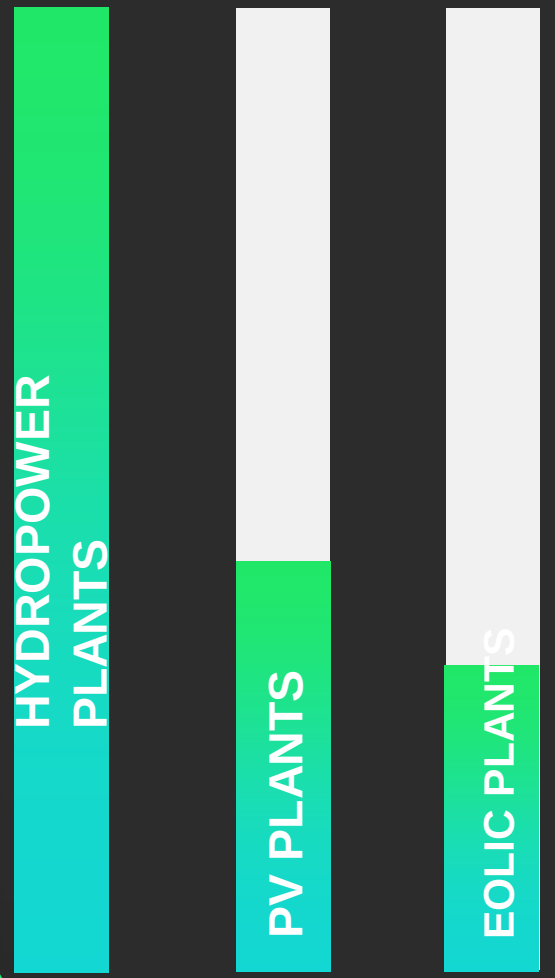
- There are signed 185 concession contracts, for the construction of 525 hydropower plants. Out of these, 165 are in production, 316 HPPs are in construction, and the rest are obtaining the necessary permits.

- 88 Applications for the construction of photovoltaic plants up to 2 MW. There are 12 authorization for the construction of small PV up to 2MW (Total capacity 24 MW), with FiT.

- The first Auction, Akerni Vlore, for the construction of PV Plant with an installed capacity of 50 MW with (CfD) and 50 MW without support measure.

- 70 Application for the construction of eolic plants. There are 3 authorization for the construction of 3 eolic plants up to 3MW **Total capacity 9 MW** (with FIT) and 32 MW without support measures.



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RES UP TO 2019 - IN FIGURES

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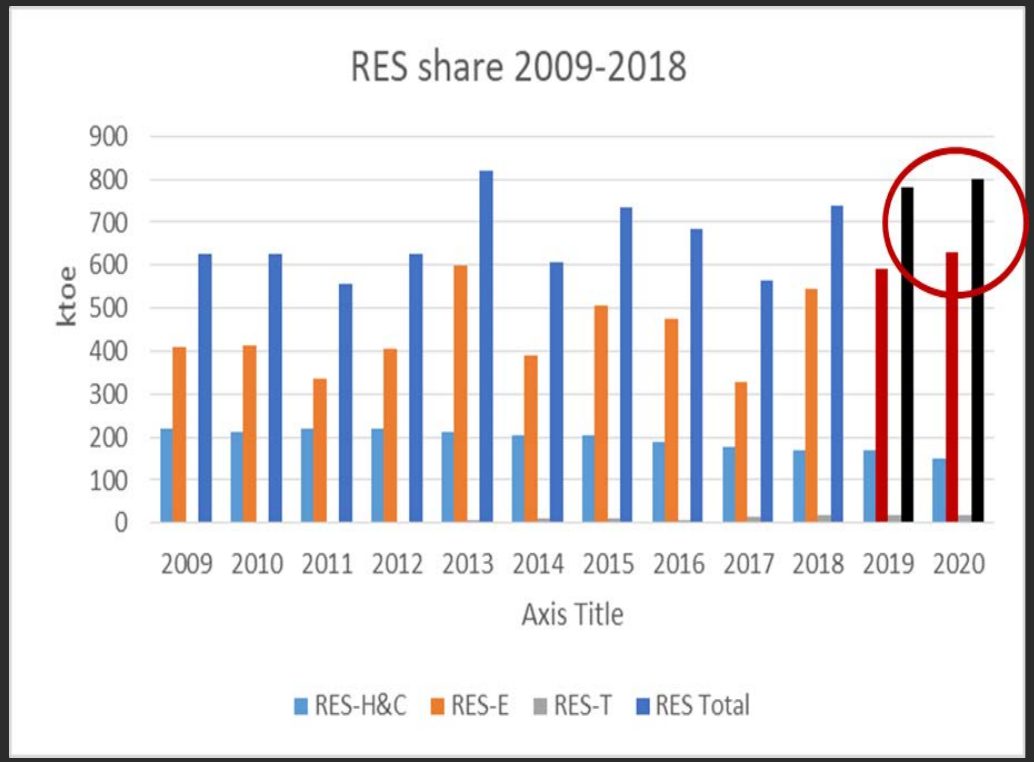
	December 31st 2018 Additional technologies of RES to NREAP 2018-2020	Quantity ktoe		Generation GWh/y		Installations MW	
		NREAP-Fact		NREAP -Fact		NREAP -Fact	
RES-E	**SHPP** up to 15 MW	**212.8**	**126**	**1,600**	**947**	**600**	**507**
	Wind (Wind)	**28.0**	**20**	**210**	**147**	**70**	**41**[1]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

[1] 3 contracts 3MW with FIT and 32 MW without support

[2] 12 contrats 2MWp and 50 MWp auctions Akerni Vlore

[3] Sharre (Tirane)

[4] financial support - not accepted by ERE yet



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DIVERSIFICATION OF ENERGY SOURCES

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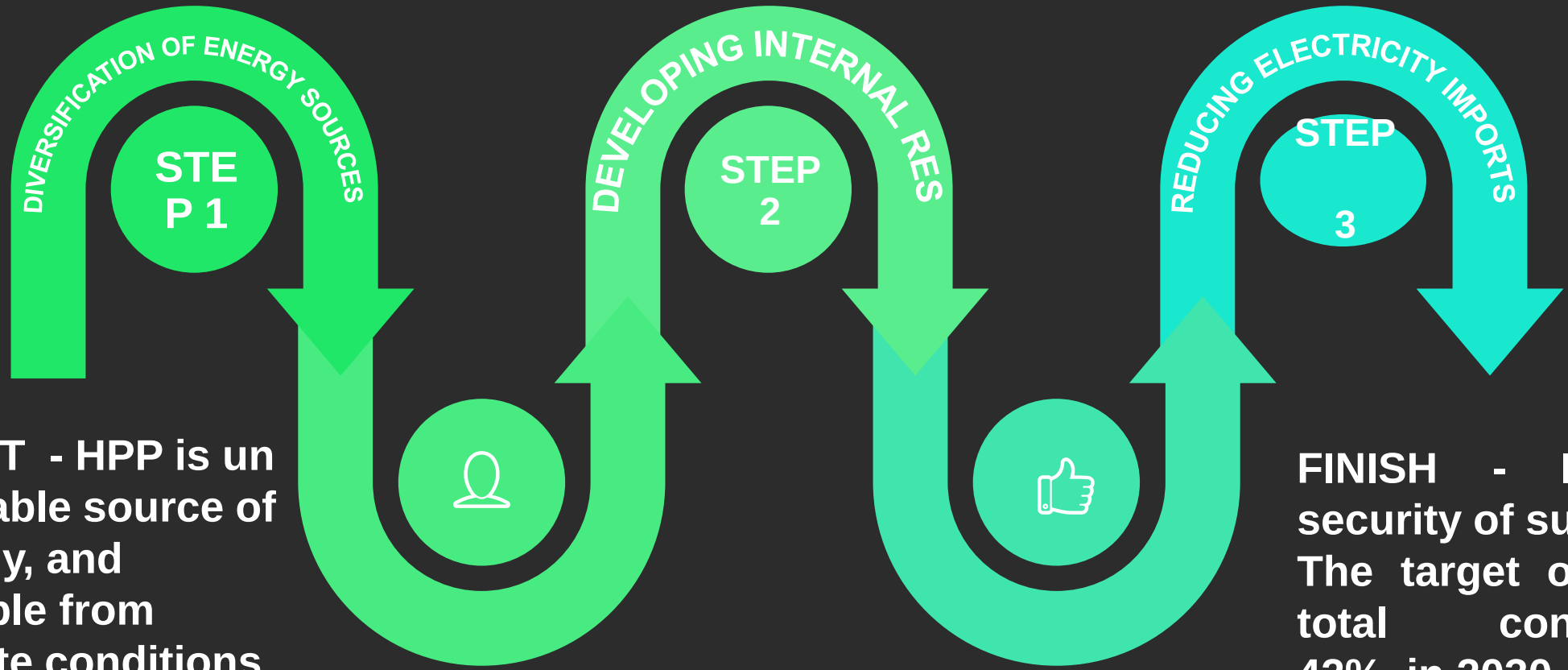

START - HPP is un stainable source of energy, and variable from climate conditions

FINISH - Improving security of supply. The target of RES in total consumption 42%, in 2030.

(NCREAP) 2019 – 2020

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NCREAP 2019 – 2020

foresees the expansion of installed electricity generators based on renewable sources to 738 MW, as follows:

- **57 MW of hydropower energy;**
- **490 MW of photovoltaic energy;**
- **150 MW of wind energy;**
- **41 MW of waste to energy;**

-The NCREAP 2019–2020 takes into consideration the progress in the deployment of these technologies towards these targets, and adjusts them accordingly to ensure the achievement of the national target of RES consumption (38%) in 2020.

NREAP 2018 – 2020

foresees the expansion of installed electricity generators based on renewable sources to 798 MW, as follows:

- **600 MW of hydropower energy;**
- **120 MW of photovoltaic energy;**
- **70 MW of wind energy;**
- **8 MW of waste to energy;**

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Support Schemes awarded through Auctions (DCM 349 dt.12.06.2018)
Albania auctioned 50 MW + 50 MW (without support measures)

- ✓ ***The Ministry of Infrastructure and Energy completed the first bidding procedure (auction)*** *for selecting the bidder for the development of the project of a Solar PV with an installed capacity of 50 MW, as part of the Support Measures, and an additional capacity of 50 MW, which are not part of the Support Measures, in Akërnia,Vlora;*
- ✓ The government offered 1) the land; 2) The PPA for 15 Years;
- ✓ ***The winning bidder offered a price of 59.9 euro/MWh, for 15 years.***

- ✓ *59,9 €/MWh price in the auction is very competitive, compared with 100 €/MWh as FiT .*

- ✓ *The investor will build up also an addition capacity of 50 MW, which will not be par of the supporting measures.*
- ✓ *In January 2019 was signed the Project Agreement which is under implementation.*

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NET METERING SCHEME

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Pursuant to Article 15 of Law No. 7/2017 “On the promotion of energy from renewable sources”, the Minister of Infrastructure and Energy approved the Guidance No. 3, dated 20.06.2019 "On the approval of facilitated procedures for the connection of the solar self-producers projects with the distribution grid”

1. **A small or medium-sized company, or a family customer can install a small PV with total capacity of 500 kWp for self-generation of electricity.**
2. **Those customers who produce a part or all the electricity that they consume, are allowed to inject into the distribution grid the surplus electricity.**
3. **OSHEE s.a (DSO) makes monthly net balance and billing for each metering point of the customers.**
4. **The surplus electricity, greater than the monthly consumption, will be sold to the Universal Service Provider after the approval of the methodology for determining the purchase price of electricity produced for self-consumption by these consumers.**
5. **The installed capacity for self-consumption shall be determined on the basis of historical electricity consumption of the last two years, or in the absence of a history, this calculation shall be based on the consumption forecast in the electricity audit report for this purpose.**

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THANK YOU

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