

Operator of Renewable Energy Sources & Guarantees of Origin

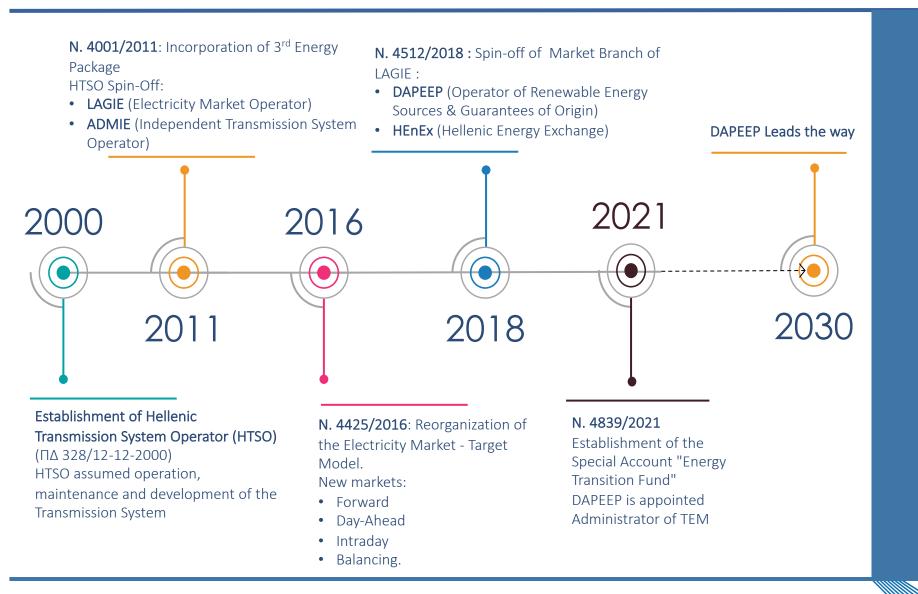
DAPEEP SA.

Dr. Nikolaos P. Ziogos Director, RES Registry & Contracts



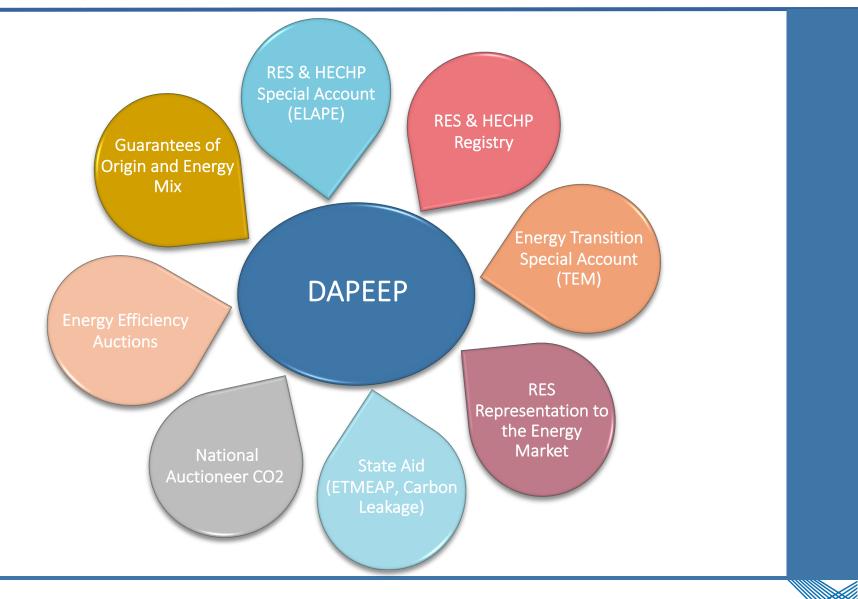
Evolution





Company Profile









RES Representation on the Energy Market (1)



DAPEEP represents the RES production in the Electricity Market by participating in the **Day Ahead Market (DAM)** and the **Intraday Market (IDM)**, as well as in the **Balancing Market** as a Balancing Responsible Party.

RES & CHP Units with no obligation for participation in the Market Feed-in tariff Contracts-FIT (SEST & SNHE)

• Representation in the Energy Market by DAPEEP as RES Aggregator

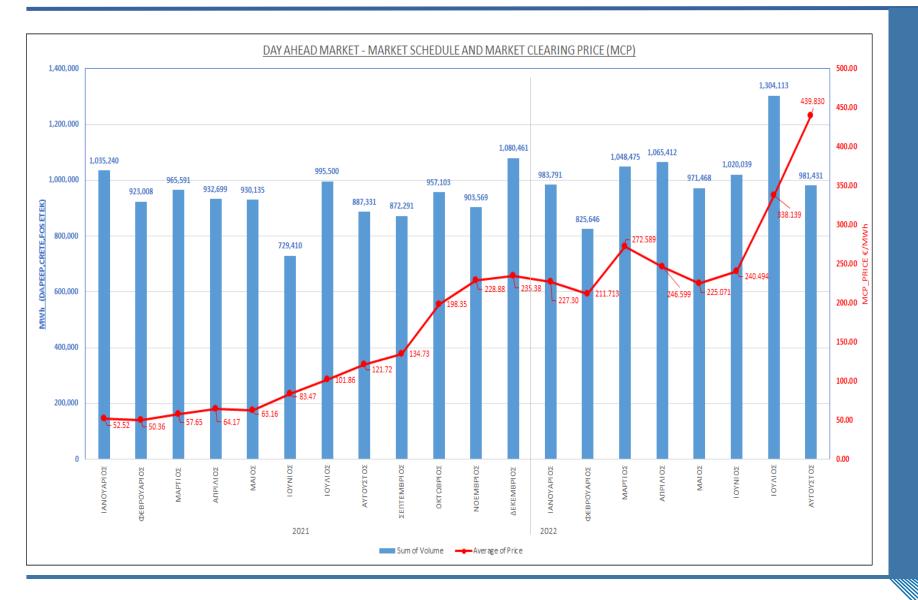
RES & CHP Units of Small Interconnected System of Crete

• Representation in the Energy Market by DAPEEP as RES Aggregator

RES & CHP Units with obligation for participation in the Market Feed-in Premium Contracts-FIP ($\Sigma E \Delta \Pi$) and seized feed-in tariff Contracts

- Registration in Participants Register of HEnEx and **direct participation** in the Market, or
- Contract with a RES Aggregator (FOSE) for their representation in the Market, or
- Contract with **DAPEEP**/Last Resort Aggregator (FOSETEK) for their representation in the Market

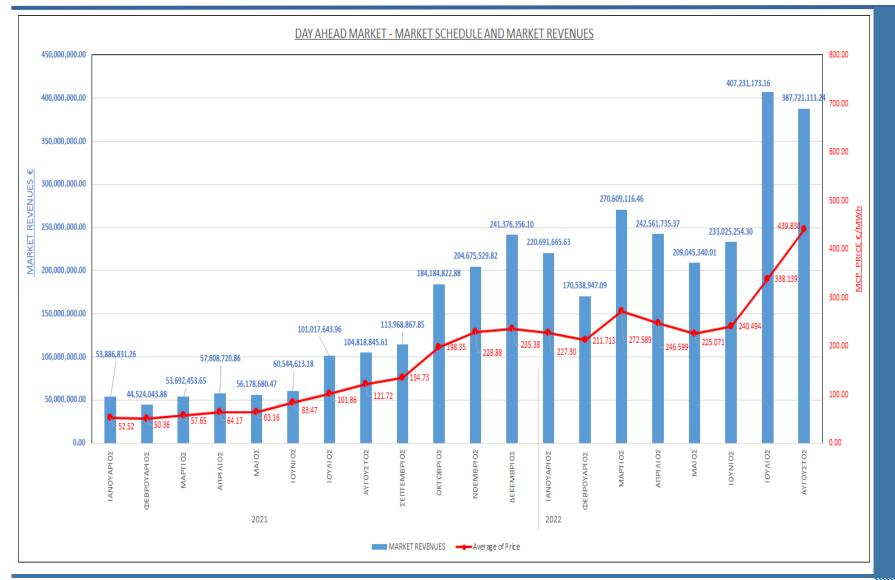
RES Representation on the Energy Market (2)



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RES Representation on the Energy Market (3)











RES & HECHP Registry (1)

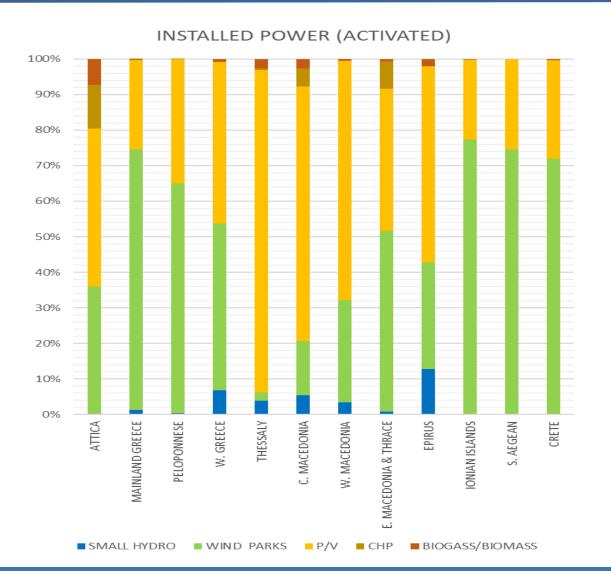
CATEGORY	NUMBER OF ACTIVE CONTRACTS	INSTALLED POWER (MW)
WIND	347	4,450.48
BIOGAS/BIOMASS	100	115.50
SMALL HYDROS	141	268.39
СНР	36	206.45
PV	17,366	4,448.55
TOTAL	17,990	9,489.36

CATEGORY	NUMBER OF READY CONTRACTS	INSTALLED POWER (MW)		
WIND	9	19.03		
BIOGAS/BIOMASS	7	3.66		
SMALL HYDROS	0	0.00		
СНР	1	0.50		
PV	1,648	980.28		
TOTAL	1,665	1,003.47		

CATEGORY	NUMBER OF NON-ACTIVE CONTRACTS	INSTALLED POWER (MW)		
WIND	117	2,374.83		
BIOGAS/BIOMASS	88	96.84		
SMALL HYDROS	43	88.98		
СНР	21	74.14		
PV	4,808	3,671.76		
TOTAL	5,077	6,306.54		

RES & HECHP Registry (2)





RES Digital Transformation of DAPEEP



- ➢ 83% under self-invoicing:
 - Settlement until <u>15th of M+1</u>-> Payment until <u>20th of M+1</u> with self-invoicing
 - Settlement until <u>10th of M+1</u> -> Payment until <u>10th of M+2</u> without self-invoicing
- New RES Contracts are signed within <u>10 days</u>
- Coming soon: Digital upload of all necessary documents





Energy Transition Fund – TEM (1)



N. 4839/2021 (ФЕКВ 181/02.10.2021)

- The special account is established under the name "Energy Transition Fund" TEM
- DAPEEP is appointed as the Administrator of TEM

TEM Inflows:

- a) Part of the revenues from Greenhouse Gas Emission Allowances auctions
- b) Funding by RES & CHP/HECHP Special Account (ELAPE)
- c) Funding by Public Utility Special Account (ELYKO)
- d) Funding by State Budget
- e) Temporary Mechanism for Returning Part of Revenue from Day Ahead Market (DAM)

TEM Outflows:

- a) subsidization of **electricity consumption**
- b) subsidization of natural gas consumption
- c) subsidizing part of the cost of granting a **heating allowance**
- d) emergency aid until the connection of the **district heating** with the unit under construction "PTOLEMAIDA V"
- e) funding of Special Account for electricity **supplies re-connection** of low-income consumers
- f) funding of Special Account for the granting aid to household consumers due to environmental burden from lignite activity
- g) funding of actions related to the **replacement/recycling** of household electrical appliances

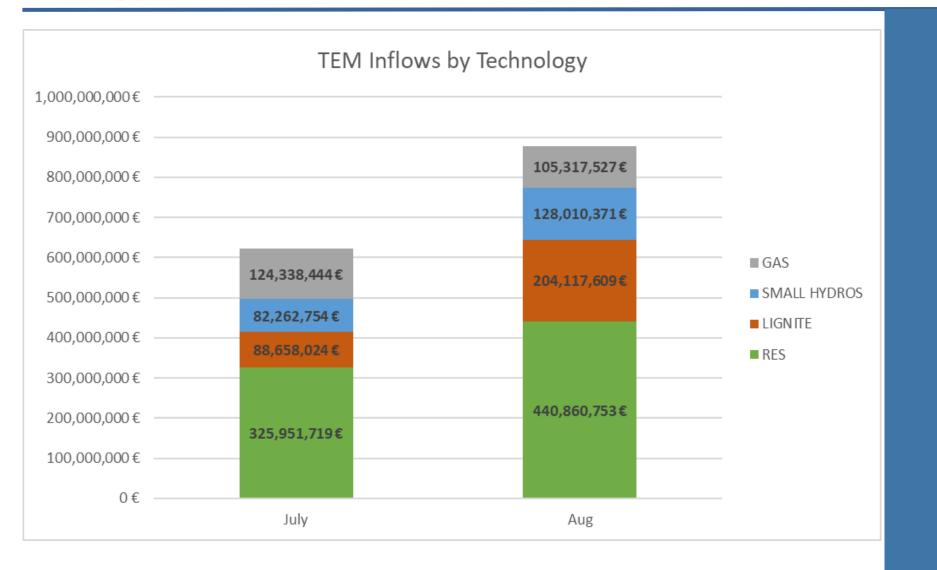
Energy Transition Fund – TEM (2)



TEM REVENUES DISTRIBUTION							
Month	Electricity Consumption	GAS Consumption	Additional Agricultural Benefit Subsidies	Heating Allowance	Distrinct Heating	Supplies Re- Connection	Grand Total
Aug-21							
Sep-21							
Oct-21							
Nov-21	-165,395,380 €			-90,000,000 €	-15,000,000€		-270,395,380€
Dec-21	-465,787,003 €					-9,000,000 €	-474,787,003€
Jan-22							
Feb-22							
Mar-22	-427,005,480 €	-42,811,236€	-279,637€				-470,096,353€
Απρ-22	-207,331,285 €	-41,757,433€					-249,088,718€
Ma y-22	-80,562,341€	-54,892,893 €					-135,455,233€
Jun-22	-661,602,697 €	-47,049,840 €					-708,652,537€
Jul-22	-534,862,334 €	-21,280,058 €	-27,787,926€				-583,930,319€
Aug-22	-711,032,265 €	-46,240,856 €	-543,554 €				-757,816,675€
Sep-22	-163,007,402 €	-8,358,635€					-171,366,037€
Grand Total	-3,416,586,187 €	-262,390,951 €	-28,611,116 €	-90,000,000 €	-15,000,000 €	-9,000,000 €	-3,821,588,254 €

Energy Transition Fund – TEM (3)









Guarantees of Origin (1)



European Commission introduced Guarantees of Origin in 2001 with the Directive 2001/77/EC on the promotion of electricity produced from renewable energy sources in the internal electricity market.

- A GO is the electronic certificate issued for 1 MWh of energy produced from RES determining the following attributes:
 - Renewable Energy Source and technology
 - Production Period
 - Installed capacity
 - Commissioning date
 - Country and location of the production device
 - Support scheme

All the above attributes reflect the commercial value of a GO.

- A GO is cancelled by a power supplier with the sole purpose of demonstrating to a customer that a given share or quantity of energy was produced from renewable sources.
- ✓ Only one guarantee of origin (1GO) shall be issued for one (1) MWh of energy
- Each GO is valid for twelve (12) months after the end of the production period it was issued for.

Guarantees of Origin (2) – The role of DAPEEP

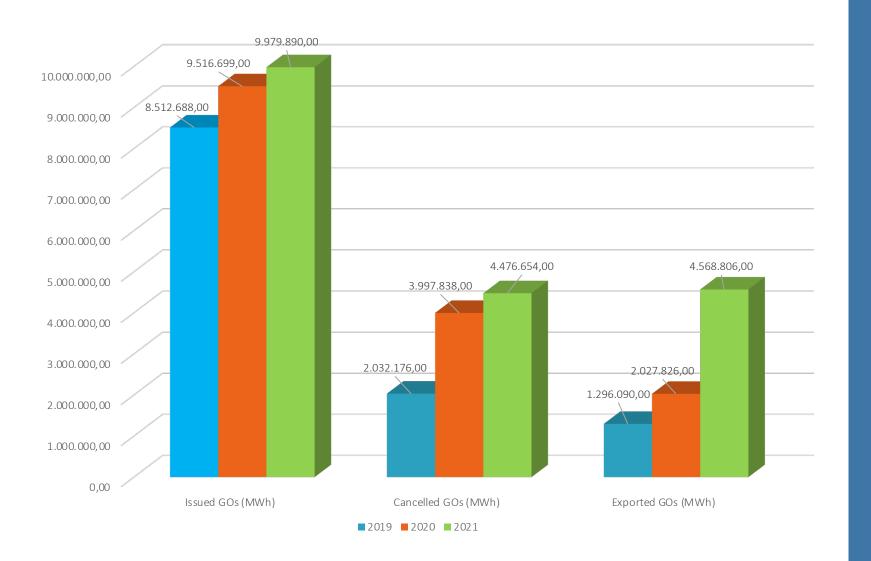


- Authorised Issuing Body
 - Electricity GOs
 - DAPEEP holds and operates the GO Registry and the corresponding Registration Databases
 - The Greek GO system went through a major update in August 2022 with the Ministerial Decree YΠΕΝ/ΔΑΠΕΕΚ/81331/3661/04.08.2022

Renewable Gas GOs and Hydrogen GOs

- The respective legislative framework providing the rules for the set up and the operation of the Gas and Hydrogen GO System is <u>under shaping</u>
- Member of the Association of Issuing Bodies (AIB)
 - Compliance under the EECS and Cen CENELC EN 16325 standards
 - For two (2) consecutive years DAPEEP was chairing in EECS and Electricity Scheme Group in AIB
- Competent Authority for Disclosure
 - Residual Energy Mix (REM) and Energy Supplier Mix
 - Monitoring the use of GOs by suppliers and the information they provide to their customers
- Authorised to set up and operate GO Auctions

Guarantees of Origin (3) – Statistics







Thank you for your attention

Dr. Nikolaos P. Ziogos Dr. Electrical & Computer Engineer

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