



## GUARANTEES OF ORIGIN

### *Renewable Attributes Tracking*

ΙΕΝΕ - ΑΠΕ ΚΑΙ ΕΝΕΡΓΕΙΑΚΗ ΑΠΟΔΟΤΙΚΟΤΗΤΑ

Πέμπτη 18 Απριλίου 2024



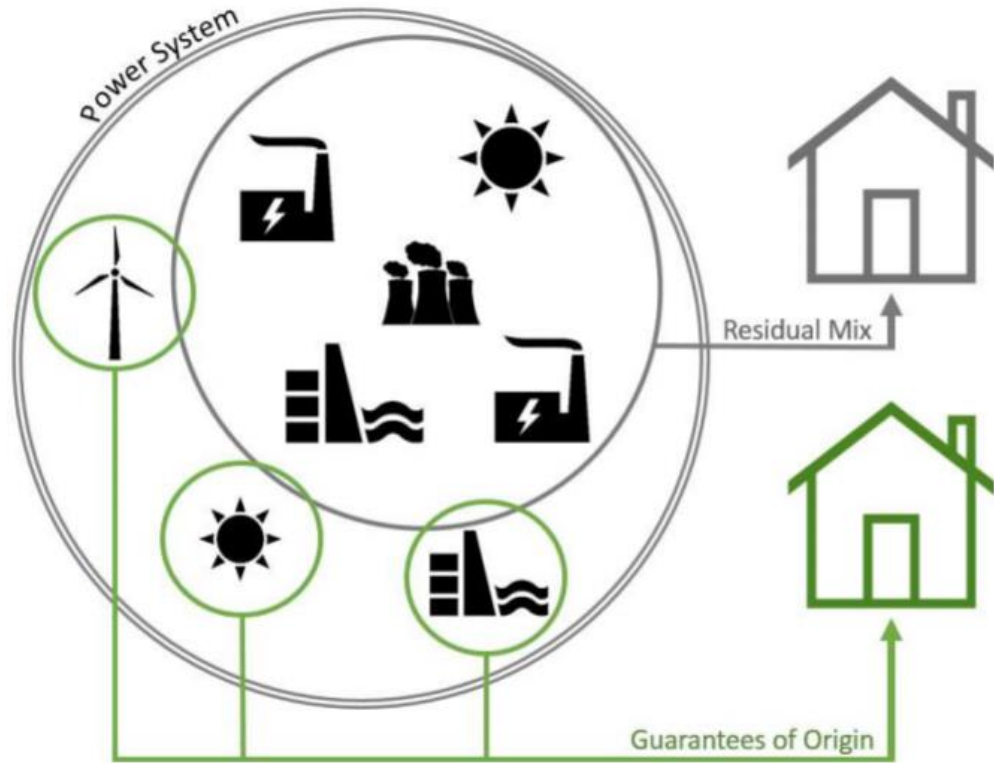
# DAPEEP – Operator for RES & Guarantees of Origin

State-owned company under the supervision of the Ministry of Environment and Energy and the Regulatory Authority for Energy Waste & Water

DAPEEP's authority in the electricity sector :

- Subsidise the operation (Feed-in-Tariff / Feed-in-Premium) of RES & HE-CHP in the Interconnected System
- Administration of ELAPE: the Account that facilitates the operational subsidy in Greece
- Representation to the electricity market of the power stations that are subsidised with FiT
- Competent Authority for State Aid schemes for climate, energy and environment.
- Auctioneer of the CO2 Emissions Allowances
- Authorised Issuing Body for Guarantees of Origin (GO)
- Competent Body for Disclosure and Residual Mix calculation
- Auctioneer of GOs

# GOs : Tracking the energy attributes



## ▶ Guarantees of Origin

Electronic Certificate which has the sole function of providing evidence to a final customer that a given share or quantity of energy was produced from renewable sources

## ▶ The Residual Mix

the total annual energy mix for a Member State, excluding the share covered by cancelled guarantees of origin

# European Regulatory Framework

## Internal Energy Market Design Directive (IEM) 2019/944(EU)

- Disclosure Obligation for electricity suppliers and obligation for Member states to supervise.

## Gas Market Directive (16516/23(EU) built upon interinstitutional file 2021/0425 COD)

- Disclosure Obligation on renewable gases and obligation for Member states to supervise.

## Renewable Energy Directives 2009/28 (EC), 2018/2001(EU) and 2023/2413(EU)

- Purpose of Guarantees of Origin
- Basic rules for issuance and information content of GOs
- Standardization according to CEN EN 16325
- MS and Suppliers' obligations

## Corporate Sustainability Reporting Directive 2022/2464(EU)

- Disclosure Requirement for corporates: Energy consumption and share of RES in their mix.

## Delegated Act RFNBO 2023/1184(EU)

- Criteria on considering electricity consumed for RFNBOs as renewable

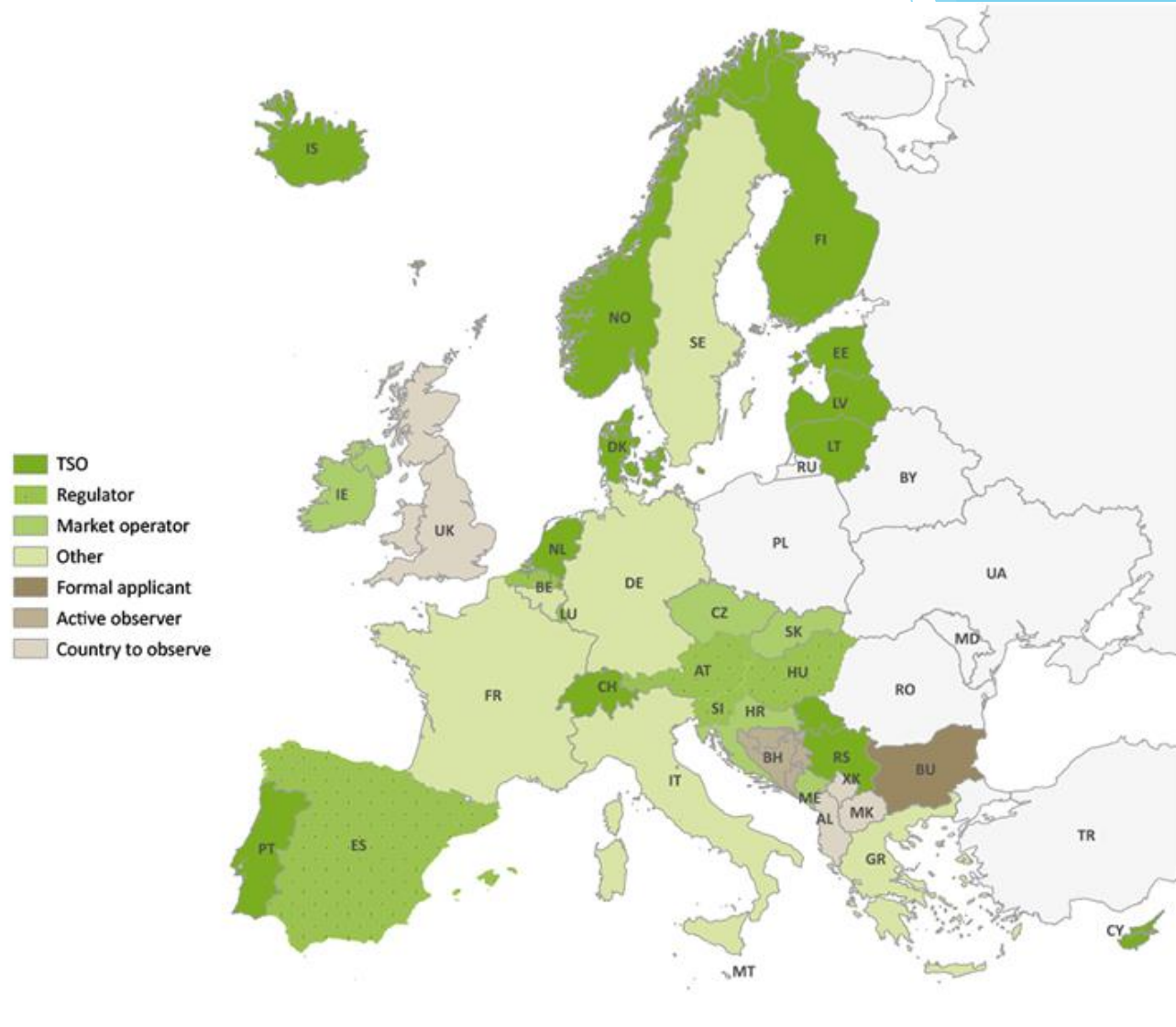
## Green Claims Directive

- Green Claims must be substantiated – responsibility on member states

# AIB and its Member Countries / Regions

## AIB Facts & Statistics

- 27 countries connected (31 members)
- Geographical scope: EU - EFTA – Energy Community
- All AIB's current members are issuing bodies for GOs
- About half AIB's members are also competent bodies for the supervision of electricity disclosure
- Already 7 AIB members assigned by their government for issuing gas GO – more to follow



## Generic data fields

Energy Carrier

• *Electricity / Hydrogen / Gas / Cooling or Heating*

Unique certificate number

Production period (start and end dates)

Energy source (solar, wind, hydro etc)

Type of installation (photovoltaic, internal combustion engine, etc)

Production device info

Identity and country of Production Device owner

Issue date

Identity and country of relevant Issuing Body

Purpose (disclosure)

Support received by type

Conversion Tag

Storage Tag

Carbon Footprint \*

Time stamp \*

Independent Criteria Schemes (Labels) \*

\*Optional field

## Additional on Electricity GO

**High Efficiency Cogeneration (Y/N)**

• *If yes, then the following fields are mandatory*

Lower Calorific Value

Use of Heat

Primary energy savings

## Additional on Hydrogen/gas GO

Type of Gaseous Carrier

• *Networking compatible gas, hydrogen, other gas*

Calorific Value

Means of Supply - Category

CO2 Emissions Saved & Produced\*

Sustainability Criteria met?\*

• *Y/N; name Certification Body, reference to report*

GHG saving criteria met?\*

End-Use of gas category\*

\*Optional field



# DAPEEP – Operator for RES & Guarantees of Origin

## Issuing Body for Guarantees of Origin (GO)

2010	Electricity GO Registry is launched
2018	Disclosure mechanism is established
2019	DAPEEP becomes a Member of AIB
2023	New Registry infrastructure

## New Registry implementation

August 2023	UAT finalized, new Registry in productive mode
September 2023	Technical audit successfully performed by AIB HUB administrator
October 2023	Connection to the AIB HUB approved and established
January 2024	Standard Terms and Conditions (STC) signed by Account Holders Account Holders were provided access to the Registry First transactions over the HUB



# DAPEEP – Operator for RES & Guarantees of Origin

## **Competent Body for Disclosure**

- Annual Residual Mix since 2018
- Coordination with European Attribute Mix
- Responsibility to supervise Suppliers

## **GOs Auctions**

- Auction rules : approved by RAEWW
- Auction platform : finetuning to comply with final version of Auction Rules as approved by RAEWW

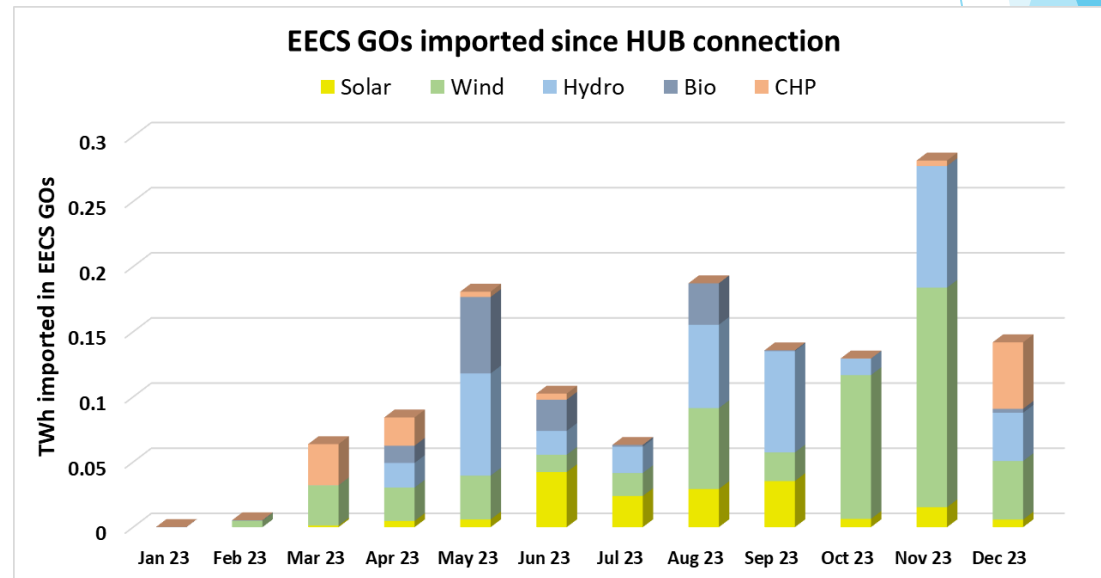
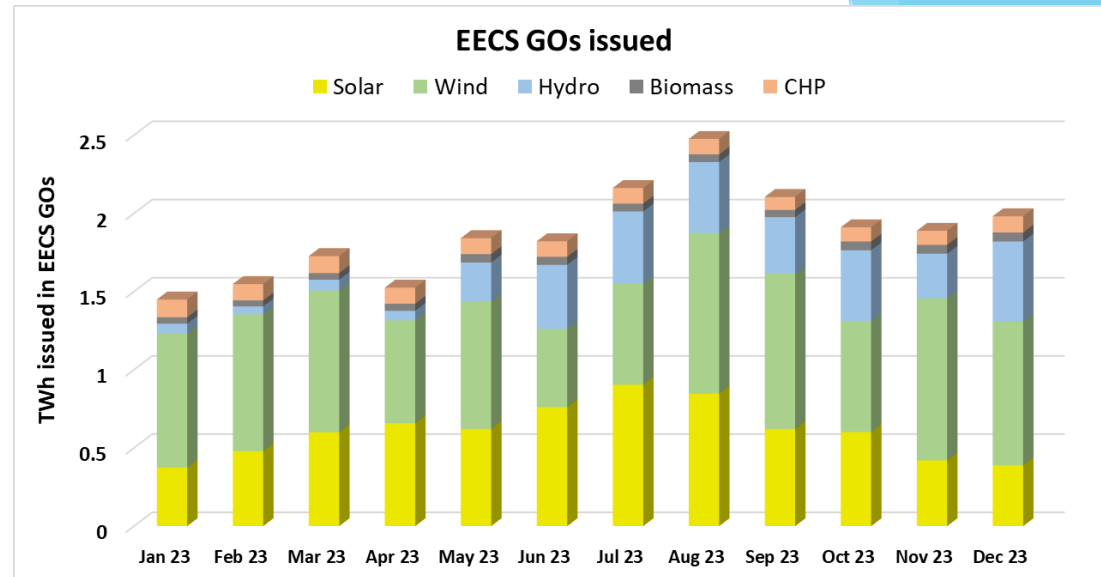




## Transaction statistics in MWh for 2023 production

National Production	24,838,575
EECS GO issued	22,433,216
-> From which eligible for auctions	4,448,923
EECS GO cancelled	15,491,460
-> From which for green products	528,234
EECS GO imported	1,375,521

Updated: 20 March 2024





## Directive (EU) 2023/2413

amending Directive 2018/2001 on the promotion of energy from renewable sources

To be transposed by 21 May 2025

### Impact on Guarantees of Origin

- **Issuing interval:**
  - *hourly or sub-hourly interval* for renewable gas & gaseous RFNBO
  - in accordance with the *imbalance settlement period* for renewable electricity
- **Size:** Default is set at 1 MWh, with provision for fractions multiple of 1 Wh
- **Linkage to the Union Database** for sustainable biofuels (UDB): process flow

### Impact on Disclosure

- **Residual Mix:** Member States obligation to annually publish the Residual Mix
- **Suppliers' Disclosure obligations:**
  - Use GOs to demonstrate the origin to end consumer, except for Residual Mix or supported energy
  - Obligation set upon **Gas Suppliers** as well as **Electricity Suppliers**

### Monitoring

- Commission shall monitor GO market and assess the balance of supply and demand by June 2025
- Commission shall assess by December 2025 the option to establish a Union-wide green label based on GOs from new installations



## Guarantees of Origin contribution to energy transition

### Current status

- *Corporate sustainability reporting*
- *Allocation of renewable attributes to energy injected from storage facilities*
- *Accommodate PPA*

### Future proofing for electricity GOs

- Temporal matching of production and consumption when there is no direct connection*
- *i.e. EV chargers*
  - *Temporal & geographical matching, fulfillment of additional requirements:*
    - *Delegated Act 2013/1184 for renewable fuels of non biologic origin ( RFNBO )*

### Transposition to national legislation for gaseous GOs

- *Link GOs with Proof of Sustainability (PoS)*
- *Interaction between GO Registry and Union Database (art.25 RED II)*



## Independent Certificate Schemes : Labels on GOs

An Independent Certificate Scheme (ICS) sets additional criteria beyond legal minimum requirements.

An ICS Operator verifies compliance of energy produced and delivered with the additional criteria.

GOs provide the necessary information.

Based on GOs an ICS Operator can certify compliance with the Certificate Scheme.

For ICS Operators having a contractual relation with AIB the verification is recorded as a flag (Label) on the EECS GOs.

### ICS Operators under EECS

TÜV SÜD Generation EE	certifies electricity produced from renewable resources where generation can be attributed to a clearly identifiable source
Naturemade	certifies compliance with strict and comprehensive ecological requirements
EKOenergy	ensures the sustainability and additional impact of renewable energy purchases



Thank you for your attention

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