

Guarantees of origin in Serbia



What are the Guarantees of Origin (GO)?

- ▶ A guarantee of origin is an electronic document that has the exclusive function to demonstrate to the end customer that a certain amount of electricity is produced from renewable energy sources



Guarantees of origin

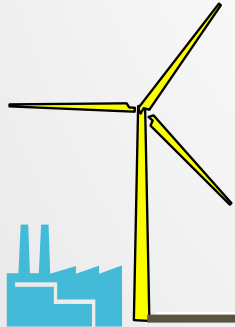
- ▶ Guarantees of origin offer customers the opportunity to express requirement for a “green” energy



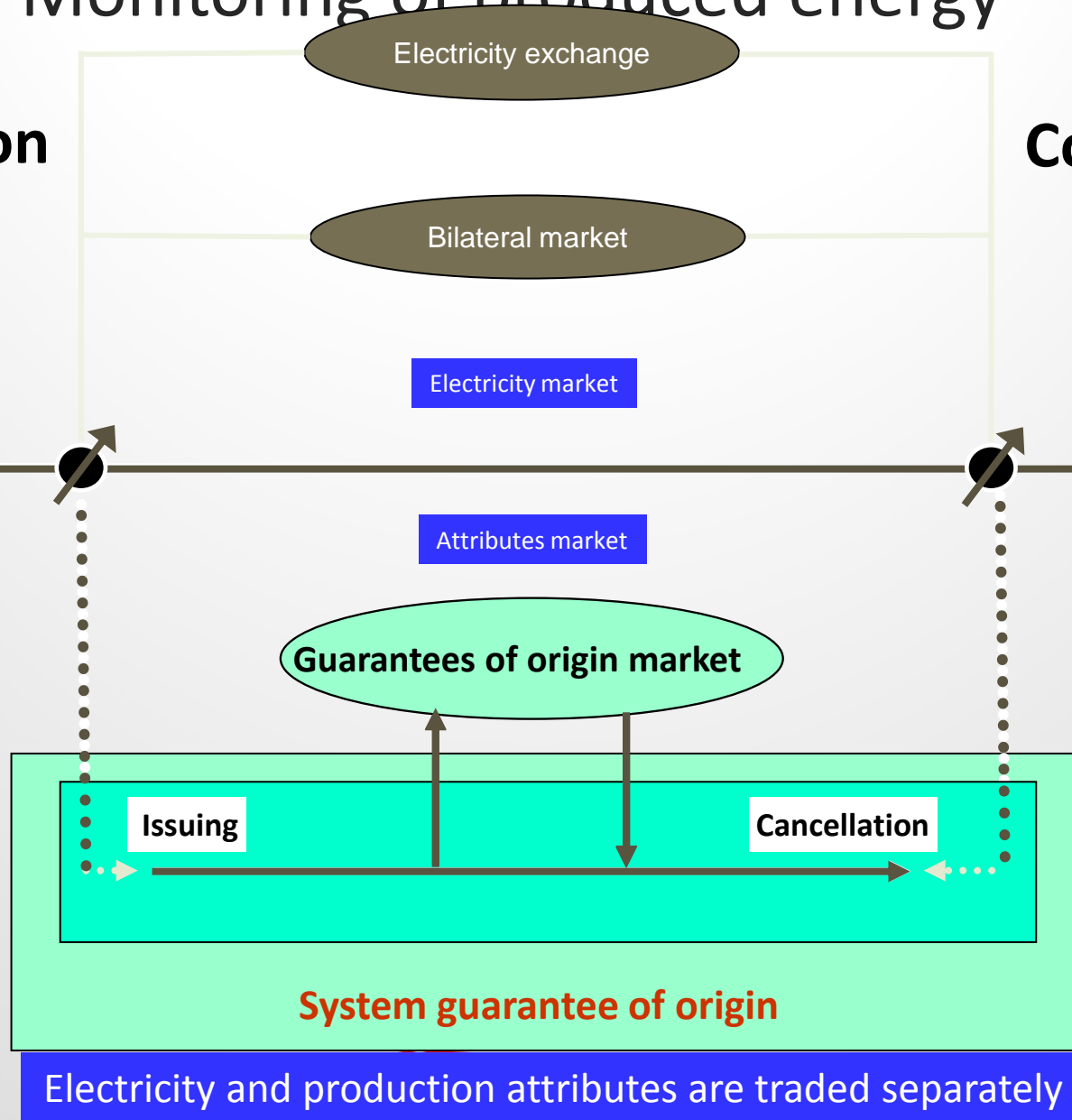
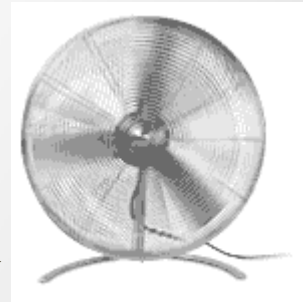
- ▶ It is not possible for the buyer to physically secure electricity from a specific source
- ▶ The electricity tracking system through the attributes enables this
- ▶ The Guarantees of origin system uses the certificates that guarantee the attributes of the produced MWh of electricity
- ▶ Providing reliable information to customers about the origin of energy they consume

Monitoring of produced energy

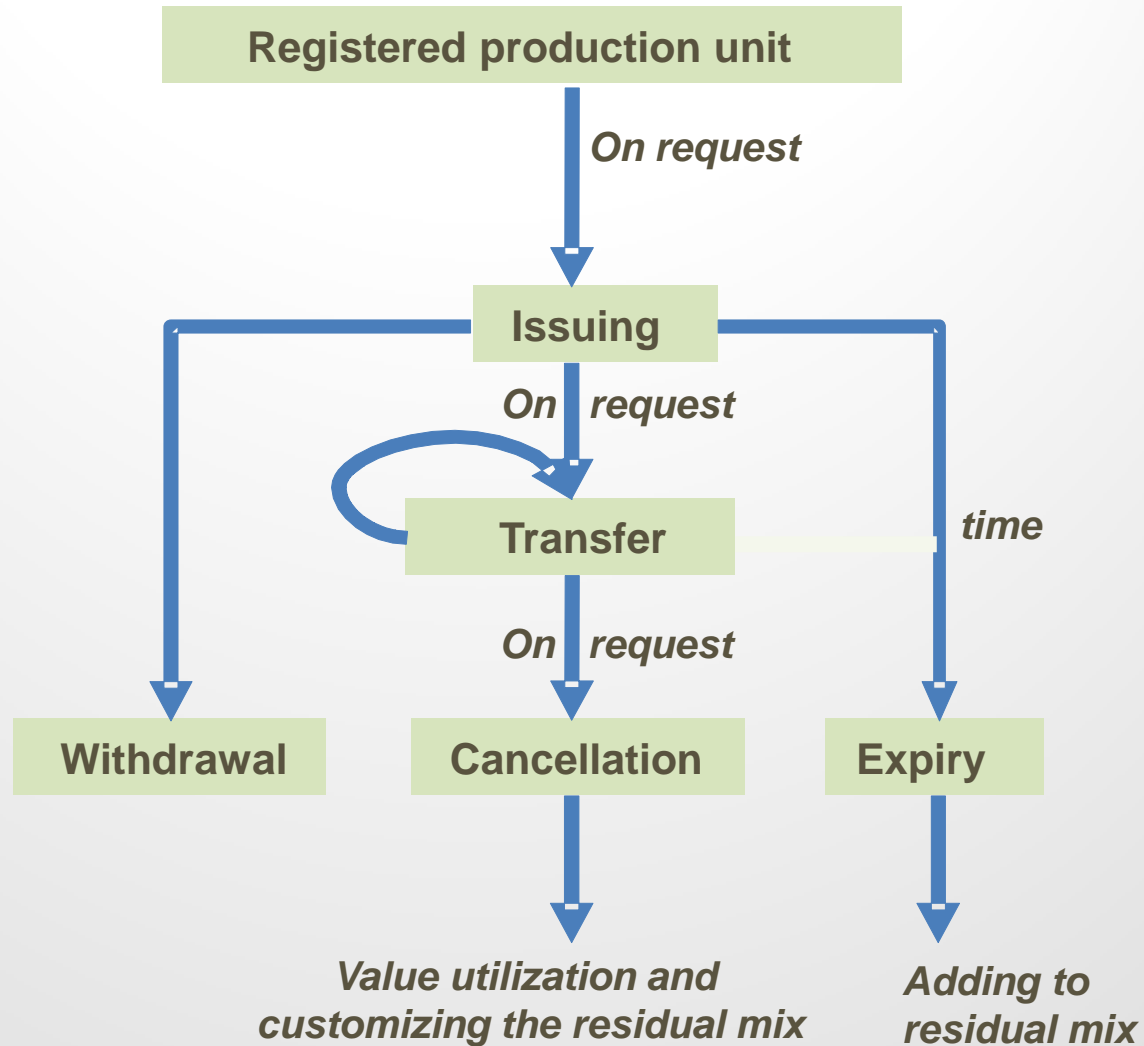
Production



Consumption



Lifetime of Guarantees of origin



Regulation of guarantee of origin in Serbia

- ▶ Energy Law
- ▶ Decree on Guarantee of Origin
- ▶ Disclosure rules – came into force 27.10.2017.
- ▶ Main Protocol – by the end of 2017
- ▶ Price Act – by the end of 2017

Market participants



Issuing Body



Registry Operator



Regulatory Authority

Issuing

Transferring

Cancellation

Producers from renewable sources



Producers, Suppliers



Suppliers



Market participants

- ▶ EMS AD BEOGRAD was appointed as the Issuing Body for GO for Serbia
- ▶ Registry users:
 - ▶ Electricity producers from renewable sources registered at Ministry of mining and electricity registry– receive guarantees of origin
 - ▶ Suppliers – use guarantees of origin for end costumers
 - ▶ Wholesale suppliers– trade with guarantees of origin
- ▶ Ministry keeps a registry of electricity producers from renewable sources in Serbia
- ▶ AERS supervises all participants whether they act in accordance with the legal provisions
- ▶ End costumers

EECS Electricity Domain Protocol

- ▶ Adopt by JSC EMS
- ▶ EECS Electricity Domain Protocol sets out:
 - ▶ The manner of registering the user of the guarantee of origin
 - ▶ Model of the agreement with users of the GO registry
 - ▶ Issuing, transferring, cancellation and withdrawal of guarantees of origin
 - ▶ Objection of the user of the GO registry
 - ▶ Publication of public data
 - ▶ and other issues necessary for keeping the GO registry
- ▶ EMS JSC adopts Domain Protocol in Serbian and English language

Disclosure rules

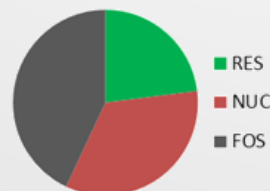
- ▶ Describes more closely the Calculation of the share of all types of energy sources in the sold electricity, as well as the method of controlling the calculation
- ▶ Disclosure rules consists of part that regulate publication of data and the Methodology containing the calculating part
- ▶ The supplier offers tariff packages to customers:
 - ▶ Tariff with certain share of RES
 - ▶ Tariff with no obligation to provide a share

Guarantees of origin – obligations of the supplier

- ▶ **Law dictates suppliers to provide information once a year to its end customers on the origin of the electricity they used in the previous year**
- ▶ For that purpose data on used guarantees of origin, energy feed-in system and national residual mix



General mix of supplier



Delivered to all customers

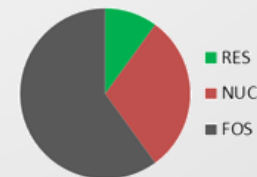
Energy product mix

Green energy as a product



Delivered to customers of certain products of green energy, supported with guarantees of origin. Promotional material products

Residual mix of the supplier



Delivered to customers who do not consume a particular product of green energy. Promotional material supplier mix

Internationally recognized guarantees of origin

- ▶ JSC EMS will apply for membership in Association of Issuing Bodies (AIB)
- ▶ Membership in the AIB allows for the guarantees of origin from the Republic of Serbia to be recognized in other members of the AIB, and that the guarantees of origin from other AIB countries are recognized in the Republic of Serbia
- ▶ Import and export of guarantees of origin through AIB HUB

Advantages and requirements of the guarantees of origin

► Producers:

- Potential higher value of the selling price of electricity
 - Additional income
 - Encourage investment in new jobs
-
- Effort to master the system of guarantees of origin
 - Registration of production units
 - Acceptance of the fact that electricity will no longer be sold as renewable if the guarantee of origin is separated and sold on the other market, independently of the electricity itself



Advantages and requirements of the guarantees of origin

➤ Supplier:

- Additional earnings from the sale of guarantees of origin
 - Providing evidence to end customers
-
- Overcoming of the new system, reviewing the rules and operation of the system of guarantees of origin
 - Required to open account in an electronic system
 - Cancellation of guarantees of origin in registry
 - Calculation of disclosure data



Thank you for your
attention