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Romanian Green Certificates Market in the new legislative context

“Renewable Energy Conference - Opportunities in renewable energy - How to create and make a green business profitable in Romania?” / 2nd of October 2012 / Bucharest, JW Marriott Bucharest Grand Hotel

Support System for E-RES

Established by Law

- Fixed Quantities – mandatory quotas
- Variable price – determined by market mechanisms

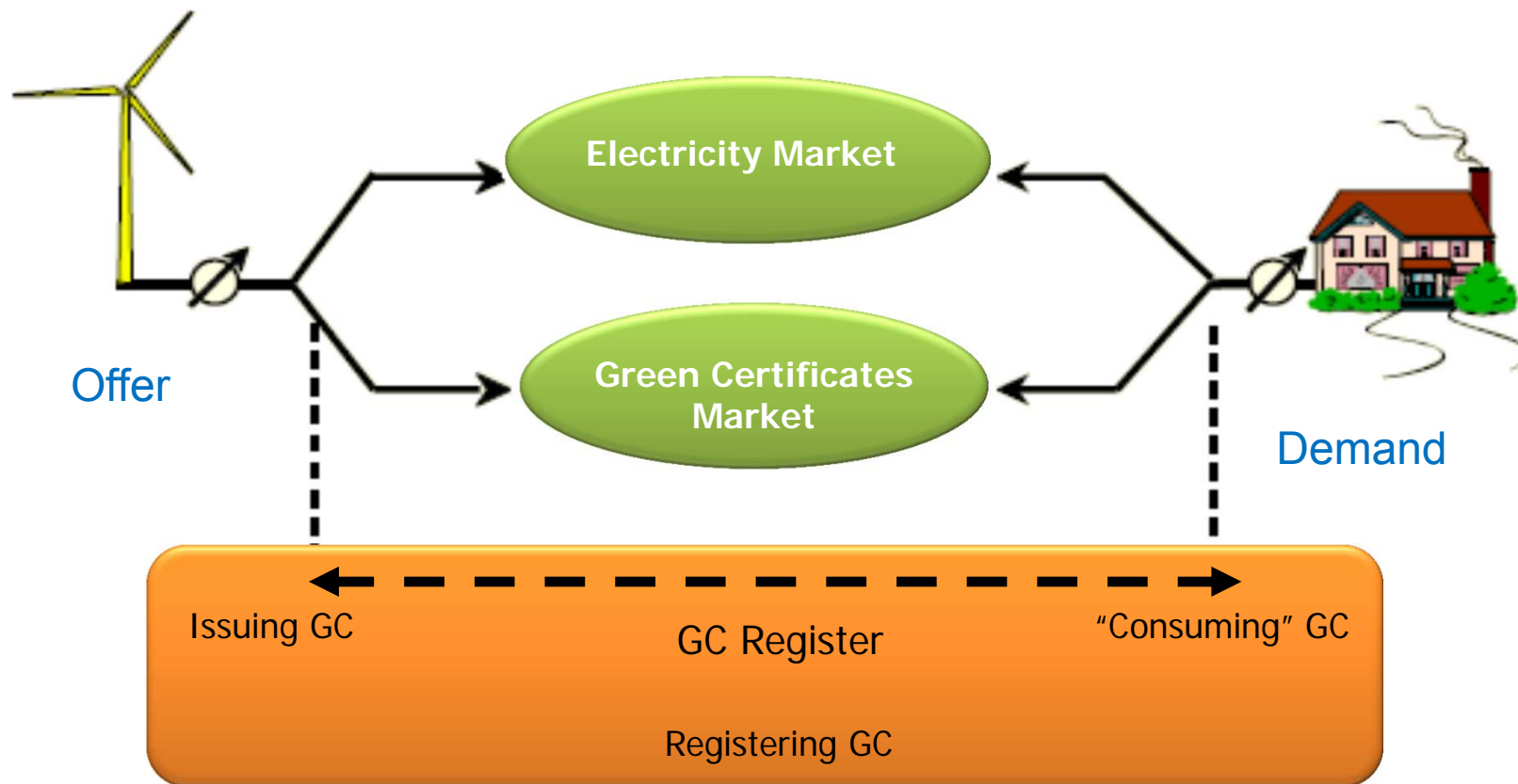
Minimum and maximum values established by Law
(27 €/certificate – 55 €/certificate)

For producers protection

For consumers protection

***Instruments for promotion of electricity produced from renewable energy sources
- Green Certificates tradable on the Green Certificates Market -***

Support system for E-RES

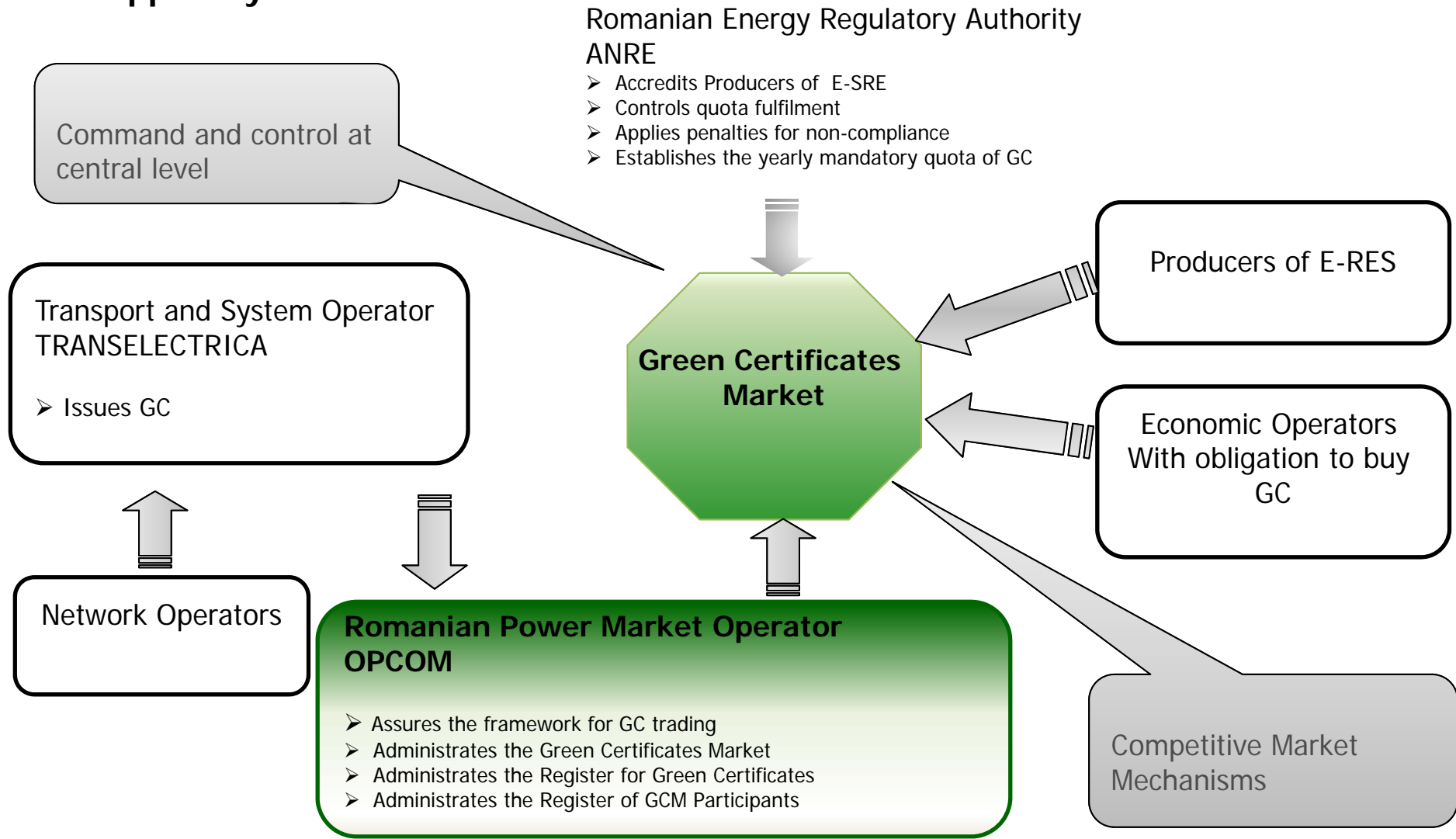




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Support system for E-RES





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Primary Legislation

- Law 134/18.07.2012 for the approval of the OUG 88/12.10.2011 regarding the amending and completing the Law 220/2008 on establishing the promotion system of electricity production from RES
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- OUG 88/12.10.2011 on amending and completing the Law 220/2008 for establishing the support system of the production of the E-RES, published in OJ MO 736/19.10.2011
Undertakes the amendments of EC to the Law 220/2008
- GO 29/2010 on amending and completing the Law 220/2008 for establishing the support system of the production of the E-RES
Systems for certification of the installers and information campaigns
- Law 220/2008 for establishing the support system of the production of the E-RES, republished in OJ 577/13.08.2010, Part I



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Secondary legislation

Ord. ANRE 42/20.10.2011 – Regulation for accreditation of the producers of E-RES for participation in the support system by tradable green certificates

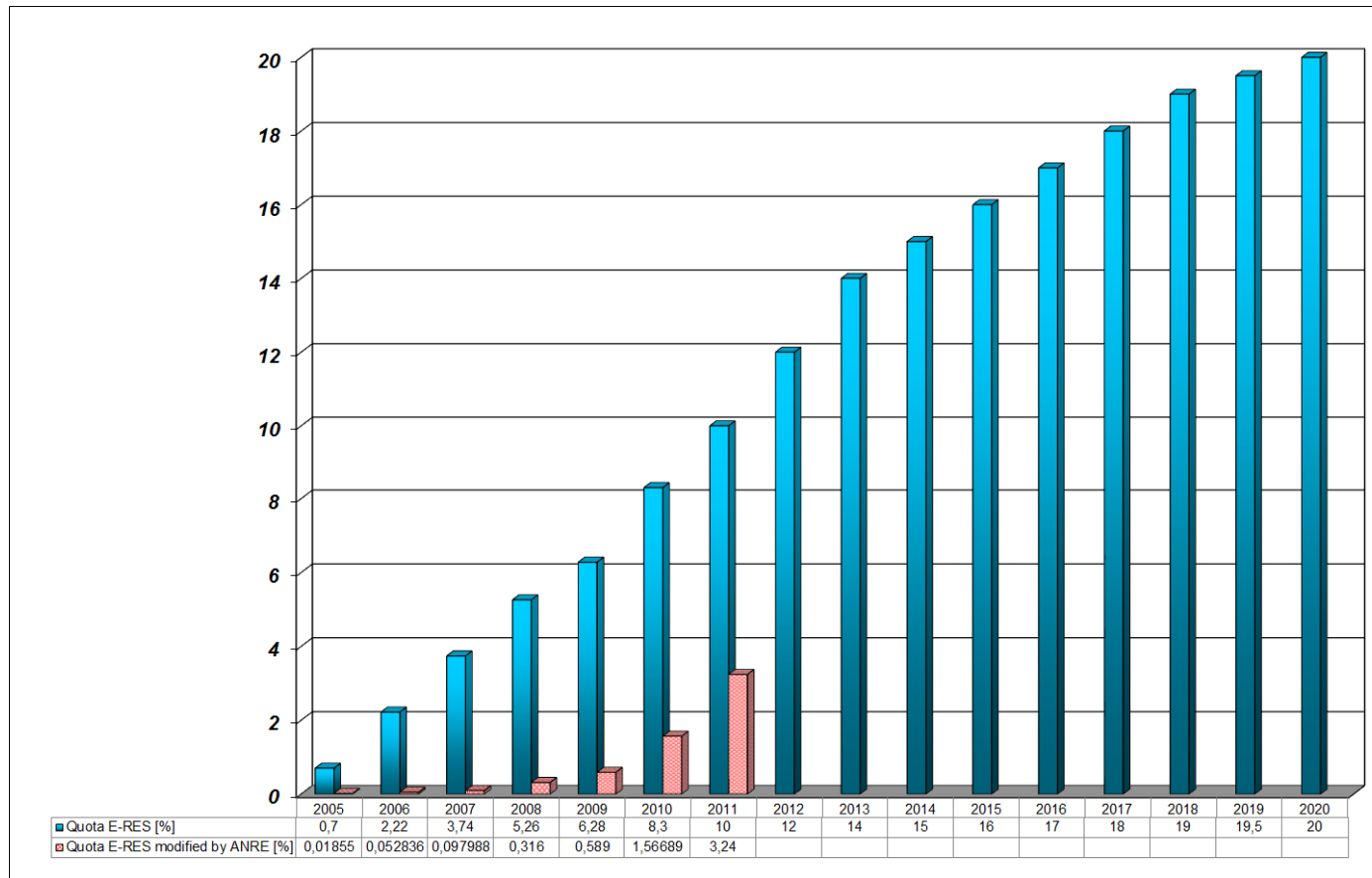
Ord. ANRE 43/20.10.2011 – Regulation for GC issuing

Ord. ANRE 44/20.10.2011 – Regulation for organization and functioning of the green certificates market

Ord. ANRE 45/20.10.2011 – Methodology for setting of the annual quota of GC acquisition

GCM – current state

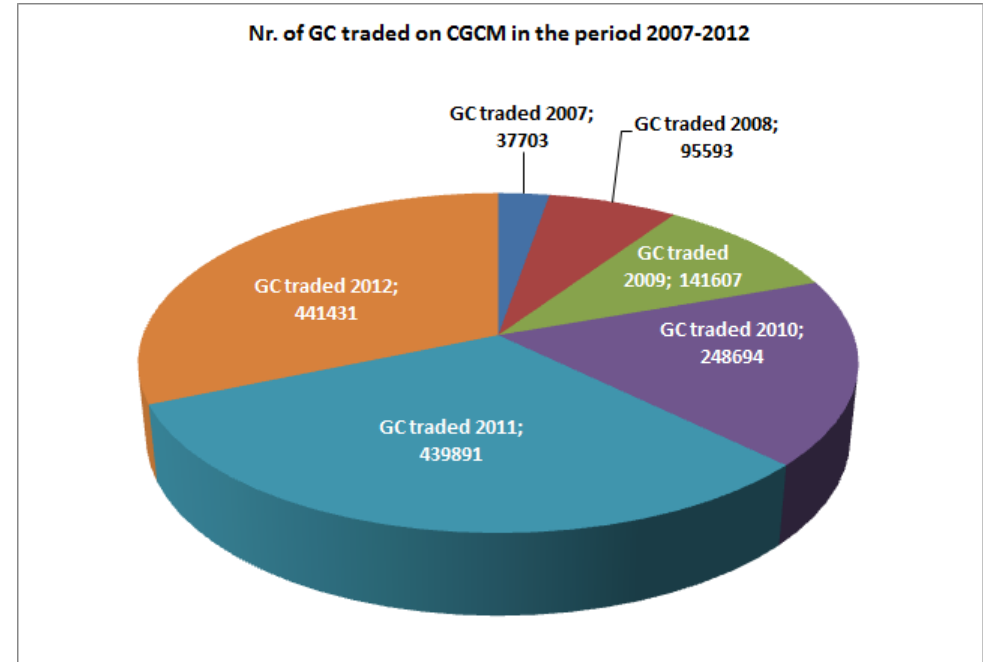
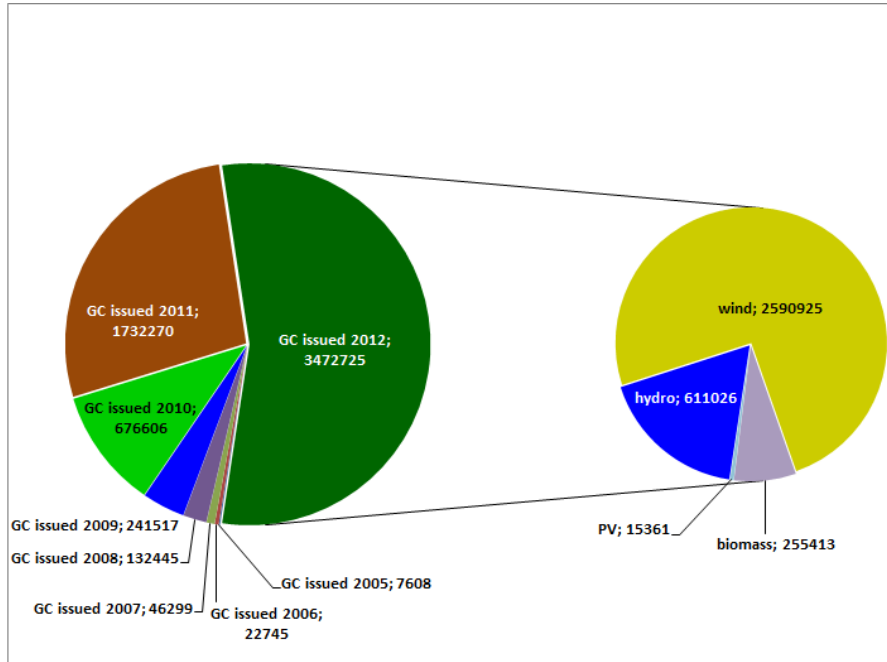
E-RES Quotas: provided in the Law and realized



GC Quota estimated for 2011 by ANRE : 0,03768 GC/MWh

GC Quota estimated for 2012 by ANRE : 0,126 GC/MWh

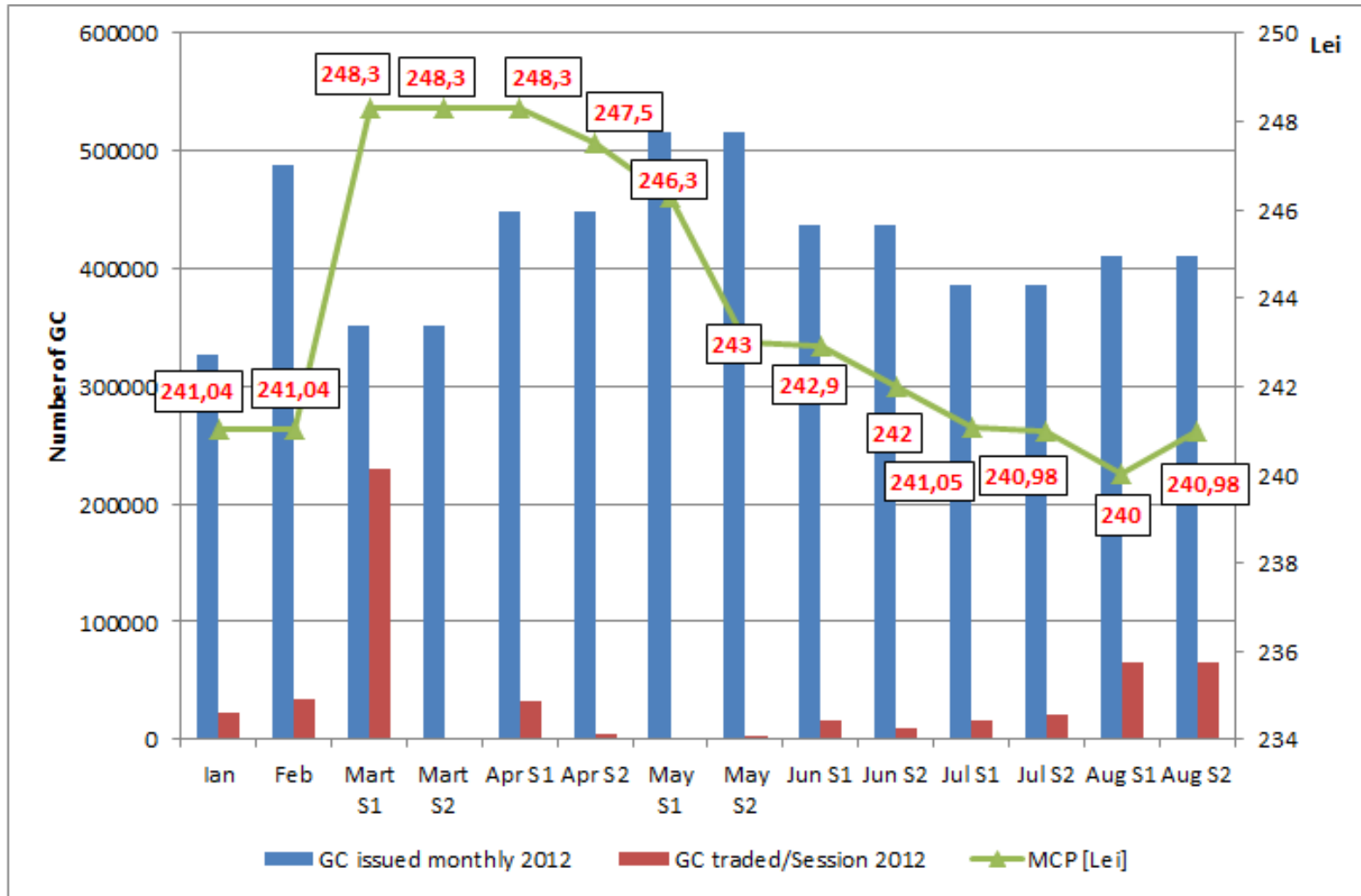
GCM – current state



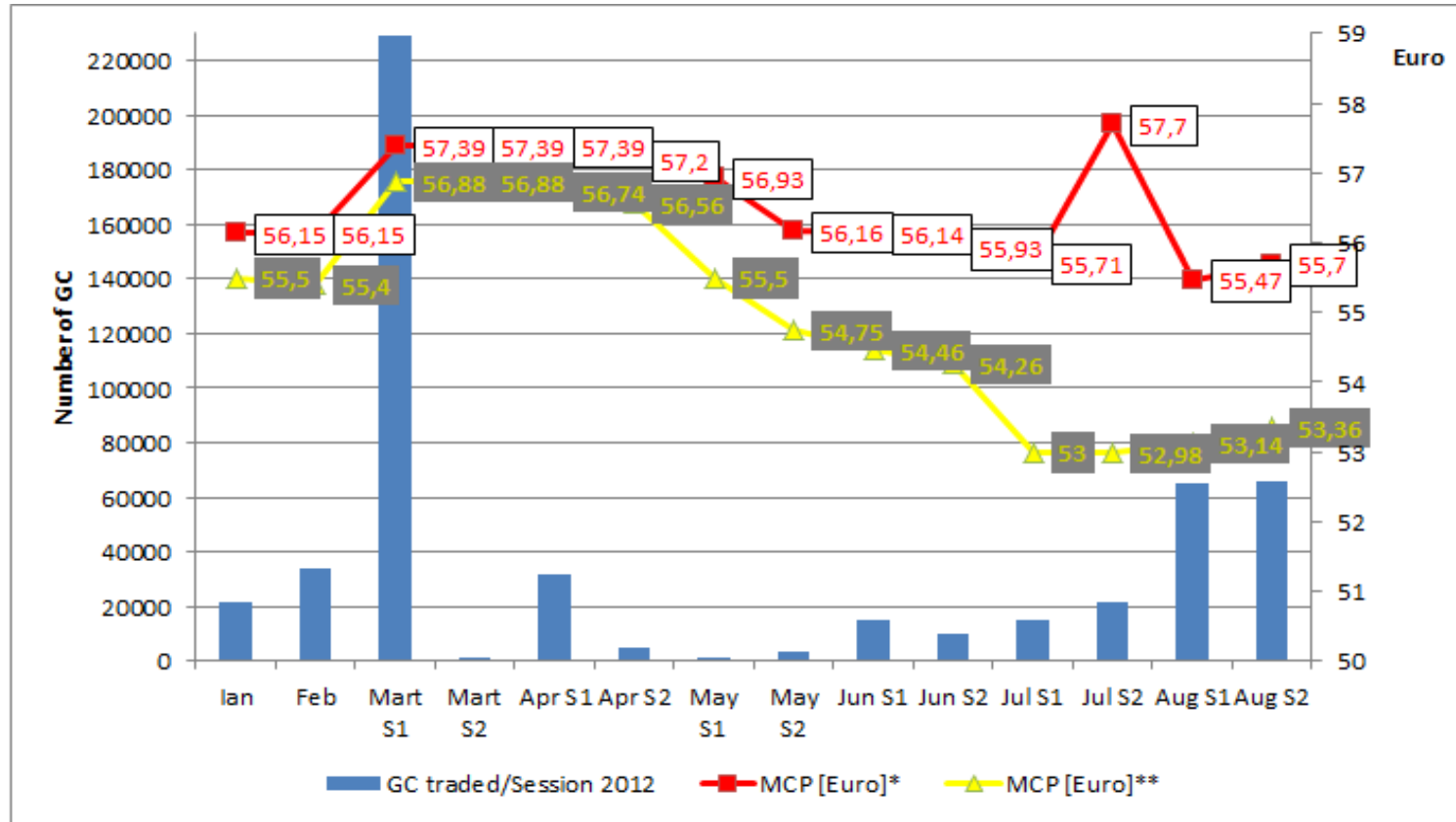
Share of each type of RES in the total number of GC issued for E-RES produced in 2012

hydro	17,60%
wind	74,61%
biomass	7,35%
PV	0,44%

GCM – current state



GCM – current state

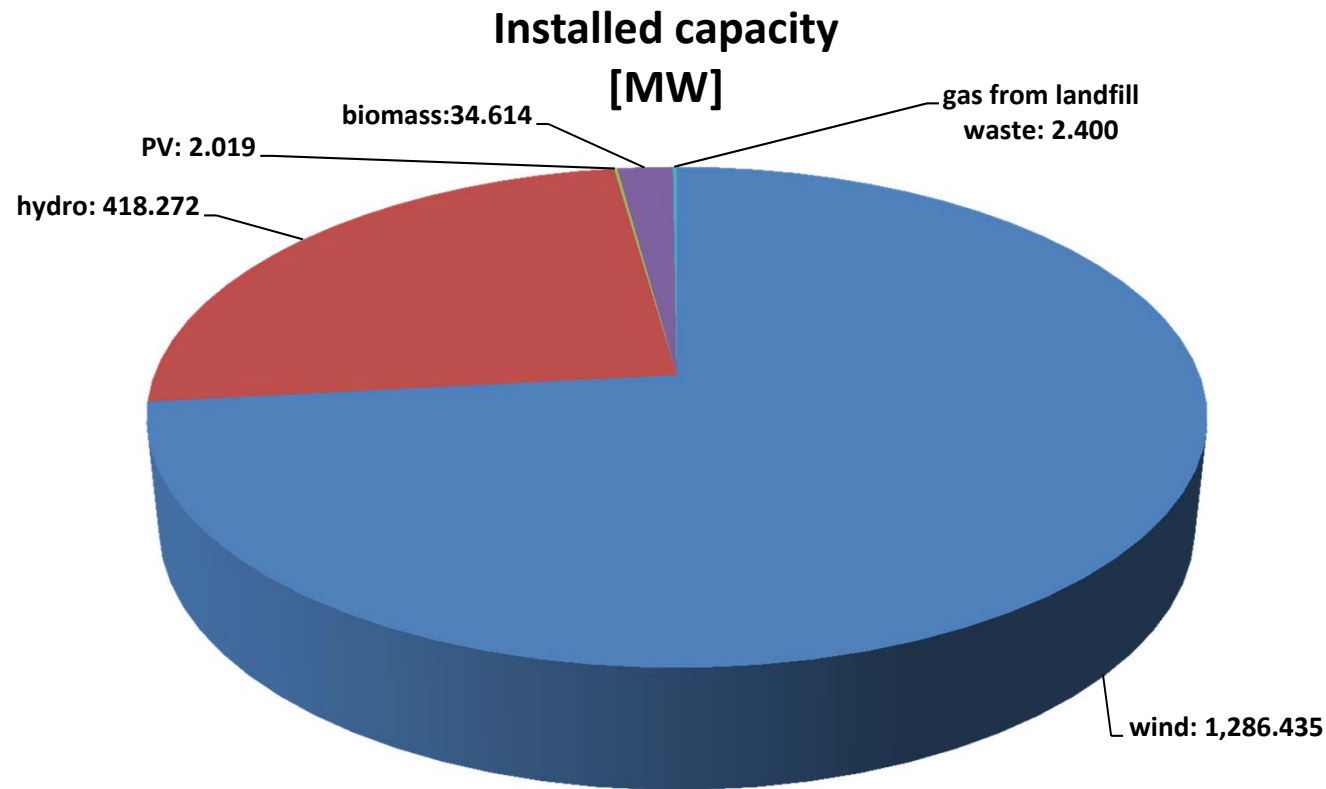


* Price in Euro calculated with the exchange rate calculated by Romanian National Bank as average of the month of December 2011, used by ANRE in the calculation of the limit values for the trading price of GC



** Price in Euro calculated with the exchange rate euro/leu calculated by Romanian National Bank as monthly average for 2012

PCV – current state



Data from TRANELECTRICA website



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Law 134/2012 for the approval of the OUG 88/12.10.2011 regarding the amending and completing the Law 220/2008 on establishing the promotion system of electricity production from RES, republished, with subsequent amendments

Are defined :

- ‡ Power plant multifuel
- ‡ Overcompensation
- ‡ Cost-benefit analysis
- ‡ Internal rate of return
- ‡ Energetic crops
- ‡ Priority acces to the network for E-RES
- ‡ Guaranteed acces to the network for E-RES

Additional provisions to the 220/2008 republished:

- ‡ For E-RES producers that received GC before applying the system provided in this Act, the duration of applying the system will be diminished according to the period for which they already received GC.
- ‡ Producers of electricity from : **biomass, bioliquids, biogas**, can benefit from the promotion system established by the Law only if they own certificates attesting the origin of those energy sources, **issued by accredited institutions.**



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Law 134/2012 for the approval of the OUG 88/12.10.2011 regarding the amending and completing the Law 220/2008 on establishing the promotion system of electricity production from RES, republished, with subsequent amendments

Number of GC issued for 1 MWh E-RES:

- ♦ for electricity produced in hydropower plants with capacity up to 10 MW:
 - 3 GC/1 MWh if the plants are **new**
 - 2 GC/1 MWh if the power plants are **refurbished**
 - 1 GC/2 MWh if the power plants are old and are not refurbished
- ♦ for electricity produced in wind power plants:
 - 2 GC/1 MWh, until 2017
 - 1 GC/1 MWh starting with 2018
- ♦ for electricity produced in power plants with use: geothermal energy, biomass, bioliquids, biogas:
 - 2 GC/1 MWh
- ♦ for electricity produced in power plants with use gas from wastes processing, gas from the process of fermentation of sludge from wastewater treatment plants:
 - 1 GC/1 MWh
- ♦ for electricity produced in power plants with use solar energy:
 - 6 GC/1 MWh
- ♦ for electricity produced in high efficiency cogeneration in power plants which use biomass :
 - 1 GC/1 MWh **additional**
- ♦ for electricity produced in power plants which use biomass from energetic crops or forestry wastes:
 - 1 GC/1 MWh **additional**
- ♦ for testing period, whatever the type of the renewable energy source :
 - 1 GC/1 MWh
- ♦ for power plants which benefit from State Aid :
 - the number of GC/MWh is reduced according to the reduction of the reference value of the investment per MWh with the value of the State Aid received (for example 1,12 GC/MWh instead of 2 GC/MWh))



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GCM – current state

Price limits applied:

- ‡ 27 ÷ 55 euro
- ‡ exchange rate used: average of the december of the previous year established by National Romanian Bank
- ‡ indexed with the average inflation index of Euro registered in the previous year for euro zone, communicated officialy by EUROSTAT

Penalties for non-compliance:

- ‡ 110 euro
- ‡ exchange rate used : average of the december of the previous year established by National Romanian Bank
- ‡ indexed with the average inflation index of Euro registered in the previous year for euro zone, communicated officialy by EUROSTAT
- ‡ 55 euro for noncompliance with the yearly quota quarterly

Collection of penalties:

- ‡ Administration of Environment Fund (yearly)
- ‡ Guarantee Fund for functioning of GCM (quarterly)

Use of penalties:

- ‡ Financing the investments in E-RES production by persons wich realize installations with capacity up to 100 kW (Administration of Environment Fund)
- ‡ Buying the GC unsold becose of quota nonfulfilment quarterly, at the request od the producers (Guarantee Fund)

Duration of support scheme application:

- ‡ 15 years for new installations
- ‡ 10 years for hydro power plants with installed capacity up to 10 MW, refurbished
- ‡ 7 years for power plants used before in other states
- ‡ commissining/refurbishment until the end of 2016



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Law 134/2012 for the approval of the OUG 88/12.10.2011 regarding the amending and completing the Law 220/2008 on establishing the promotion system of electricity production from RES, republished, with subsequent amendments

Changes :

Period of valability of GC: **16 months** from the issuing date

The quantity of electricity for which is established the obligation of GC acquisition includes:

- ♦ electricity bought by **suppliers** of electricity, for their final consumption as well as for selling it to final consumers
- ♦ electricity used for own final consumption, other than own technological consumption, by a **producer** of electricity
- ♦ electricity used by a **producer** for supplying with electricity the **consumers connected by direct lines to the power plant**

Price limits and value of penalty :

- ♦ are indexed yearly by ANRE with **the average inflation index of euro, for the previous year, calculated for euro zone,** communicated officialy by EUROSTAT

The calculation of fulfilled quotas for the economical agents with obligation, will be quaterly

Penalties collection: Administration of the Fund for Environment

Producers that own power plants with installed capacity up to 1 MW/plant or 2 MW/plant for high efficiency biomass cogeneration can sell the electricity **with regulated prices, unique for each type of technology** and not receive GC.

The Guarantee Fund-administrated by OPCOM



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Other provisions:

Priority dispatching for E-RES so that the effective production is as close to the availability of these resources

Limiting or stopping the production of E-RES will be made only upon the technical and commercial regulations approved by ANRE or in exceptional cases , where such action is absolutely necessary to maintain stability and meet safety of national system of electricity.

Guaranteed acces to the network: E-RES that benefits of support system by tradable GC, **contracted and sold on the electricity market**

Priority acces to the network: E-RES **contracted and sold with regulated price**

Network connection is made to the extent that the safty of the national electricity system is not affected

Producers which develop projects for E-RES production in power plants with installed capacity grater than 125 MW:

- ◆ are obliged to notify them separately to EC.
- ◆ receive GC only after they receive authorization from EC



Secondary legislation – Role of OPCOM

Regulation for organizing and functioning of green certificates market

- **Administrator of the green certificates market:** green certificates market consists of centralized green certificates market and bilateral contracts for green certificates
- **Operator of the centralized green certificates market**
- **Administrator of the Register of the green certificates market participants**
- **Administrator of the Register of green certificates:** Each participant on GCM has an account of GC in the register of GC, in which are registered the codes of identification of GC that the participant own and their state – valid, cancelled, transferred or consumed

OPCOM transfers GC from the seller account to the buyer account after receiving the confirmation of payment of financial obligation, both for transactions on centralized market and on bilateral contracts.



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Secondary legislation – Role of OPCOM

- According to the provisions of the Law 134/2012, Opcom has the obligation to constitute the Guarantee Fund for the functioning of GCM
 - ❖ The Fund consists of the money paid by the suppliers which didn't fulfilled their quota each quarter; for each GC missing from the quota will be paid the maximum price of GC calculated by ANRE for the respective year
 - ❖ The money of the Guarantee Fund will be used by OPCOM to buy GC unsold in the respective quarter because of quota nonfulfillment, at the producers request

- Opcom elaborates the Regulation for the establishing and use of the Guarantee Fund for the functioning of GCM

- Opcom calculates and publishes quarterly, the weighted average price on the CGCM

- Opcom proposed the amendments of the Regulation for organizing and functioning of CGM; the Draft of this document is published on Opcom's website for comments



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Thank you for your attention !

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