



**HIDROELECTRICA**

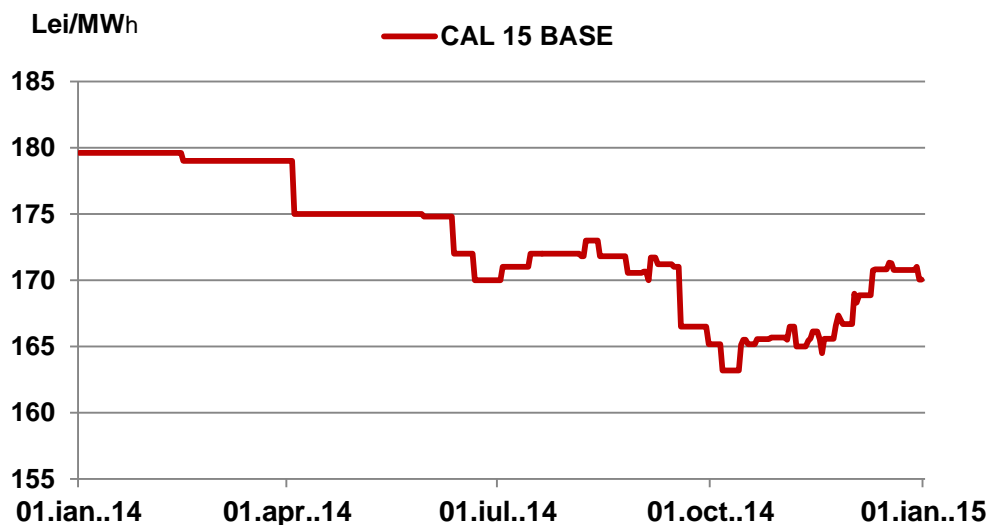
*...for a new beginning!*

# Hidroelectrica

February 2015

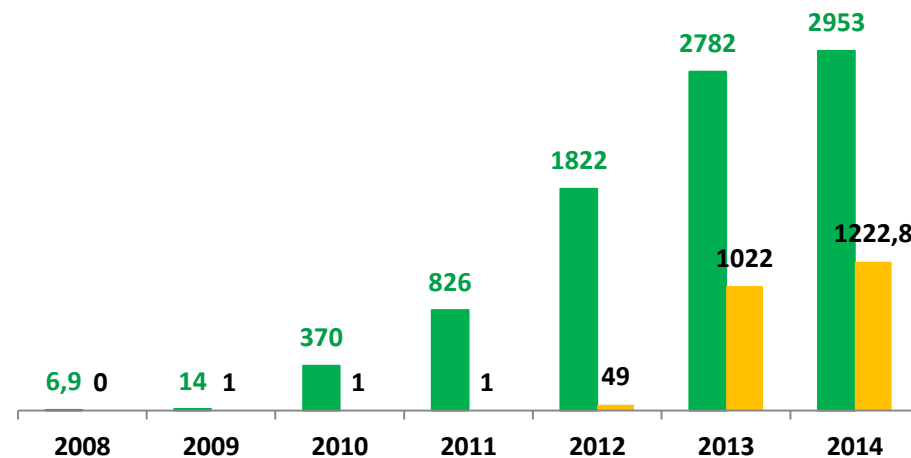
# Romanian electricity market – brief characteristics

- Strong development of wind and photovoltaic parks;
- Stagnation or even decrease of electricity demand leads to over-capacity;
- Subsidised renewables and cogeneration push inefficient coal and gas power plants out of the merit order and cut the profitability of peak power plants;
- Low electricity wholesale prices do not cover full costs for classical power plants.

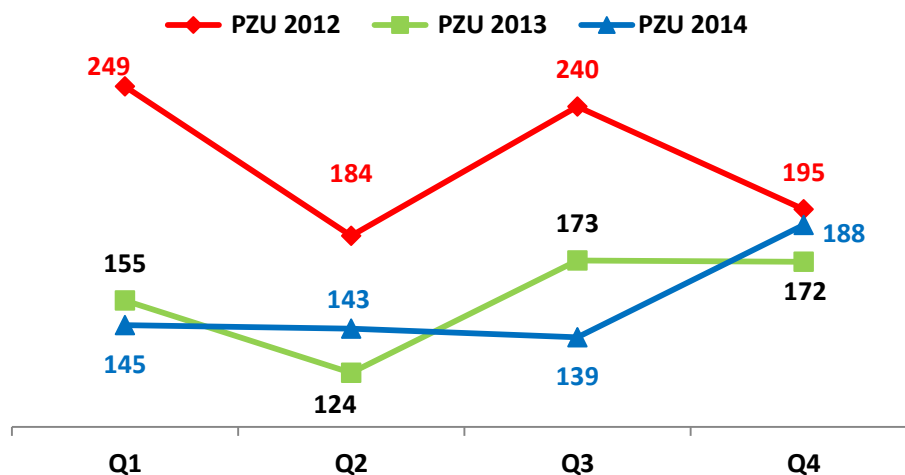


Source: OPCOM PCCB and OTC closing prices for Calendar 15 product

■ Installed Capacity Wind (MW) ■ Installed Capacity PV(MW)



## Day Ahead Market (DAM) baseload prices

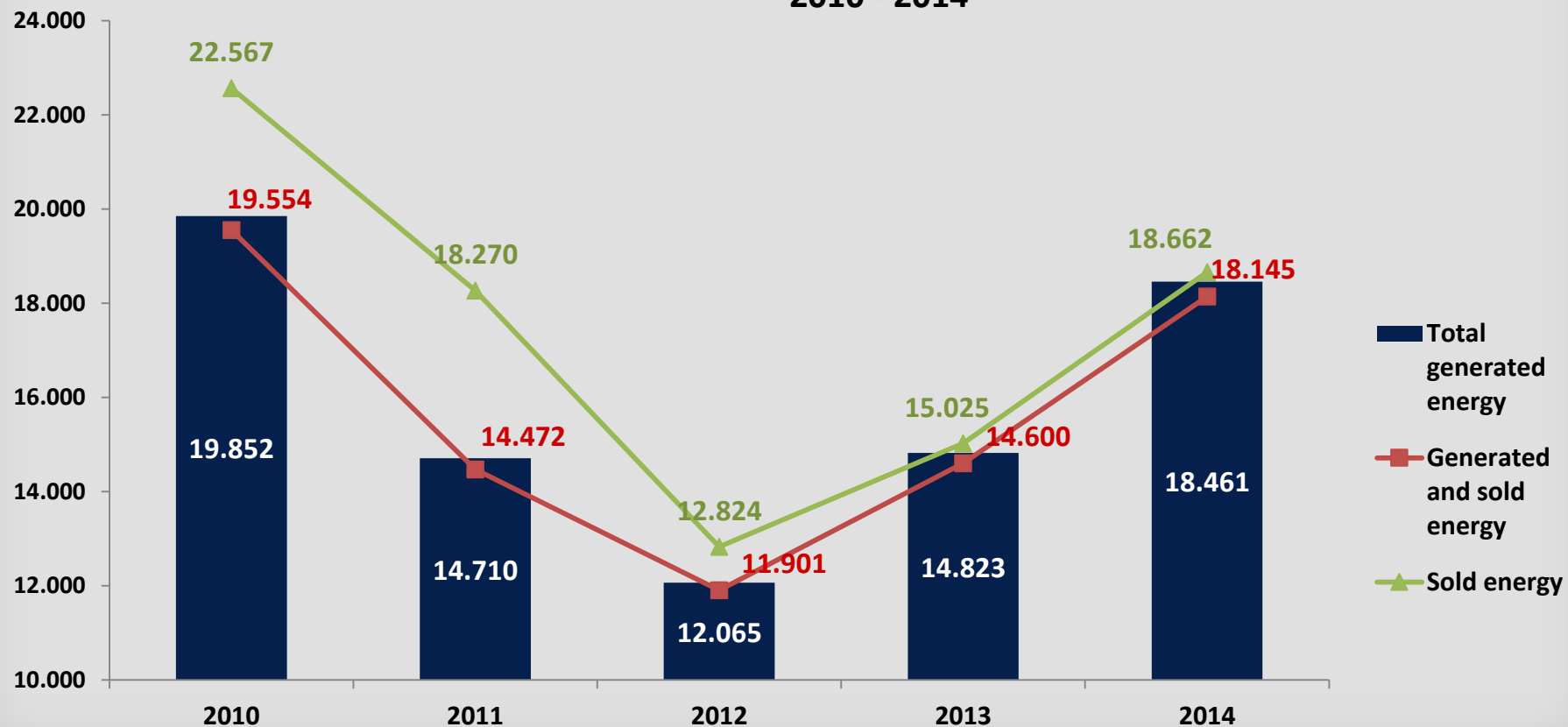


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# Hidroelectrica – Power generation

## Hydro generation (GWh)

2010 - 2014



# Hidroelectrica – Financials (I)

## REVENUES

LEI mn.	2012	2013	2014
Operating Revenues	2.418	3.150	3.450
Turnover	2.402	3.083	3.406
Other revenues	15	67	44
OPEX	2.740	2.134	2.222
Operating result	(322)	1.016	1.228
Financial result	(166)	(114)	(30)
Pre tax profit	(488)	902	1.198
Income tax expense	20	183	231
Net profit	(508)	719	967
EBITDA	924	1.987	2.190
EBIT	(322)	1.016	1.228
No. of employees	5.115	4.172	3.711
Production costs (lei/MWh)	171.2	128.3	108.7

Source: Hidroelectrica Financial statements; 2014: interim data

# Hidroelectrica – Financials (II)

## CASH FLOW

LEI mn.	2012	2013	2014
Operating cash flow	1.043	1.236	1.564
CAPEX	(752)	(278)	(188)
Investing cash flow	(748)	(237)	(166)
Dividends	(6)	(98)	(103)
Loan reimbursements	(393)	(414)	(679)
Financing cash flow	(248)	(512)	(782)
Net cash generated	47	487	616

## BALANCE SHEET

LEI mn.	2012	2013	2014
Long term assets	19.913	19.065	18.311
Current assets	410	465	1.007
Interest bearing debt	2.262	1.397	605
Shareholders equity	16.040	16.697	17.665

Source: Hidroelectrica Financial statements; 2014: interim data

# Strategic Directions (I)



## MANAGEMENT

Persons who are able to implement the best practices from private companies were appointed in all company's key positions: new Finance, Trading, HR and Development Directors, new Finance& Accounting, Internal Audit, IT, Trading, Risk management and Internal Control Managers appointed.

A remuneration package and a job evaluation policy similar to those applied within the private companies will be implemented.



## LISTING

The company will be listed after exiting from the reorganization procedure.



## ENTRY ON OTHER MARKETS/ ENERGY EXPORT

One option to protect the margins from the decreasing prices on the Romanian market is to enter the neighbouring markets, where there is energy deficit and prices are higher. In this respect, the following actions have been taken:

- trading started on the OPCOM OTC market
- the company was licensed on the Hungarian market, starting with October 2014; first transactions made in December, covering the entire year 2015
- the company shareholders approved on July to open a subsidiary in Republic of Serbia, registered in November. Licensing process - in progress.



## A NEW APPROACH FOR SELLING ENERGY

Focus on optimization and margin maximization; new trading, risk and portfolio management procedures and processes will be implemented. New trading team joined the company. A new Strategy for trading on medium and long term was approved in 2014; its implementation – in progress.



# Strategic Directions (II)



## **COST OPTIMIZATION & PROFITABILITY INCREASE**

The company focuses on optimizing further the cost base.

Initiatives to change the applicable legislation, with impact on the cost base and company's performance:

- quantity and price of the energy sold on the regulated market – the special construction tax was recognized as production cost component;
- tax level on special constructions – reduced from 1.5% to 1% starting with 2015;
- tariff level for turbinated water;
- Public procurement procedure.



## **ASSETS UPGRADE**

The focus of the CAPEX plan will be on upgrades and rehabilitations of largest assets, such as Stejarul, Vidraru and Mariselu plants.

Hidroelectrica will continue the diagnose of its assets portfolio, to dispose the small hydropower plants and to take all the necessary measures in order to optimize the generation capacities and their availability. Company will also continue selling non core assets and some unfinished investments.



## **ORGANIZATIONAL STRUCTURE**

The company's organizational structure will be further optimized and made more efficient, based on a process approach.



## **CORPORATE GOVERNANCE**

Hidroelectrica will uphold best corporate governance principles among its peers. The first Corporate Governance Code was approved and published.



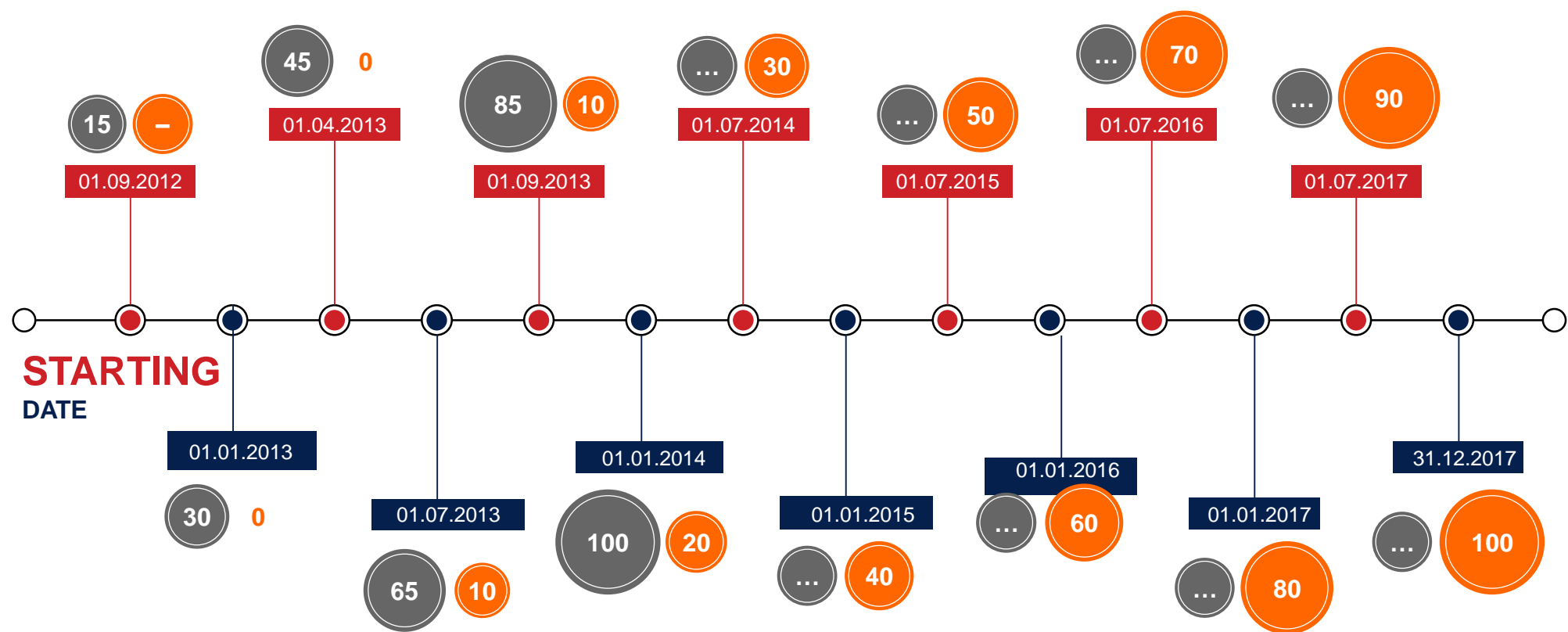



# Romanian Electricity Market – Overview

- **The Romanian electricity network is synchronized with ENTSO-E**
- Within the ENTSO-E, Romania is interconnected to Bulgaria, Hungary and Serbia, as well as separately to Ukraine and Moldova
- Romania is currently upsizing connections into Europe in order to avoid a physical bottleneck in transmission
- The **4M Market Coupling (4M MC)**, integrating the markets of OTE in Czech Republic, HUPX in Hungary, OPCOM in Romania and OKTE in Slovakia, has been launched successfully in November 2014. The 4M MC, as extended by Romania, replaces the Trilateral Coupling, in operation since 2012 between Czech Republic, Hungary and Slovakia.
- **In 2013, in Romania, a quantity of about 450 GWh was imported and 2,466 GWh were exported;** these values do not represent physical flows, but are the result of commercial trade, as reported monthly by the transmission system operator (TSO)
- **In 2014, for the first 9 months** the exports of energy were of **7,125 GWh** as per the reports by the TSO (3.53 times more than in 2013, when exports were or 2,016 GWh). In the future, power exports to other markets may provide the power generation/supply companies with a market advantage



# Calendar of the Gradual Elimination of the Regulated Electricity Prices



 NON – HOUSEHOLD CONSUMERS –  
% ACQUISITION FROM THE COMPETITIVE MARKET

 HOUSEHOLD CONSUMERS –  
% ACQUISITION FROM THE COMPETITIVE MARKET

**Hidroelectrica is uniquely positioned to provide ancillary services.**

# In order to promote renewable energy, Romania has a supplier quota system of Green Certificates (GC) in place since 2005

- **Romania** expects a contribution by renewable energy to gross electricity consumption of 41.9% in 2015 and 42.6% in 2020
- **Romania** has a supplier quota system of GCs in place since 2005
- **Quota Obligation System** – mechanism used to promote the production of electricity from renewable energy sources by means of the acquisition by the suppliers of a specified quota of electricity produced from renewable energy sources
- **GCs** are awarded to producers on a monthly basis by the TSO and can be traded on a central market administered by the market operator, OPCOM
- **GC transactions** are subject to a minimum and maximum price per GC

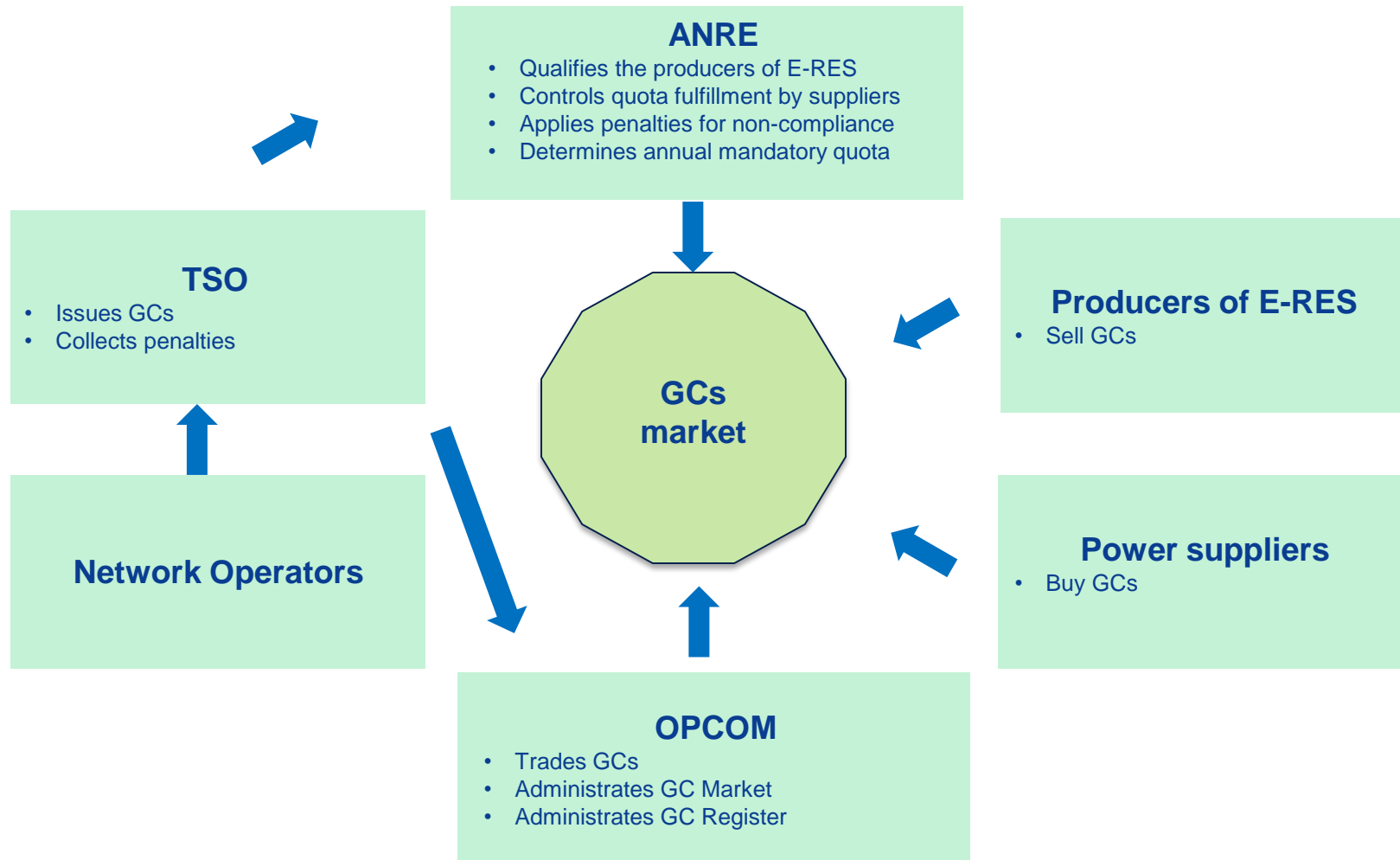


# The GCs value is determined by means of the market mechanisms in a range established by Government Decision

- **The GCs value is determined by means of the market mechanisms:**
  - Bilateral contracts negotiated between producers and suppliers
  - On a Centralized Market organized and administrated by OPCOM
- **The price of GCs varies in a range established by Government Decision, [Pmin ÷ Pmax].**  
The minimum is imposed in order to protect the producers and the maximum to protect the consumers.
- **2014 price trading limits of GCs on GC market are:**
  - minimum: 130.69 lei/GC (29.280 euro/GC)
  - maximum: 266.22 lei/GC (59.647 euro/GC)
- In case of failing to reach the mandatory quota of GC for 2014, the amount for a GC not purchased by economic operators that are compelled to annually acquire them is 532.44 lei/GC not purchased (119.293 euro/GC not purchased)
- In 2014, the monthly evolution of the price of the traded GCs was the following:

2014	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec
Price (RON)	197	190	138.42	130.69	130.69	130.69	130.69	130.69	130.69	130.69	130.69	130.69

# Romanian Green Certificates Market Scheme



# Small Hydro Support Scheme

**Small Hidro Power Plants (SHPPs) are generation capacities from renewable sources which, up to an installed capacity of 10 MW, benefit from the green certificates support scheme**

*(Act no. 220/ 2008, amended by the following acts: Gov. Ordinance no. 29/2010, Gov. Emergency Ordinance no. 88/2011, Gov. Emergency Ordinance no. 57/2013, Gov. Emergency Ordinance no. 79/2013, Gov. Decision no. 994/2013, Act no. 23/2014).*

Currently, the number of GCs obtained by small hydro producers is:

Type of RES	Power plant type	GC/MWh	Period (years)
Small hydro	Refurbished	2	10
	Unrefurbished	0.5	3

# Advantages of SHPPs

- ❑ are appropriate for small and decentralized energy requirements;
- ❑ flexibility - in particular concerning their ability of adjusting to variable loads according to the affluent flow, making them a privileged component in any integrated power system;
- ❑ the short period of construction, materials usage and local people's skills, can have a great impact upon the country life quality;
- ❑ can be private owned, co-owned or jointly owned, and require a reduced operation staff in number and without any high skills;
- ❑ have a long lifetime; some are centenary and are still under operation;
- ❑ investments in small hydropower plants were proved to be certain and viable and can serve consumers for more generations without polluting the air.



# Sale of Small Hydropower Plants

- According to the strategic directions set by the Judicial Administrator, Hidroelectrica will continue the sales process of SHPPs
- A sales process through outcry auctions of 31 SHPPs grouped in 20 packages of assets is ongoing.





# List of 31 SHPPs (20 packages) submitted to sale – part 1/2

Package Crt. No.	Name of SHPP	Branch	County	River	PARAMETERS		Commissioning year	Functioning
					Installed capacity (kW)	Energy (MWh)		
1	Neagra Sarului 1	Bistrita	Suceava	Neagra Sarului	750	1,941	1987	Yes
	Neagra Sarului 2	Bistrita	Suceava	Neagra Sarului	1,832	3,916	1990	Yes
	Saru Dornei 1	Bistrita	Suceava	Neagra Sarului	1,829	8,190	1987	No
	Saru Dornei 2	Bistrita	Suceava	Neagra Sarului	1,698	3,773	1989	Yes
2	Caralita	Bistrita	Bacau	Trotus	1,000	4,400	1994	No
3	Neagra	Bistrita	Neamt	Neagra	236	610	1989	Yes
4	Bolovanis	Bistrita	Neamt	Bolovanis	550	1,600	1991	Yes
5	Cracau 1	Bistrita	Neamț	Cracau	746	1,952	2001	Yes
6	Falticeni	Bistrita	Suceava	Water supply	260	1,521	1984	No
7	Gura Haitii 1	Bistrita	Suceava	Neagra Sarului	1,260	2,910	1987	Yes
	Gura Haitii 2	Bistrita	Suceava	Neagra Sarului	1,000	2,467	1990	No
8	Lucaciu	Bistrita	Suceava	Haitii	380	736	1989	Yes
9	Valea Cracului 1	Hateg	Hunedoara	Valea Cracului	536	1,266	1987	Yes
	Valea Cracului 2	Hateg	Hunedoara	Valea Cracului	415	1,240	1987	Yes
	Valea Cracului 3	Hateg	Hunedoara	Valea Cracului	560	1,290	1988	Yes
	Zeicani	Hateg	Hunedoara	Valea Cracului	365	870	1986	Yes
10	Chiuzbaia	Cluj	Maramureș	Chiuzbaia + Sasar	495	1,750	1987	Yes
11	Tarlung 1	Sebes	Brasov	Tarlung	730	4,230	1984	No
	Tarlung 3	Sebes	Brasov	Tarlung	1,200	3,520	1990	Yes
	Tarlung 4	Sebes	Brasov	Tarlung	1,200	3,700	1993	Yes
	Tarlung 2	Sebes	Brasov	Tarlung	1,800	4,230	1990	No
12	Sebiș	Hațeg	Arad	Sebis	270	580	1994	No
13	Talmaciu	Sebes	Sibiu	Sadu	235	700	1985	No
14	Rasinari	Sebes	Sibiu	Rasinari	60	380	1987	No
15	Halchiu Moara	Sebes	Sibiu	Vulcanita	130	803		No



## List of 31 SHPPs (20 packages) submitted to sale – part 2/2

Package Crt. No.	Name of SHPP	Branch	County	River	PARAMETERS		Commissioning year	Functioning
					Installed capacity (kW)	Energy (MWh)		
16	Manzalesti	Curtea de Arges	Buzau	Slanic	940	4,400	1987	Yes
17	Vicov	Bistrita	Suceava	Suceava	660	1,908	2000	Yes
18	Boia 3	Sebes	Valcea	Boia	500	1,100	1992	Yes
	Boia 2	Sebes	Valcea	Boia	500	1,100	2001	Yes
19	Surduc	Hațeg	Timis	Surduc	1,700	4,300	1986	Yes
20	Vladești	Ramnicu Valcea	Valcea	Olanesti	1,000	3,790	1986	No



***In the light of the aforementioned, we hereby invite you to take part in our sales process.***

***Further details are available in the Public Announcement posted on our website [www.hidroelectrica.ro](http://www.hidroelectrica.ro)***

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