



Transelectrica®

Compania Națională
de Transport
al Energiei Electrice

WE LEAD THE POWER

EU 2020 targets: Managing integration of wind in the Romanian grid

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Wind Energy the Facts – Integrating wind power in Romania

Bucharest, May 2nd, 2009

Long term targets for Romanian PS

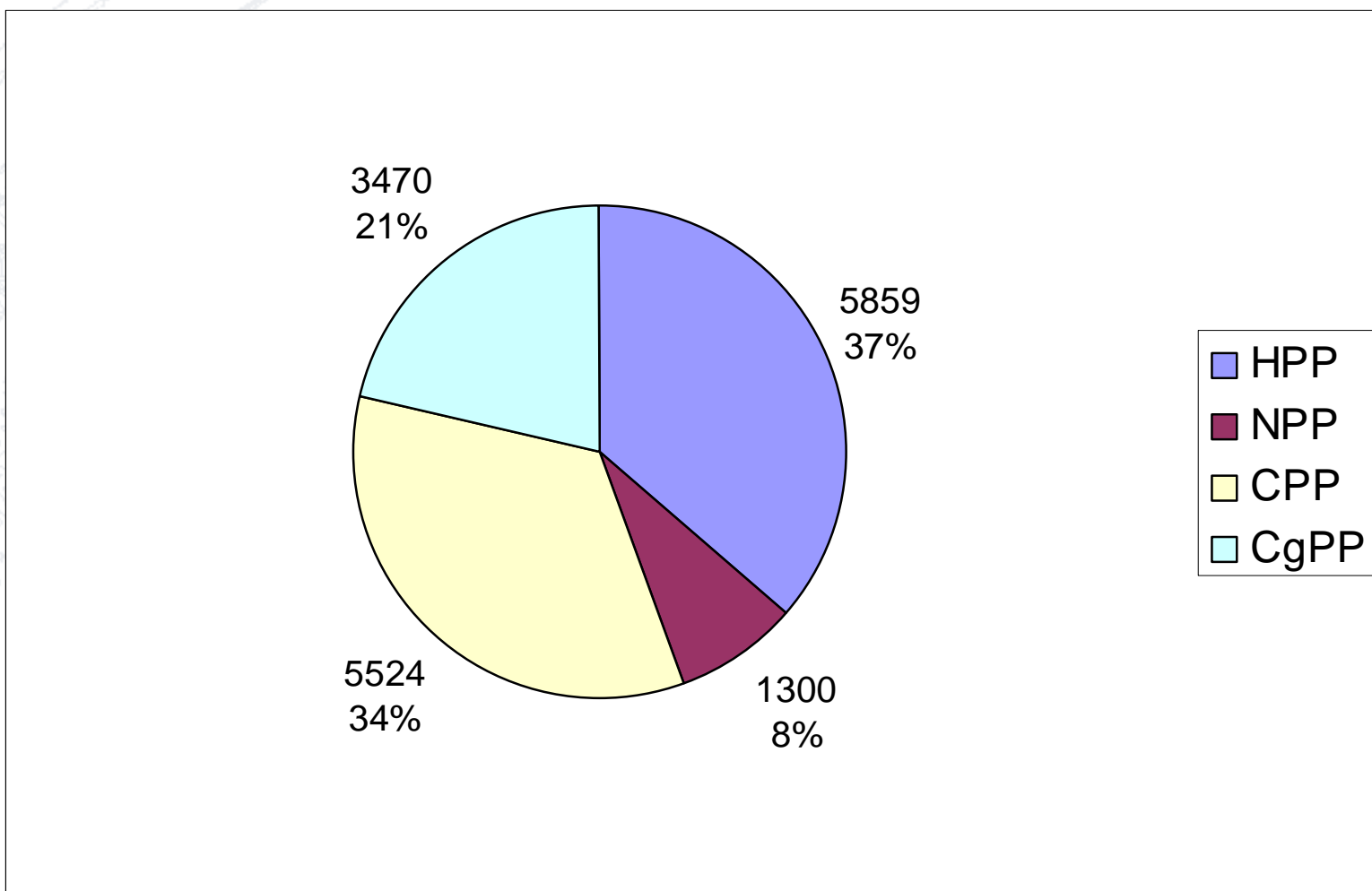
According to the Law 220 / 2008 the generation on renewable sources (subject of green certificates support scheme) should cover the following quantities per year:

- 2009 – 6,28 % – ~3,20 TWh;
- 2013 – 9,00 % – ~4,95 TWh;
- 2017 – 13,20 % – ~8,05 TWh;
- 2020 – 16,80 % – ~10,92 TWh.

Values are not including the generation of the “big” HPP.



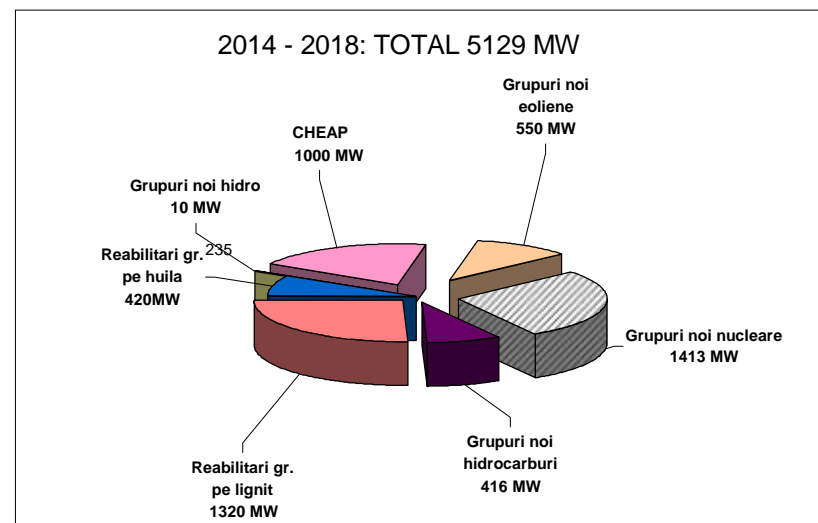
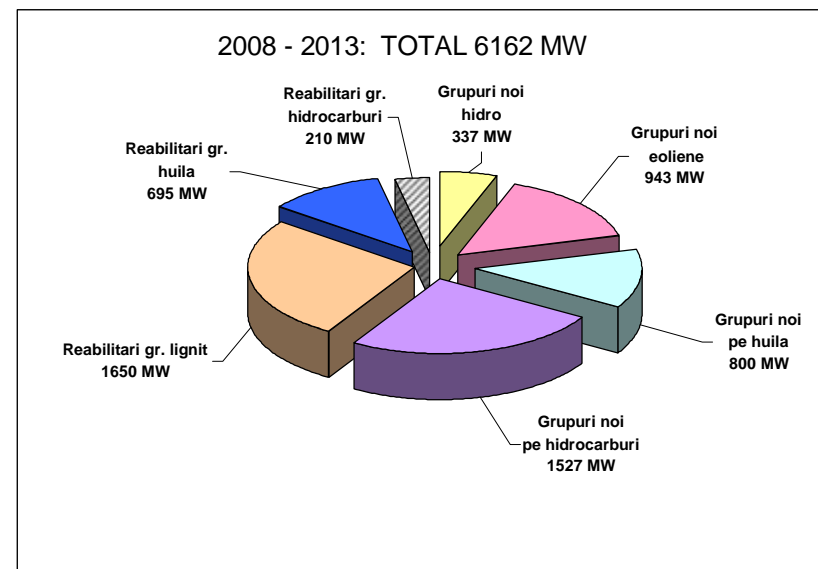
Installed capacity structure – 2008





New investments in generation

Forecast – 2008 ÷ 2018



Present status

Access to the grid contracts (AGC)

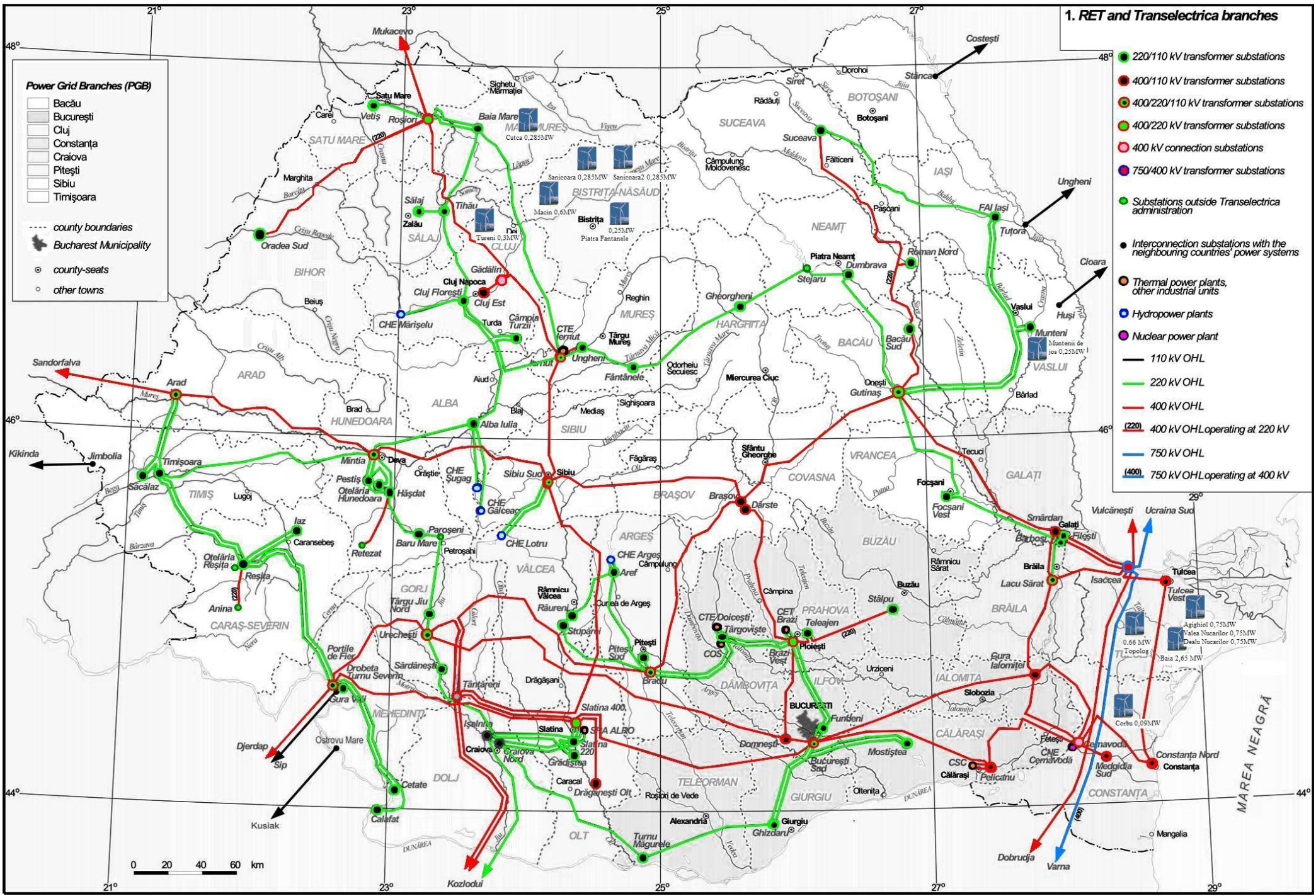
Date	Dec. 2007	è Dec. 2008	è June 2009
Installed power [MW]	0,03	600	286
Currently In operation [MW]	0,03	0	0

Technical permit for access to the grid (TPAG)

Date	Dec. 2007	è Dec. 2008	è June 2009
Installed power [MW]	13,01	2125	968
Without AGC signed [MW]	3,00	1525	682

ELECTRICITY TRANSMISSION GRID (RET)

1. RET and Transelectrica branches



Possibilities to increase the amount of wind generation – (I) Administrative measures

- New rules and prices for ancillary services;
- New rules for congestions;
- New types of contracts;
- New types of electricity markets (intra- day);

Possibilities to increase the amount of wind generation – (II) Investments for PS

- Construction of one or even more (if suitable) PSHPP;
- Promoting flexible, modern (usually combine cycle and gas fired) generation units;
- Promoting the modernization (if possible) of the old generation units in order to make them capable to follow the charge variation;
- Promoting new technologies for storage.

Possibilities to increase the amount of wind generation – (III) Investments for PN

- Construction of several new OHL to increase the transmission capacity from the generation areas toward the consumption areas;
- Construction of several OHL to ensure the redundancy during scheduled maintenance actions;
- Promoting the “smart grid” concept.



dr. Dan Preotescu – Bucharest, May 2nd, 2009

Thank you for your attention!