



## CEZ overview of Environmental Investments



## Bucharest Renewable Energy Conference 2009

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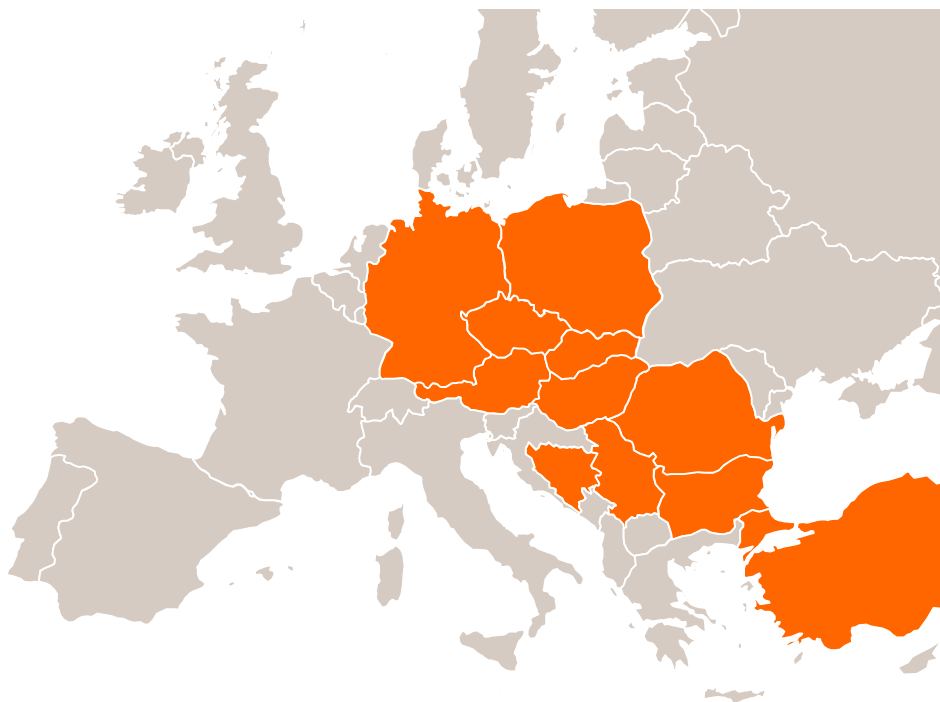
## Agenda

- Ø CEZ Group, a leader in energy generation in Europe
- Ø CEZ, plan to triple the annual renewable energy production
- Ø Zoom on the wind investments in Romania



CEZ is the leading utility in Central and Southeastern Europe with strong growth dynamics over the past years

## KEY MARKETS OF THE CEZ GROUP



## COMMENTS

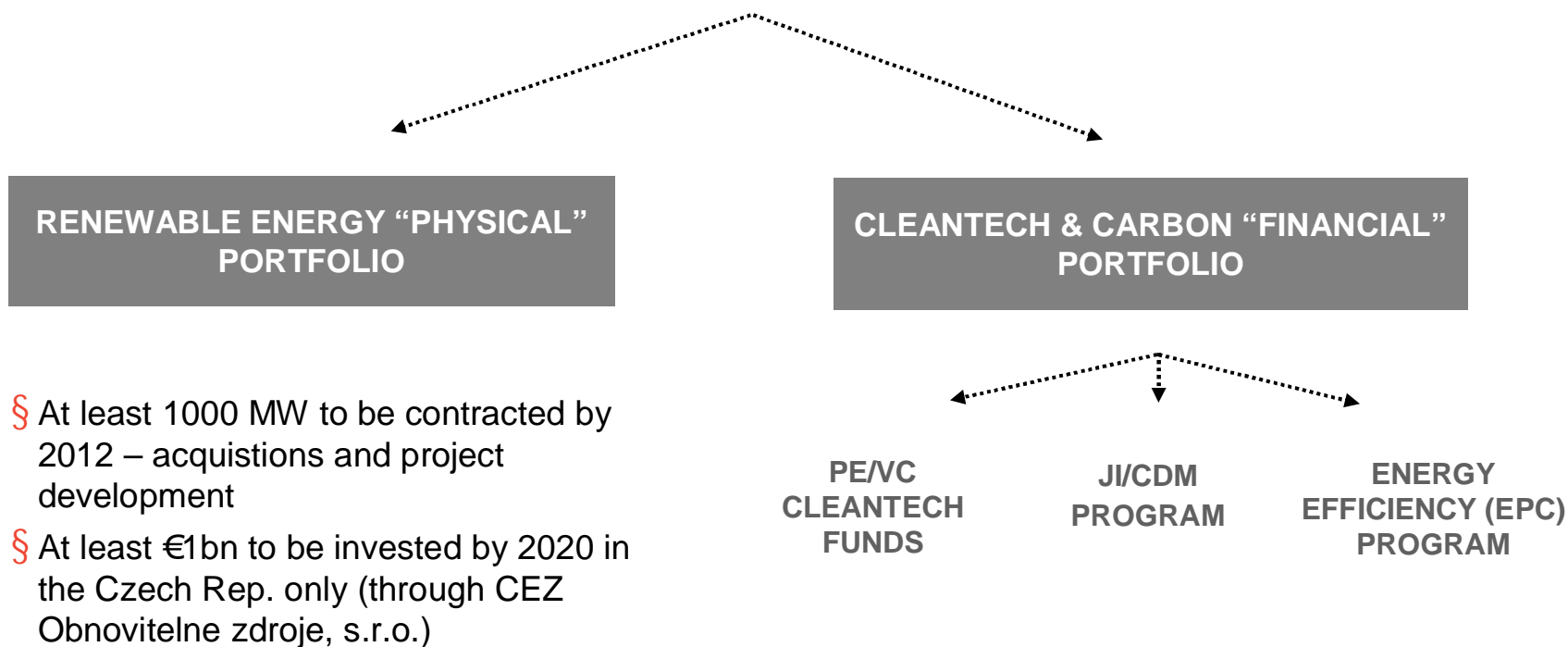
- 7<sup>th</sup> European power utility by number of customers and by market capitalization<sup>1)</sup>
- One of the most profitable utilities in Europe<sup>2)</sup>
- Strong dynamics in profit growth over the past years
- 75% market share in the Czech Republic (power production)
- Company committed and recognized for its CSR<sup>3)</sup> program (CEZ foundation, Green Energy projects, etc.)



# ENVIRONMENTAL INVESTMENTS: DEVELOPING “PHYSICAL” AND “FINANCIAL” PORTFOLIOS

*Moving from being a purely „strategic“ investor to a model with own development capacity, and some PE/VC investing capability*

## ENVIRONMENTAL INVESTMENTS





## Beginning of a large investment plan in wind farm is currently focus outside Czech Republic

### CEZ Group in Poland (99.91% stake in Skawina, 89% in Elcho)

Skawina, Southern Poland 492 MW  
Over 84,6 GWh of "green" energy produced in 2008

Elcho Power plant 238MW  
58,6 GWh of "green" energy produced in 2009

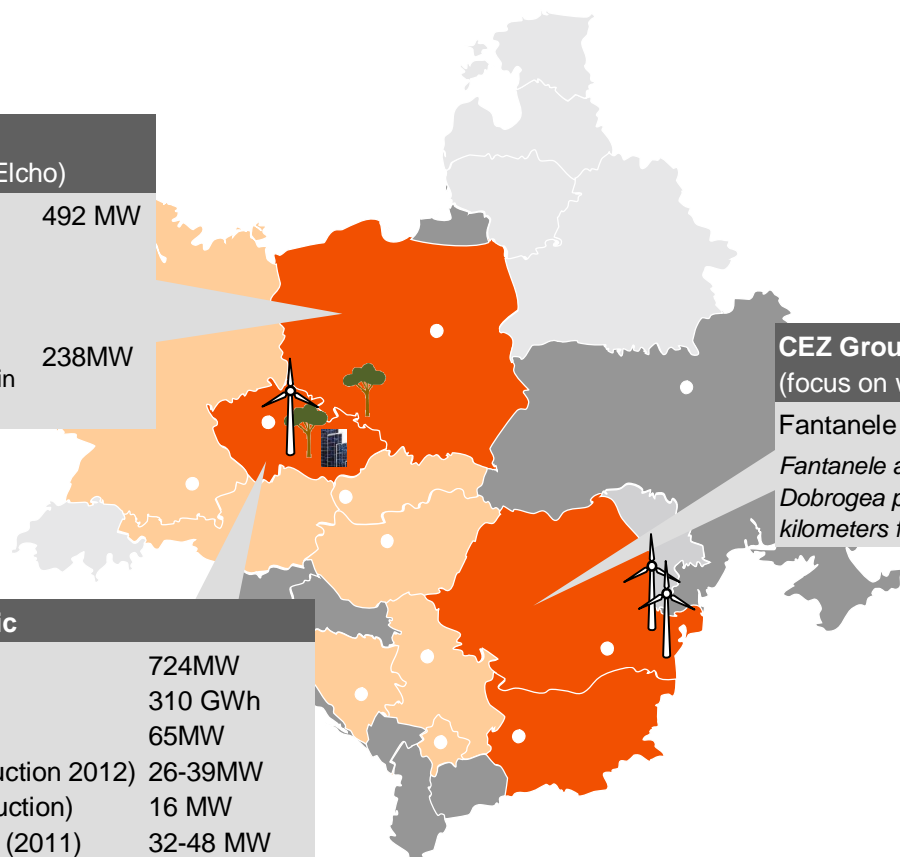
### CEZ Group in Romania (focus on wind)

Fantanele & Cogealac projects 600 MW

*Fantanele and Cogealac are situated in the Dobrogea province, north of Constanta, about 17 kilometers from the Black Sea*

### CEZ Group in the Czech Republic

Hydro Power plants	724MW
Biomass cofired plants	310 GWh
Small hydro plants	65MW
Stribro Wind Park (expected construction 2012)	26-39MW
Resice Wind Park (expected construction)	16 MW
WindfarmTavíkovice-Čermákovice (2011)	32-48 MW
Wind farmDlouhé Pole (under development)	Up to 66 MW
Solar PV	0,01 MW





## Wind park projects in Fantanele and Cogeaalac will be the largest on-shore wind farm built in Europe

### Basic information about CEZ wind farm projects

#### Both wind parks

- § Two wind farm projects in Dobrogea county, between villages of Fantanele and Cogeaalac (north of Constanta, 17 km west of the Black Sea coast);
- § Total projected size: 240 WTGs<sup>(1)</sup> of 2.5MW – installed capacity of 600MW;
- § The project will be the largest onshore wind farm in Europe;
- § Once wind farm are operational, CEZ will have 10 % share on the Romanian market with renewable energy.

#### Fantanele Project

- § 1<sup>st</sup> phase of the project – 139 wind turbines;
- § To be finished in 2010;
- § CEZ has engaged CWP as a project manager; CEZ project team performs controlling and monitoring functions;
- § Construction has started in October 2008.

#### Cogeaalac Project

- § 2<sup>nd</sup> phase of the project – 101 wind turbines;
- § To be finished by the end of 2010/beginning 2011;

Note: (1) WTG – Wind Turbine Generator  
Source: CEZ



Fantanele project is designed to provide 347.5 mw capacity of the ecological energy

### Overview of the key technical parameters of Fantanele project

Technical parameter	Description
<b>Total generation capacity</b>	347.5 MW
<b>Wind turbine generators composition</b>	139 generators (generation capacity 2.5 MW each) – 100m hub height, 99m rotor diameter
<b>Energy transformation</b>	Generators are connected to four 33 kV/110kV substations, which deliver on 110kV level to the Main Transformer Station which connects the Fantanele wind farm on the 400kV grid line Constanta -Tulcea operated by Transelectrica.
<b>Selected technical information on Wind Turbine Generators (WTG)</b>	Producer: General Electric Maximum speed: 73.6 m/s Blades material: fiber glass – epoxy resin/polyester Cut-in wind speed: 3 m/s Cut-out wind speed: 25 m/s Rated power output: 2.5 MW Tower: tubular steel, 100m



## Pictures from the site



Pouring of blinding concrete



Construction of adapter ring and steel installation





## Pictures from the site



Placing of adaptor to foundation



Placing of cable ducts into foundation



## Pictures from the site



**Finalization of concrete foundation FE17**



**Laying of 110 kV cables**



## Pictures from the site



**Foundation of FE substation**



**Start of the works for MTS roads**



## Pictures from the site



**Delivery of the 1<sup>st</sup> transformer for FE substation on site**



**Installation of the transformer in the foundation**



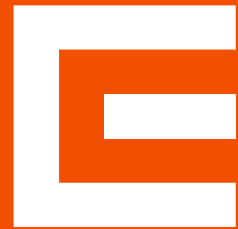
## Pictures from the site



Delivery of GE “oversized components”  
(blades)



First ship of GE in Midia Port



**Thank you very much for your attention**

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