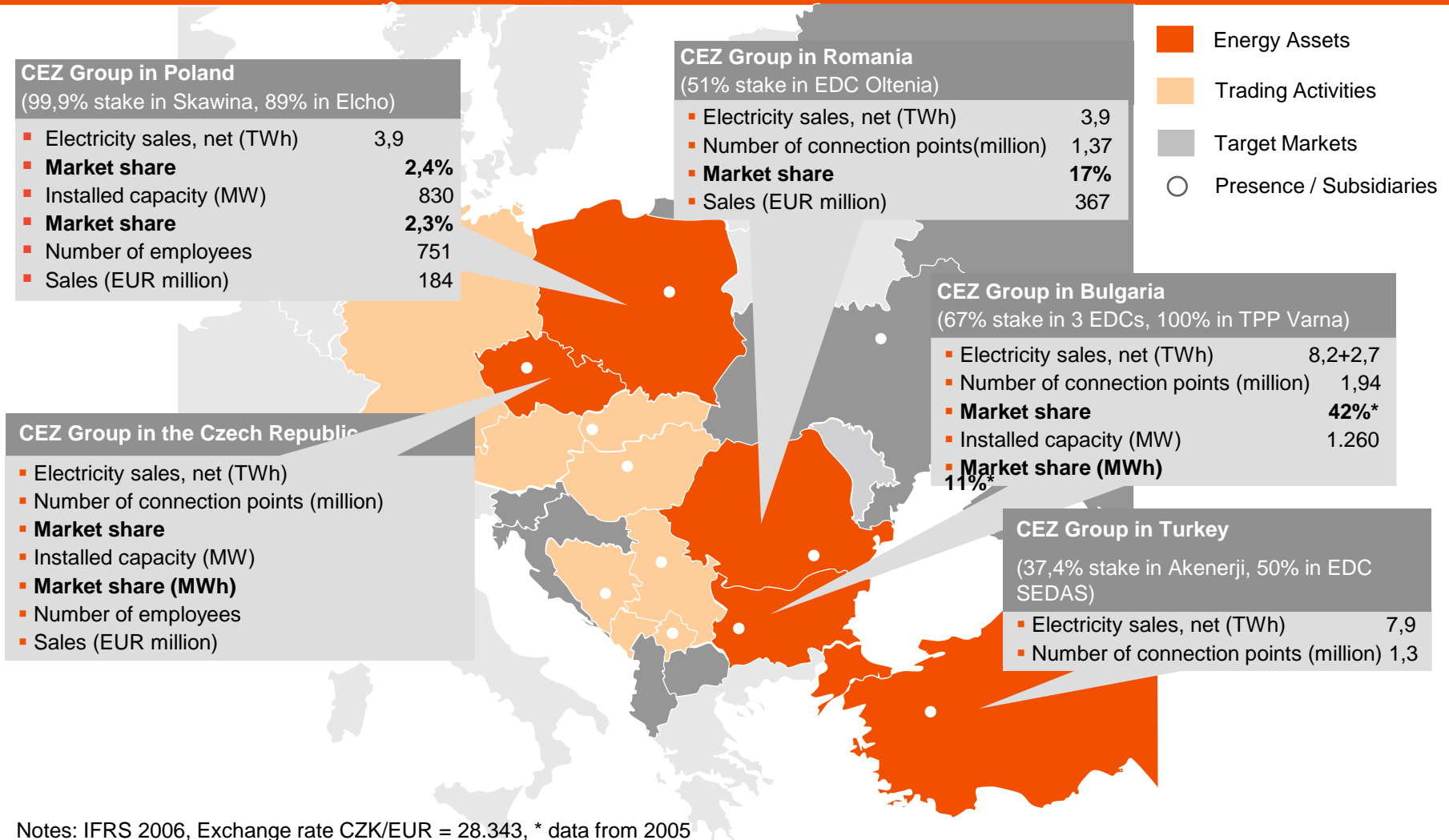


DIRECTIVE ON INDUSTRIAL EMISSIONS
CEZ GROUP VIEW
2nd December 2009

Vladimir Hlavinka
Member of the Board of Directors
CEZ, a.s.



CEZ GROUP IS A MAJOR EUROPEAN PLAYER



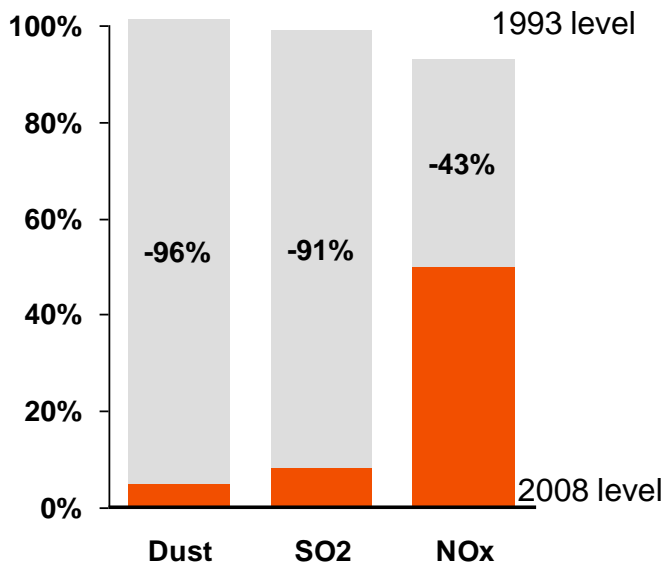
Notes: IFRS 2006, Exchange rate CZK/EUR = 28.343, * data from 2005



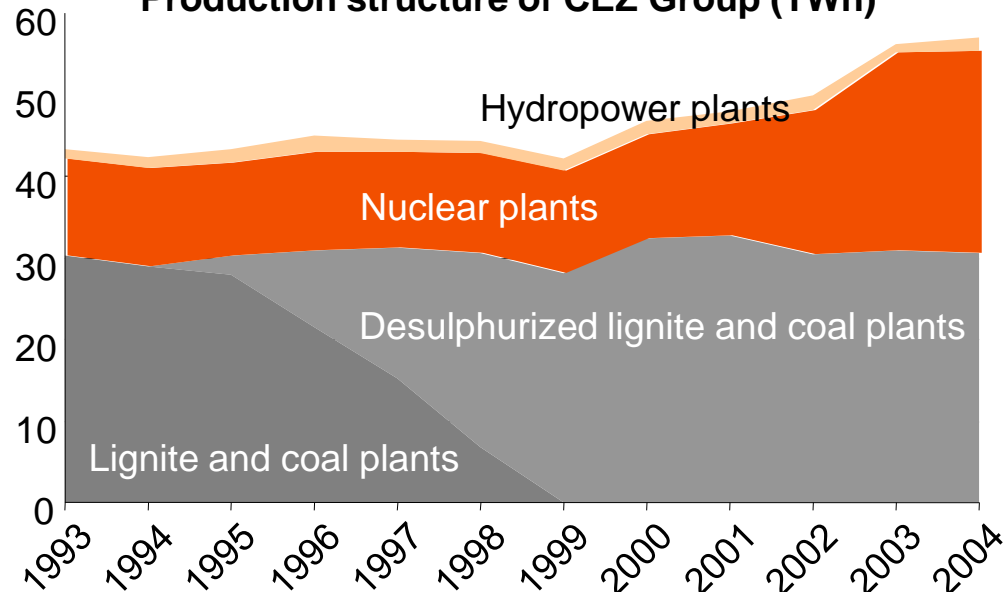
REAL AND LONG-LASTING COMMITMENT TO REDUCE EMISSIONS

- **1993 – 1999 1.5 billion EUR invested into desulphurization**
- Half of all investments in the 1990's were emission reduction investments (whereas new plants were also under construction)
- **By 2020, 10 billion EUR will be invested into new sources**

CEZ Group emissions 2008/1993



Production structure of CEZ Group (TWh)





POWER PLANTS > 300 MW_{th} (ALL SOLID FUELS)

Desulphurisation

- **Current plants:** SO₂ ELV of **200 mg/Nm³** (*EP and Council agree*)
- **New plants:** SO₂ ELV of **150 mg/Nm³** (200 mg/Nm³ for fluidized bed combustion) (*EP and Council agree*)
- Member States may apply the **minimum rates of desulphurisation** set out in Part 5 of Annex instead of ELVs (this represents **96% for current** and **97% for new plants**) (*proposed by the Council*)

NO_x limit values

- **Current plants:** NO_x ELV of 200 mg/Nm³ (*EP and Council agree*)
- **New plants:** NO_x ELV of 150 mg/Nm³ (200 mg/Nm³ for pulverised lignite combustion) (*EP and Council agree*)

Desulphurization rates proposed by the Council should be accepted



FLEXIBILITY MECHANISMS (COUNCIL COMMON POSITION)

TNP – Transitional national plan (art. 33b)

- For the period **2016-2020**
- Installations which had been granted the permit/submitted an application for it before 27/11/2002 and were put into operation before 27/11/2003
- Installations in TNP shall respect limits laid down in their IP valid until 31/12/2015 (pursuant to the Directives 2008/1/EC and 2001/80/EC)
- TNP shall contain:
 - ✓ Ceiling for each emission included into it
 - ✓ Provisions ensuring continual monitoring and reporting
- MS shall communicate their TNP to the CION not later than 1/01/2013, CION has 12 months for its evaluation

Limited life time derogation (art. 33c):

- During the period **2016-2023** a plant may be expected from ELV compliance if:
 - ✓ It is not operated for more than 20.000 hours
 - ✓ The operator submits each year a record of operating hours
 - ✓ The installation respects at least ELV laid down in its IP valid until 31/12/2005 (pursuant to the Directives 2008/1/EC and 2001/80/EC)
 - ✓ This possibility does not concern the plants which have been granted exemption as referred to in Art.4(4) of Dir. 2001/80/EC
- Specific provisions for small isolated systems + installations with thermal input $> 1500 \text{ MW}_{\text{th}}$ put into operation before 1987, firing solid fuels of specific characteristics (calorific value, moisture content...)



WITH NO FLEXIBILITY MECHANISM AFTER 2016 (I)

Massive, yet ineffective investments into ecologization of old plants...

- Due to limited timeframe, only ecologization measures of old plants conceivable
-> **no efficiency improvement possible**
- On the contrary, ecologization measures lead to **partial deterioration of plants' efficiency**
- In case of plants intended for decommissioning between 2016 – 2023, even ecologization measures may not be envisaged because of **lack of economic viability** of the return on investment



WITH NO FLEXIBILITY MECHANISM AFTER 2016 (II)

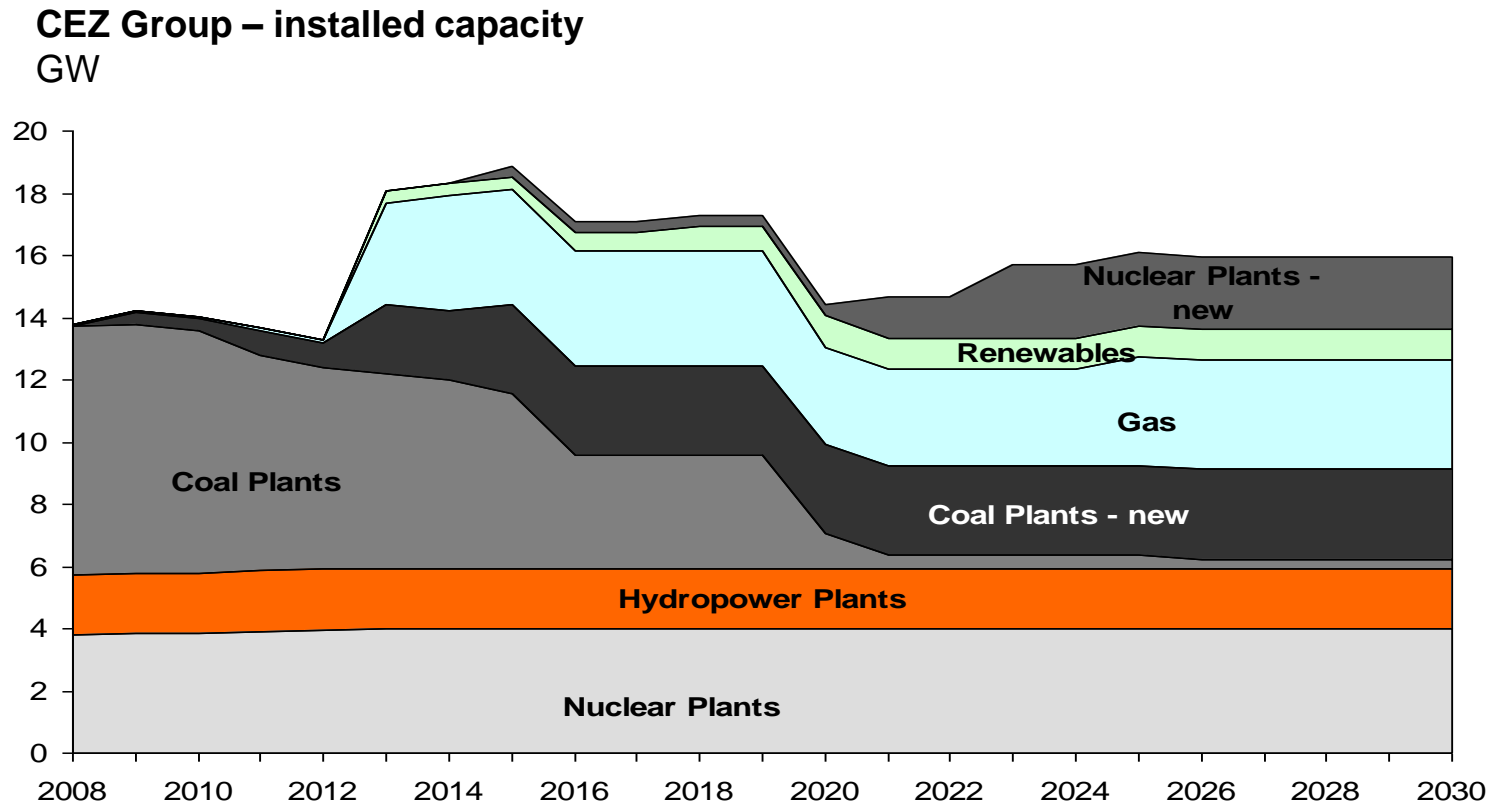
...with tremendous consequences

- Closure of plants for which investments are not reasonable
-> **DETERIORATION OF SECURITY OF SUPPLY**
- Closure of plants or/and need to fund the investments
-> **DETERIORATION OF ECONOMIC SITUATION**
- Partial deterioration of plants' efficiency combined with use of alternative sources of heat by final consumer (home-burnt polluting fuel)
-> **DETERIORATION OF ECOLOGIC AND HEALTH SITUATION**

**EP should accept Council's flexibility concept
– it is a much needed and fair proposal**



WE WANT TO FURTHER ENHANCE OUR COMMITMENT TO INCREASE EFFICIENCY AND REDUCE EMISSIONS



Realization of ambitious production change plan is, in the context of ETS, only possible with flexibility mechanisms - EP should accept them.

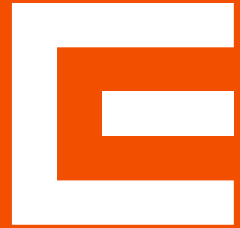


CONCLUSION

Major role of the EP

- EP's responsibility for the security of electricity supply in the EU is fundamental
- Investments into ecologization must go hand in hand with efficiency measures of electricity generation
- EU should promote economic and social development
- Solutions proposed by the Council (flexibility mechanisms) provide the possibility for investment cycles respectful to both health and climate change concerns and sustainability of electricity supply

-> EP should agree with the common position of the Council of the EU



Thank You!



BACK-UP



PROPOSAL FOR IPPC DIRECTIVE REVIEW – STATE OF PLAY

- Review and recast of Directive 96/61/EC on integrated pollution prevention and control (IPPC)
- Simplification and addition of six other „sectoral“ directives (*LCP directive 2001/80/EC on limitation of emissions of certain pollutants into the air from large combustion plants, 2000/76/EC directive on incineration of waste, 99/13/EC directive on limitation of emissions of volatile organic compounds due to the use of organic solvents in certain activities and installations and three so called TiO₂ directives concerning different aspects of disposal and using of Titanium Dioxide*)

- Proposal submitted by the European Commission in **December 2007** for negotiations in the Council of EU and the European Parliament
- Consideration by committee responsible – ENVI (vote in **January 2009**); then in **March 2009** vote in the plenary of the EP
- Political agreement reached by the Council in **June 2009** (→ common position)
- First reading agreement could not be reached for the complexity and the scope of the proposal



PROPOSAL FOR DIRECTIVE – CHAPTER III LARGE COMBUSTION PLANTS

Scope

- Plants with total thermal input ≥ 50 MW with no distinction of the type of fuel used

Aggregation rules

- Where the waste gases of two or more separate combustion plants are discharged through a common stack, the combination formed by such plants shall be considered as a single combustion plant (capacities are added)
- For the purpose of calculating the total rated thermal input of a combination of combustion plants, individual plants with an input < 15 MW_{th} shall not be considered

Emission limit values

- Current plants (installations with IP/ application for IP submitted 2 years before the entry into force of the directive) shall respect ELVs laid down in Part 1 of Annexes V of the directive
- Installations which had been granted an exemption as referred to in Art.4(4) of Directive 2001/80/EC and which are operated 2016 shall respect ELVs laid down in Part 2 of Annex V
- All other installations (=new) shall respect ELVs laid down in Part 2 of Annex V

Desulphurisation

- Provision for plants firing indigenous solid fuel with high level of sulphur – for SO₂, Member States may apply the minimum rates of desulphurisation set out in Part 5 of Annex instead of ELVs (this represents 96% for installations with input > 300 MW_{th})



EXPECTED TIMETABLE FOR 2nd READING IN THE EP

- 18 January 2010 official start of 2nd reading (transmission of the Common Position, then 4 months period for 2nd reading)
- 25 January 2010 consideration of the draft report in ENVI
- 28 January 2010 deadline for tabling AMs
- 23 February 2010 vote in ENVI
- 17 May 2010 vote in Plenary

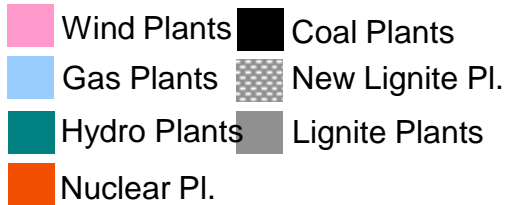
- Rather short deadline for tabling amendments
- More time (almost 3 months) for the negotiations between the Council and the EP – which is, for this complex proposal and expected complicated negotiations, a good sign



GRADUAL REDUCTION OF CO₂ EMISSIONS UP TO 50%

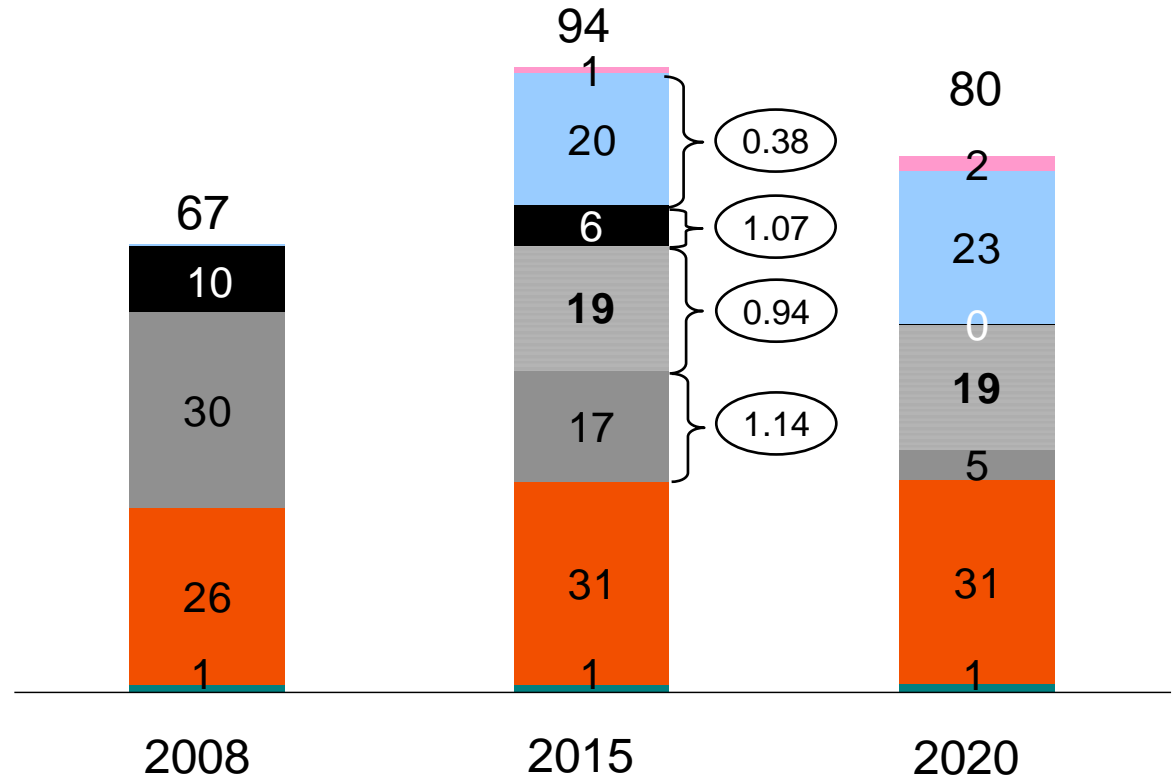
Electricity Supply (TWh)

Legend:



0.38 Emission factor (t of CO₂ per MWh distr.)

Emission factor (t CO₂/MWh distr.)



0.65

0.54

0.39