

Challenges in Polish Energy Market

STOEN S.A.



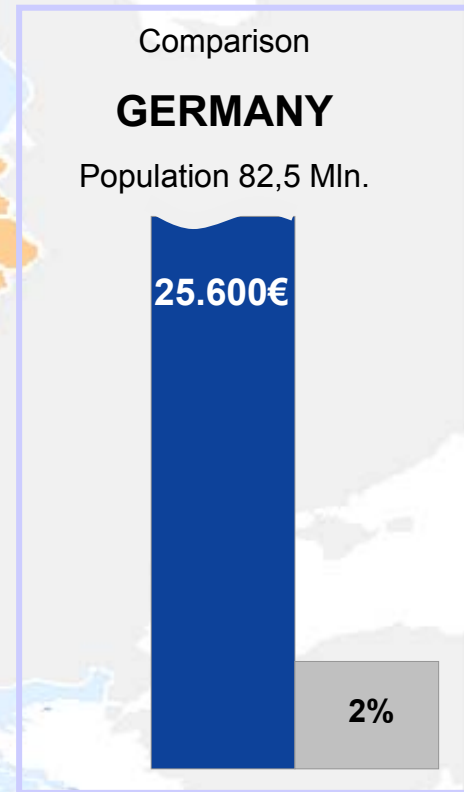
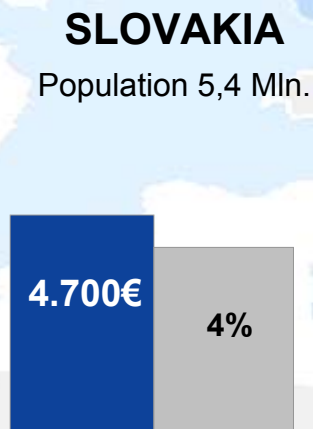
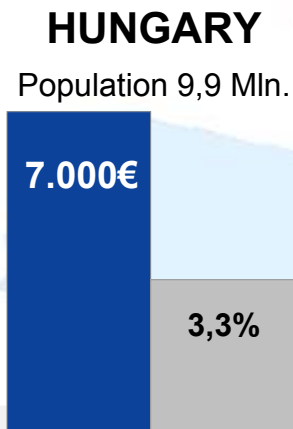
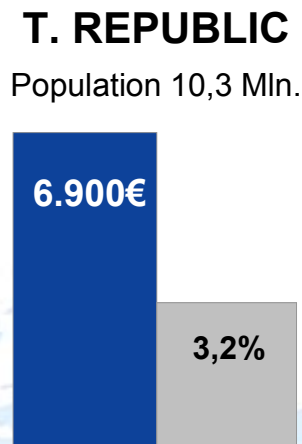
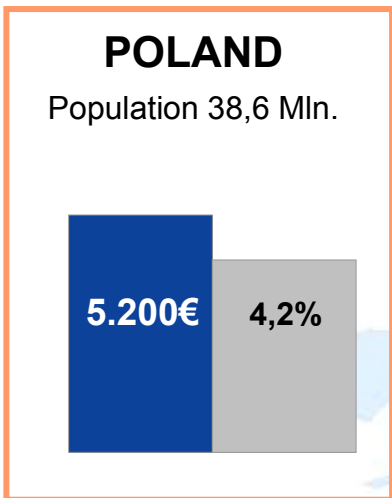
Christian Hövelhaus
SESSA Conference

Berlin, 10.12.2004

- Structure of Power Market**
- Problem Areas of Competition**
- Conclusion**

Attractiveness: new EU members

- Poland high potential market -



Source: Investor Relations, RWE AG 200

- Poland**
- ❑ Largest accession country – approx. 50% from 75 million new EU inhabitants
 - ❑ Has highest growth forecasts

Structure of Energy Market

Fuel supply

- coal domination
- Poland extracts 102 million t/a – more than all remaining EU countries

Generation

- over capacities for base load
- obsolete capacities (70% older than 20 years)
- low efficiency

Transmission

- state owned TSO company PSE
- net running, balancing market, cross border trading

Distribution

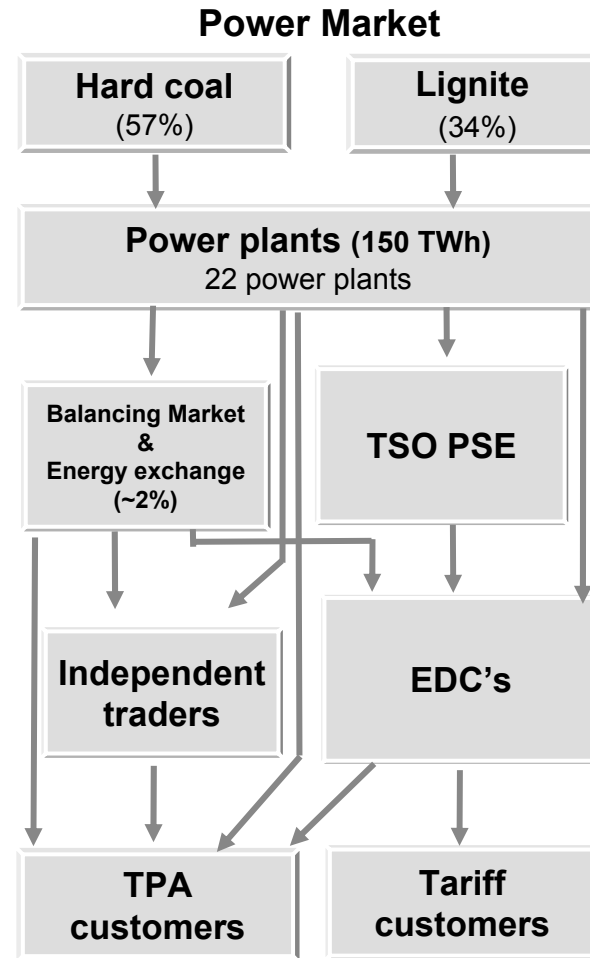
- 21 EDC's
- just 2 privatised (RWE + Vattenfall)

Regulation

- regulation authority: URE
- regulated media: electricity, gas, district heating

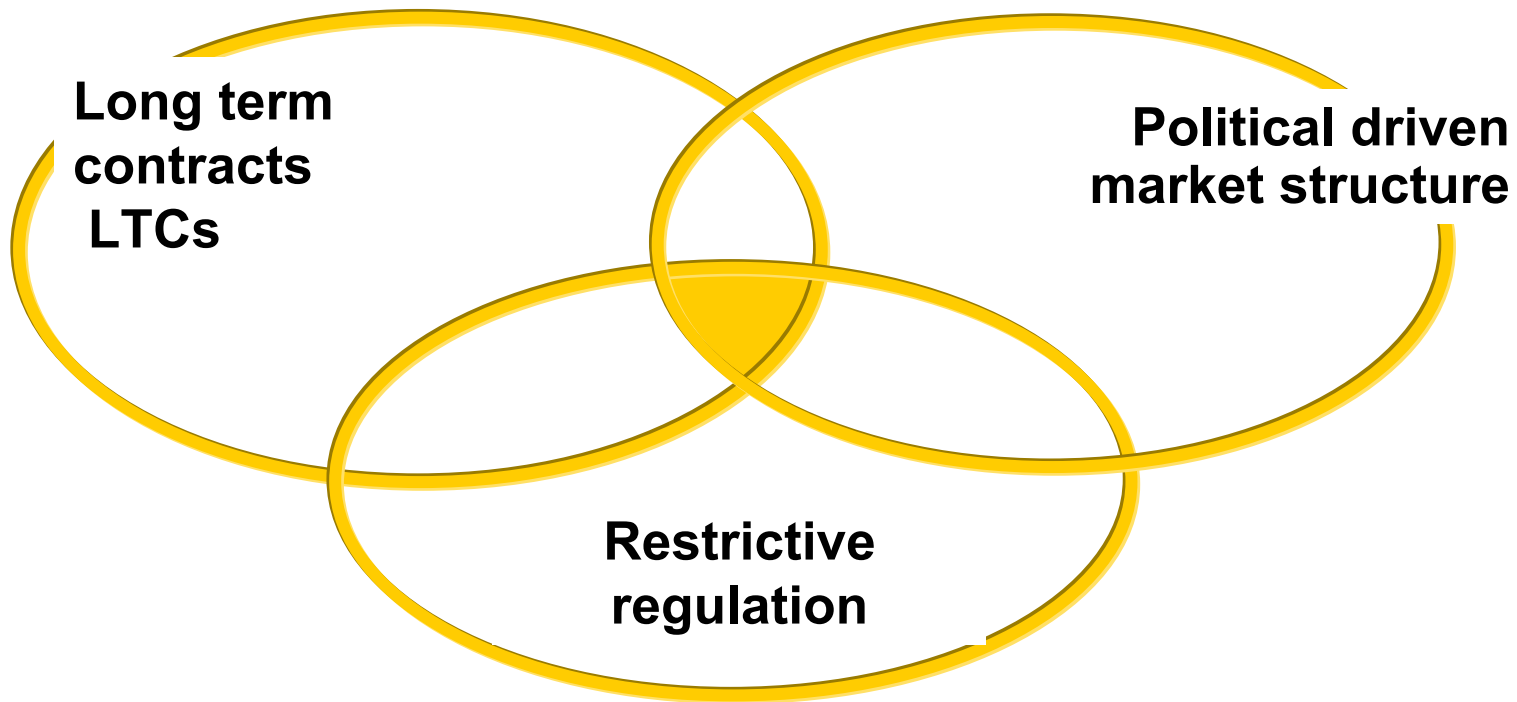
Gas

- TSO PGNiG (state owned)
- 6 GDC: (State owned PGNiG subsidiaries)



- ❑ **Energy Market in Poland**
- ❑ **Problem Areas of Competition**
- ❑ **Conclusion**

3 main problem areas of competition



Market driven price mechanism at present not possible

**Due to high share of hard coal in generation
high dependence to world coal prices**

State ownership main reason for problem areas of competition

Generation

Transmission

Distribution

■ Just 18% of capacities privatised

- Lignite PAK / Elektrim
- Coal Polaniec / Electrabel
- Coal Rybnik / EdF
- Coal Skawina / PSEG

■ -> **82% state**

■ **100% state**

■ Monopolised activities within cross border business

■ Just 15% market share privatised

- GZE / Vattenfall
- STOEN / RWE

■ -> **85% state**

No profit orientation

Oligopoly tendency

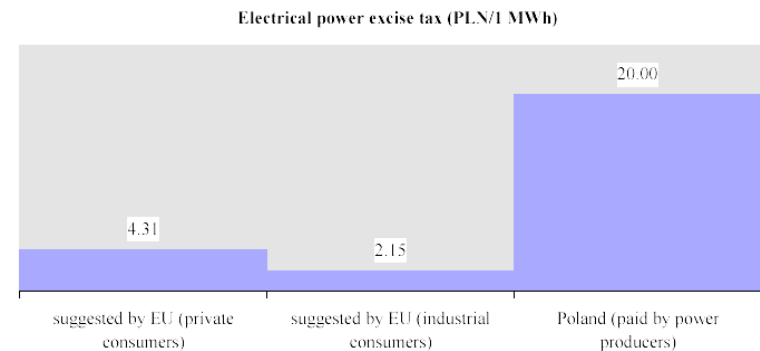
State interference in market structure

Over regulation

- Energy Market in Poland**
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Conclusion

- Privatisation process delayed
- Two large generation groups BOT und PKE
- Low liquidity of Polish Power Exchange, forwards market not existing
- Regulation of grid and energy prices
- Price cap green energy
– no investment incentives
- High energy excise tax:



Source: Ministry of Finance (Rzeczpospolita 2003.03.22-23)

Key Findings

- Poland is the largest accession country
- High growth potential
- Dominated by state owned companies
- Due to EU-requirements and market pressure identified problems are likely to be solved in the midterm

Recommendations

- Acceleration of privatisation process
- Reduction of energy excise tax
- Market forces not politics should create structure of energy sector
- Incentives for green energy investments