### **Development of the IEM**

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#### Traditional paradigm

- Model of government energy industry relations that emphasizes stability, reliability of supply, and public service; a model of technical organization involving the central control over a synchronized network.
- Security of supply imperative.
- Public service imperative.



#### Traditional paradigm

- Essential characteristics:
  - Exclusive rights to build and operate networks.
  - Closure to competition.
  - Detailed regulation.
  - Remuneration based on historical costs.
  - Centralized control over planing.
  - Limited participation of consumers.



#### Drivers of change in regulatory paradigm

Started in around 1980, following the development in airlines and telecoms.

- Ideology and politics.
- Sympathetic regulators.
- Technology (smaller gas power plants, now RES).
- Public debt.
- Inadequate investment in infrastructure.
- Poor accountability and performance (drop in prices of commodities not followed by drop in prices of energy).
- Seemingly poor performance of state run companies (over-investments).
- Corruptive symbiosis between state and monopolies.
- Curbing trade union power.



### Liberal paradigm

• Liberal paradigm stresses a greater reliance on markets. It seeks to introduce competition whenever possible, encouraging openness, decentralized production with network access, and profit based on the market prices, not costs (regulation for competition).



#### Liberal paradigm

#### Some basic characteristic:

- Separation of activities to facilitate the competition (unbundling).
- Freedom of entry and investment into competitive activities, instead of a centrally-planned approach.
- Freedom of contract and competitive formation of prices.
- Access to the network and infrastructure.
- Supervision of the model by an independent regulator.



#### Internal Energy Market

Trade area with common policies on product regulation and free movement of energy, where the maximum competition between suppliers and providers of different types of energy is essential. The barriers among the MS are removed to maximum.

Focus on electricity and natural gas.



#### Prerequisites for the IEM

- Liberalisation and competition withdrawal of the state from the energy sector, removing the barriers.
- But also regulation to limit the power of (natural) monopolies and to remove the legacy of pre-liberal paradigm – regulation to competition.
- Interconnectors.



#### First legal acts

- 1988 Working Document on the Internal Energy Market.
- First activities of the Commission date from 1989:
  - Communication from the Commission: Transparency of consumer energy prices. COM (89)123, 1989.
  - Towards completion of the internal market for natural gas.
    Communication from the Commission. Proposal for a Council Directive on the transit of natural gas through the major systems. COM (89) 334, 1989
  - Increased intra-Community electricity exchanges: a fundamental step towards completing the internal energy market. Proposal for a Council Directive on the transit of electricity through transmission grids. COM (89) 336, 1989.
  - And the others ...



#### First liberalization package

- Directive 96/92/EC of the European Parliament and of the Council of 19 December 1996 concerning common rules for the internal market in electricity
- Directive 98/30/EC of the European Parliament and of the Council of 22 June 1998 concerning common rules for the internal market in natural gas

	Unbundling of networks	Access to networks	Market opening	National regulation
First legislativ e package	Separate management and accounts	Negotiated or regulated terms of access	Power: 35% open by 2003 Gas: 33% open by 2018	Mechanism for regulation

#### Second liberalization package

 Unsatisfactory pace as well as targets, new legislation introduced in 2003.

 "European national gas markets are characterized by high prices and tariff differentials, a high degree of market concentration, insufficient unbundling, a lack of market based balancing regimes, and ex ante regulation ... The prices of gas and electricity are especially of concern. In some European countries, natural gas increases its share in electricity generation. During the 1990's the European industry was paying 40% more for its electricity than its American competitors" (2001 common market report).



#### Second liberalization package

- Directive 2003/54/EC concerning common rules for the internal market in electricity
- Directive 2003/55/EC concerning common rules for the internal market in natural gas

	Unbundling of networks	Access to networks	Market opening	National regulation
First legislative package	Separate management and accounts	Negotiated or regulated terms of access	Power: 35% open by 2003 Gas: 33% open by 2018	Mechanism for regulation
Second legislative package	Separate subsidiary	Regulated terms of access (but TOP in gas)	Power and gas markets 100% open by July 2007	Specific regulator for energy

## The following steps of the European Commission

- EC sector inquiry (2005 2007) highlited some serious shortages:
  - The persistence of great market concentration (vertical foreclosure, just a few interconection).
  - Too little integration between MS markets (e.g. limited common auctioning).
  - Absence of transparent market information.
  - Unsatisfactory level of unbundling.
- Solution = market transparency and caps on incumbents' market shares, closing the gaps between the responsibilities and competences of national regulators, structural (ownership) unbundling.



#### Non-functioning market: Utilities' reactions

- Vertical foreclosure the process where incumbent wittingly or unwittingly foreclose, or close in advance, the availability of crucial inputs or assets to potential rivals. Long-term upstream, capacity and downstream contracts.
- Market segmentation (LTC in gas, physical interconnectors in electricity).



#### EC enforcing new rules

- Just in 2006 EC court proceedings against 17 states for inadequate transposition of the 2003 directives.
- In 2007 anti-trust investigations against Eni, RWE (underivestments, capacity hoarding, high prices for access to network etc.).
- Unexpected inspections of 25 companies in Austria, Belgium, France, Germany, Hungary, Italy.
- 2/2008 E.ON to sell-off its grid (€1bn/y) to settle EU antitrust inquiries.
- 6/2008 RWE to sell off its gas grid to avoid anti-trust actions by Commission.



# Non-functioning market: Governments' reactions

- Championing national companies preventing foreign companies to buy domestic ones.
  - Hungary (Moll) vs OMV, Great Britain (Centrica) vs Gazprom...
- Regulating the regulators.



# Non-functioning market: Governments' reactions

- Retail market regulated vs. free pricing in case of energy.
  - EK objected in case of Slovakia, where PM Fico threatened to renationalize Slovenske Elektrarne, if they did not stop raising the prices.
  - In 2006, EC went after Spain, France, Estonia and Latvia for regulating tariffs.
  - Then EC went after Italy and Ireland for granting on discriminatory basis the right to an incumbent to supply power at regulated price.
  - And again it went after Germany, Czech Republic, Poland, Slovakia, Lithuania and Italy for failing to provide sufficient information on regulator tariffs. The same in 2007, in case of EC against Spain and France.



### Third liberalization package

**Unbundling of** 

Ownership

Third

	networks	networks	opening	regulation
First legislative package	Separate management and accounts	Negotiated or regulated terms of access	Power: 35% open by 2003 Gas: 33% open by 2018	Mechanism for regulation
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Regulated

Access to

Market

by July 2007

Already

**National** 

Upgraded and

#### Unbundling

Ownership unbundling - OU means separating the ownership or the operation of gas and power networks from other parts of the energy business

ISO – energy supply companies may still formally own gas or electricity transmission networks but must leave the entire operation, maintenance, and investment in the grid to an independent company.

ITO model – energy supply companies may still own and operate gas or electricity networks but must do so through a subsidiary. All important decisions must be taken independent of the parent company.



# EU energy regulatory framework: summary of basic principles

- Differentiation between competitive parts of the industry (= supply) and non-competitive parts (= operation of the networks).
- Obligation on operators of the non-competitive parts of the industry to allow third parties to have access to the infrastructure.
- Freeing up of the supply side of the market removing barriers preventing alternative suppliers from importing or producing energy.
- Free choice of consumers to choose their supplier and removal of restrictions on customers from changing their supplier.
- Creation of independent regulators to monitor the sector and enforce TPA.



#### Liberalization of power markets – pros and cons

- Prices are set by the market and competition drives prices lower vs. market pricing (manipulations with prices).
- Prices are 'real', reflecting the costs, demand, and supply vs. inability of some customers to buy them (public service obligation).
- Stress on profit (effective alocation of sources) may weaken the incentives to some investments vs. long-term stability, reliability and security of supply.
- Sources are not wasted on non-profitable projects vs. private utilities don't reflects the interests (social, environmental) of state.



#### Sources

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Cameron, P.D.(2007): Competition in Energy Markets: Law and Regulation in the European Union.

