

**Energy sector inquiry :  
market power and concentration  
in the EU energy markets**



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# Introduction

- On June 2005 the DG Competition launched a **sector inquiry** on the European electricity and gas markets in order to evaluate the level of competition.
- Releasing its preliminary results in February 2006, the DG Competition stated that the level of competition was **unsatisfactory**.
- In January 2007, the Commission confirmed it and clearly affirmed that further actions would be necessary to create **competitive energy markets** in the European Union.
- **Goals of the work :**
  1. Analyse of the economic approach the EU considered to measure market concentration and market power
  2. Introduce other elements that need to be taken into account to analyse the level of competition
    - Definition of the relevant market
    - Security of supply
    - Multi markets competition
    - Firm strategies and especially convergence gas-electricity
    - Short term - long term efficiency

....more than an ex post static structure approach.

Introduction

Section 1:  
Survey of the literature

Section 2:  
Results of the DG competition  
energy sector inquiry

Section 3:  
Discussion on a new analysis

Conclusion

# Agenda of the presentation

➤ **Section 1:**

**Definition of market power and concentration indicators**

➤ **Section 2:**

**Results of the DG competition energy sector inquiry**

➤ **Section 3:**

**Discussions on the different approaches that could be added in the European sector inquiry**

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# Section 1:

## Market power and concentration indicators

### ➤ Survey literature on :

- Relevant market - definition
  - Product
  - Geographic area
  - Time
- Market power
  - Definition in electricity and natural gas markets
  - Measure of market power
  - Mitigations of market power
- Structure approach with the concentration ratios
  - Traditional concentration ratios
  - Drawbacks of the traditional measures
  - New tools

### ➤ Main conclusion ?

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## Section 2:

# Results of the DG Comp energy sector inquiry

### ➤ Significant problems identified in gas and electricity markets:

- Market concentration
- Vertical foreclosure
- Market integration
- Lack of transparency
- Price formation
- Lack of competition in retail markets
- Problems with balancing markets
- LNG markets

### ➤ Analysis of barriers to creating effective competition in EU energy market

- Lack of implementation of the Directives and Regulations?
- Inadequate power of regulators?
  - Need : new legislation ?

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# Section 2:

## Results of the DG Comp energy sector inquiry

- In response to these results :
  - Structural remedies and regulatory action

- Philippe LOWE:

- « Remedies arising from competition cases can be behavioural or structural. (...). As **market concentration levels are very high in most energy markets**, competition authorities are willing to prevent the market structure from further deteriorating. ( ...)
- According to Article 7 of Regulation 1/2003 structural remedies can be imposed where there is a substantial risk of a lasting or repeated infringement that derives from the very structure of the undertaking, or where **behavioural remedies would be more burdensome on the dominant undertaking than a structural solution.** »

Source : Philip LOWE (2007), *Effective unbundling of energy transmission networks: lessons from the Energy Sector*

## Section 2:

# Results of the DG Competition energy sector inquiry

- What are the results of structural remedies on social welfare?
  
- Is there a link ?:
  - high level of concentration
  - structural remedies

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# Section 3: New analysis...

## ➤ Results of the EU inquiry

- end of the analysis ? **NO !**

## ➤ Jokowi and Schmalensee (1983) :

- *“If deregulation is to play a role in helping to improve the efficiency with which electricity is produced and used, it must be introduced as part of a long-term process that also encompasses regulatory and structural reform » (p.221).*

## ➤ In the EU, the constitution of an electric power - gas oligopoly induced a situation of **“multimarket contacts”** which is favourable to collusion, ....a phenomenon quite widespread in many sectors.

## ➤ But the overall evaluation will also depend of the **dynamic** properties of this new industrial structure: *it means the ability to guarantee the continuity of services, investments and innovations...*

## ➤ It is necessary to analyze - which is not easy - the properties of electric gas oligopoly in terms of dynamic efficiency.

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## Section 3:

# Other considerations: natural gas industry

- The natural gas industry is capital intensive
- High transmission cost
- Geopolitics concerns
- Natural gas is a substitutable energy
- Several regional natural gas markets (contrary to oil)
- Natural gas network is less developed (compared to electricity networks)
- Not all consumers have access to natural gas...

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# Conclusion

- **A lot of work ahead for the Commission and national regulators to create an Integrated European Energy Market**
  - Shift from a single market to regional markets

- **Debate on structural remedies**

- **First Draft**

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