

# Liberalisation and Security of Supply in Energy Sectors

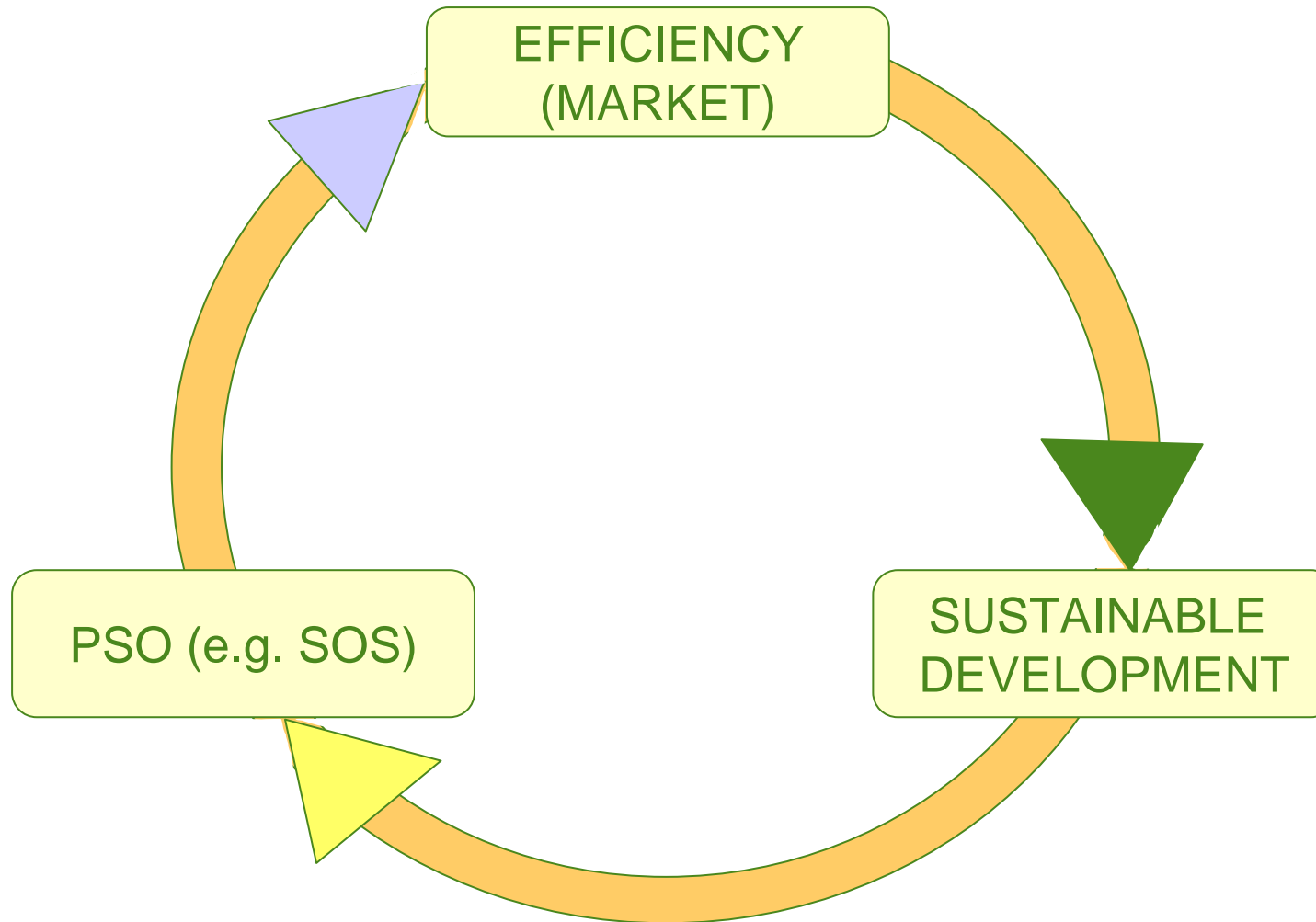
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Florence, 12 of May 2006



- **Objectives of Energy Policy**
- **Particular situation of the Energy Sector in the EU**
- **L & SOS in the Electricity Sector**
- **L & SOS in the Gas Sector**
- **Conclusions**

# Objectives of Energy Policy



# Particular situation of the Energy Sector in the EU



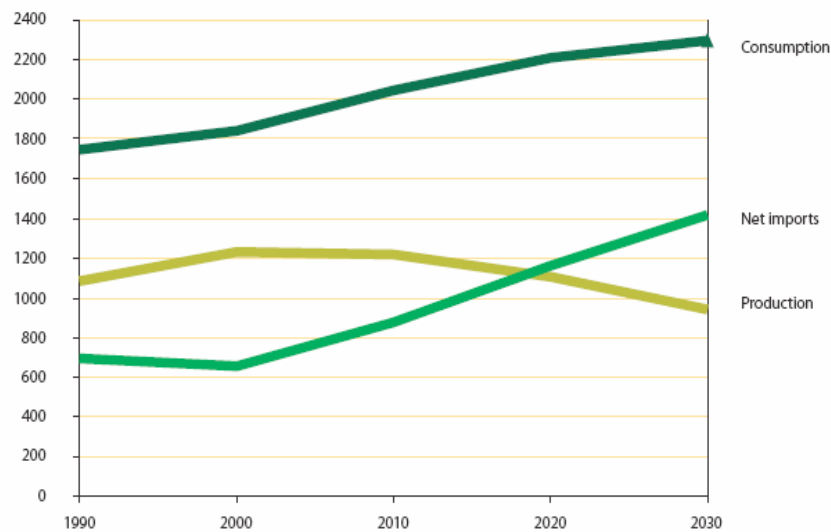
- **Market**
  - Established in E&G to promote efficiency and reduce price differences among MS
  - Still in Transition in many MS
  - Prices have lately risen
  
- **Sustainable development**
  - EU among the parties that have ratified Kyoto
  - Additional restrictions to other kind of emissions
  
- **PSOs (In particular SOS)**
  - High dependence in every primary fuel
  - Lack of common Energy Policy

# European Energy Dependence

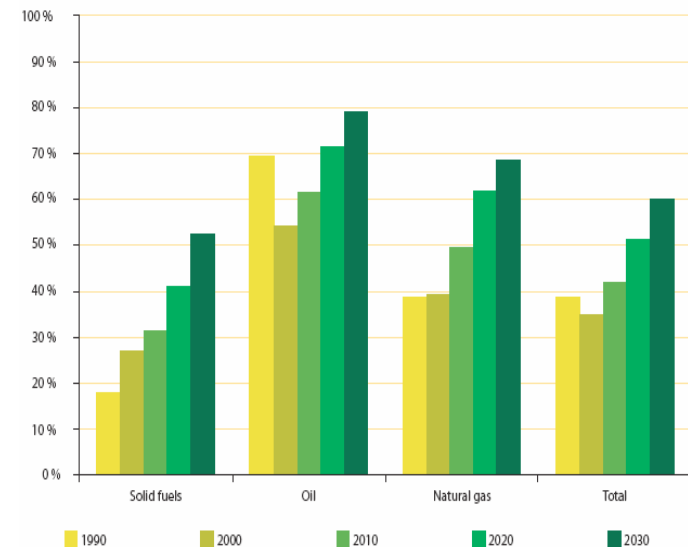


**In the next decades, European energy dependence will rise**

EU-30 — Total energy (in million toe)



EU-30 — Dependence according to energy product

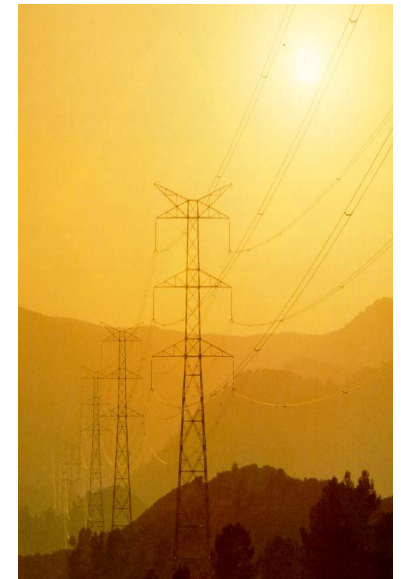


**Measures to reduce this dependence shall take into account:  
competitiveness and sustainability**

# Liberalisation and Security of Supply in the Electricity Sector – Particularities



- **From an organisational point of view:**
  - **Different actors (Generators, TSOs, DSOs, Regulators)**
  - **Different responsibilities**
  
- **Efficiency and Security of Supply must be guaranteed at:**
  - **Short Term: Operation**
  - **Long Term: Planning and Expansion**
  
- **SOS must be met global and locally**
  
- **SOS is a complex problem. There is a particular terminology (reliability, security and adequacy) not enough reflected in current Directive. No consensus in the academy world about ways to ensure generation adequacy**



# Liberalisation and Security of Supply in the Electricity Sector – What needs to be done


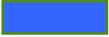



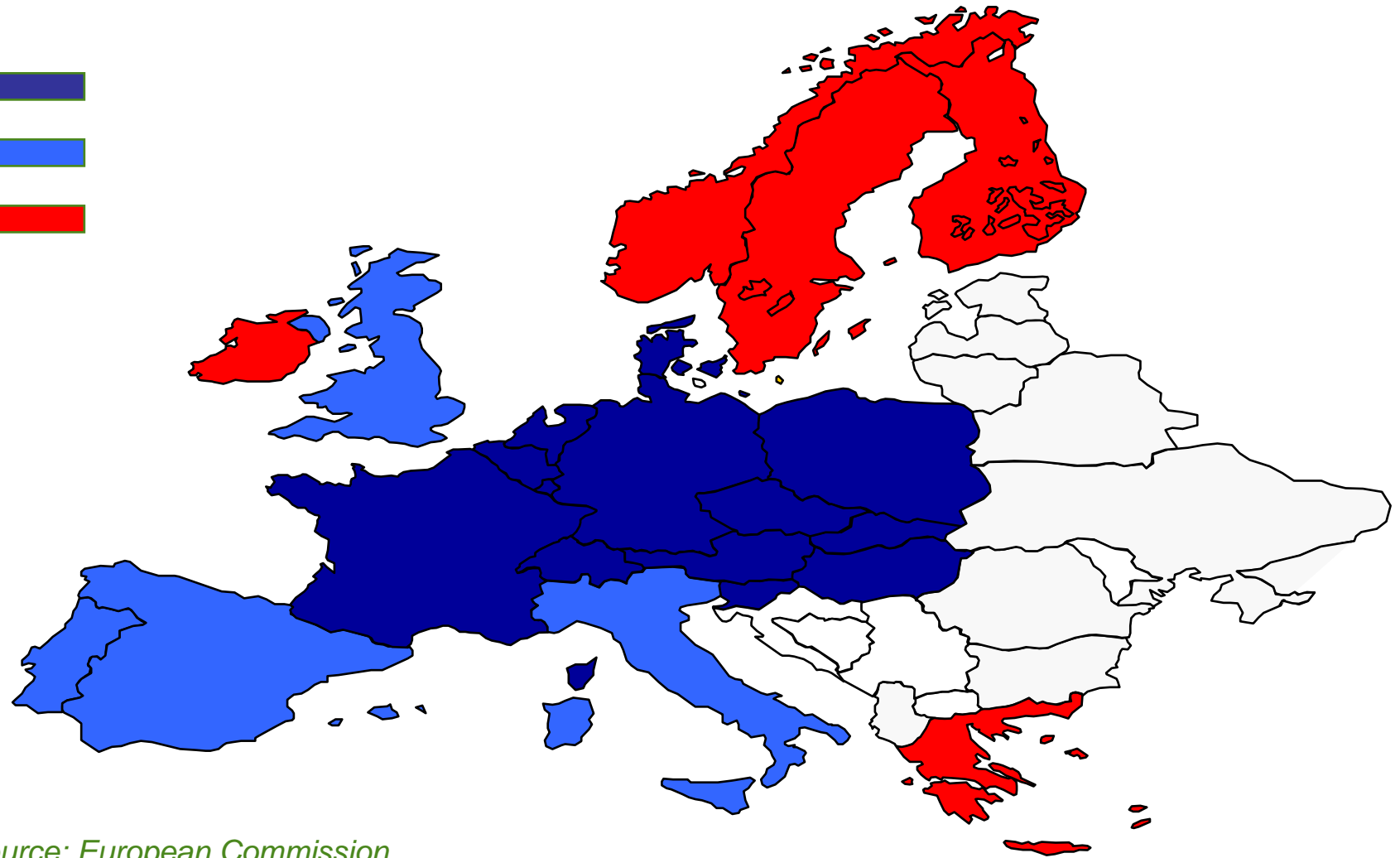
- **Define clearly roles and responsibilities**
  - **Generators**
  - **TSOs, DSOs**
  - **Regulators**
- **Maintain a stable (or at least predictable) Regulatory Framework**
- **Monitor and simulate expected expansion of the system indicating:**
  - **New Transmission facilities**
  - **Expected Generation**
- **Avoid capping prices assuring that these prices are reflected in final prices to customers. Promote Energy Efficiency and demand participation**
- **Promote cooperation among TSOs for the expansion and common financing of new interconnections.**



# Generation adequacy in Europe



- High 
- Medium 
- Low 



Source: European Commission

# Liberalisation and Security of Supply in the Gas Sector – Particularities



- **Similarities to electricity: different actors and responsibilities, LT and ST views, development of infrastructures, market prices reflected in final customers, etc.**
- **Gas is Storable (not electricity)**
- **In the particular case of Europe, there is hardly indigenous production**
  - **Large dependence on three main suppliers (N, R & A)**
- **Two main sources:**
  - **Gas Interconnections**
    - **Less diversification and prices linked to long term contracts**
  - **LNG (getting more important)**
    - **Greater diversification and prices linked to O/D balance in international markets**
- **Liberalisation less developed than electricity**



# Liberalisation and Security of Supply in the Gas Sector – What needs to be done



- **Market highly compatible with security of supply**
  - **Deepen in the liberalisation process with clear and stable rules**
  - **Customers must “see” market prices**
  
- **Reinforce relations with traditional and new suppliers**
  
- **More interconnections (¿and coordination?) between Member States**
  
- **Gas supply is key for security of electricity supply**
  
- **Market intervention only in extreme situations**

# Conclusions



- **Efficiency, PSOs and Sustainability are the three main objectives of every Energy Policy**
- **European Energy Sector highly dependent, leader in sustainability (although more effort in Energy Efficiency is needed). Markets in Gas and Electricity still in transition**
- **In Electricity, take into account different actors and time frames. Define roles, monitor situation and respect market signals. Promote Energy Efficiency and Demand participation. Coordinate transmission expansion.**
- **In Gas, achieve a real internal market and reinforce relations with supplier countries**
- **SOS in Europe requires huge investments from the private sector. In a global economy, we need to keep investing in Europe attractive. Otherwise, fuels and capitals would go somewhere else**