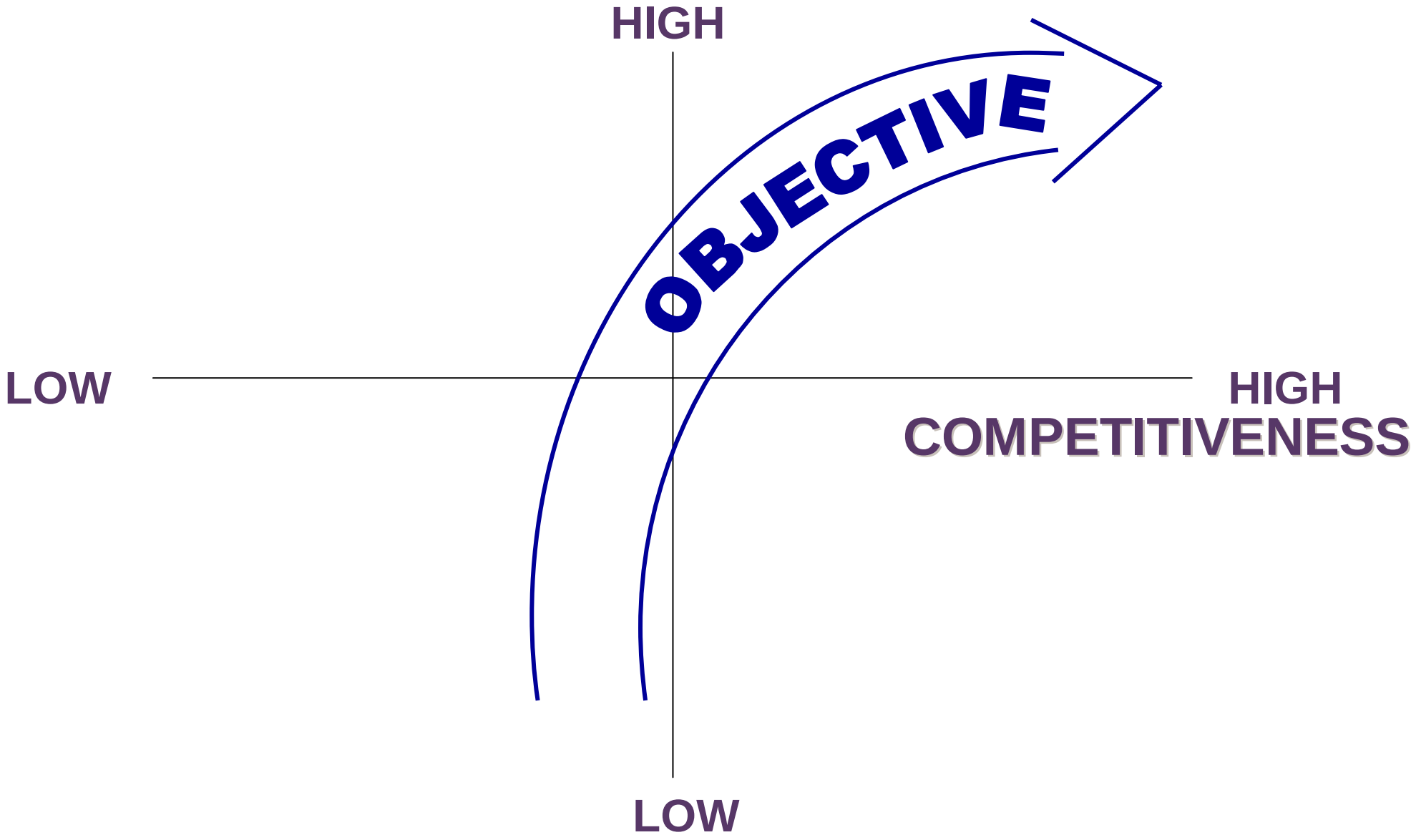
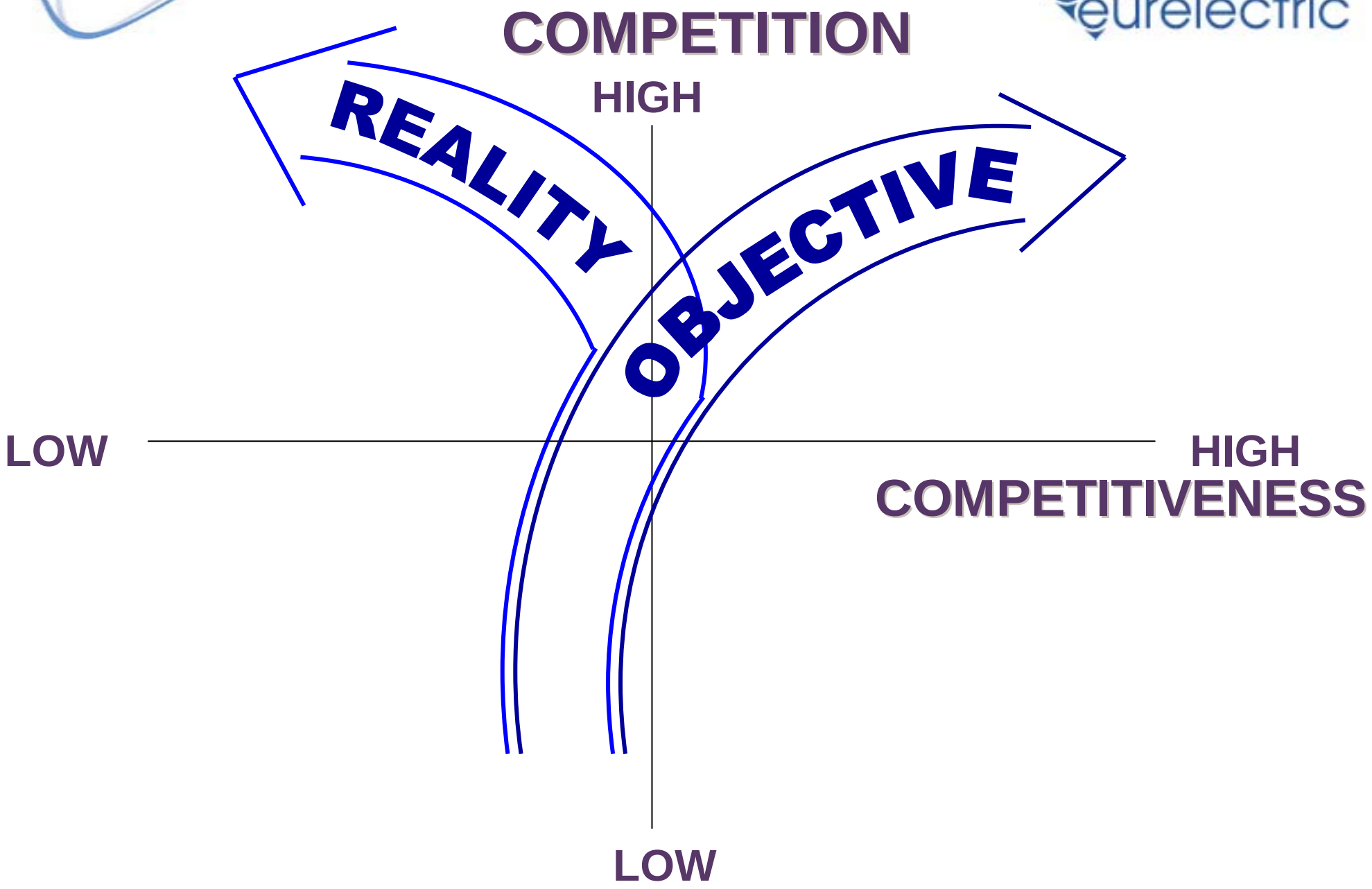
UNION OF THE ELECTRICITY INDUSTRY
eurelectric

EUROPEAN ELECTRICITY: SUSTAINABILITY AND COMPETITIVENESS

European Electricity Regulatory Forum
Rome, 16-17 September 2004


COMPETITION
HIGH
OBJECTIVE
LOW
HIGH
COMPETITIVENESS
LOW

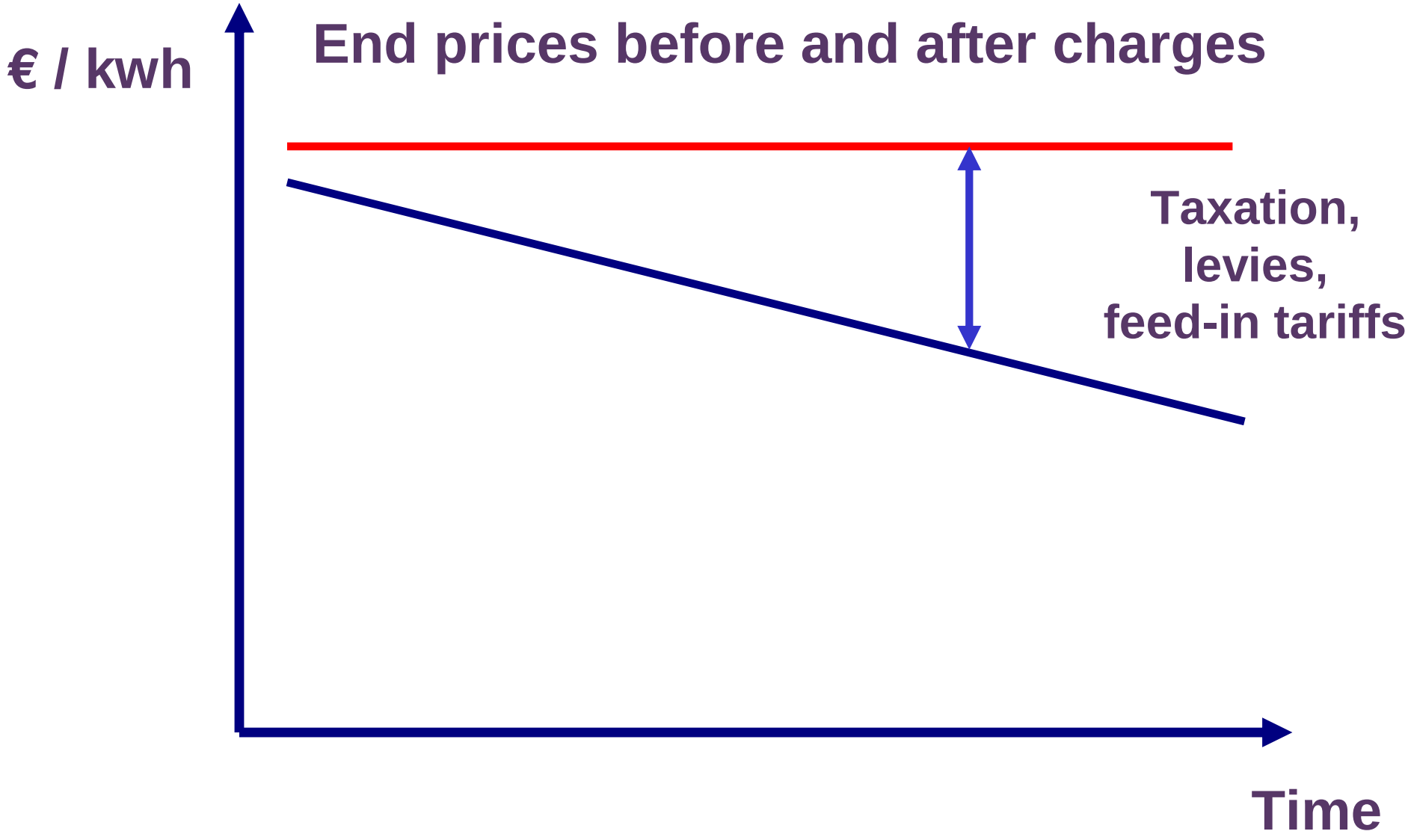

COMPETITION
HIGH
REALITY
OBJECTIVE
LOW
HIGH
COMPETITIVENESS
LOW

Labour productivity growth (%/a)

	EU - 15			US		
	79-90	90-95	95-01	79-90	90-95	95-01
Total economy	2.2	2.3	1.7	1.4	1.1	2.3
Electricity, gas & water supply	2.7	3.6	5.7	1.1	1.8	0.1

Source: DG Enterprise publication:
"EU productivity and competitiveness: an industry perspective.
Can Europe resume the catching up process?"

End prices before and after charges



EXAMPLE 1

RESULTS :

- **Market distortion**
- **No European synergy**
- **No market signals to RES**
- **Costs up to 60… 140 EURO/t CO2 (DE)**

Some more figures:

EU15: yearly costs 2010 if RES targets are reached

	billion €	% wholesale prices	€/t CO2 avoided
• Current support levels	11.5	13	88
• German levels	20	25	109
• German levels + networks and regulation costs : 2.4 €c/kWh	27.5	34	150

EXAMPLE 2

TAXATION draft Directive

national exemptions

CO_2 TRADING draft Directive

national allocation

CHP : need for support ?

- national support schemes
- free connection ?

CHP draft Directive

RESULTS :

- again market distortion ?
- again wrong market signals ?
- costs up to 45 … 90 € t / CO2 (DE)

EXAMPLE 3

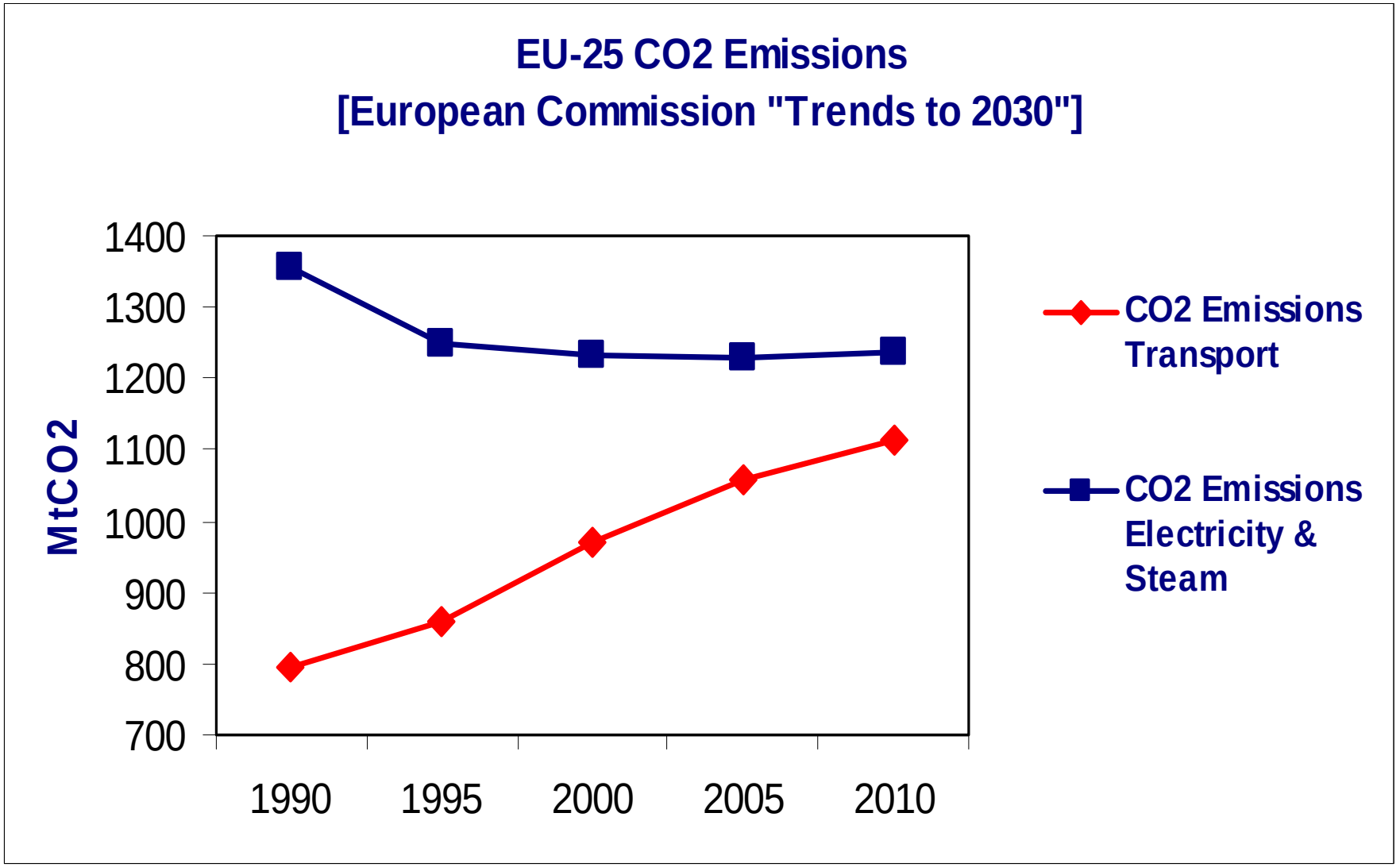
CLIMATE CHANGE AND KYOTO

➡ can Europe afford to go alone?

- costs?
- delocation of emissions?
- realism of timetable?
- no post-Kyoto without sustained nuclear?

➡ more attention to long term approach?

- new technologies: R&D + demo
- energy efficiency targets
- joint Japan - EU - US approach
- engagement of more advanced developing nations (India, China, Brazil).


EU-25 CO2 Emissions
[European Commission "Trends to 2030"]
MtCO2
1400
1300
1200
1100
1000
900
800
700
1990
1995
2000
2005
2010
CO2 Emissions Transport
CO2 Emissions Electricity & Steam

undergrounding of transmission?

non market interconnection targets

non market security of supply obligations

non market energy efficiency support

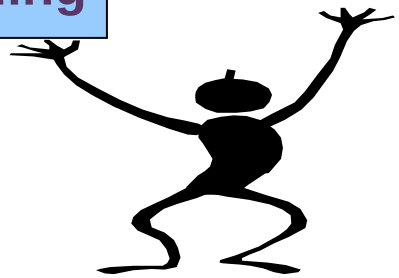
other levies

electricity taxation

non market CHP support

non market RES support

CO2 emissions trading



undergrounding of transmission?

non market interconnection targets

non market security of supply obligations

COMPETITION: YES

energy support

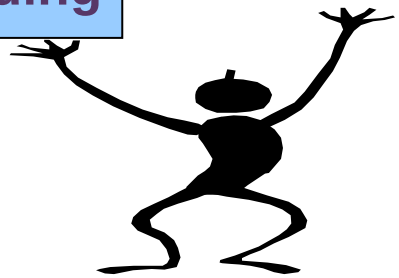
other levies

electricity taxation

non market CHP support

non market RES support

CO2 emissions trading



undergrounding of transmission?

non market interconnection targets

non market security of supply obligations

non market energy efficiency support

WHAT ABOUT COMPETITIVENESS?

electricity taxation

non market CHP support

non market RES support

CO2 emissions trading

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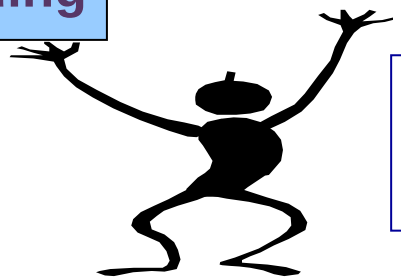
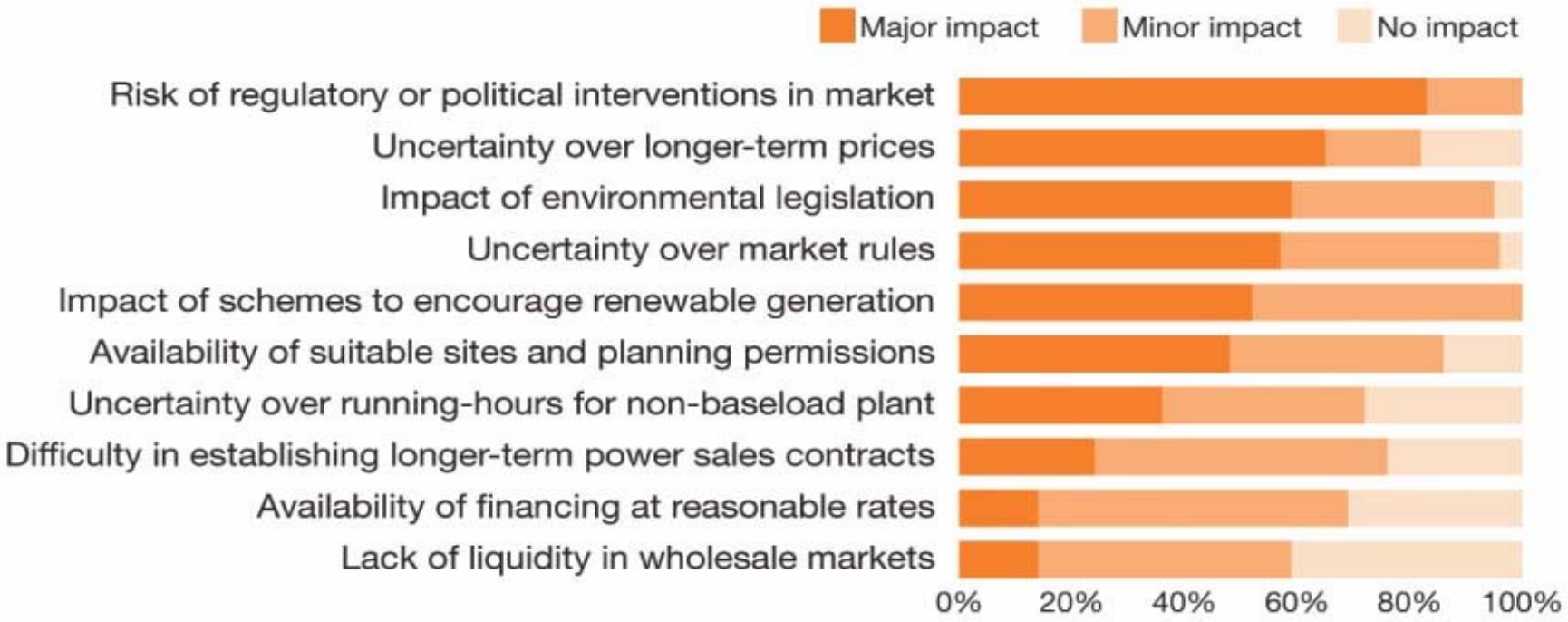


COMPETITION: YES

WHAT ABOUT COMPETITIVENESS?

Major impacts on investments decisions



Source: Capgemini 2004 Global Utilities Survey
"Deregulation: Meeting the delivery and sustainability challenges?"

INTEGRATION OF ENVIRONMENTAL OBJECTIVES IN A COMPETITIVE MARKET

- Realistic targets and timetable for environmental objectives
- Use of market mechanisms
- Coherent policies

A ROADMAP TO IMPROVED INTEGRATION OF ENVIRONMENTAL OBJECTIVES IN A COMPETITIVE ELECTRICITY MARKET

- Clarify role of electricity in sustainable development (demand and supply side)
- Review regulatory framework in view of :
  - Consistency
  - Least cost approach
  - Market Integration
- Systematic economic impact assessment
- Wide & long-term oriented reflection on “Beyond Kyoto”