

Competition in CEE electricity markets? Lessons learned from the Czech and Austrian point-of-view

Reinhard Haas ¹⁾

Christian Redl ¹⁾

Jaroslav Knapek ²⁾

1) EEG, Vienna University of Technology, Austria

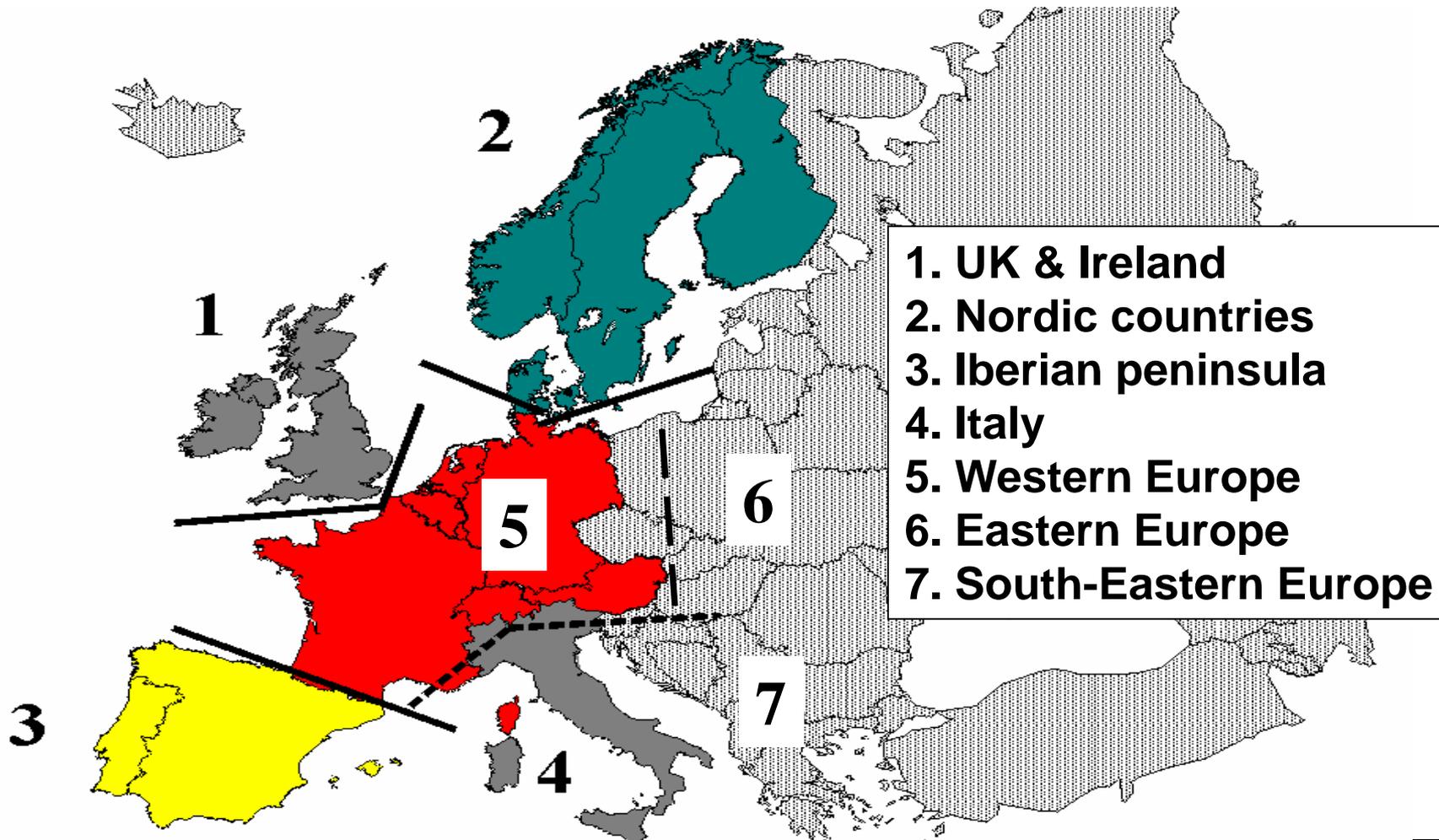
2) Czech Technical University in Prague, Czech Republic

- 1. Introduction**
- 2. European electricity sub-markets**
- 3. Background: electricity consumption**
- 4. How market prices come about**
- 5. Market power and market extension**
- 6. Future perspectives**
- 7. How many generators are required for competition ?**
- 8. Conclusions**

1. INTRODUCTION

- Intentions of the EC directive:
 - Competitive markets
 - Free choice of supplier
 - lower electricity prices

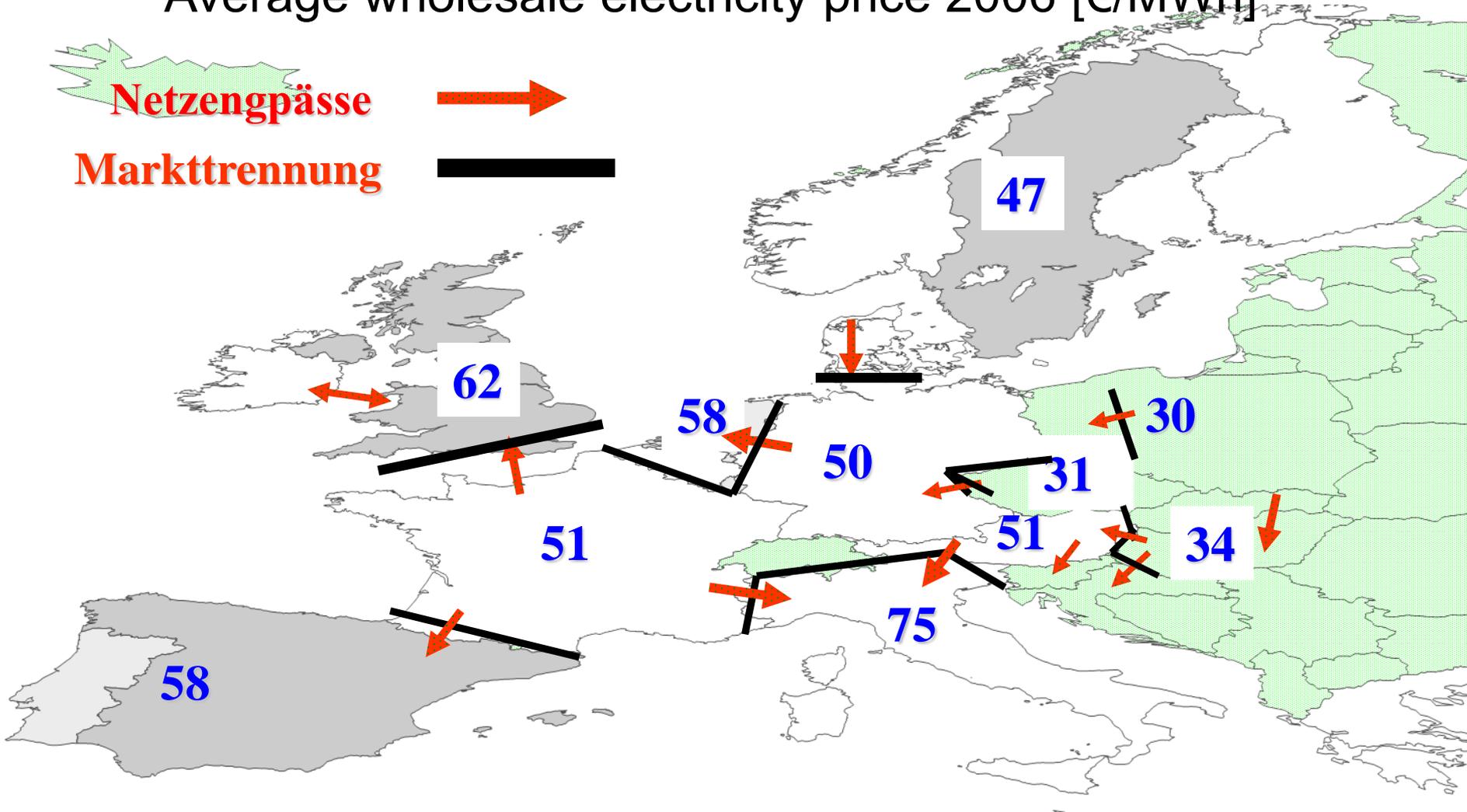
2. EUROPEAN ELECTRICITY SUB-MARKETS

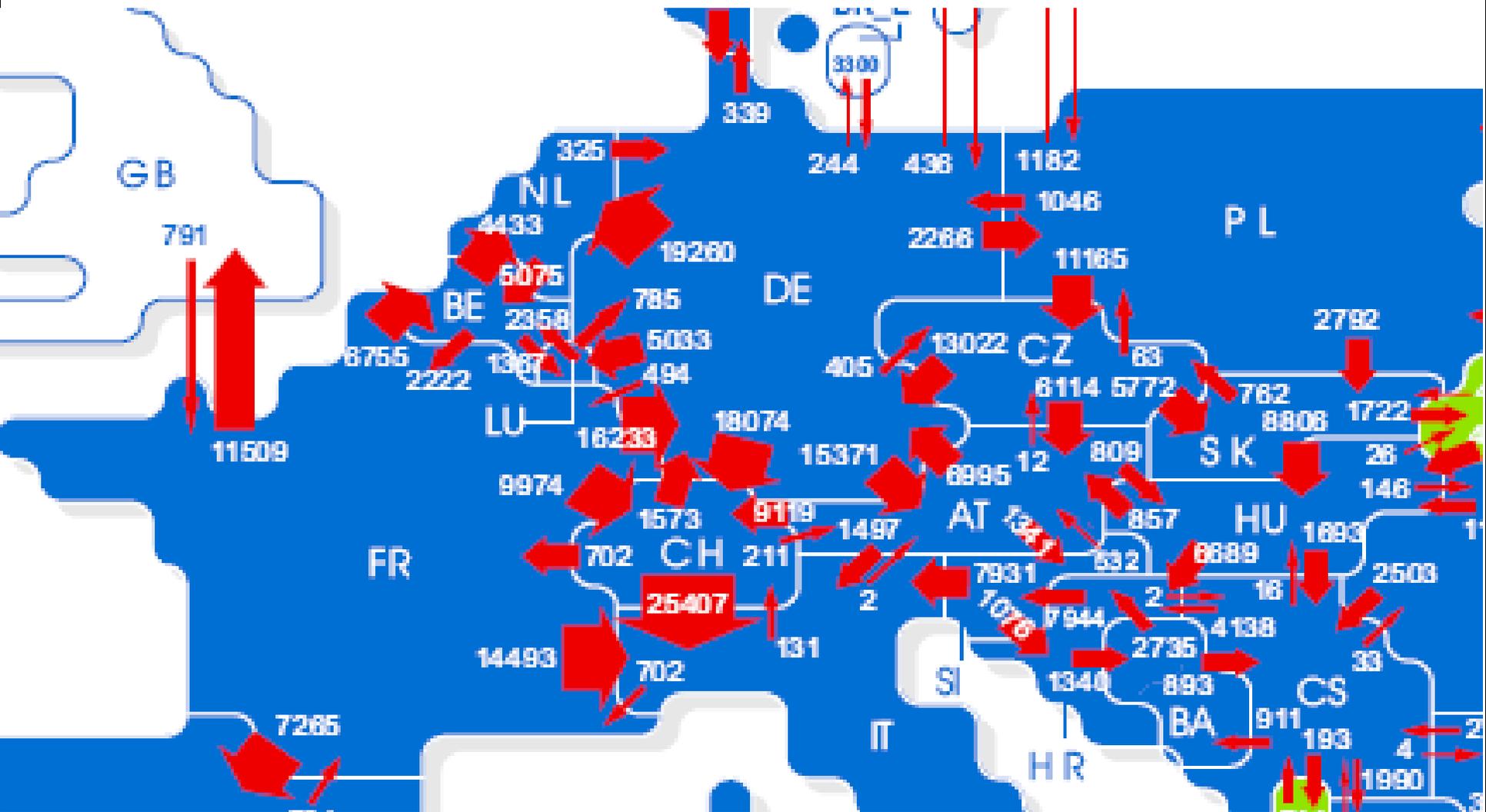


PREISUNTERSCHIEDE

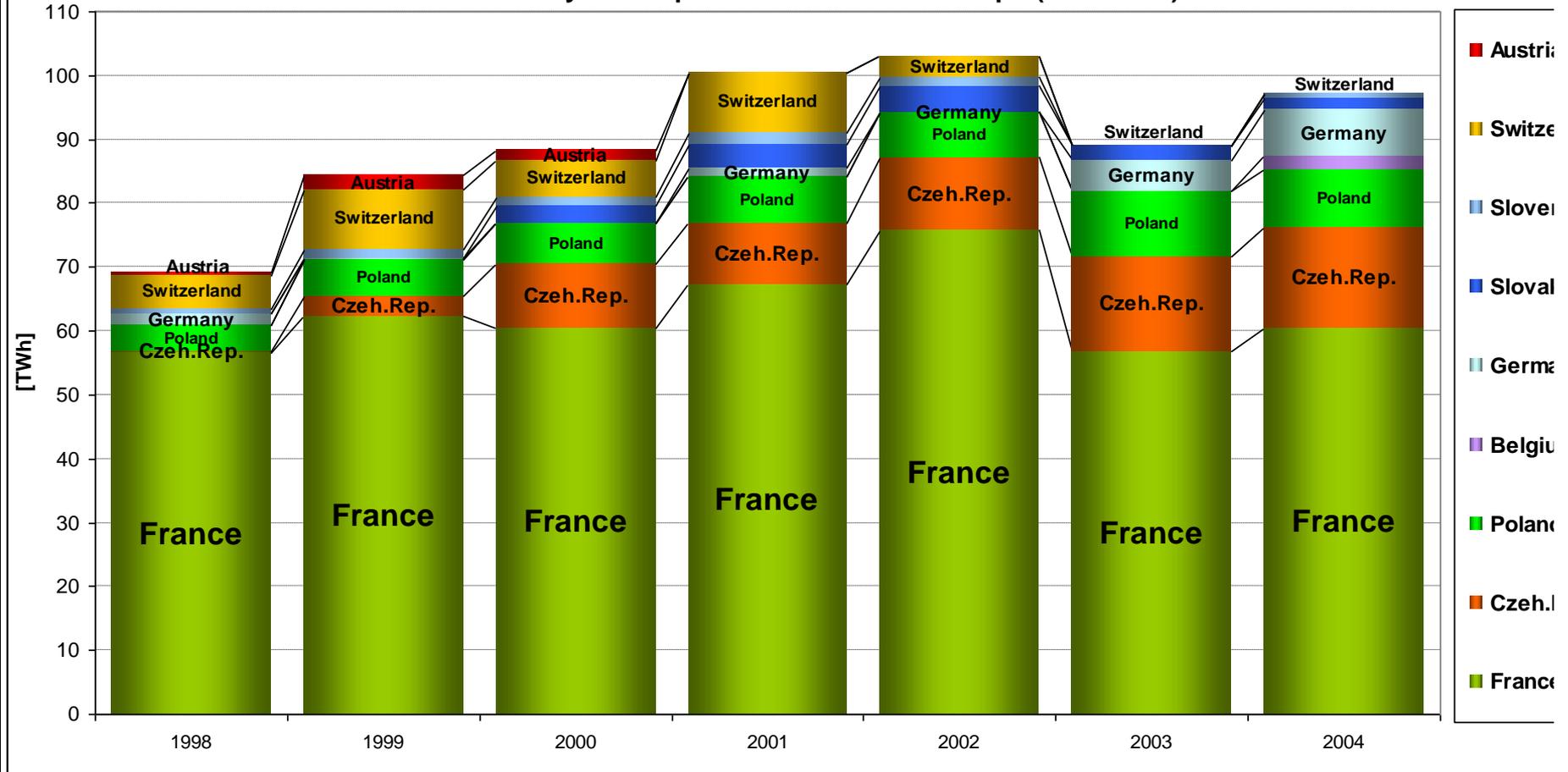
UND NETZENG PÄSSE IN EUROPA

Average wholesale electricity price 2006 [€/MWh]



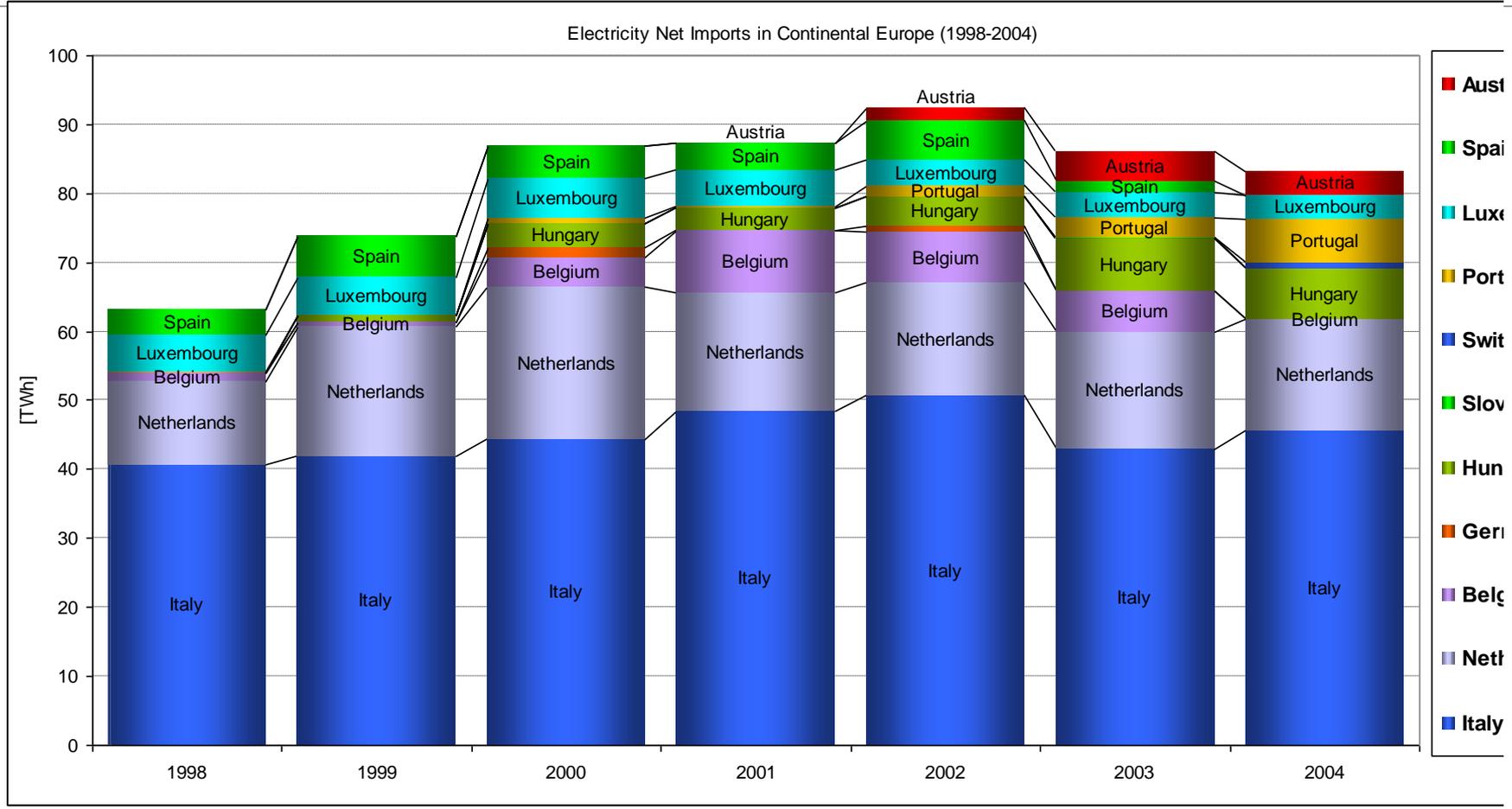


Electricity Net Exports in Continental Europe (1998-2004)



(To be updated to 2006)

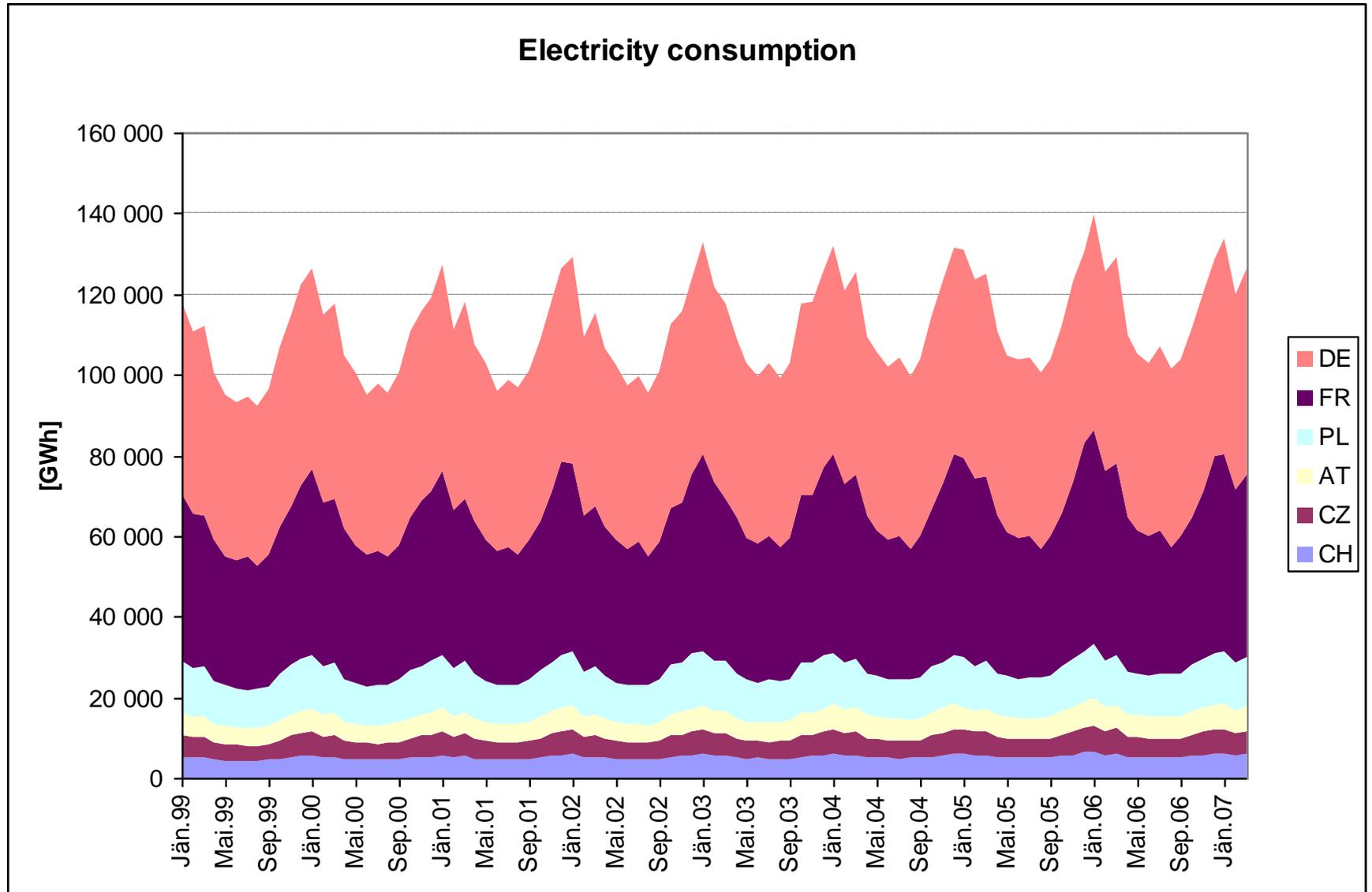
NET IMPORTS



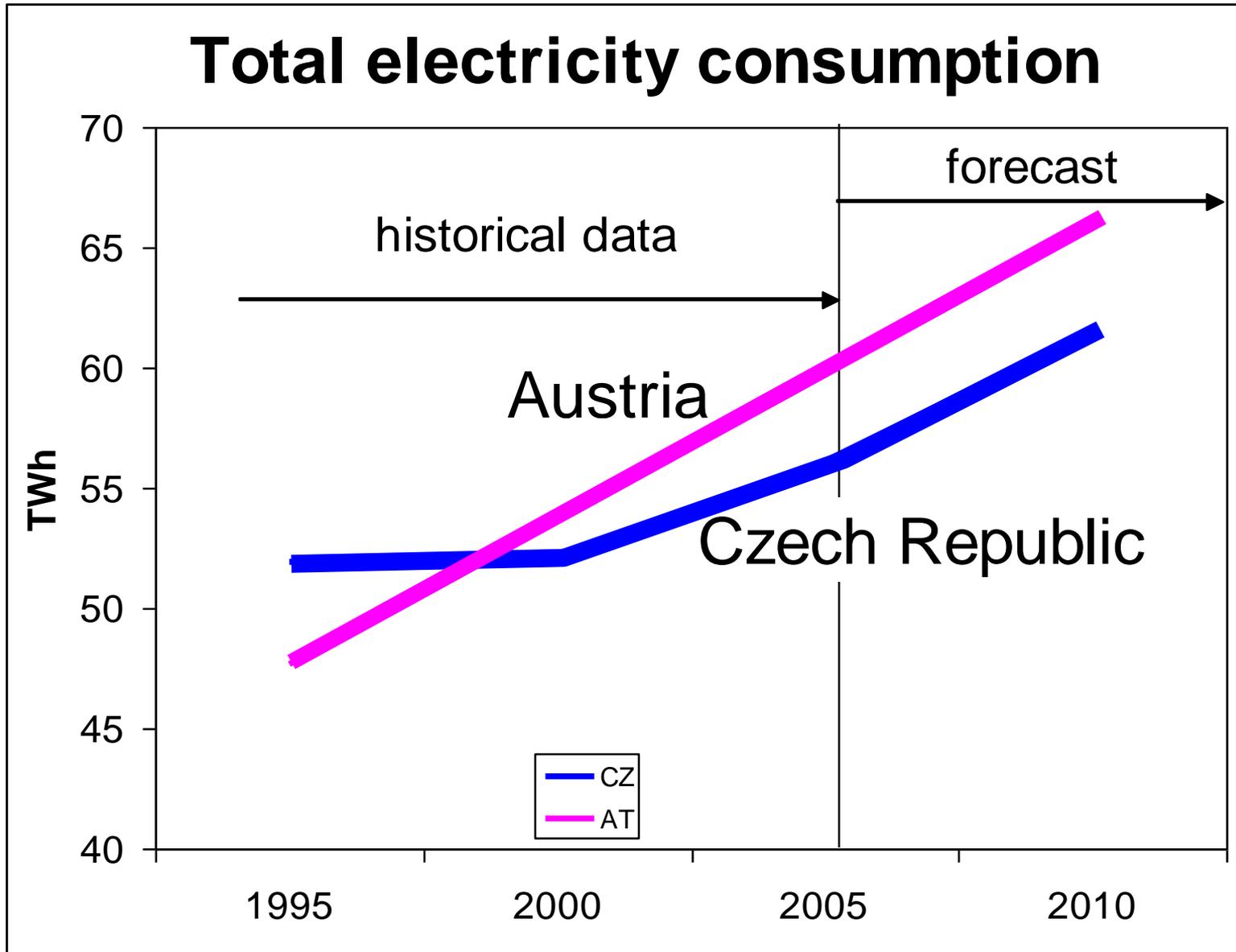
(To be updated to 2006)

3. BACKGROUND ELECTRICITY CONSUMPTION

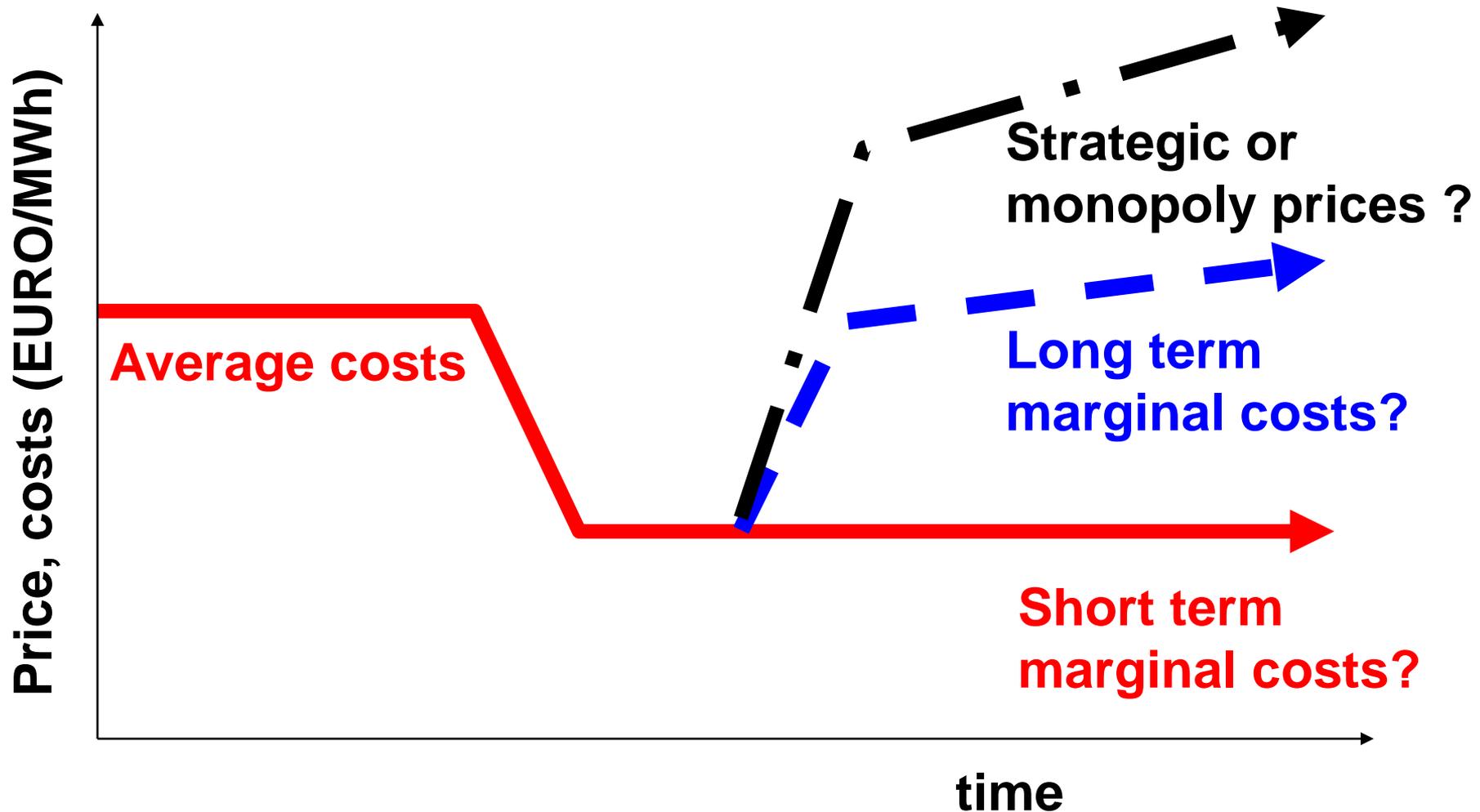
ELECTRICITY CONSUMPTION



COMPARISON CZ-AT

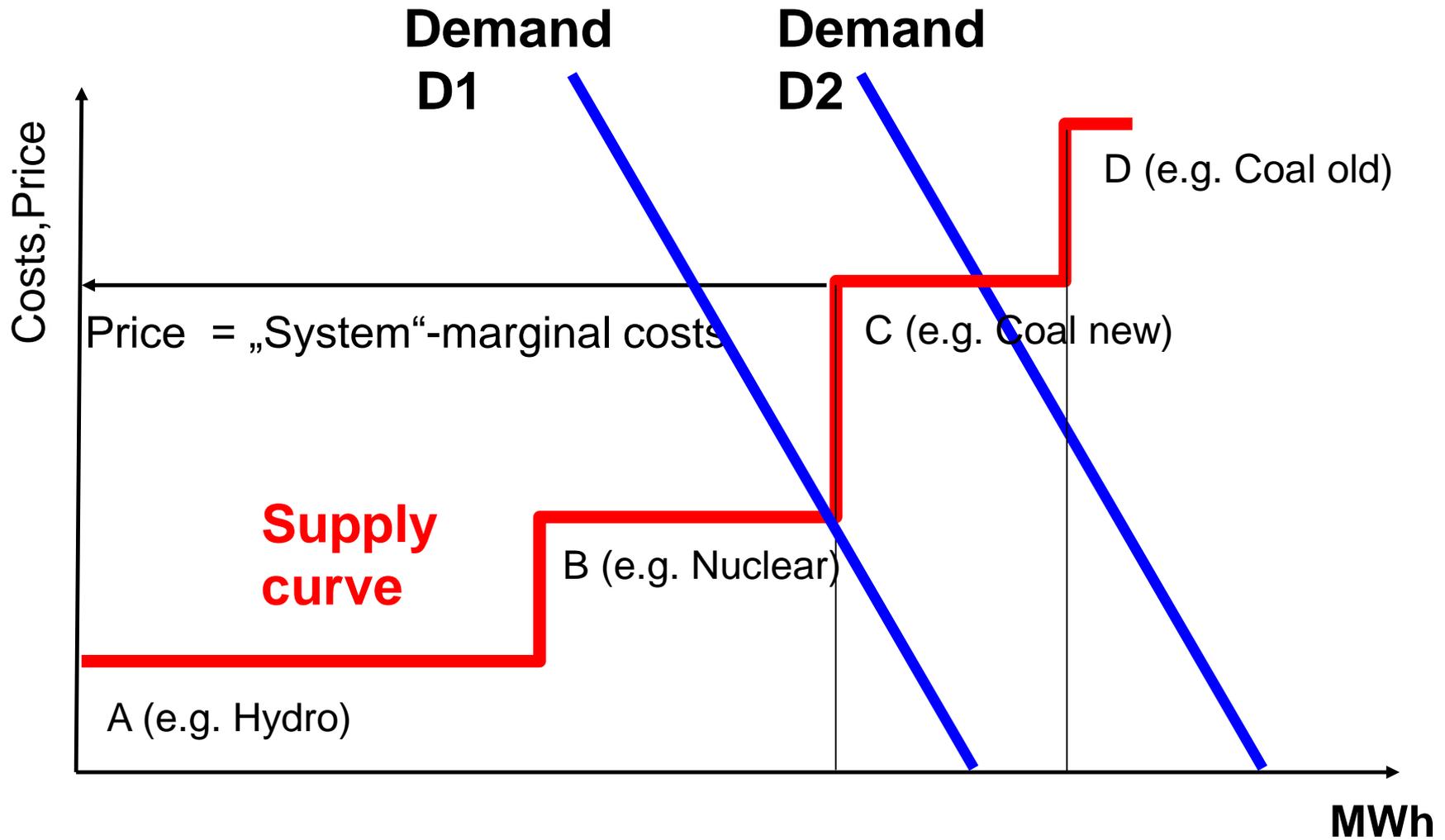


4 HOW PRICES COME ABOUT (SOME THEORY)

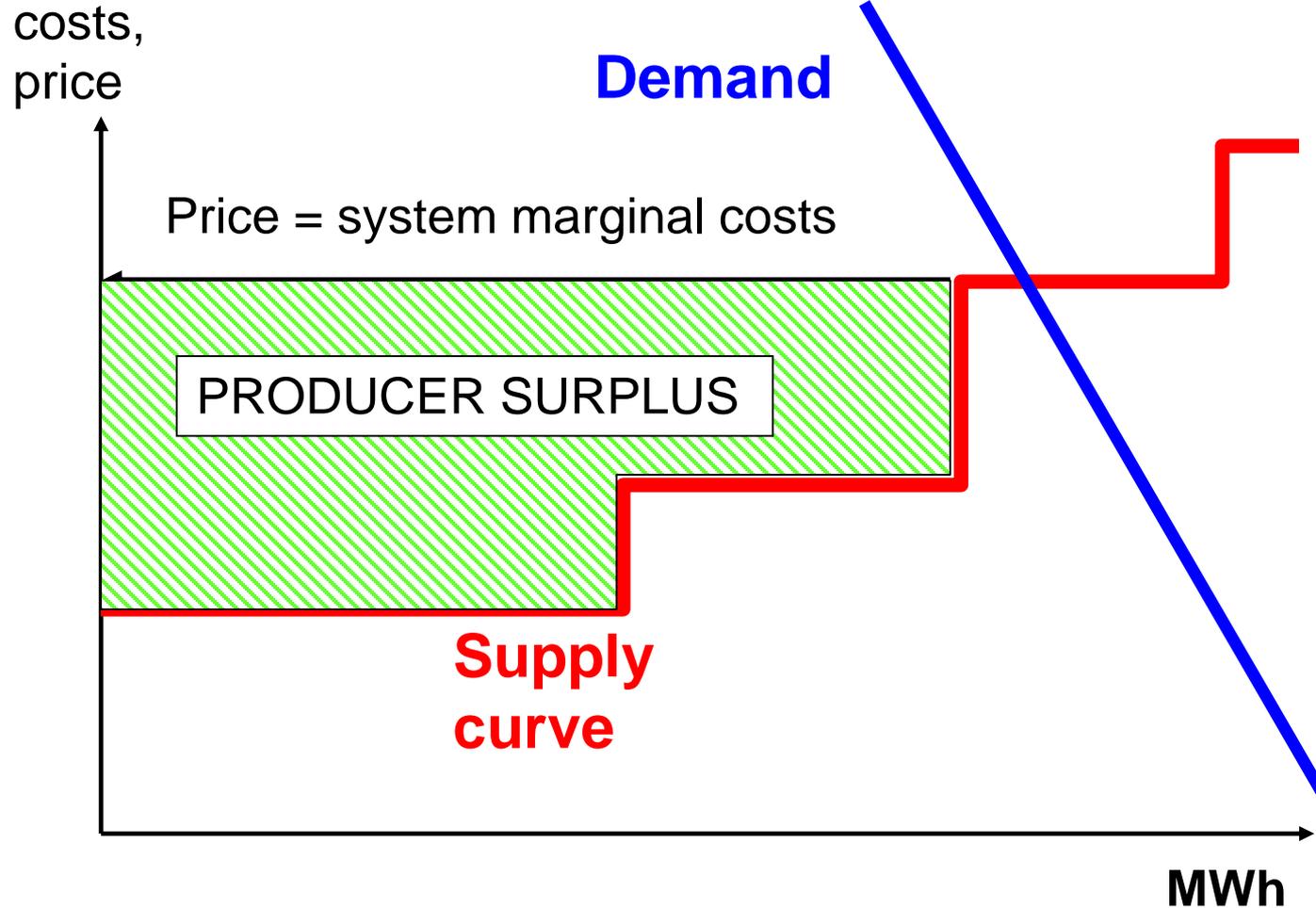


BASIC PRINCIPLE OF COMPETITION:

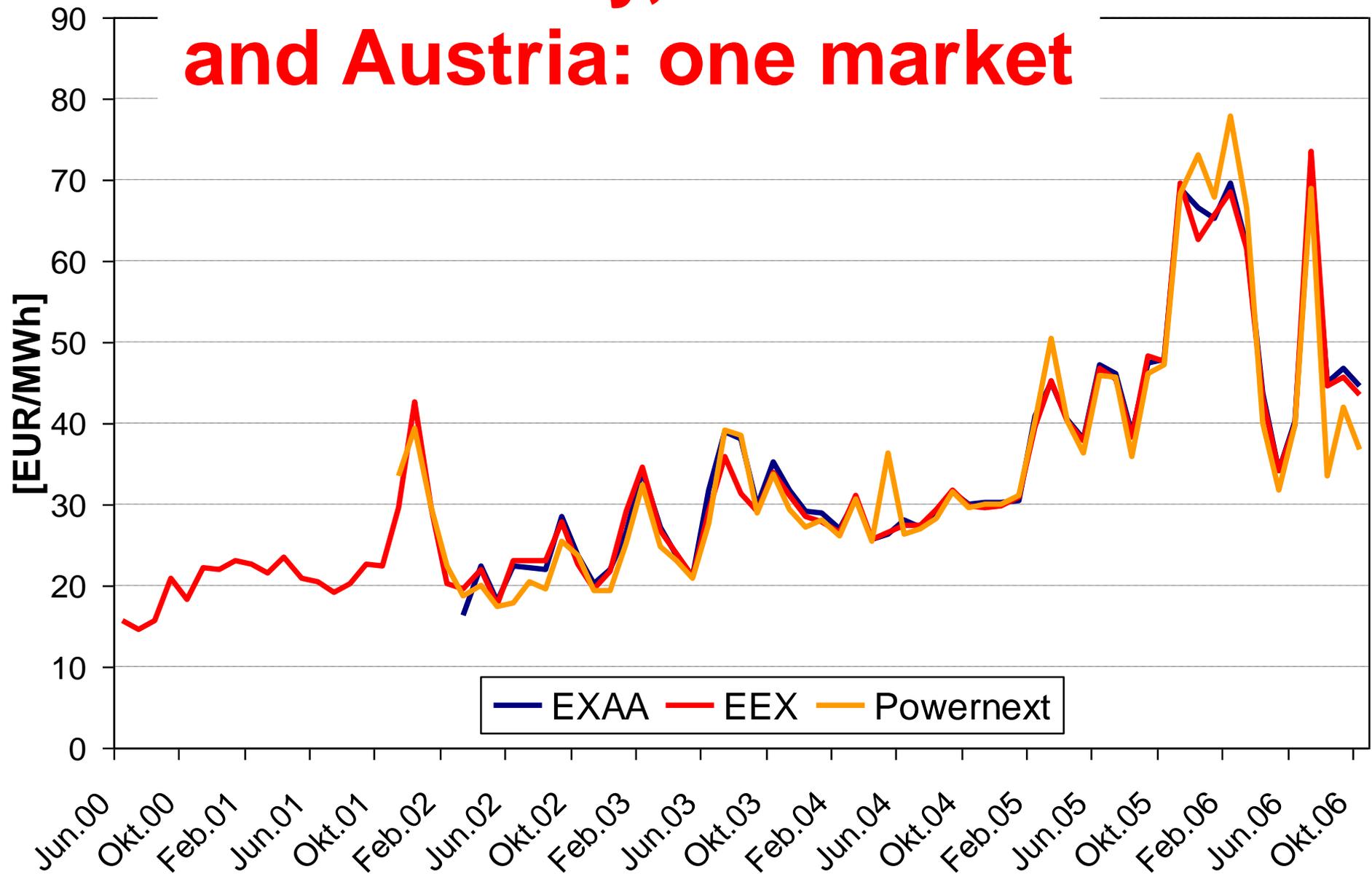
PRICE = MARGINAL COSTS



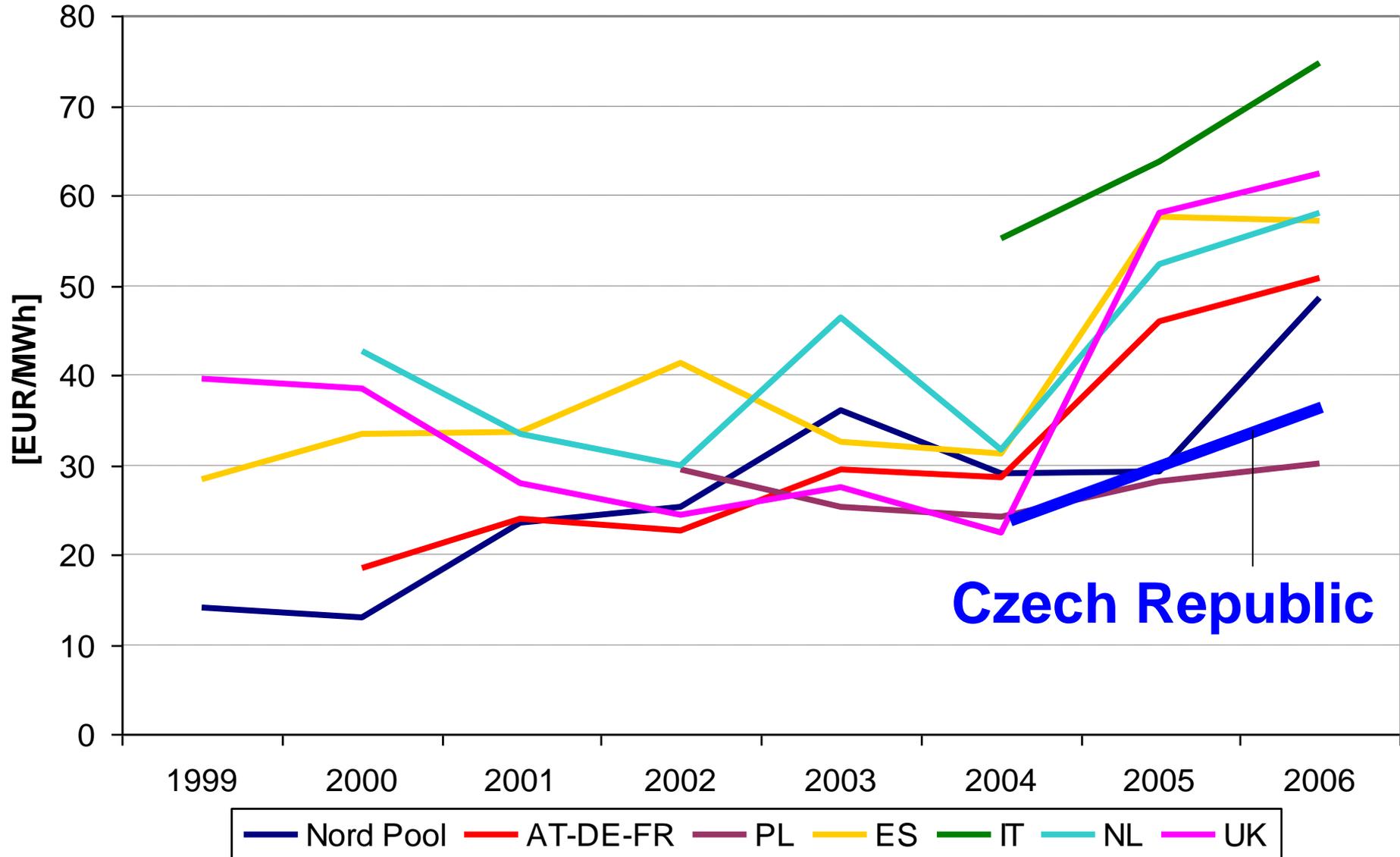
PRICES UNDER COMPETITION



Germany, France and Austria: one market



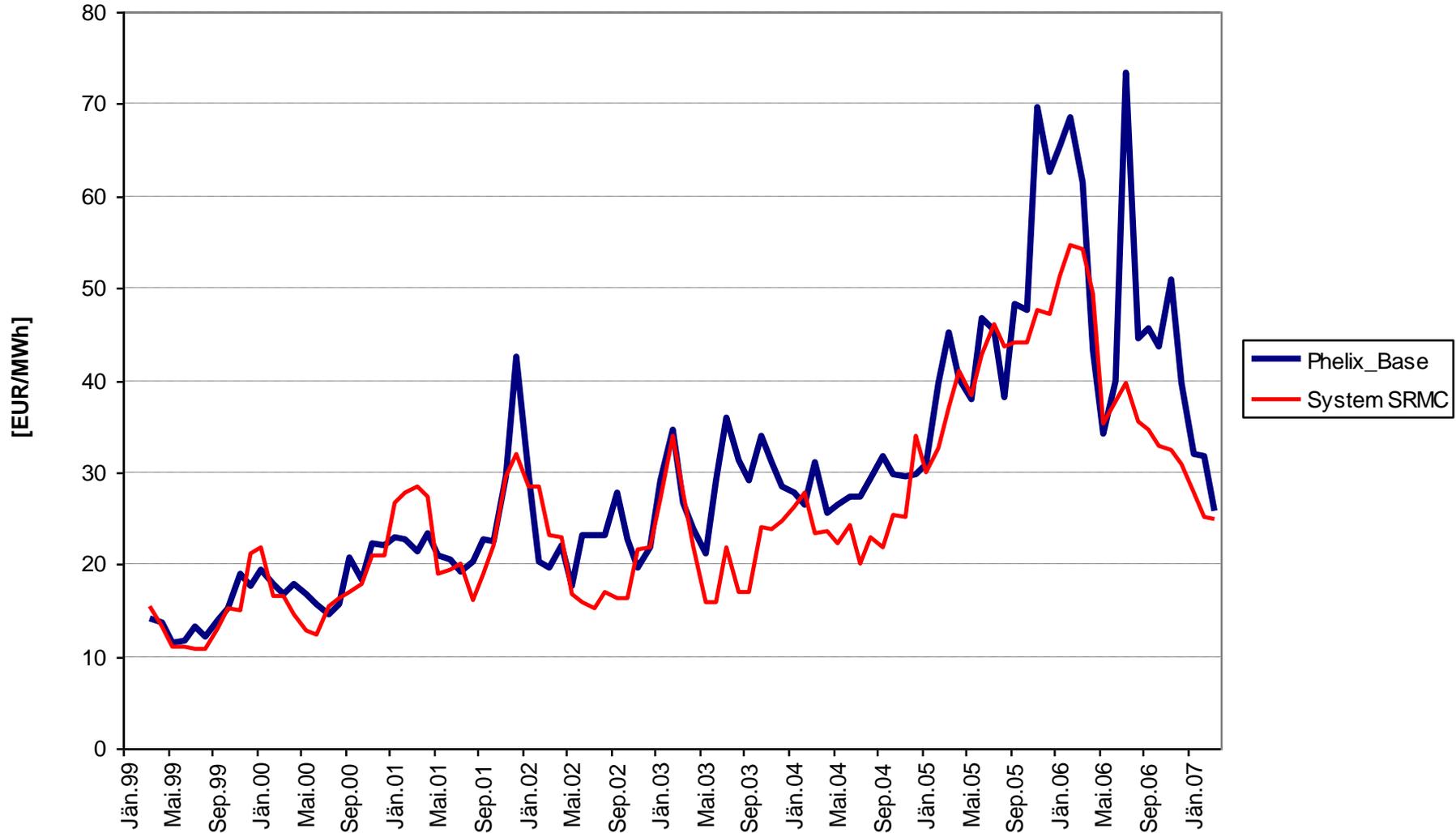
Do prices convergence?



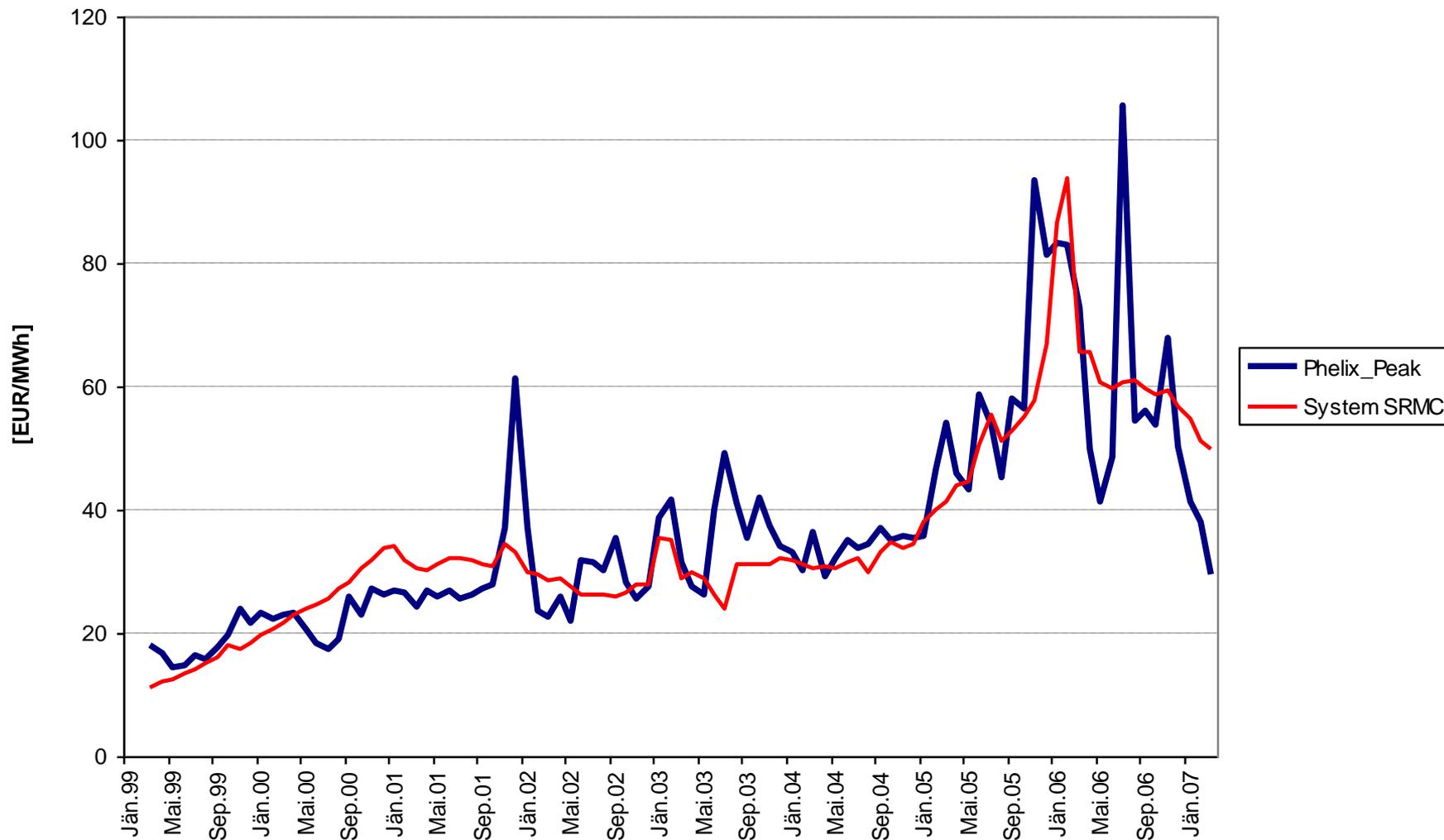
5. ANALYZING MARKET POWER AND THE EFFECT OF MARKET EXTENTION

BASEPRICE VS SRMC (EEX)

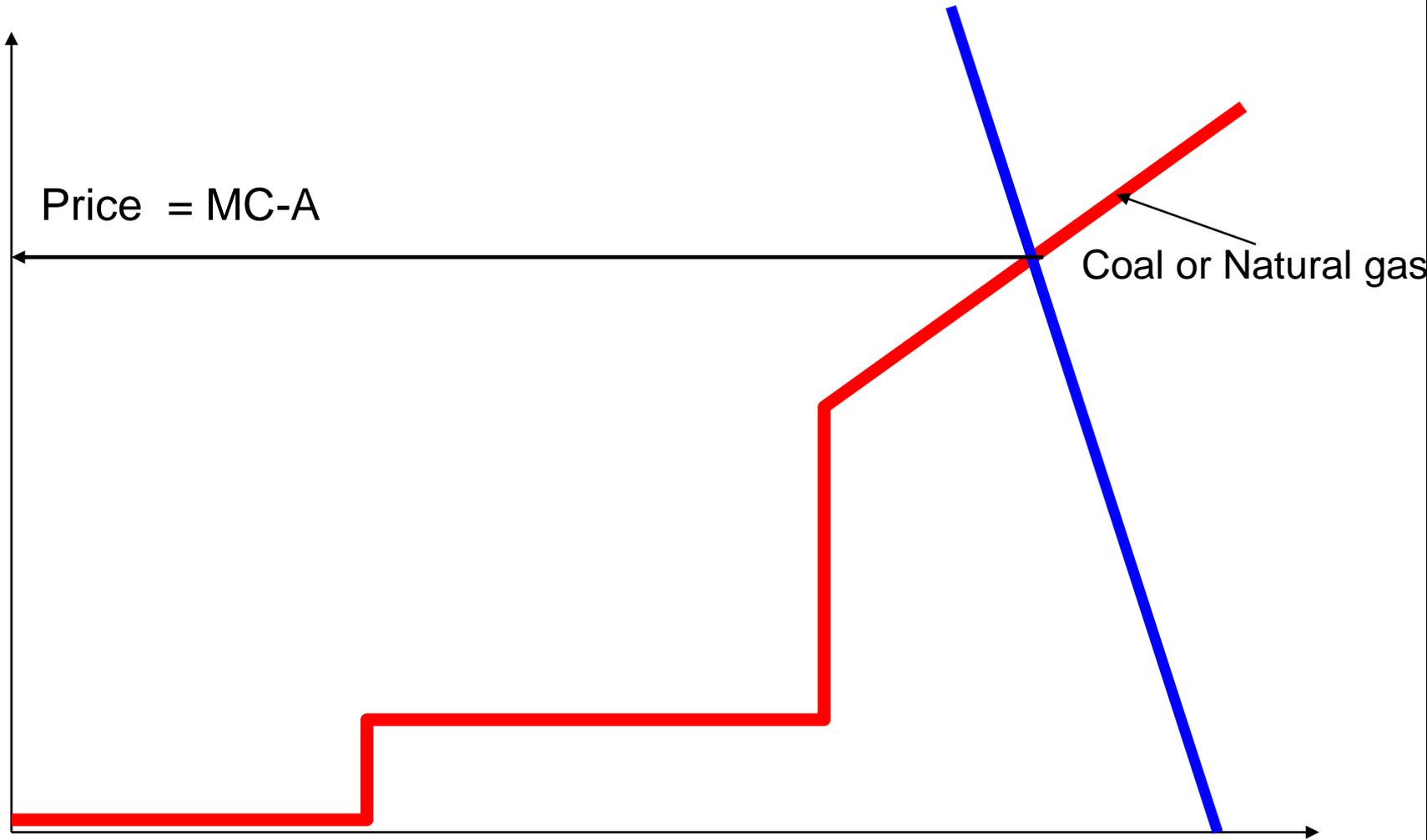
SRMC Baseload AT+CH+DE+FR



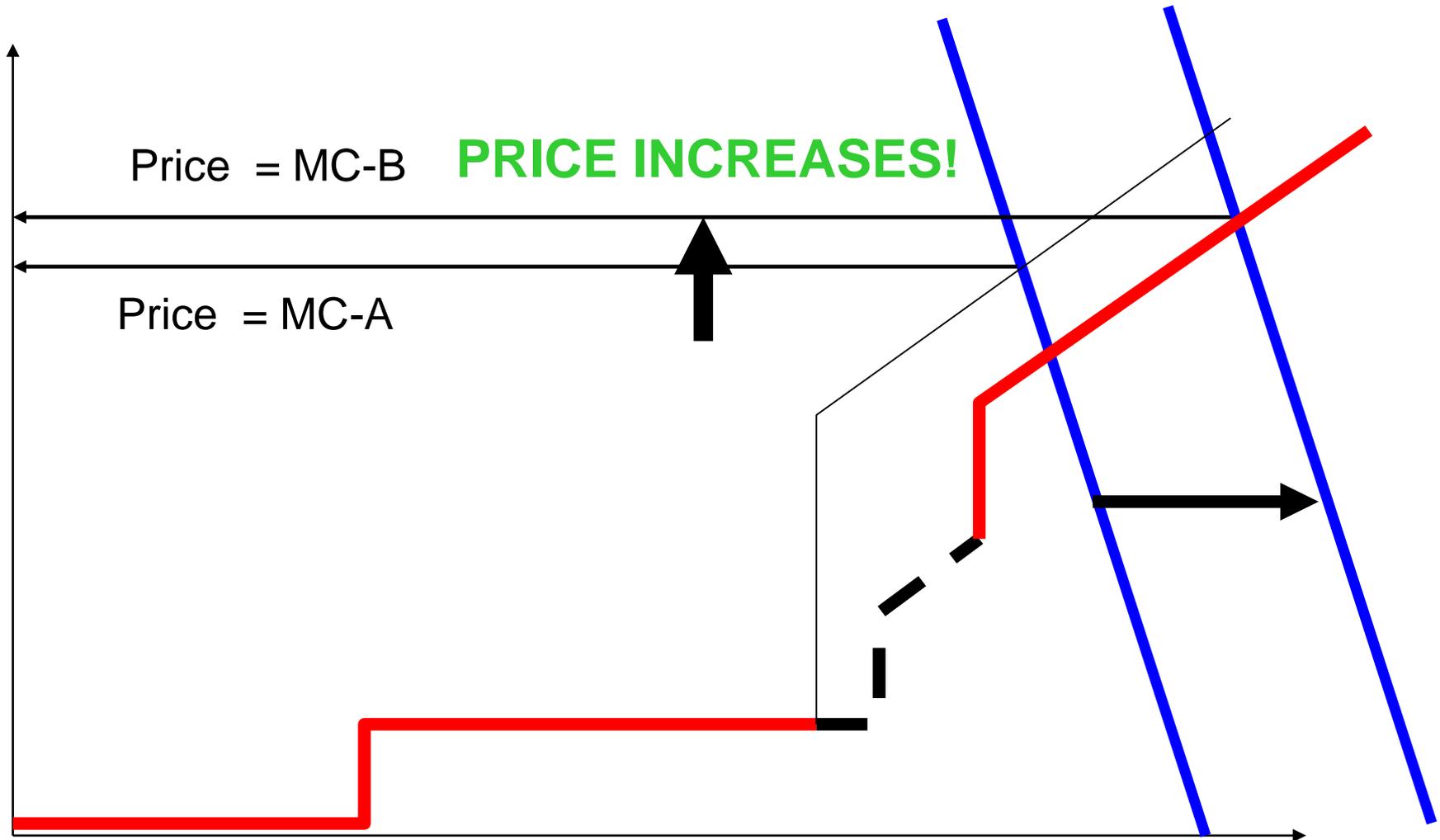
SRMC Peak load AT+CH+DE+FR



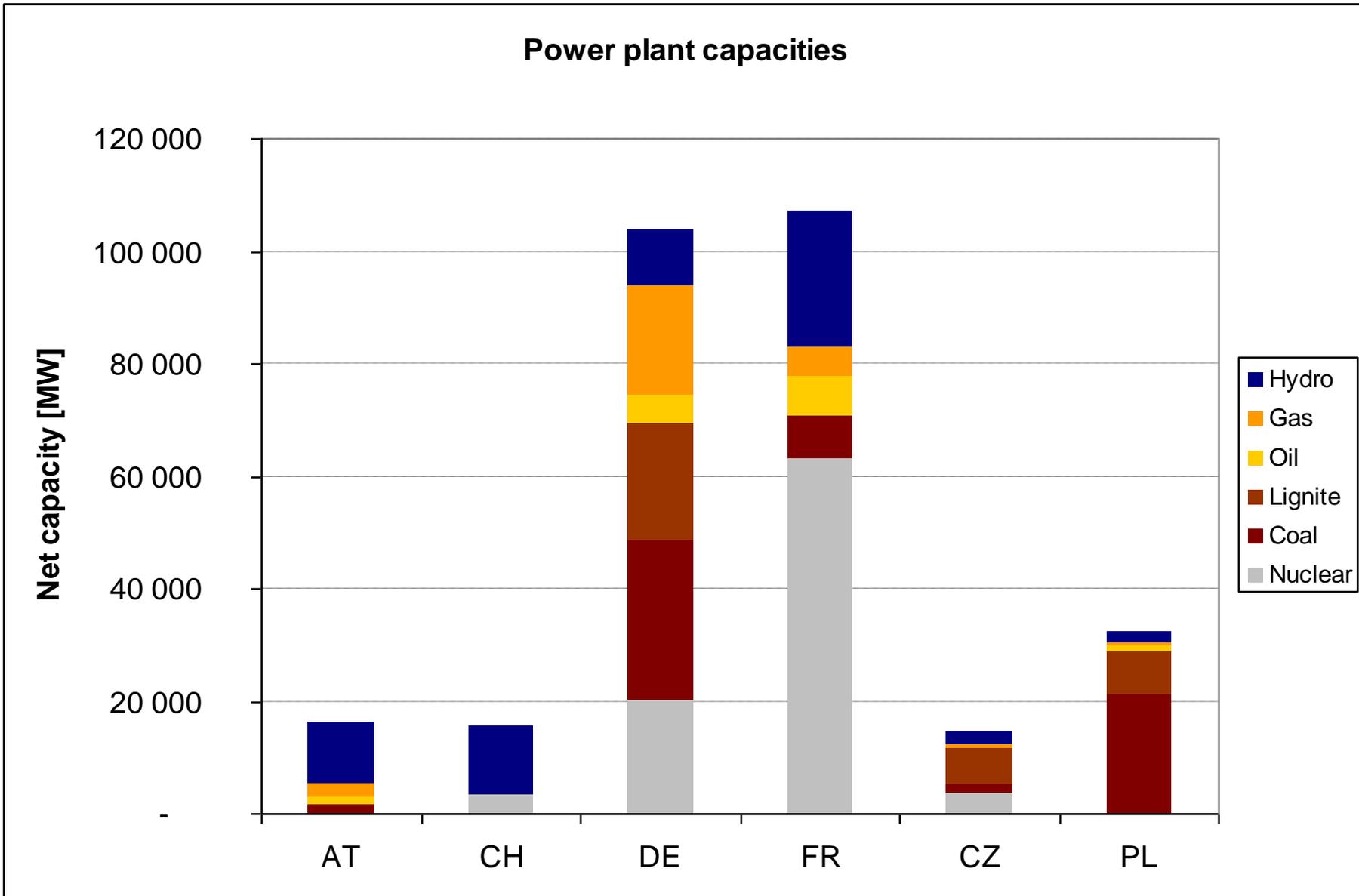
PRICE IN AREA A (DE+FR+CH+AT)



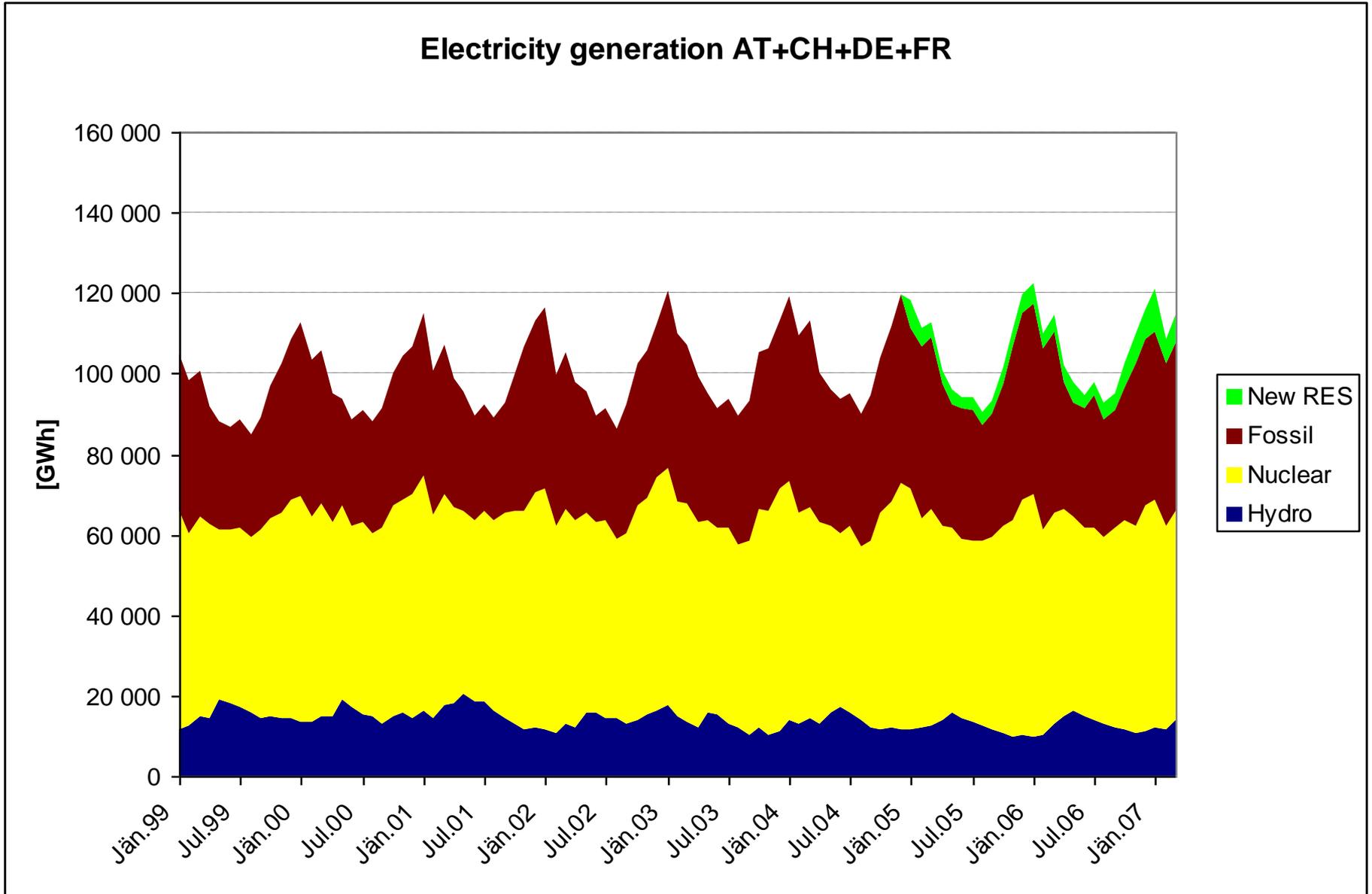
ADDING A „SHORT“ COUNTRY (e.g. Hungary)



POWER PLANT CAPACITIES



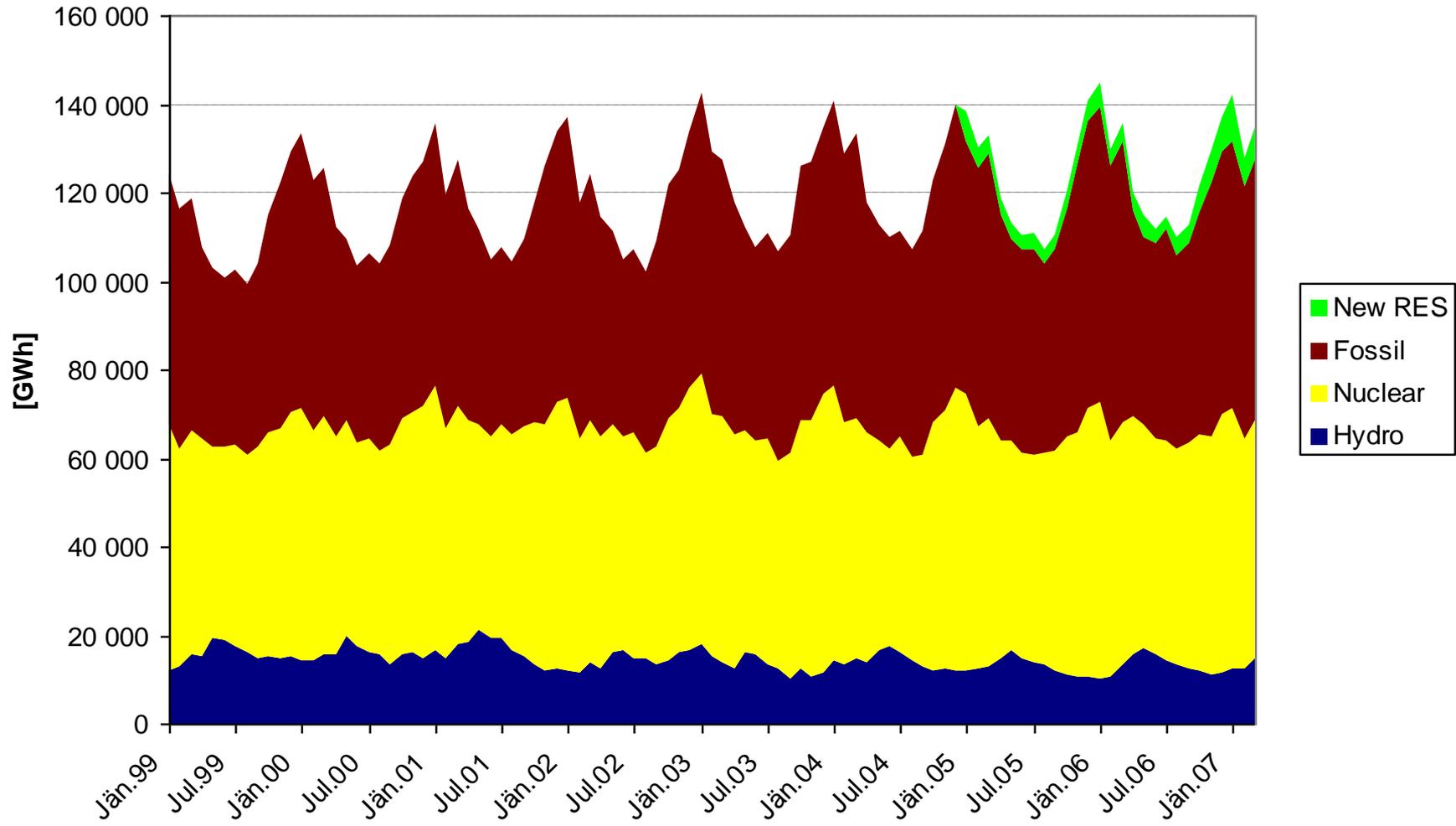
GENERATION AT+CH+FR+DE



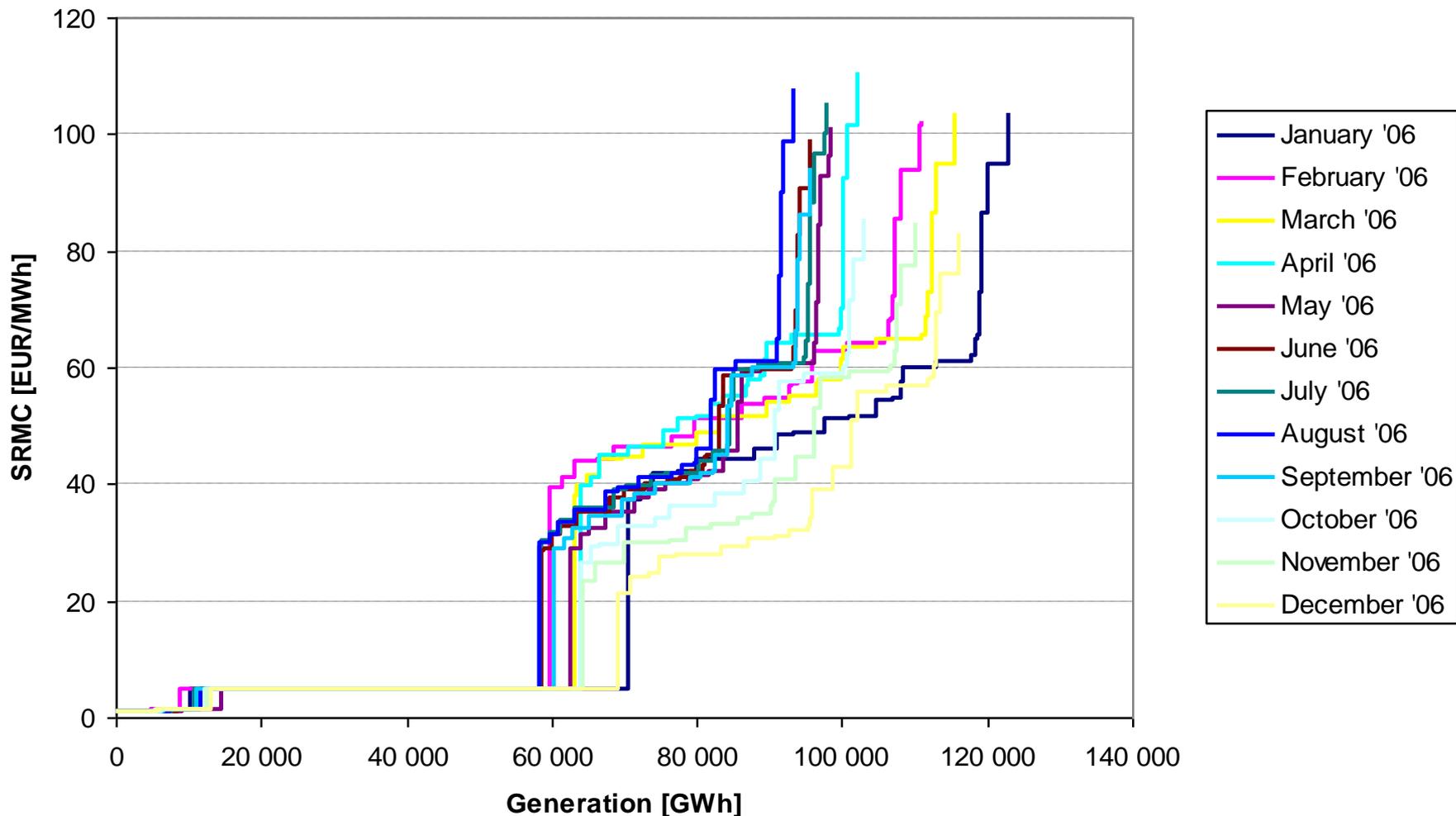
GENERATION

AT+CH+FR+DE+CZ+PL

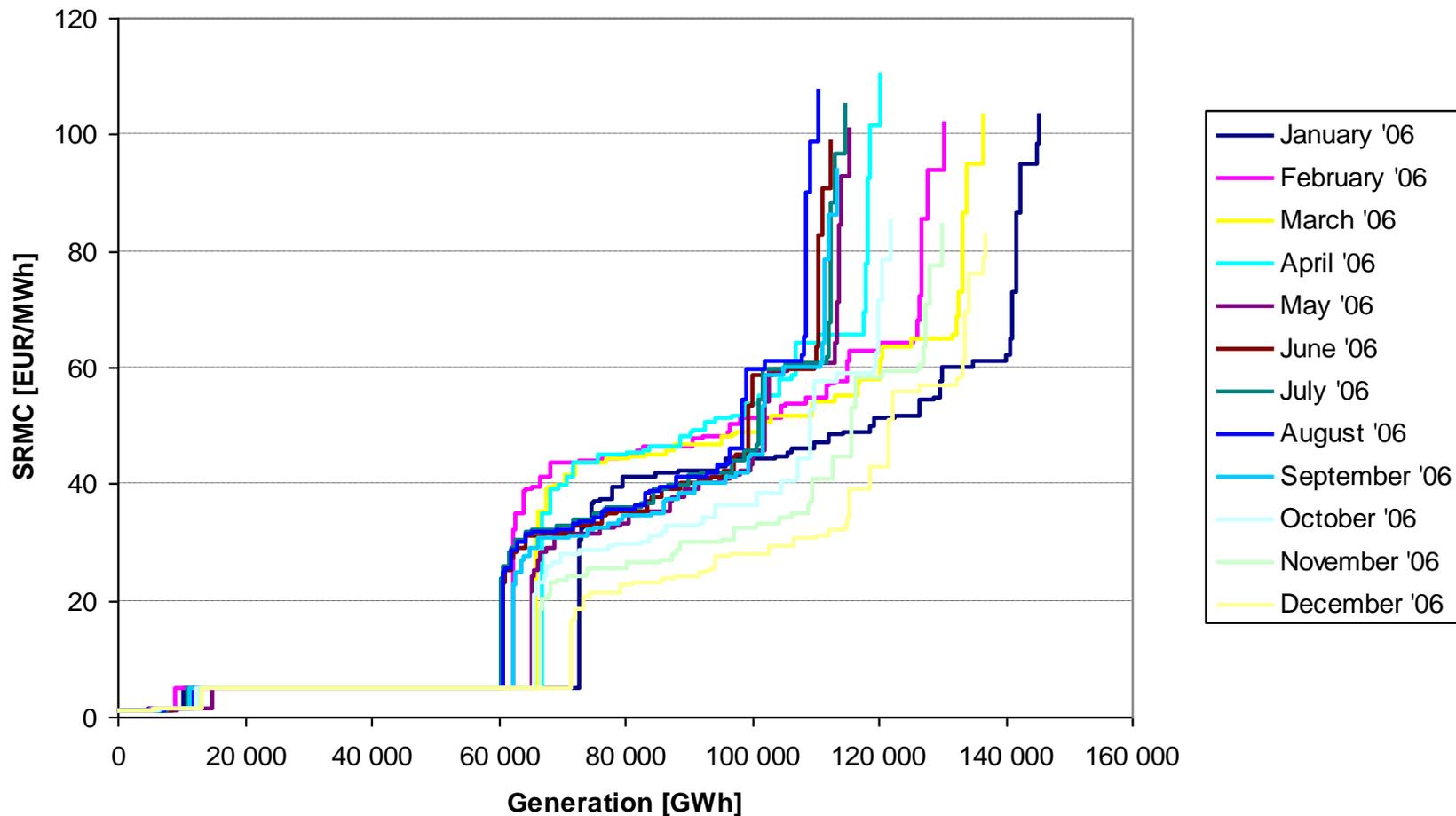
Electricity generation AT+CH+DE+FR+CZ+PL

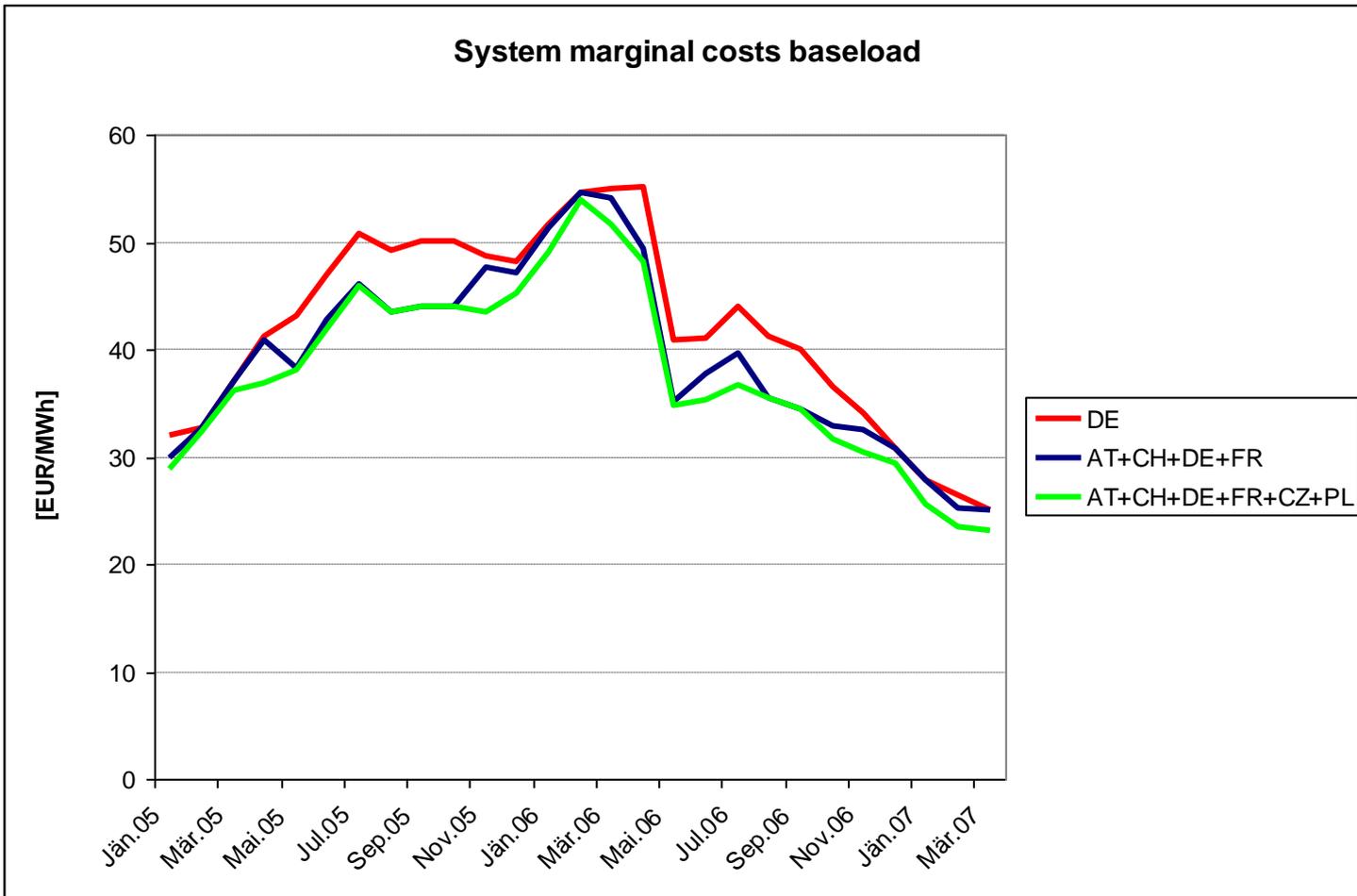


Merit Order Curves AT+CH+DE+FR

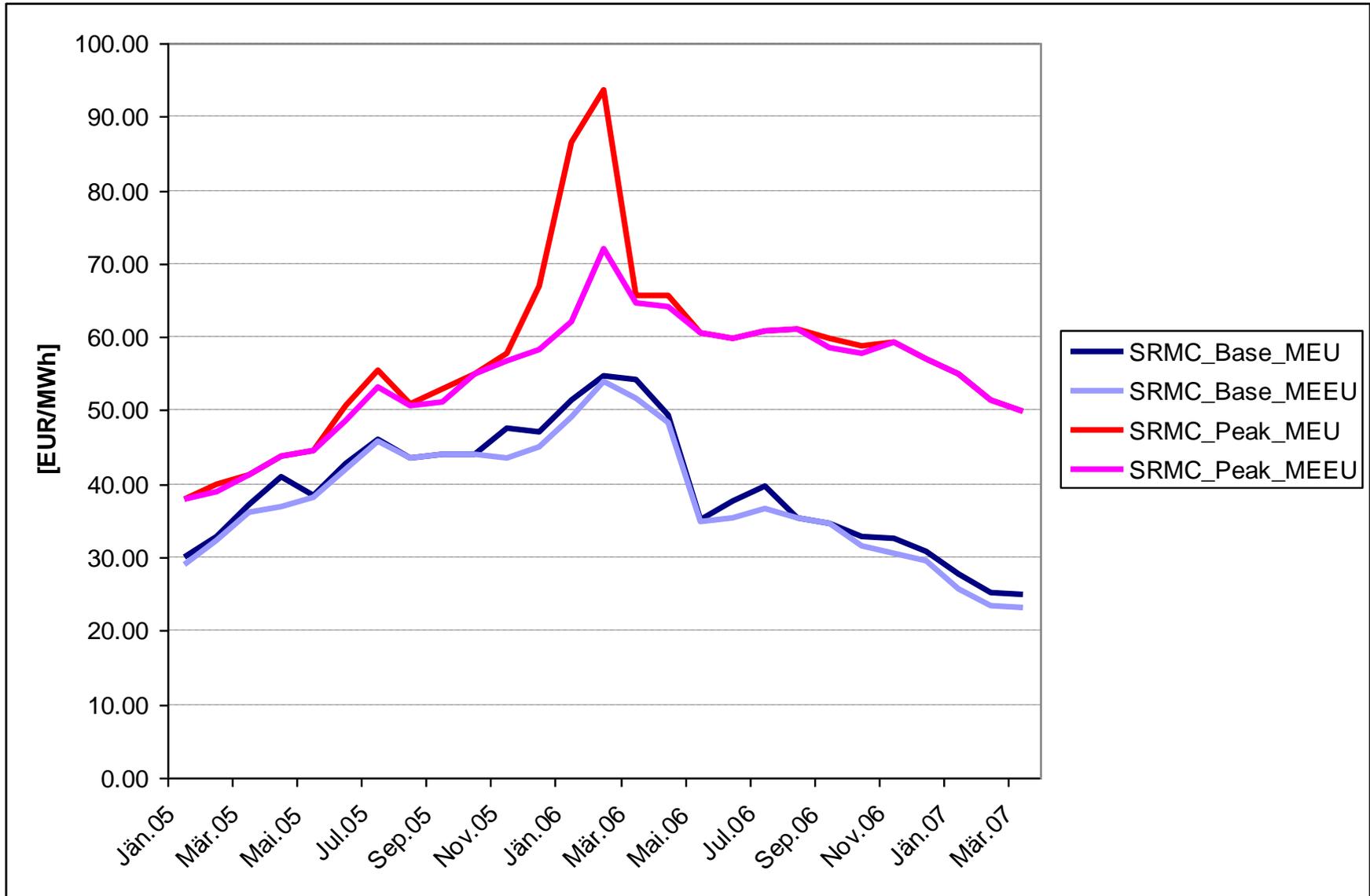


Merit Order Curves AT+CH+DE+FR+CZ+PL





SRMC MEU/MEEU



8. CONCLUSIONS

- **General lack of competition: in generation and supply in every country and sub-market**
- **In wholesale markets: strong suspicions regarding exertion of market power in every sub-market**

8. CONCLUSIONS

To bring about effective competition it is necessary to ...

- **conduct European-wide correct unbundling to avoid market power over the grid**
- **to ensure prevailance of excess capacities resp. demand-side measures**
- **avoid further mergers and cartelisation, divest capacities, provide incentives for new generators?**
- **harmonise (transboundary) conditions for access to the grid;**
- **Enhance transparency;**

8. CONCLUSIONS

- **The absolute litmus test for the liberalised CE market will come when excess capacities in transmission and generation has disappeared;**

FROM THE AUSTRIAN POINT- OF-VIEW

- Austria is well-connected to CH, DE, CZ
- Austrian generators cannot influence the market prices in this market currently. Competition must be triggered on a superior level in Europe
- Decrease in plant capacity and increase in consumption led to the change from a net electricity exporter in the 1990s to a net import country in recent years.

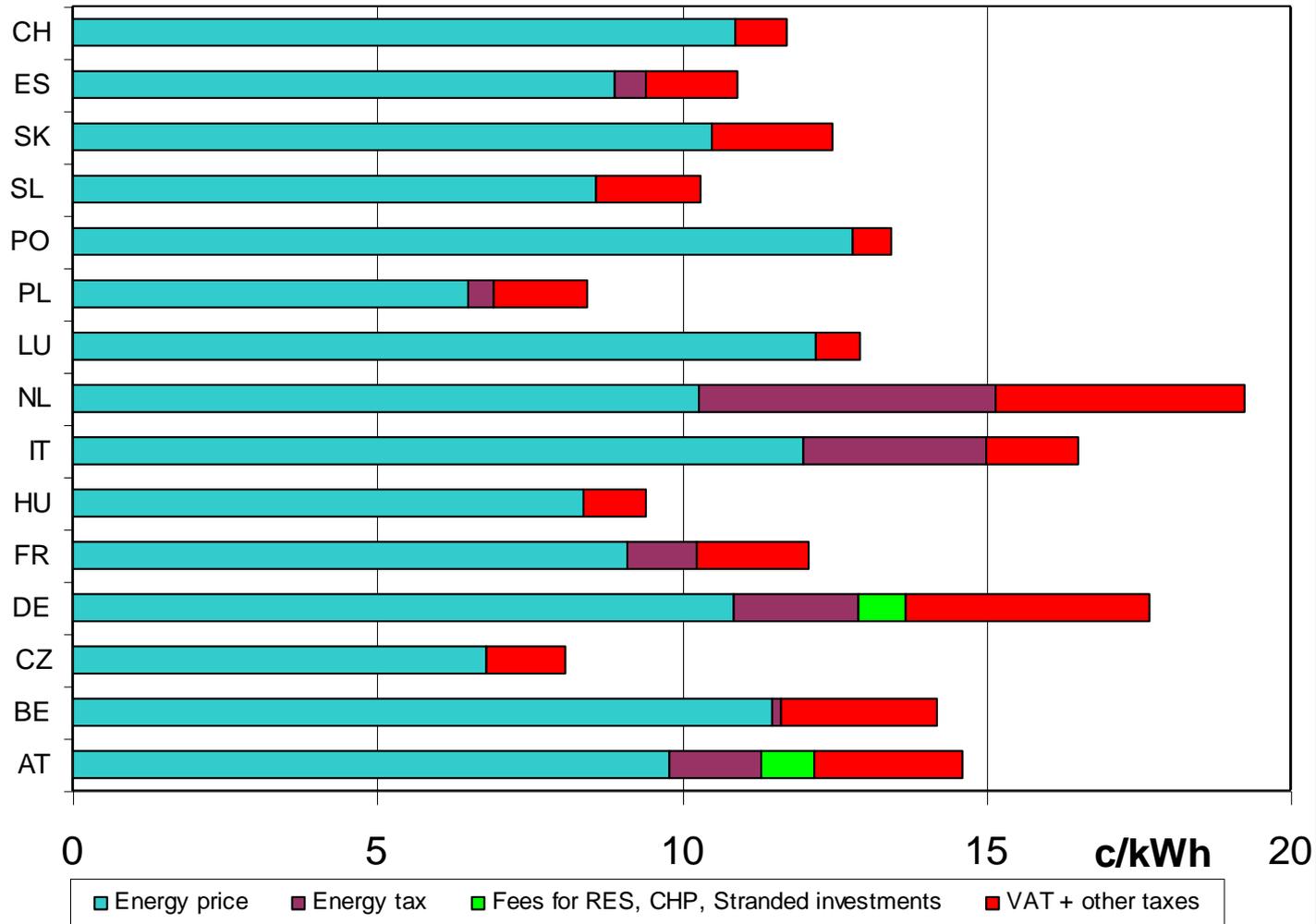
FURTHER INFORMATION:

- **Homepage:**
eeg . tuwien . ac . at

- **E-Mail :**
Reinhard.Haas @ tuwien . ac . at

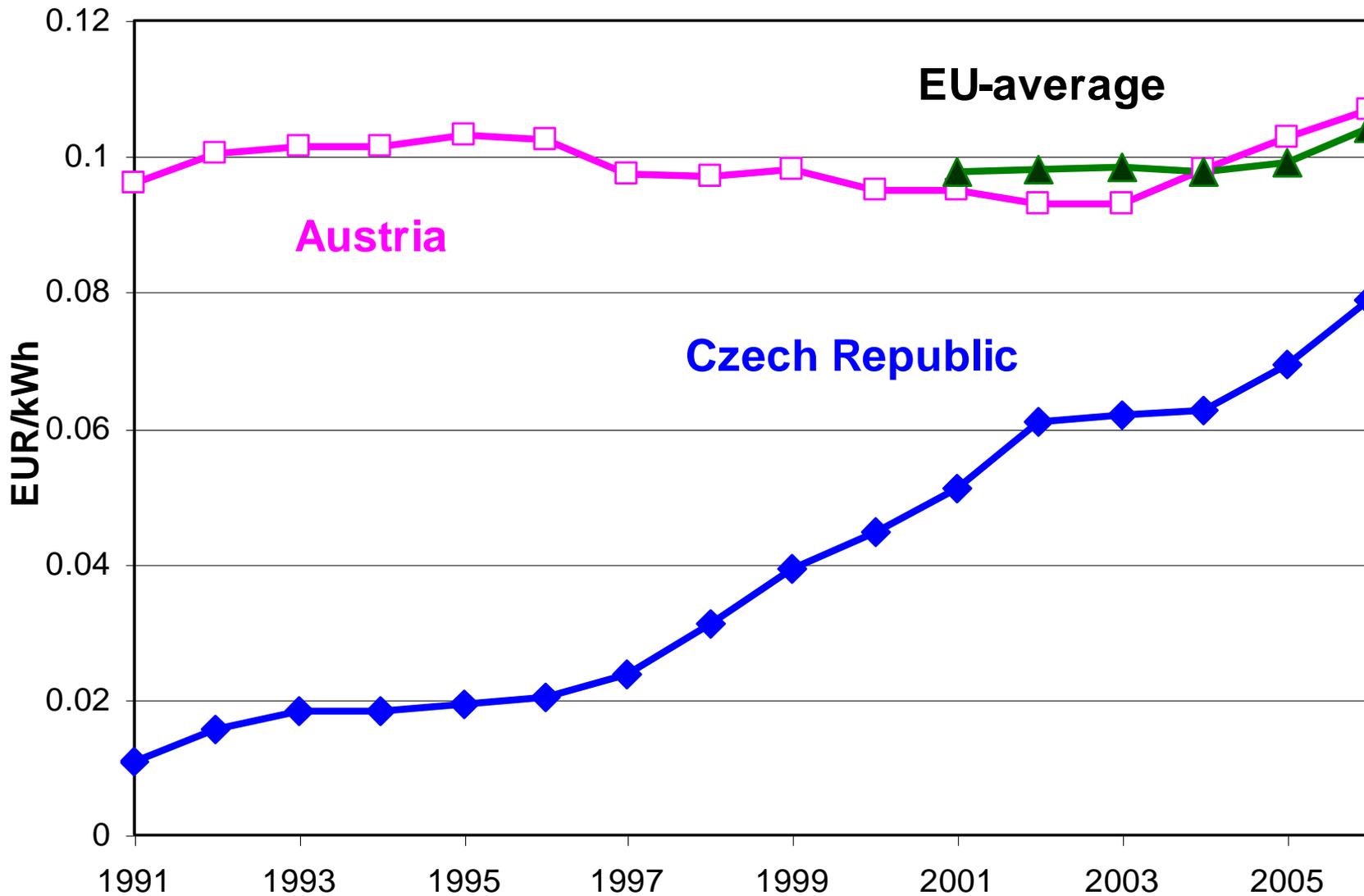
APPENDIX

ELECTRICITY PRICES HOUSEHOLDS 2004

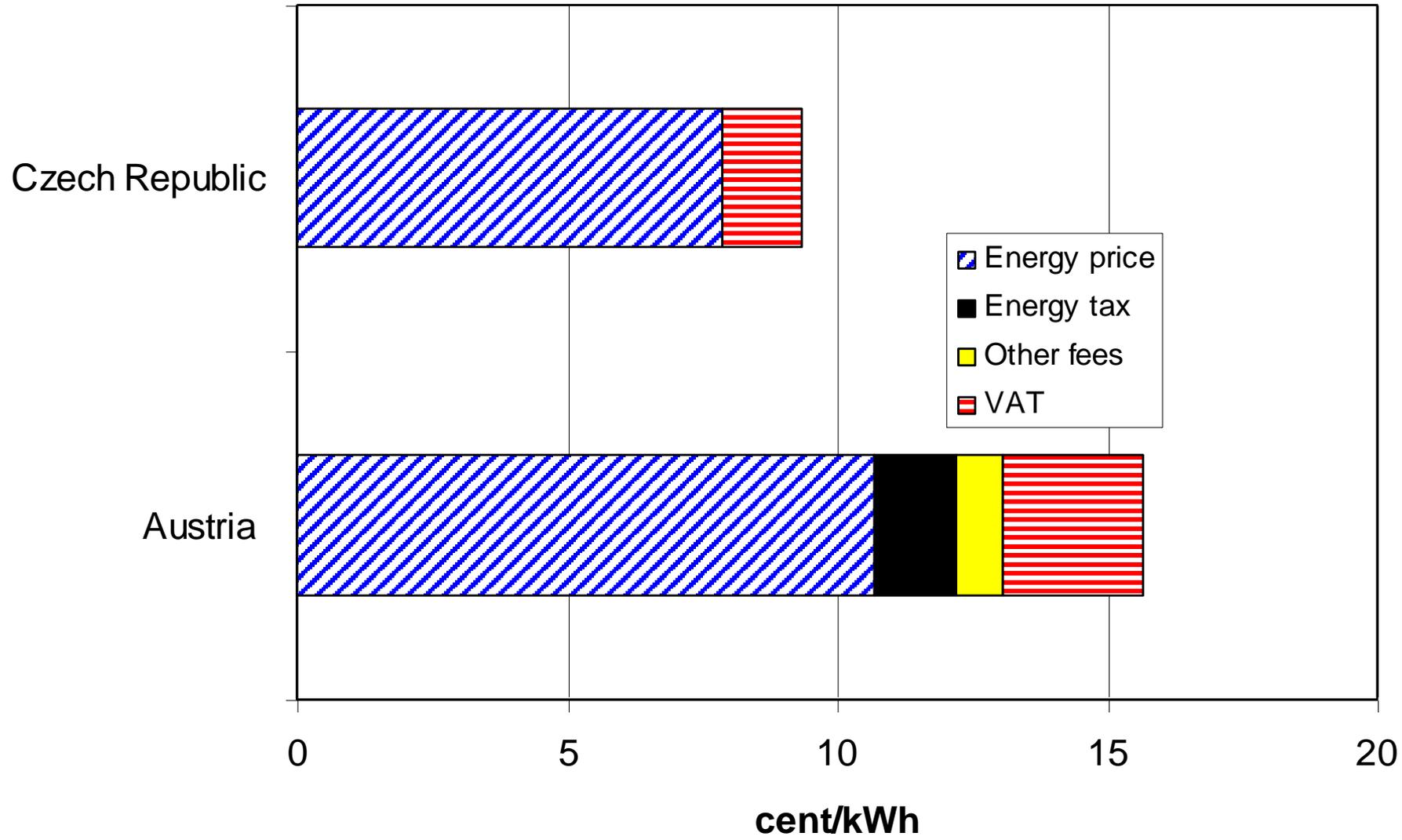


(To be updated to 2006)

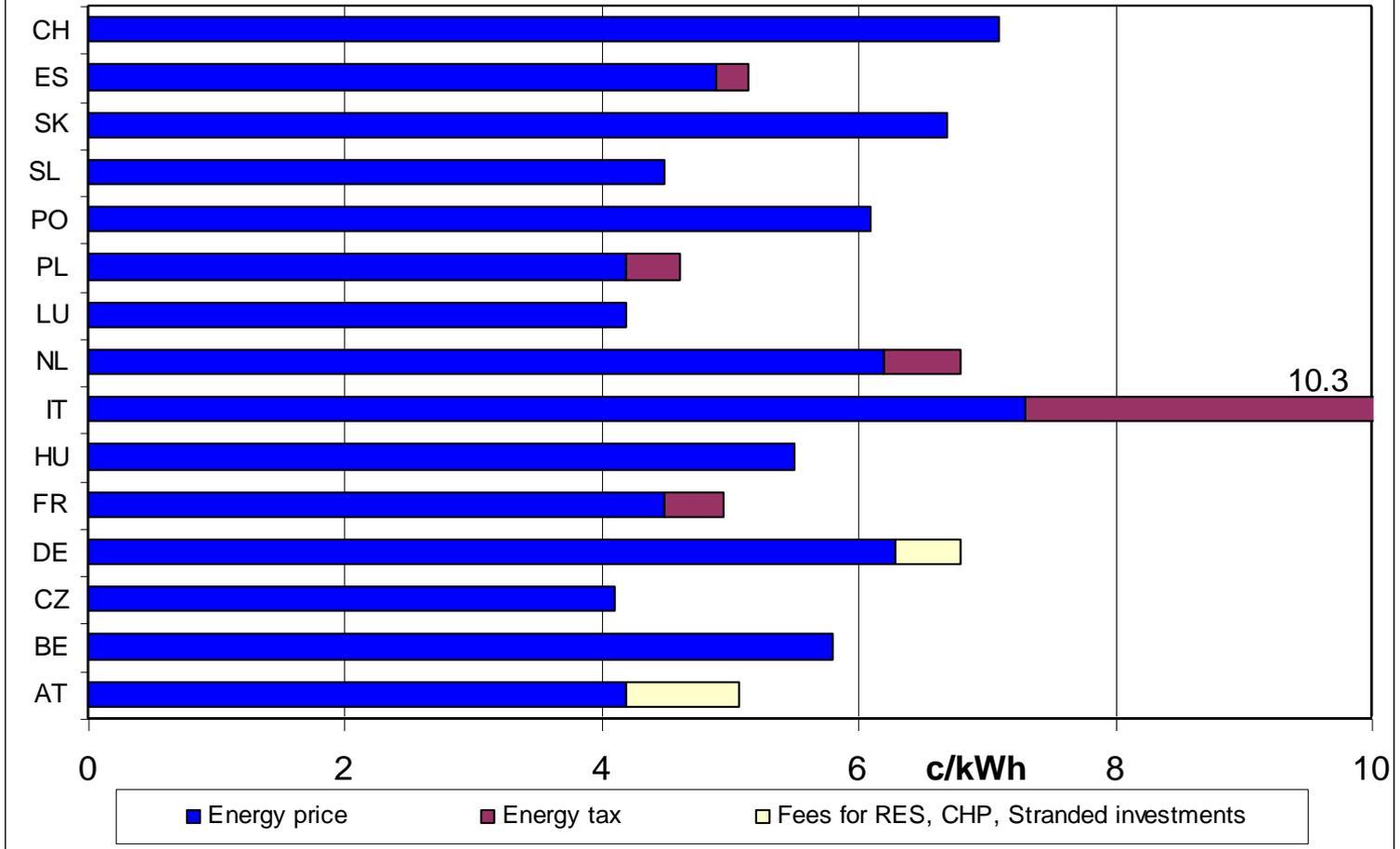
Current household electricity prices (excl. Taxes)



Electricity prices' components 2005



ELECTRICITY PRICES INDUSTRY 2004



Sources: EUROSTAT, IEA

(To be updated to 2006)

Network issues / Cross-border trade

