

# **REGIONAL PROSPECTIVE AND TRENDS FOR CEMENT PRODUCTION, ENERGY USE AND CO<sub>2</sub> EMISSIONS IN EUROPE**

***IEA MEETING ON 4 SEPTEMBER 2006***

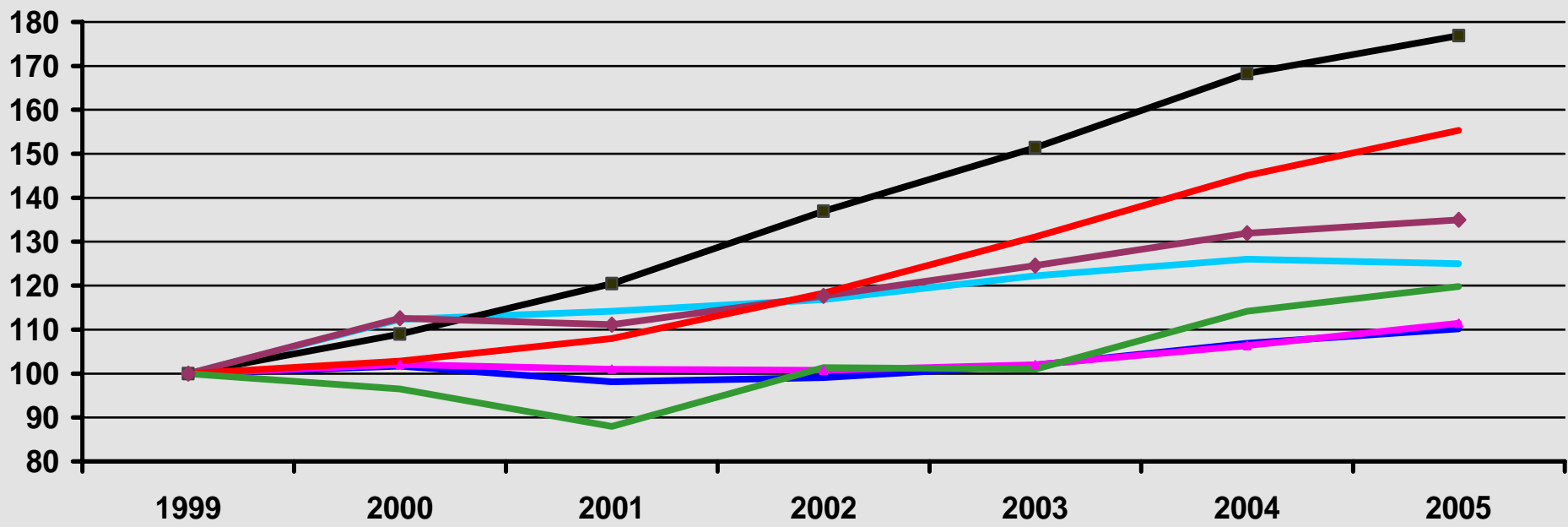
**By Ir. Claude LOREA – CEMBUREAU Technical Director**



# WORLD CEMENT PRODUCTION BY REGION

## EVOLUTION 1999-2005

Index 1999 = 100

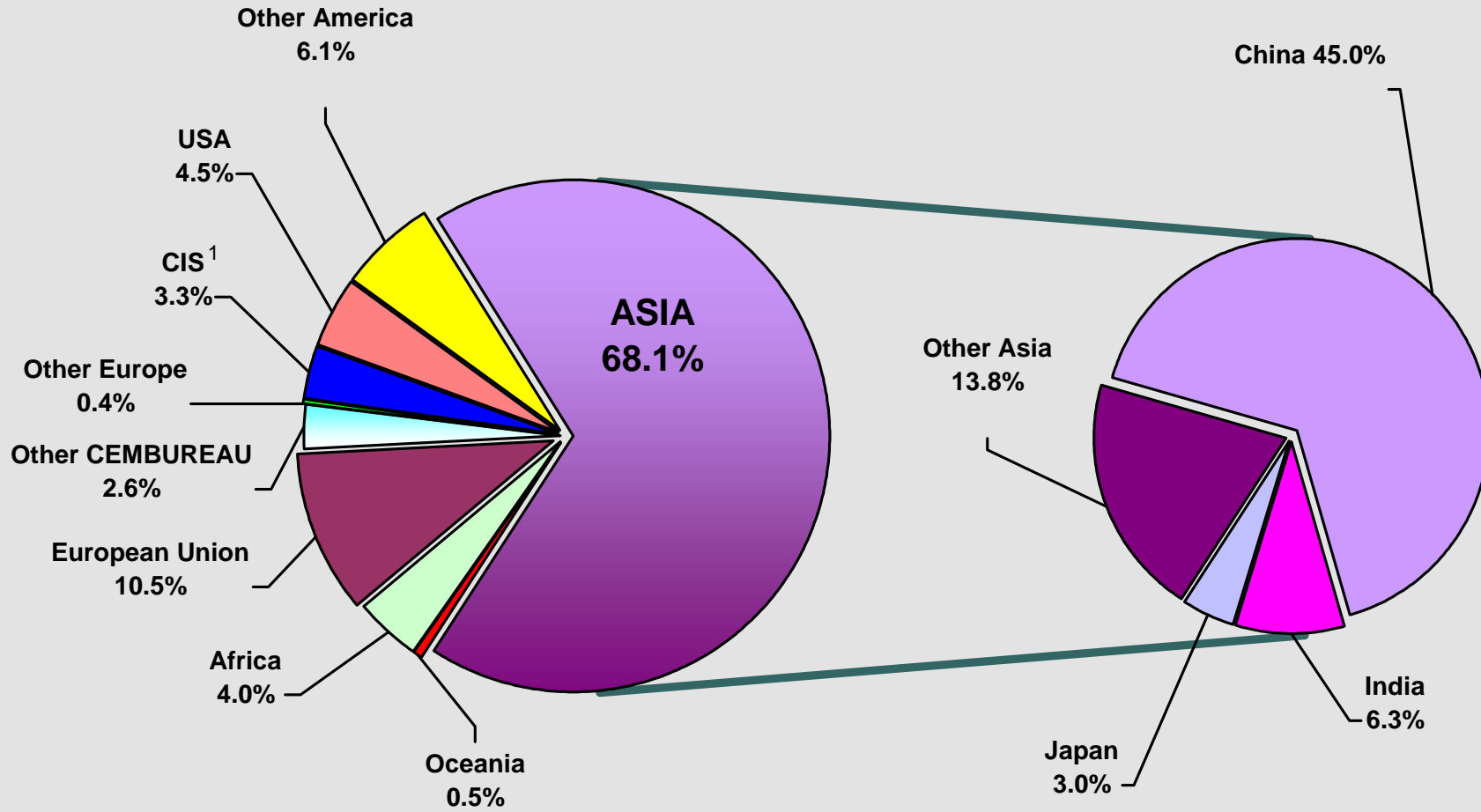


- CEMBUREAU
- Other Europe
- CIS
- Africa
- Asia
- Oceania
- America



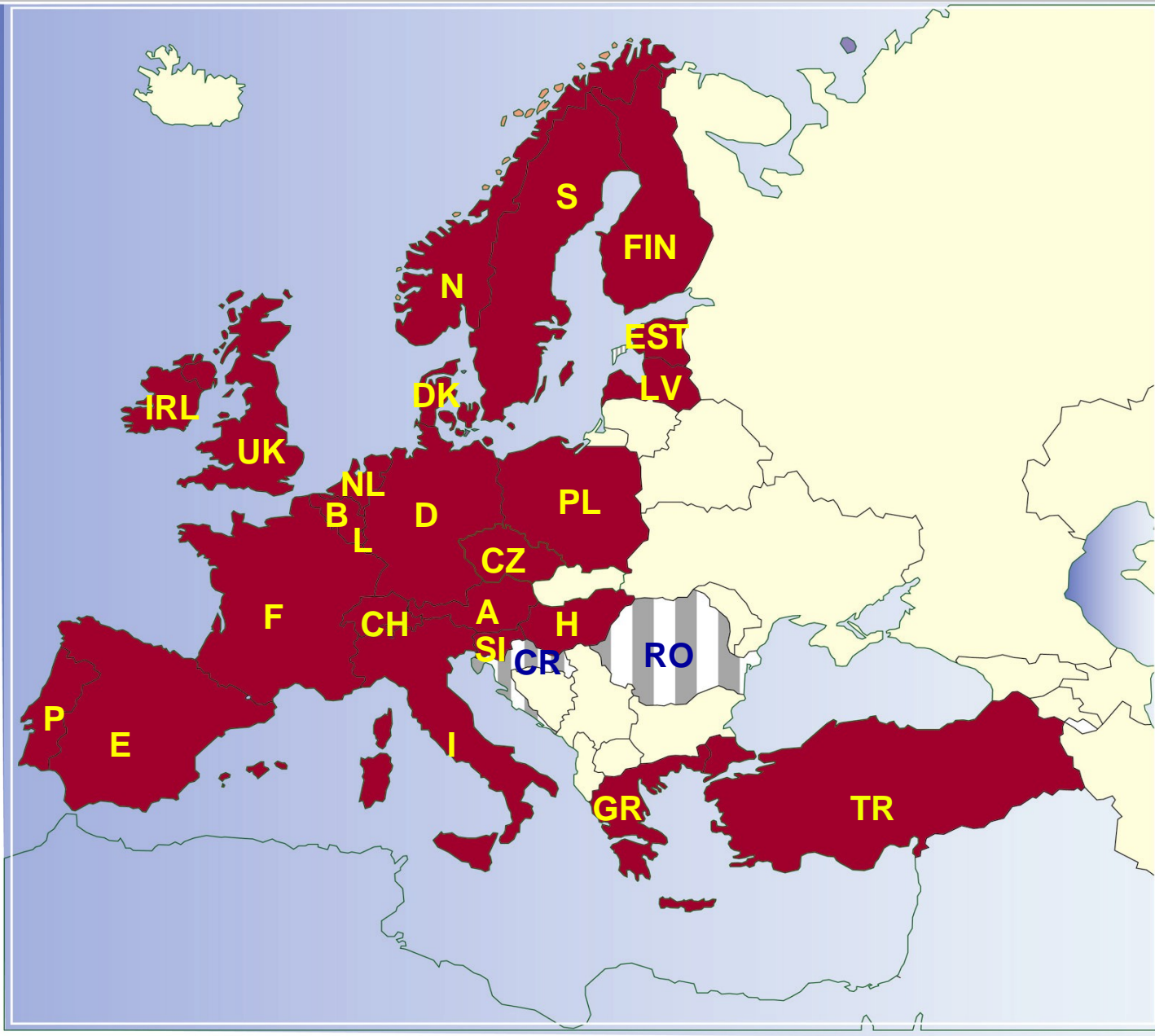
# 2005 WORLD CEMENT PRODUCTION BY REGION

2.27 billion tonnes



<sup>1</sup> CIS: Commonwealth of Independent States





**FULL MEMBERS**

AUSTRIA, BELGIUM,  
 CZECH REP., DENMARK,  
 ESTONIA, FINLAND,  
 FRANCE, GERMANY,  
 GREECE, HUNGARY,  
 IRELAND, ITALY,  
 LATVIA, LUXEMBOURG,  
 NETHERLANDS, NORWAY,  
 POLAND, PORTUGAL,  
 SLOVENIA, SPAIN, SWEDEN,  
 SWITZERLAND, TURKEY,  
 UNITED KINGDOM



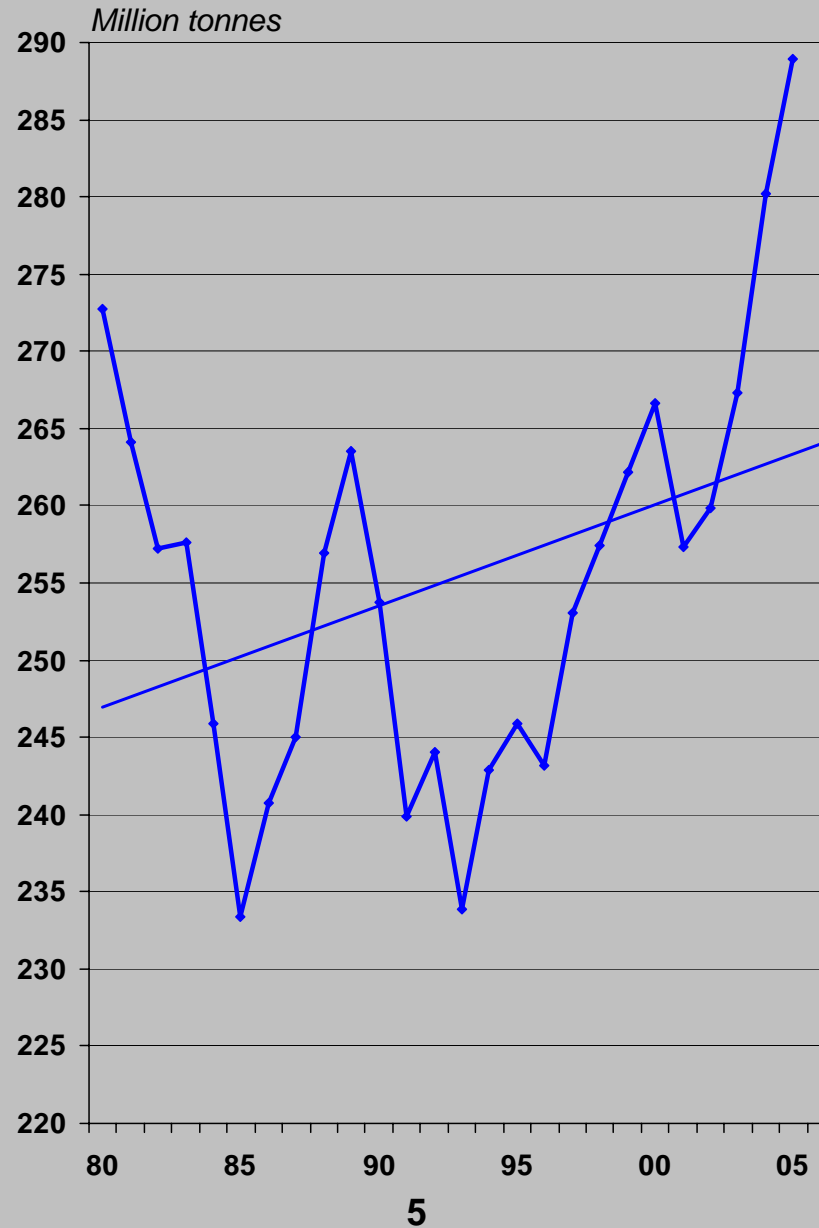
**ASSOCIATE MEMBERS**

CROATIA, ROMANIA



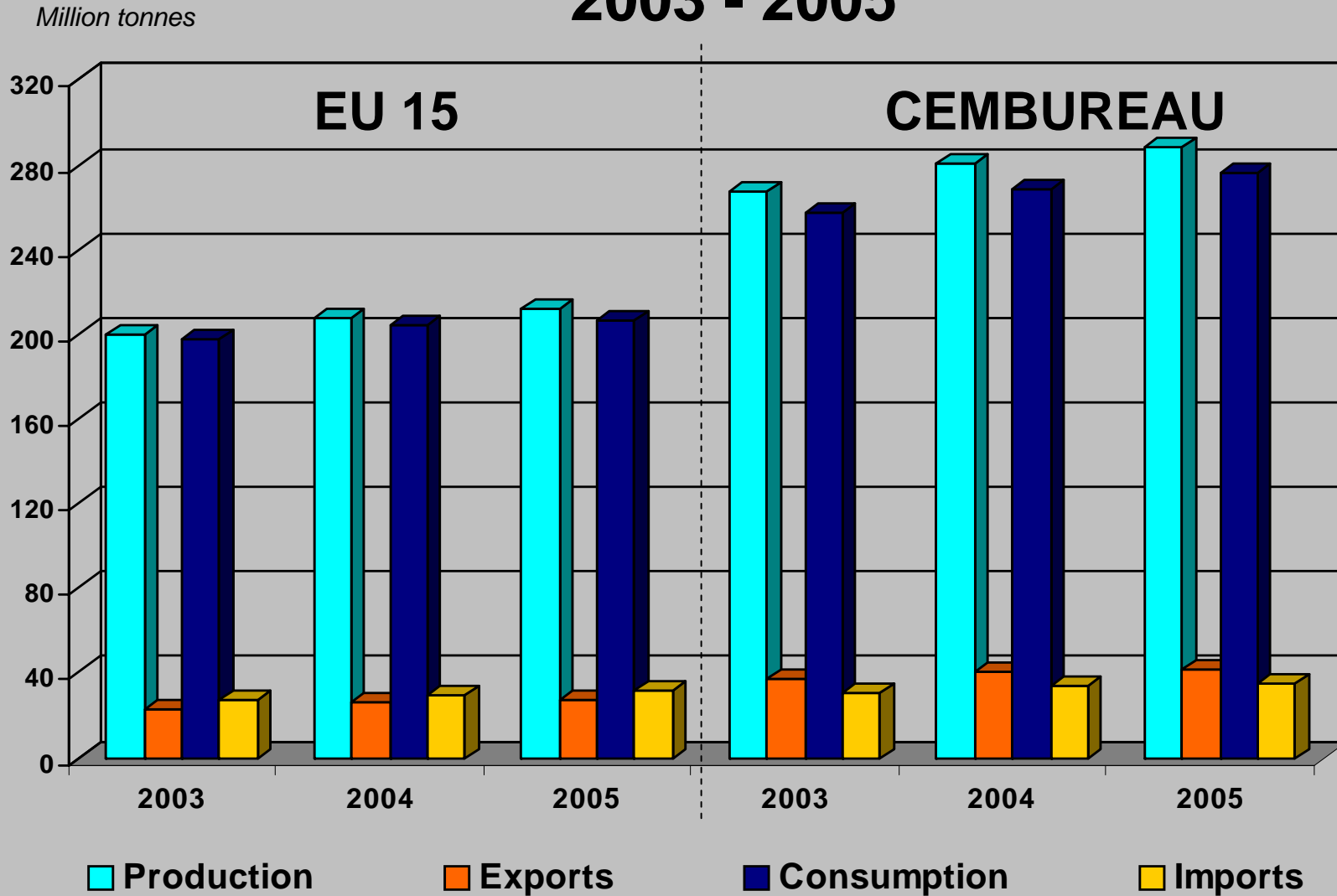
# CEMBUREAU CEMENT PRODUCTION

1980 - 2005

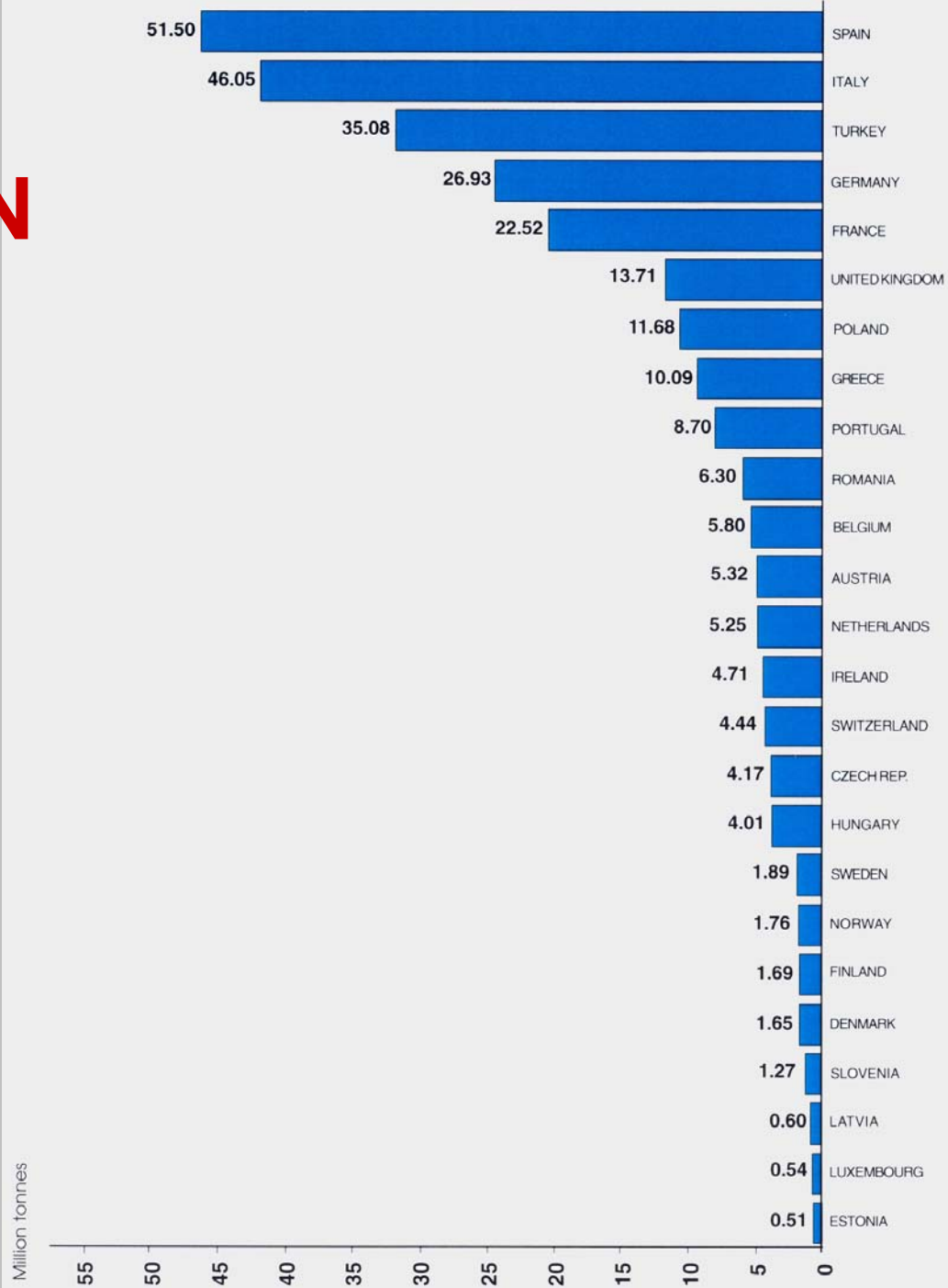


# CEMENT IN CEMBUREAU COUNTRIES

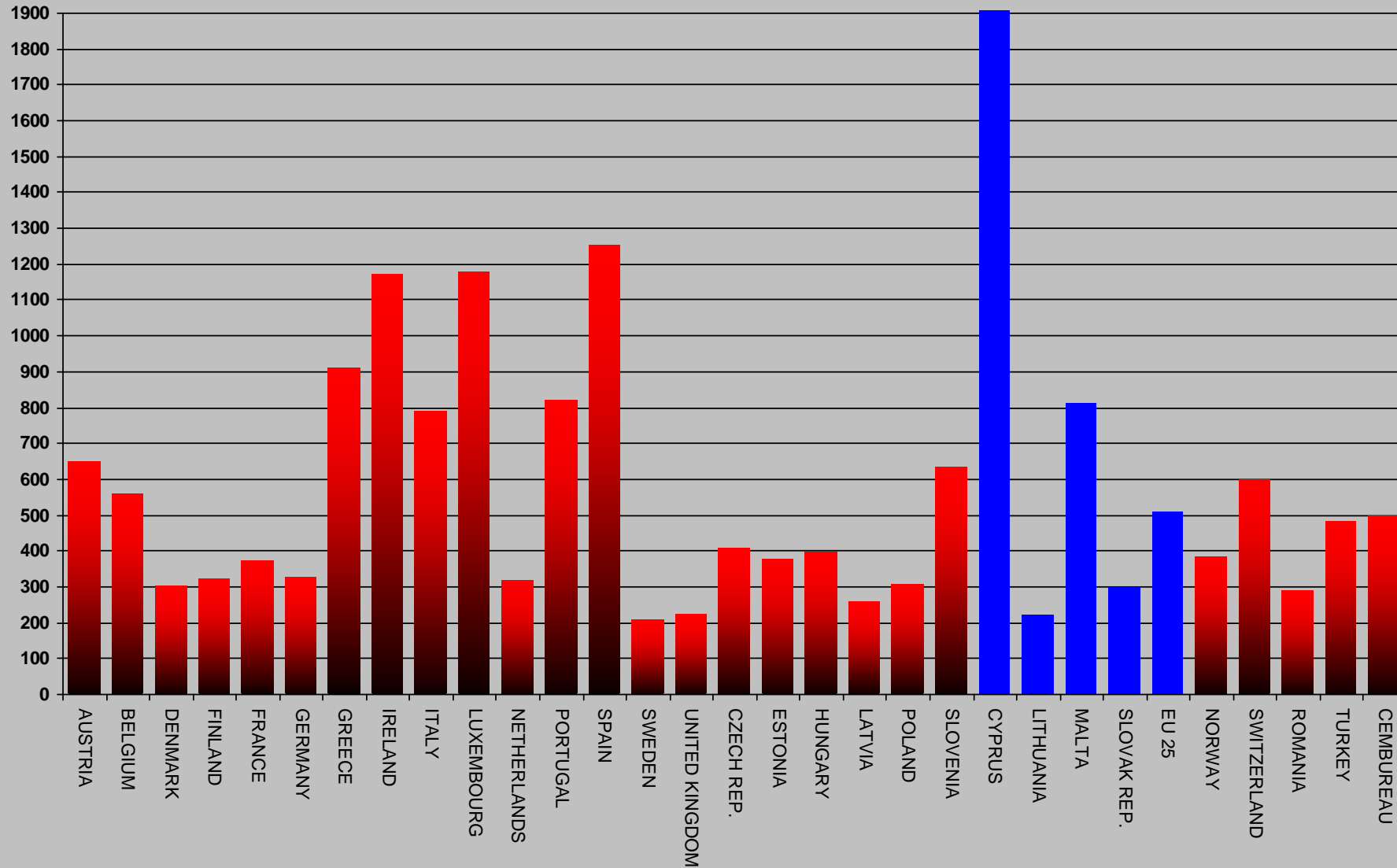
2003 - 2005



# CEMBUREAU CONSUMPTION 2005



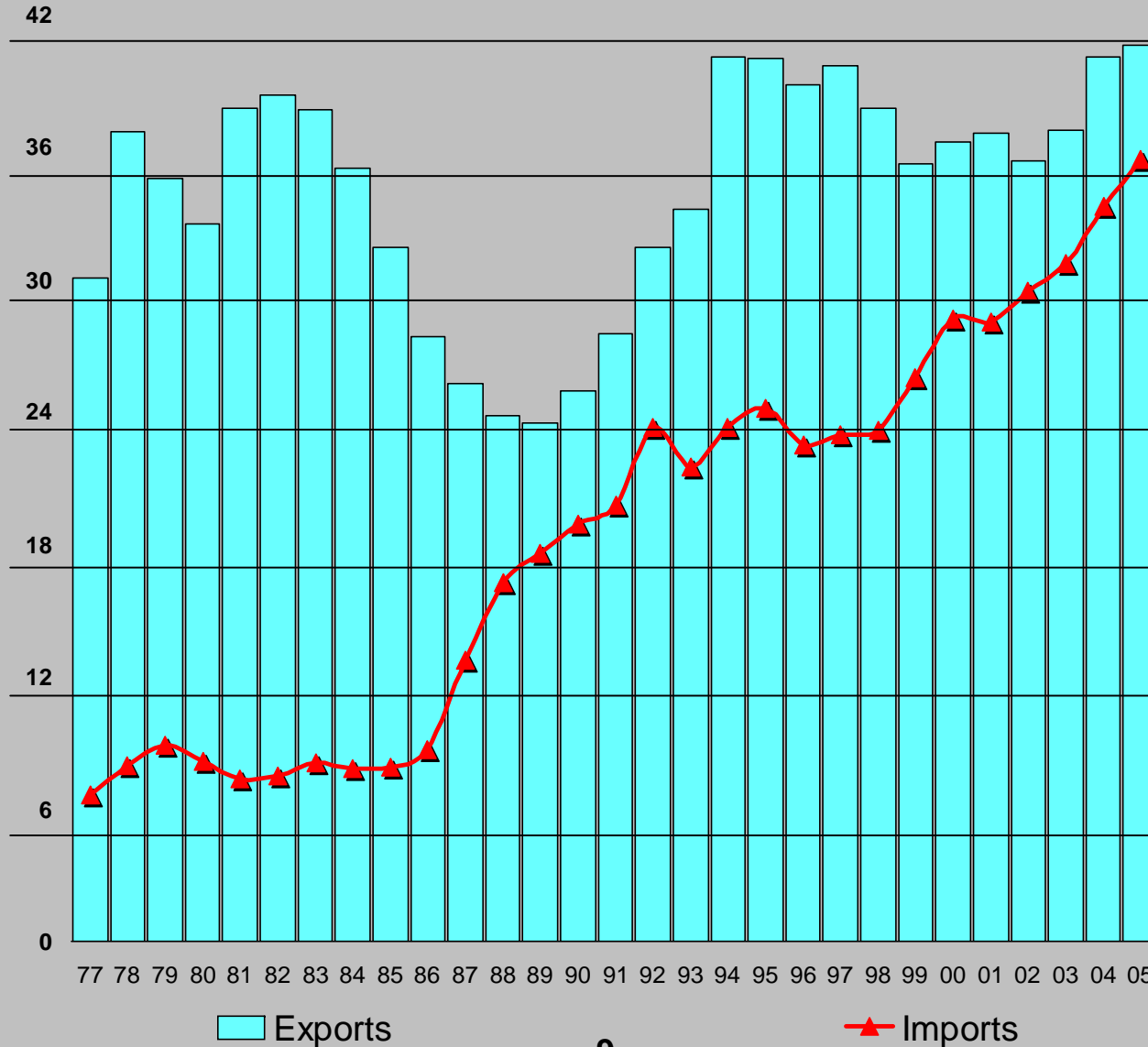
# CEMENT CONSUMPTION 2005 - PER CAPITA / KG



# CEMBUREAU TRADE

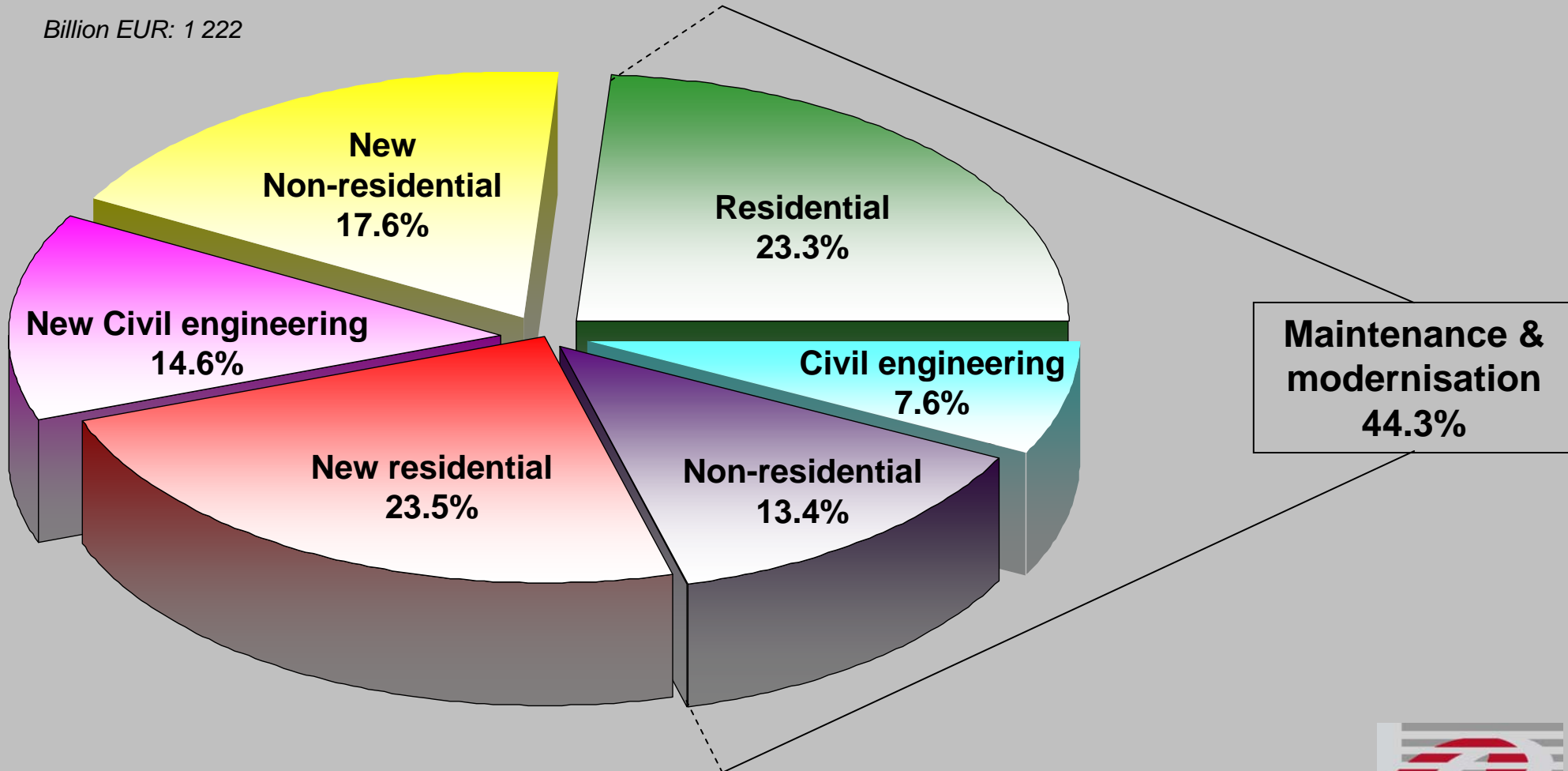
## CEMENT & CLINKER 1977-2005

Million tonnes



# 2005 CONSTRUCTION VOLUME BREAKDOWN PER SECTOR\*

Billion EUR: 1 222



\* European Union less Cyprus, Greece, Luxembourg, Malta, plus Switzerland and Norway

# EUROPEAN CONSTRUCTION & CEMENT CONSUMPTION TRENDS

For country analysis see

⇒ **CEMBUREAU Annual Report 2005**  
page 2 to page 7 on

[www.cembureau.be](http://www.cembureau.be)

# MAIN FACTORS AFFECTING EUROPEAN CEMENT PRODUCTION

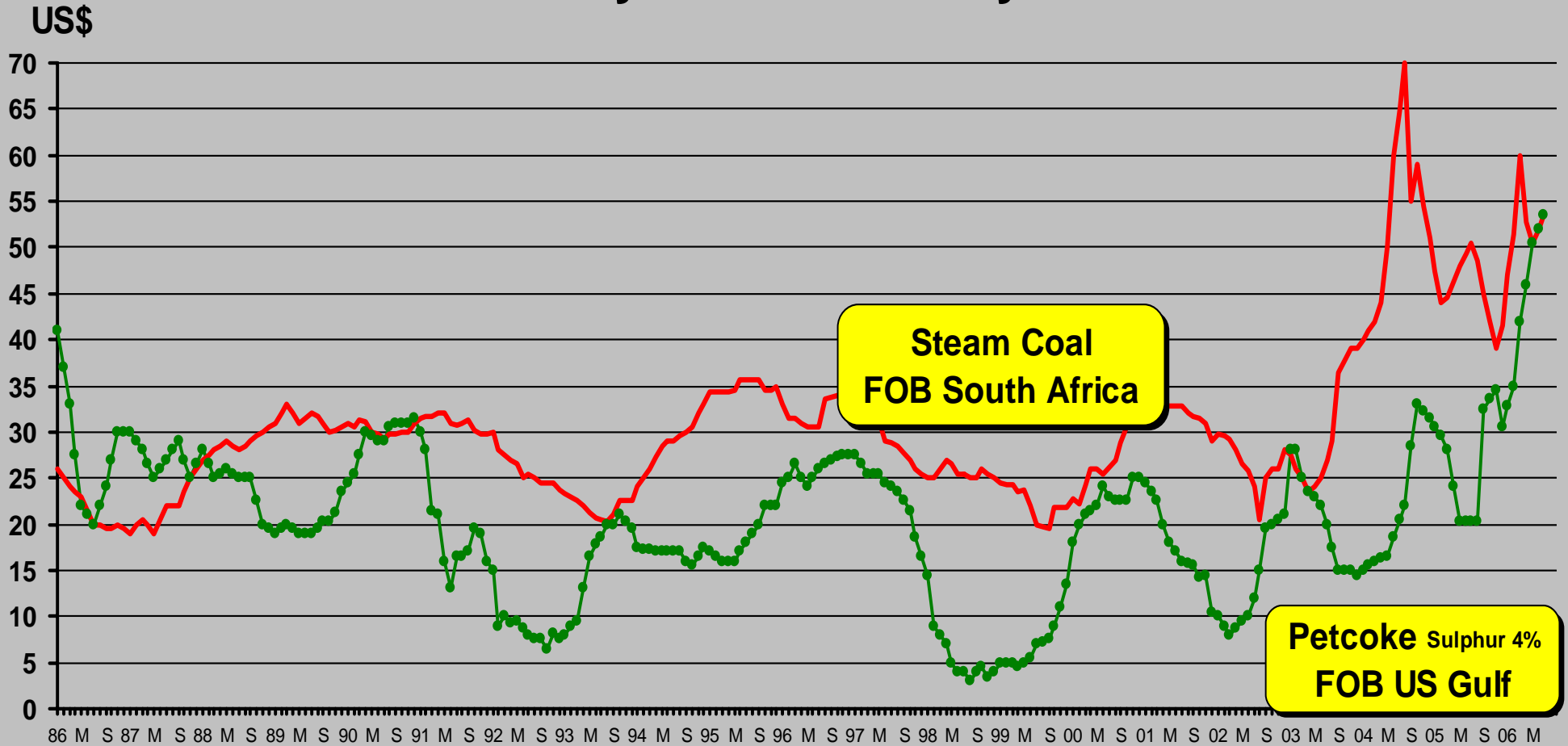
- Emissions Trading
- Coal and Petcoke Prices
- Electricity Prices

# EMISSIONS TRADING

- Cement industry cannot pass through to customers CO<sub>2</sub> cost
- EU ETS only reduces CO<sub>2</sub> by capping production ... unilaterally: no ex post adjustment
- Exports to EU increase and contribute to increase CO<sub>2</sub> emissions: CO<sub>2</sub> from shipping  $\pm$  10% of CO<sub>2</sub> < cement production from China to Europe or within Africa to Europe

# COAL AND PETCOKE PRICES AT RECORD HIGH

January 1986 - End July 2006



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M = May S = September



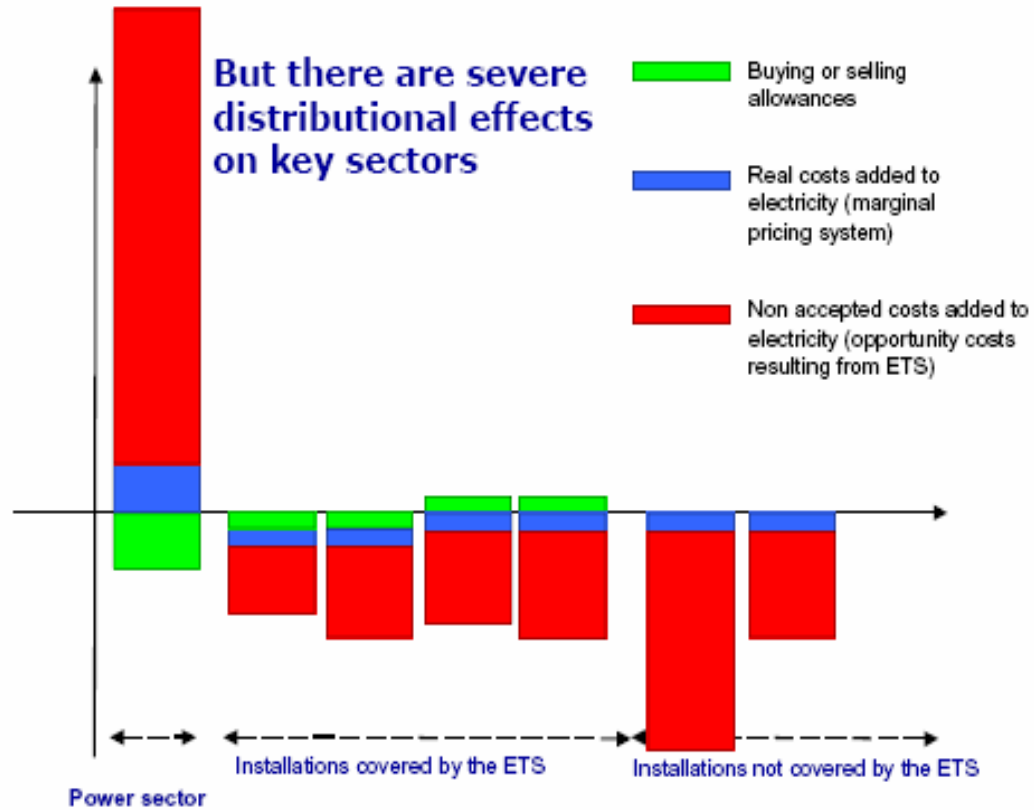
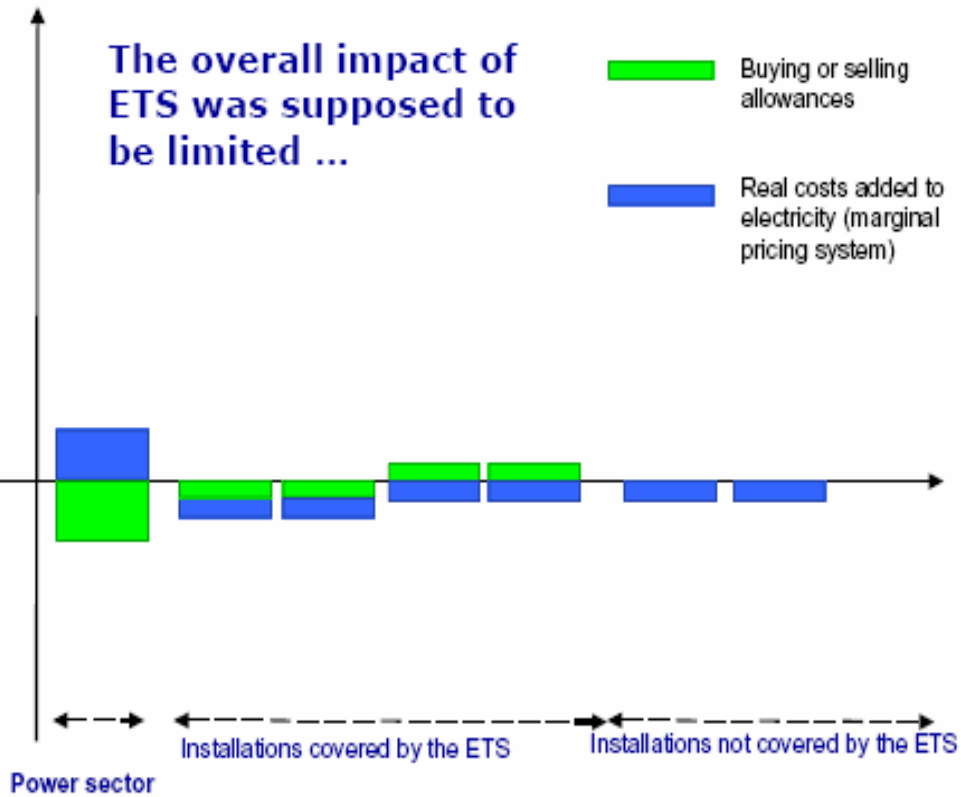
# ELECTRICITY PRICES

Electricity has increased from 14% of total production cost to 25%



**WHY?**

# EU ETS AND ELECTRICITY PRICES



# CONCLUSION

Pessimistic conclusion ...realistic?

Demand in EU grows by 1.25%

but capacities decrease, investment decreases

= de-industrialisation

# CONCLUSION

Optimistic

A worldwide sectoral approach can be found



[www.cembureau.eu](http://www.cembureau.eu)

