

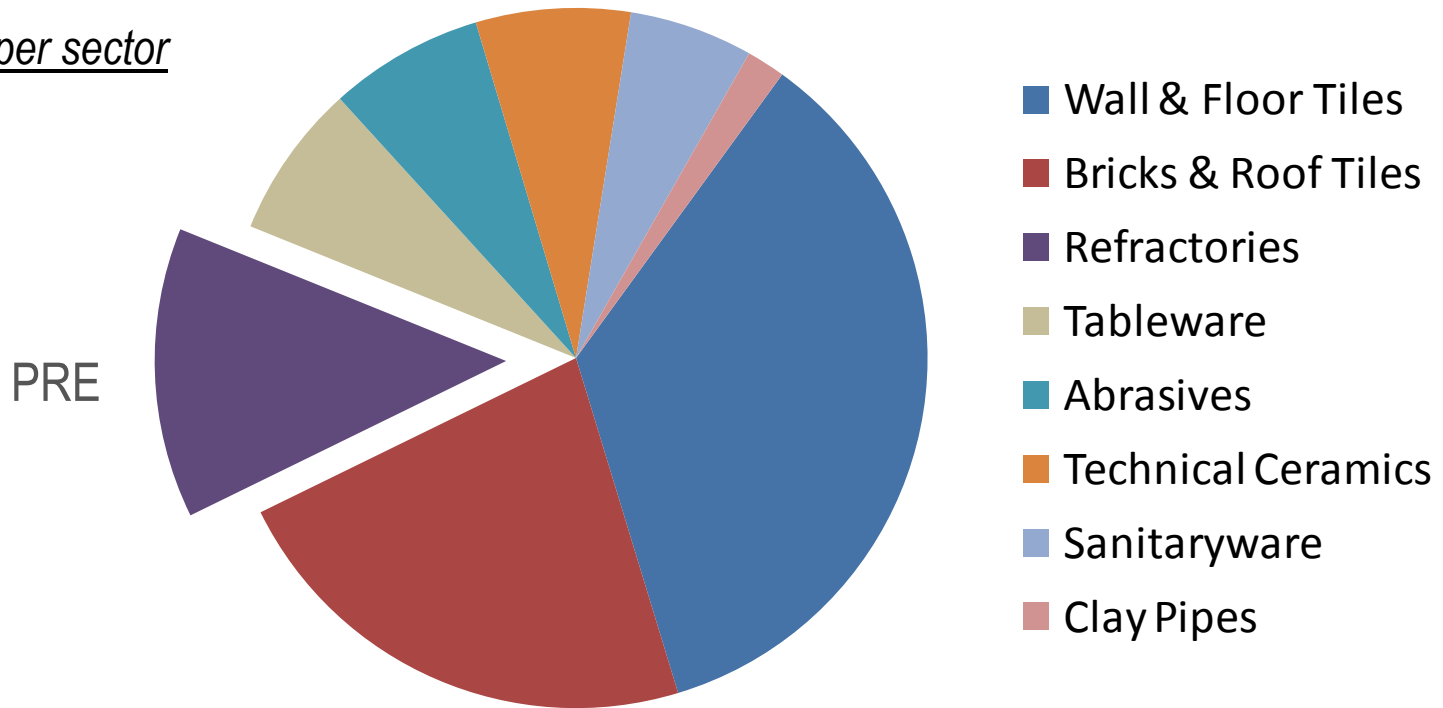
# THE IMPORTANCE OF RAW MATERIALS FOR THE EUROPEAN REFRACTORY INDUSTRY

François Wanecq, CEO of Vesuvius  
17 November 2010



# PRE – a member of Cerame-Unie

Turnover per sector



Ceramic industry (2008): 31 billion € turnover  
Refractory industry (2008): 5,1 billion € turnover

Source EUROSTAT

# PRE membership



12 National associations  
(representing 17 countries)

4 Direct members  
(Multinational groups):

- Calderys
- Magnesita
- Refratechnik
- Vesuvius

# Vesuvius is a global refractory company

## Present in 33 countries

providing consumable products to the steel, foundry, glass and photovoltaic industries

## Involving 12 000 employees of 50 nationalities

With the aim to be local in each country

Revenue 1,6 billion €

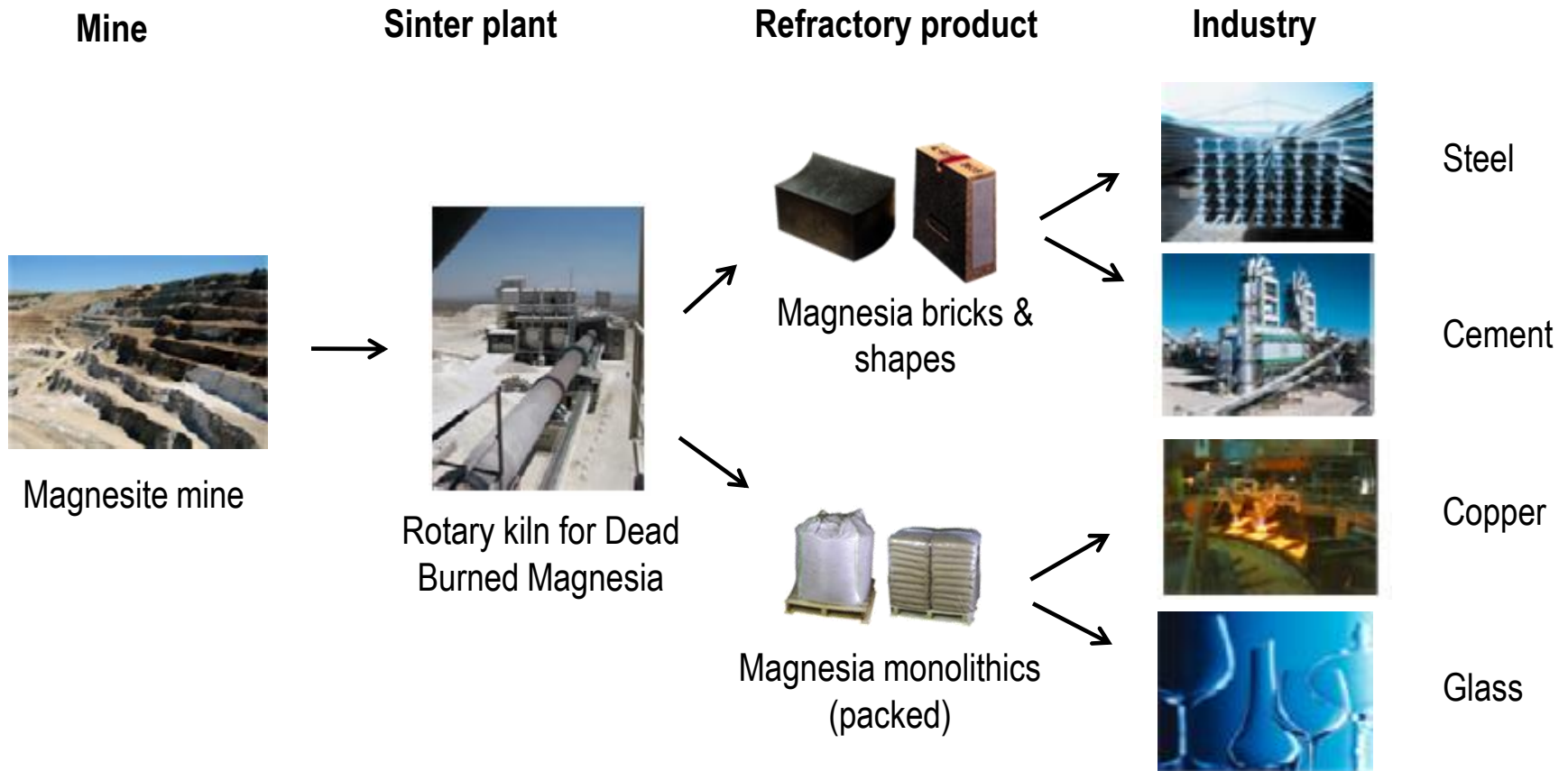
20 plants and 4500 employees in Europe

Headquarters in Brussels



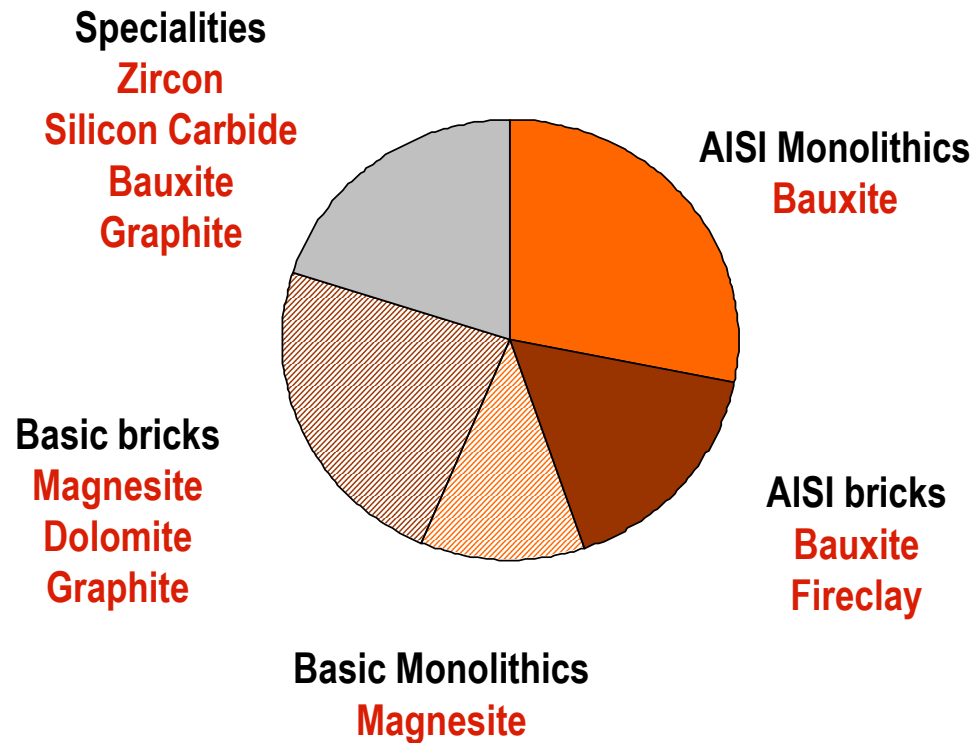
# The refractory supply chain

*Refractory material flowchart from mine to industry customer (example magnesia)*



# Refractory: a 20 billion € world market

Depending on few raw materials



# The refractory industry is strategic for EU

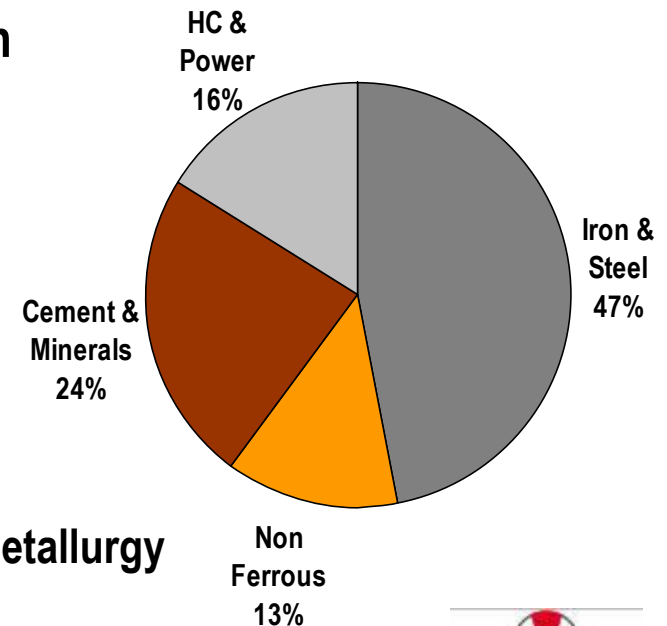
## The refractories industry is of strategic importance

Without refractories, there would be no materials industry  
no steel, no glass, no cement, no aluminium, no building bricks, no porcelain,

## The industry is **highly exposed to international competition**

Exports 40 % of production

Imports 20 % of consumption (mainly from China)



**Applications are 60% in metallurgy**

# The refractory industry is dependent on imported raw materials

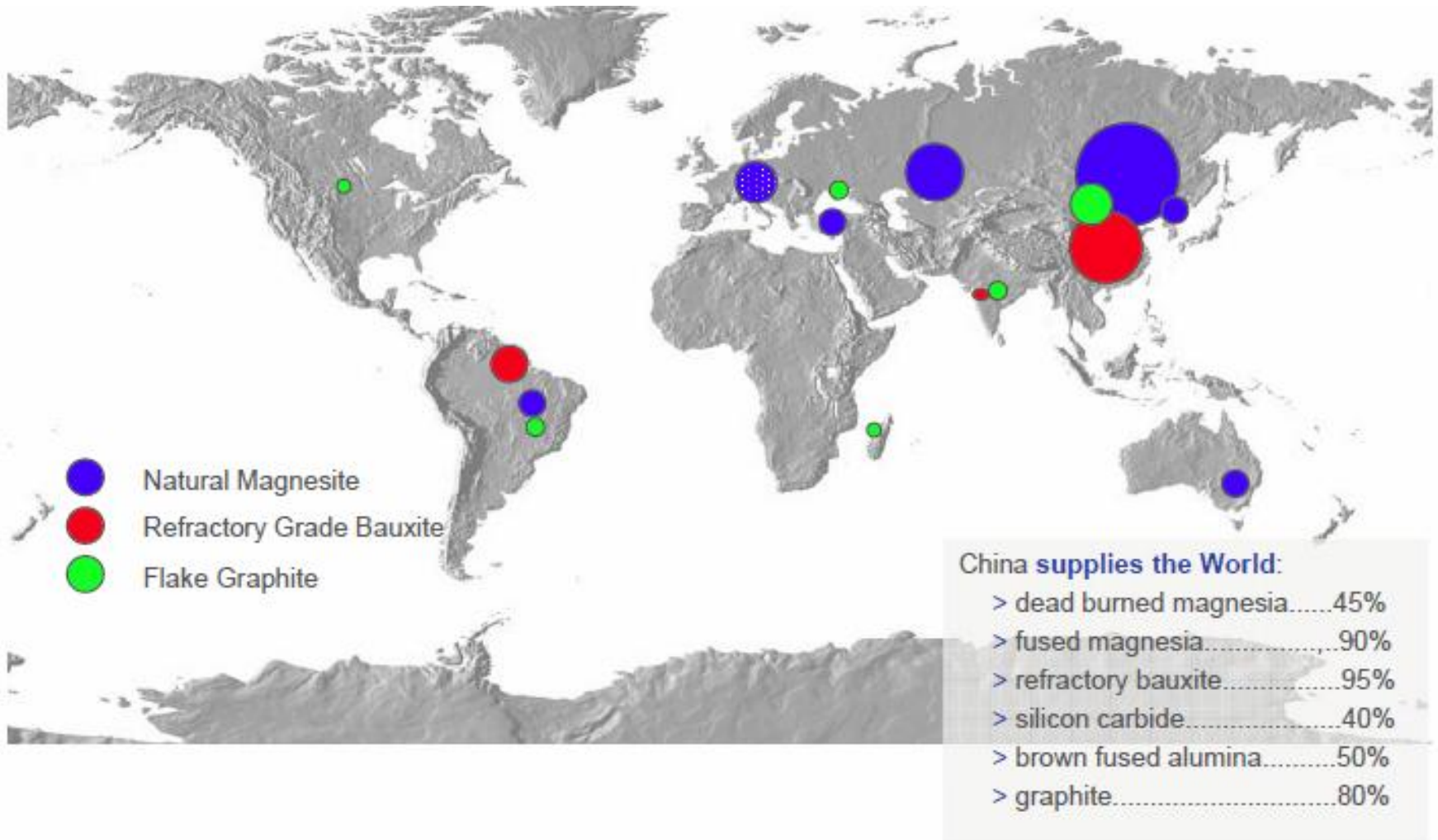
---

Raw materials are of primordial importance for the refractories industry. Availability of quality materials and security of supply are the main topics.

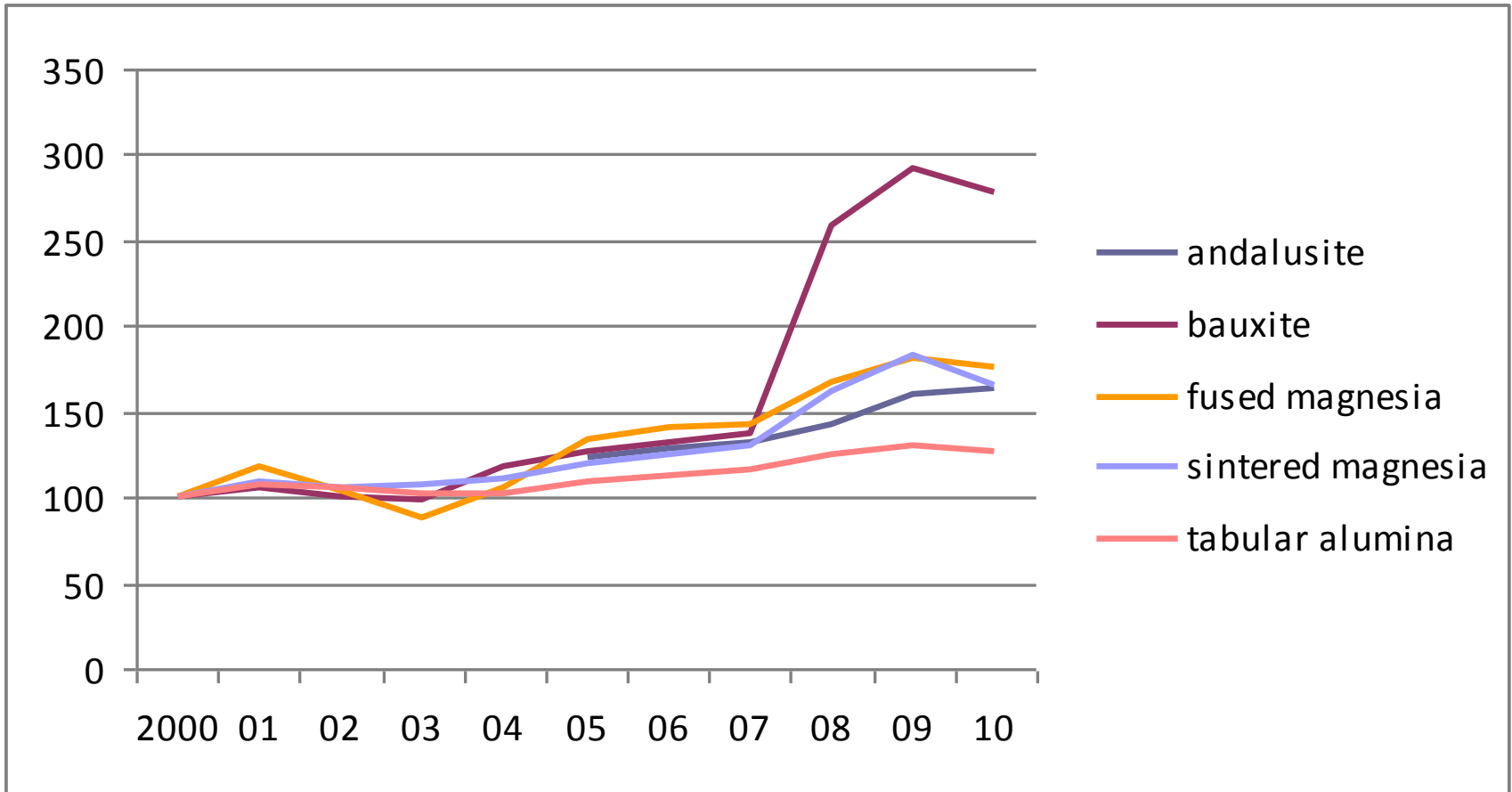
- Raw materials account for some **60% of the cost of refractories** products
- Raw materials have a major **influence on the quality** of the finished products
- The refractories industry relies heavily on **imports**.
  - More than 2/3 of the refractory raw materials consumed in EU are imported
    - Bauxite: 100%
    - Graphite 100%
    - Zircon 100%
    - Magnesite 60%



# Main sources of refractory raw materials are in China



# Raw materials prices rose dramatically in the last three years



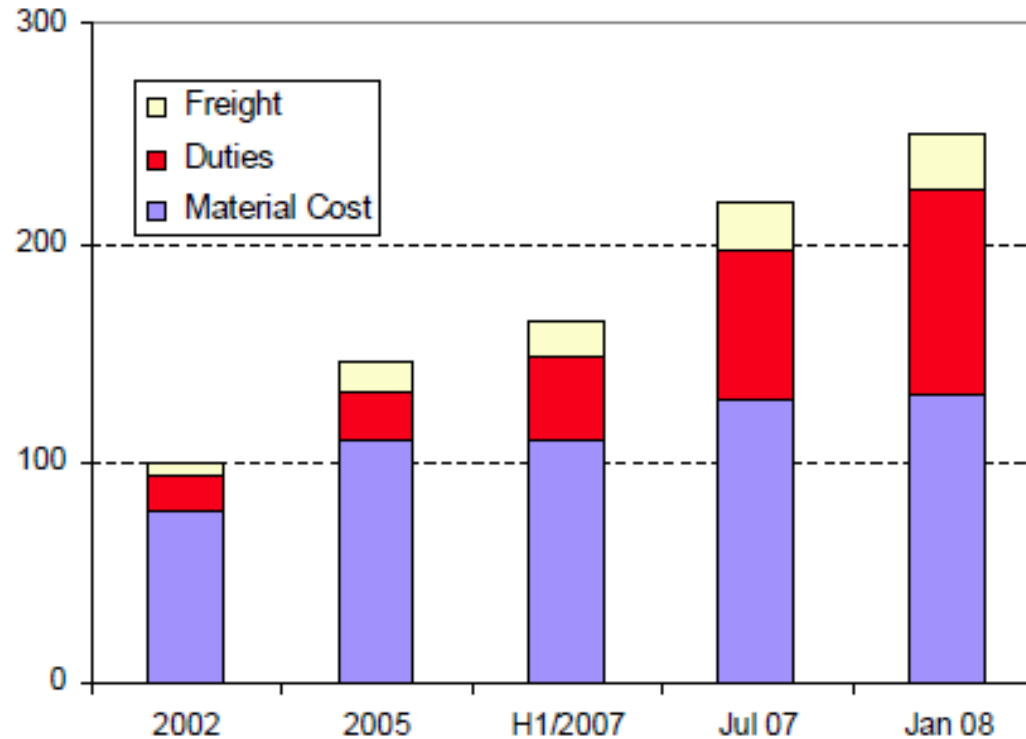
## ...mostly due to restrictive trade practices

---

**China is globally the most important supplier of refractory raw materials, but China's policy for export of raw materials is unfair:**

- Exports of raw materials are **heavily taxed and/or limited.**
- Example:
  - the total quantity of magnesia available for export is limited and reduced annually
  - export licenses are auctioned to selected domestic bidders who resell them with 30% mark up
  - 17% output value added tax
  - export tax on top: magnesia 10% - bauxite 15% - graphite 20% (not WTO conform) with a minimum in value
- None of these costs are borne by Chinese domestic producers, and exports of bricks by domestic producers are not taxed
  - unfair cost advantage of 30% for Chinese brick producers on non Chinese markets

# Magnesia prices are now twice as high in the EU than in China



Magnesia prices have increased by 70% in China and by 150% in Europe from 2002 to 2008 (135% excluding freight). Due to licensing and taxation of exported raw materials, Chinese domestic producers of bricks have a cost advantage in international markets of approximately 30%.

# PRE recommendations for an action plan

---

- Improve knowledge base on European mineral sources
- Elaborate national land use planning policy
- Support research and development of alternative sources
  
- Pursue WTO dispute settlement
- Create sub-group of Raw Materials Supply Group including representation from the ceramic refractory industry

# As a conclusion

---

- Refractories are critical for the EU steel, cement and glass industries
- EU companies are leading the world refractory industry

## However

- Refractories are highly dependant on imported raw materails, mostly from China
- Raw material prices have increased dramatically over the last years due to unfair trade practices

Rapid action should be taken to sustain fair trade practices

---

*Thank you for your attention*