Rhodia

Chemistry is our world, Responsibility is our way

Rare Earths : the vitamin of the Green Technologies

2011, January – Hanau

Agenda

- 1 :**Rhodia**
- **2 :What are Rare Earths**
- **3 : Rhodia Rare Earth Systems**
- 4 : **Rare Earths applications & market snapshot**
- **5 : Conclusion**

Essential Rhodia

S1 2010: A sustained strong performance

Excellent profitability

Rec. EBITDA[(1)]

447 M€

Operating Profit

286 M€

Net Profit

112 M€

Confirmed business dynamics

Net Sales

2 506 M€

Solid cash generation

Free Cash Flow

187 M€

Net Debt

883 M€

Rhodia

An international Group

13 600 **Employees -** 64 **Production sites - Worldwide**

45% **of sales generated in high-growth regions in 2009**

A leader in its businesses

N°1

- High performance silica
- Rare earths
- Diphenols for vanillin
- Specialty surfactants and polymers
- Guar and derivatives
- Phosphorus chemistry
- Regeneration of sulfuric acid*
- CO_2 emission credits (CERs)

N°2

- Polyamide 6.6
- Polyamide 6.6-based engineering plastics

N°3

- Cellulose acetate tow

Sources : estimations Rhodia

21% of sales generated from products from products less than 5 years old

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Responsibility is our way

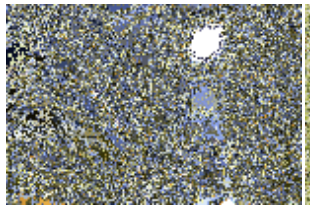
- Rhodia is committed to be the Sustainable Development Chemical company
  - **Doing business in an innovative and responsible way**
  - **Framework of sustainability commitments rolled out throughout the Group: the Rhodia Way”**
  - **A performance recognized in the Dow Jones Sustainability Index**

- **31%** of sales generated from products meeting the challenges of sustainable development

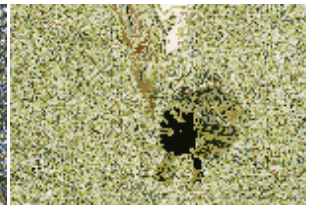
- **60%** of Innovation projects directly linked to Sustainability
  - Renewable raw Materials
  - Recyclability
  - Energy and CO2 footprint improvements

Eleven business units – growth engines focused on their markets

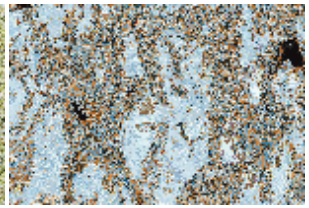
Energy Services



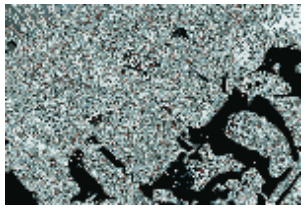
Polyamide & Intermediates



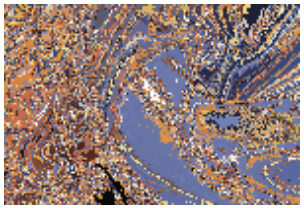
Fibras



Engineering Plastics



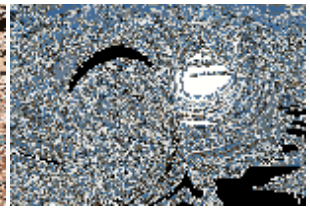
Coatis



Novecare

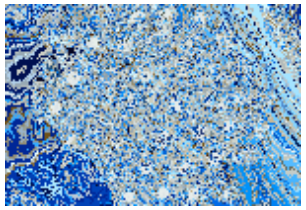
Aroma Performance

Silica



Rare Earth Systems

Acetow



Eco Services

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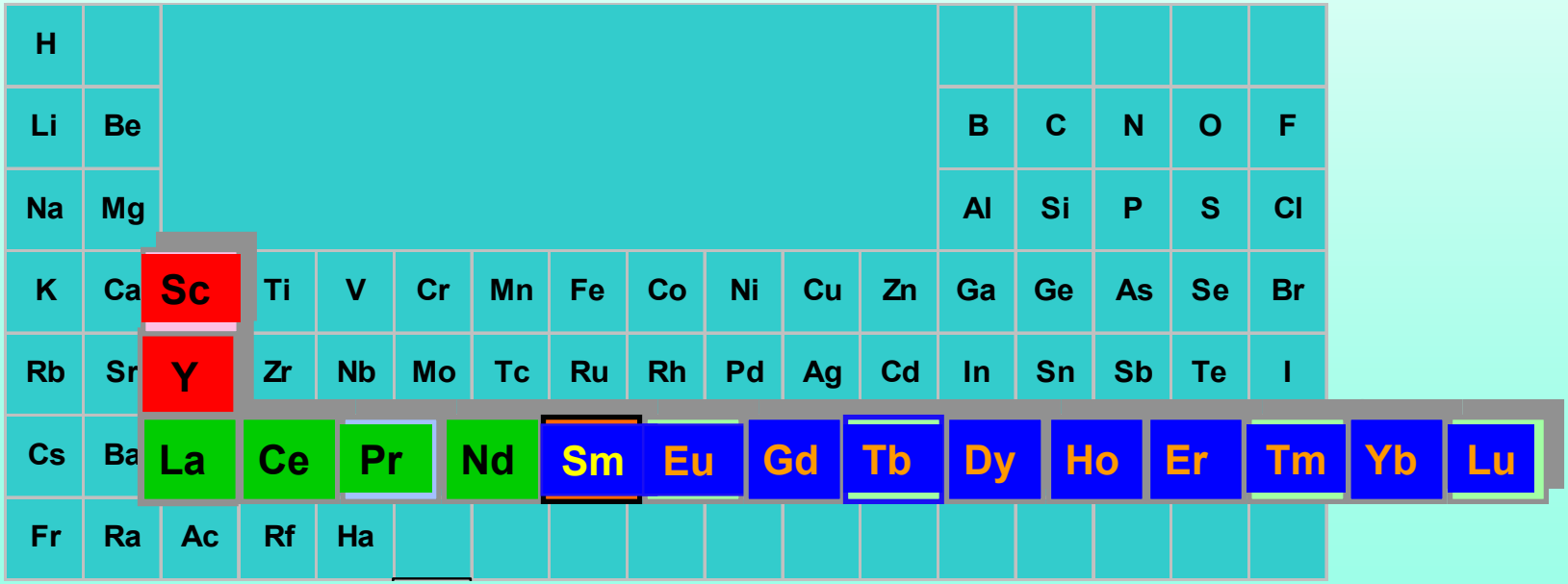
WHAT ARE RARE EARTHS ?

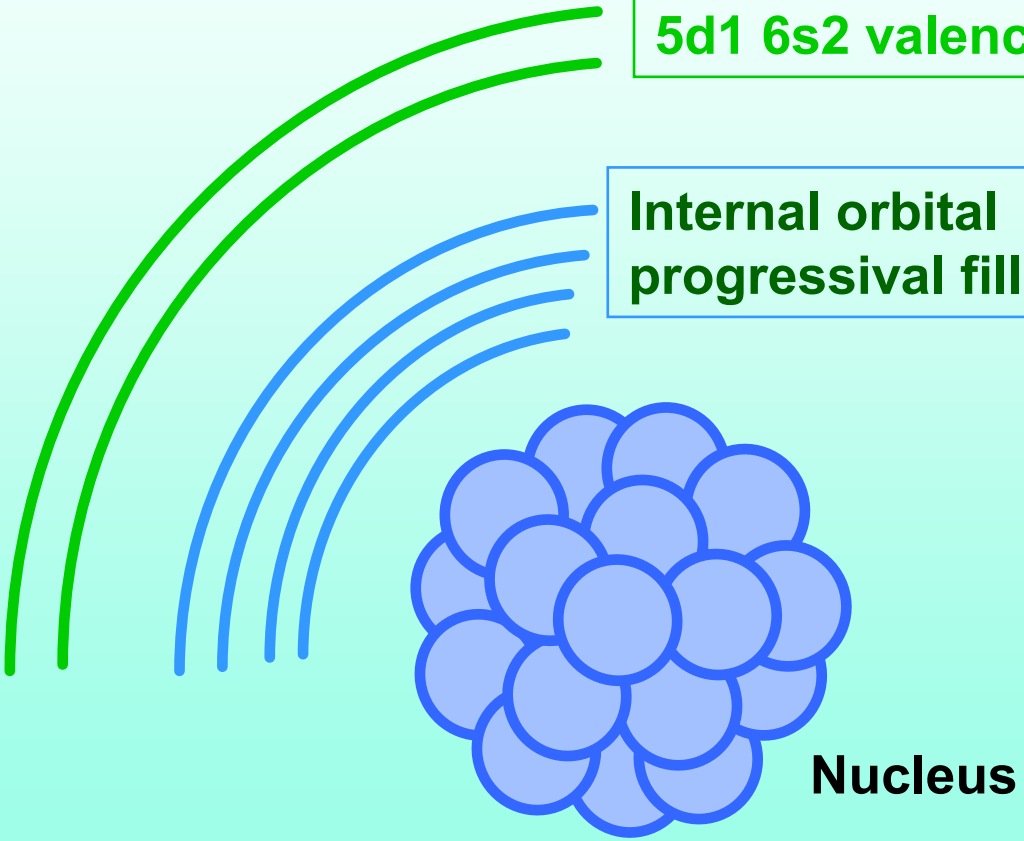
- Group of natural elements : 14 lanthanides + Yttrium + Scandium
- Present in differing proportion in several naturally occuring ores
- Similar electronic configuration and chemical properties
  - ➡ requires separation know-how
- Specific physical properties
  - ➡ to offer a large number of different applications



CHEMICAL AND PHYSICAL PROPERTIES OF RARE EARTHS

Common external orbitals
5d1 6s2 valence electrons → Chemical properties

Internal orbital
progressival fillings 4f → 0-14 → Physical properties



Unique configuration :
=> Difficult to substitute

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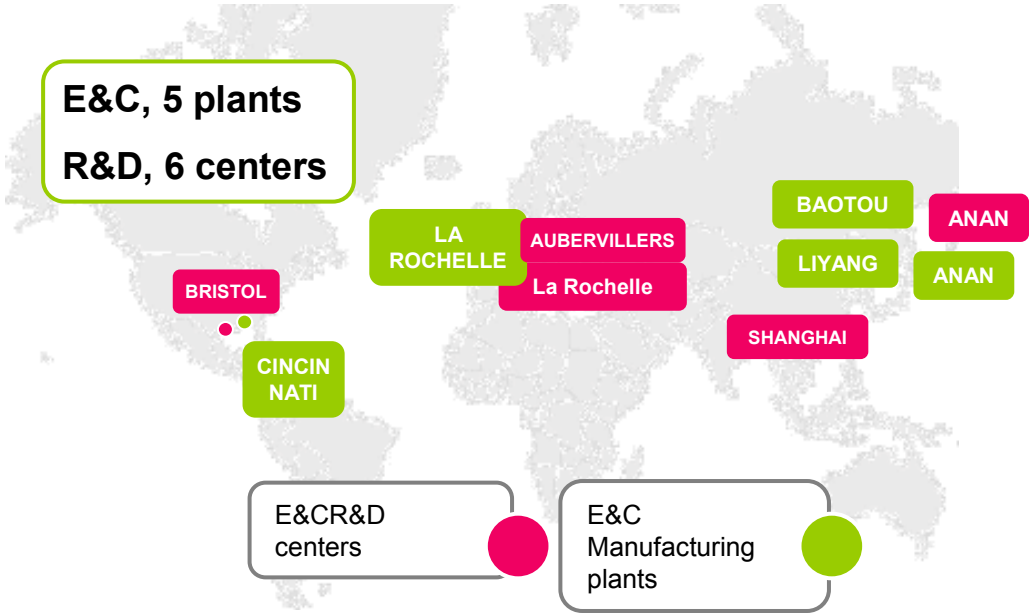
Rhodia *"The most innovative RE partner"*



Rhodia as Rare Earth formulation Leader close to 20% MS

Fragmented market

"The most innovative Rare Earth partner"

Market Share: >40%
Growth 08-15: ++++

Auto Catalysis

Polishing

Market share: >15%
Growth 08-15: +++

Market Share: >20%
Growth 08-15: +++

Lighting Phosphors

Niches & Specialities

Market Share: >5%
Growth 08-15: +++

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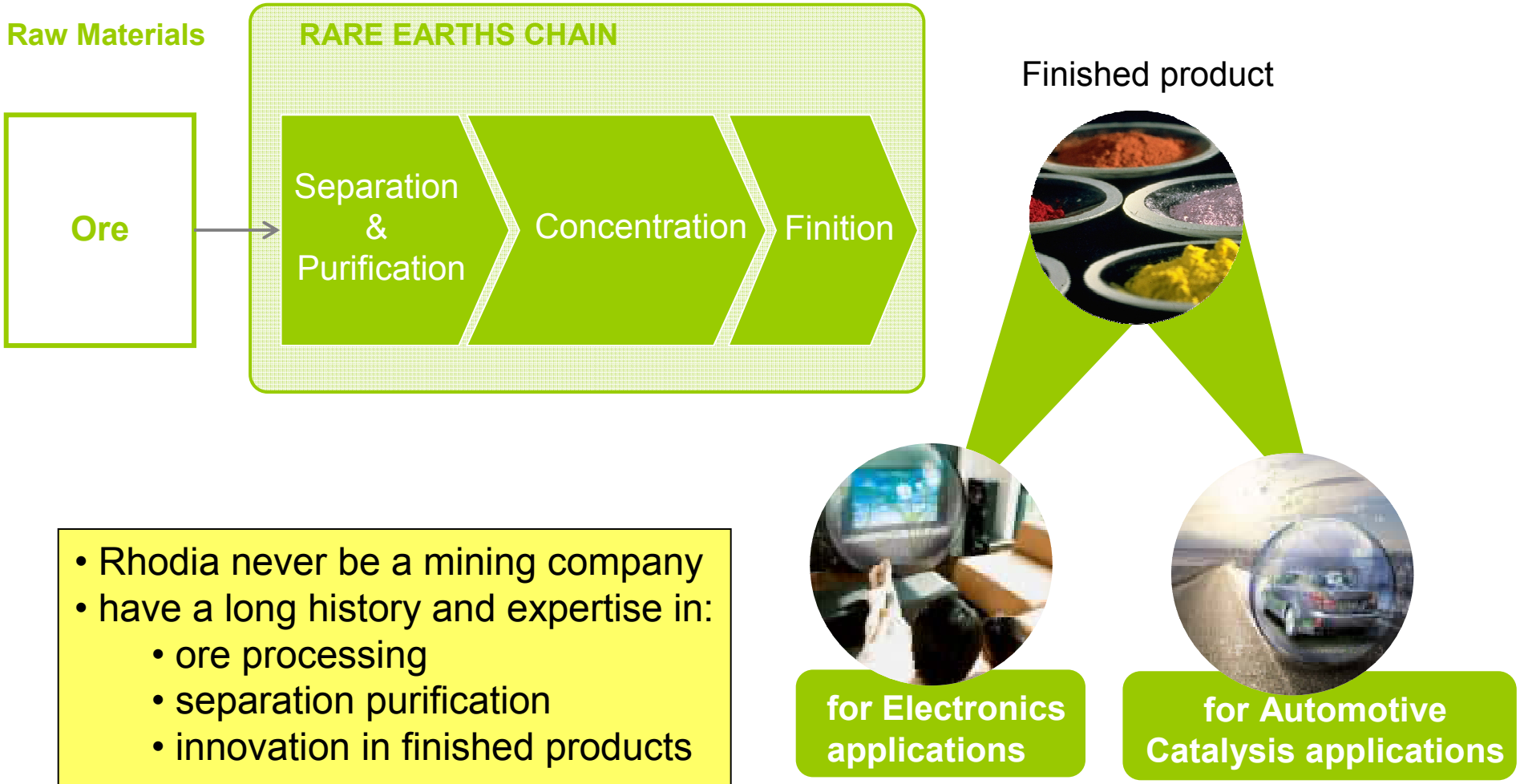
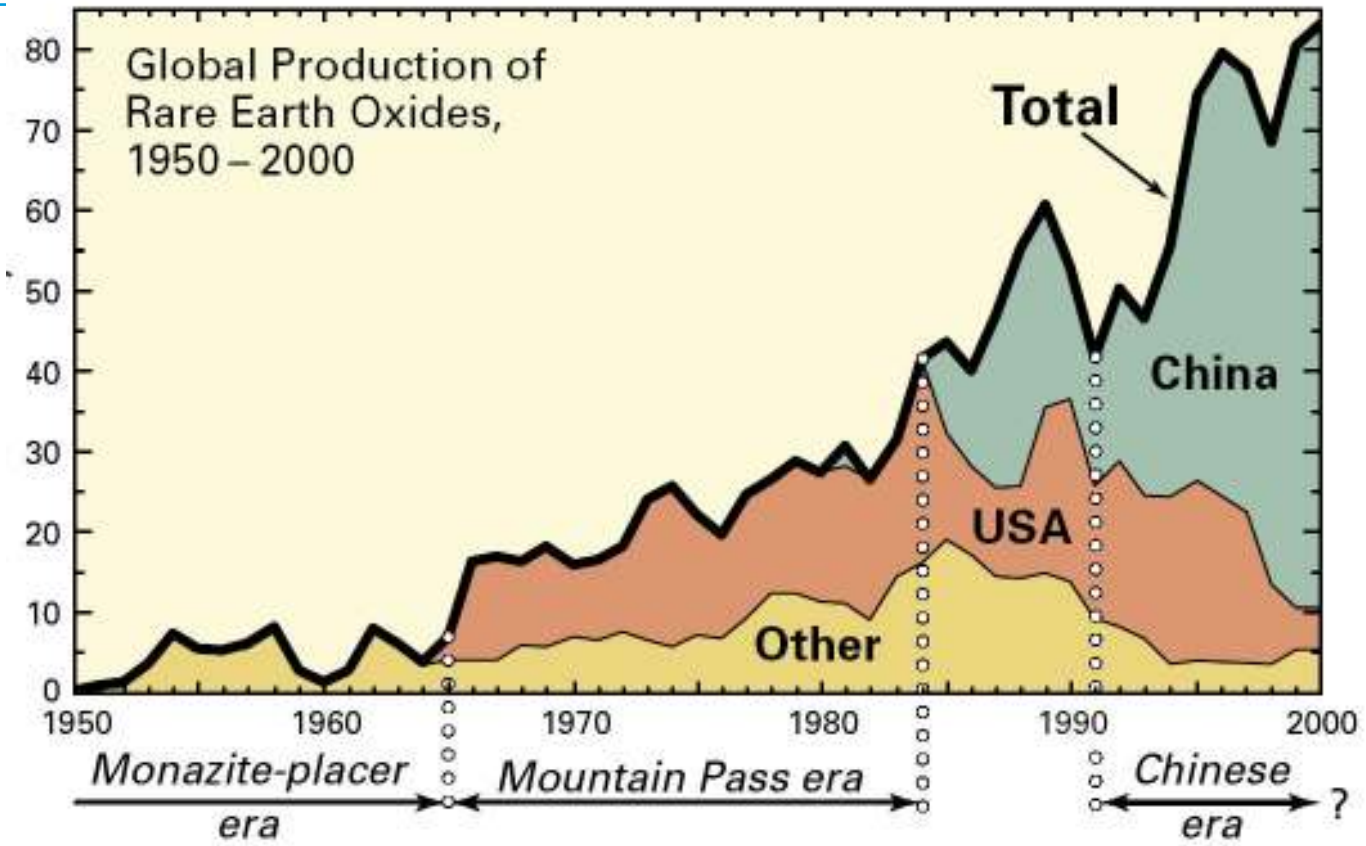
Rare Earths manufacturing process



- Rhodia never be a mining company
- have a long history and expertise in:
  - ore processing
  - separation purification
  - innovation in finished products

Rhodia has today a unique experience in processing Rare Earth ores in and outside of China



ure 1. Global rare earth element production (1 kt=10⁶ kg) from 1950 through 2000, in four categories: United tes, almost entirely from Mountain Pass, California; China, from several deposits; all other countries com- ed, largely from monazite-bearing placers; and global total. Four periods of production are evident: the mon- e-placer era, starting in the late 1800s and ending abruptly in 1964; the Mountain Pass era, starting in 1965 ending about 1984; a transitional period from about 1984 to 1991; and the Chinese era, beginning about 1991.

source: "Rare Earth Elements--Critical Resources for High Technology," Gordon B. Haxel et al., U.S. Geological Survey, November 2002

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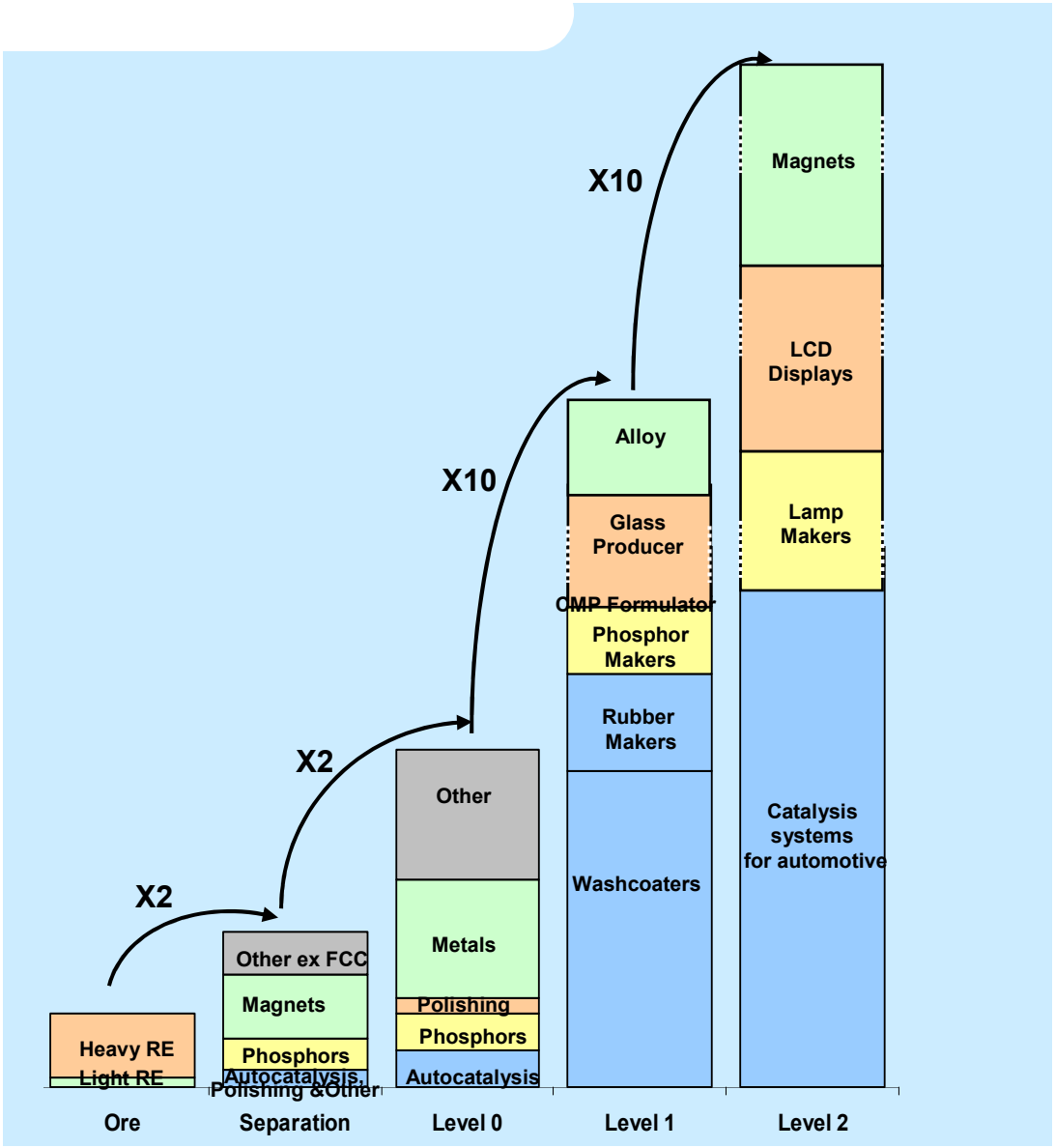
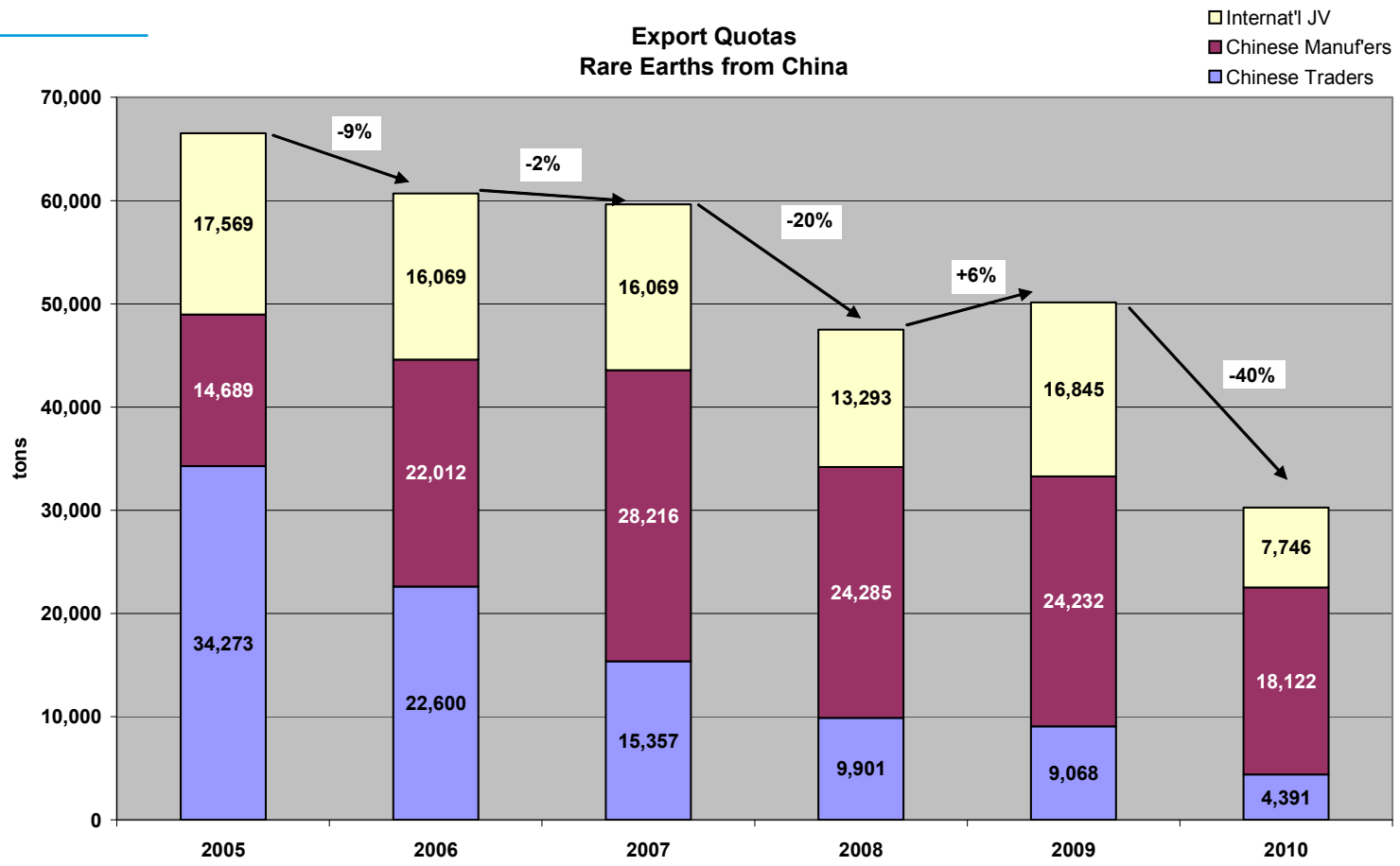
Rare Earths Value Chain

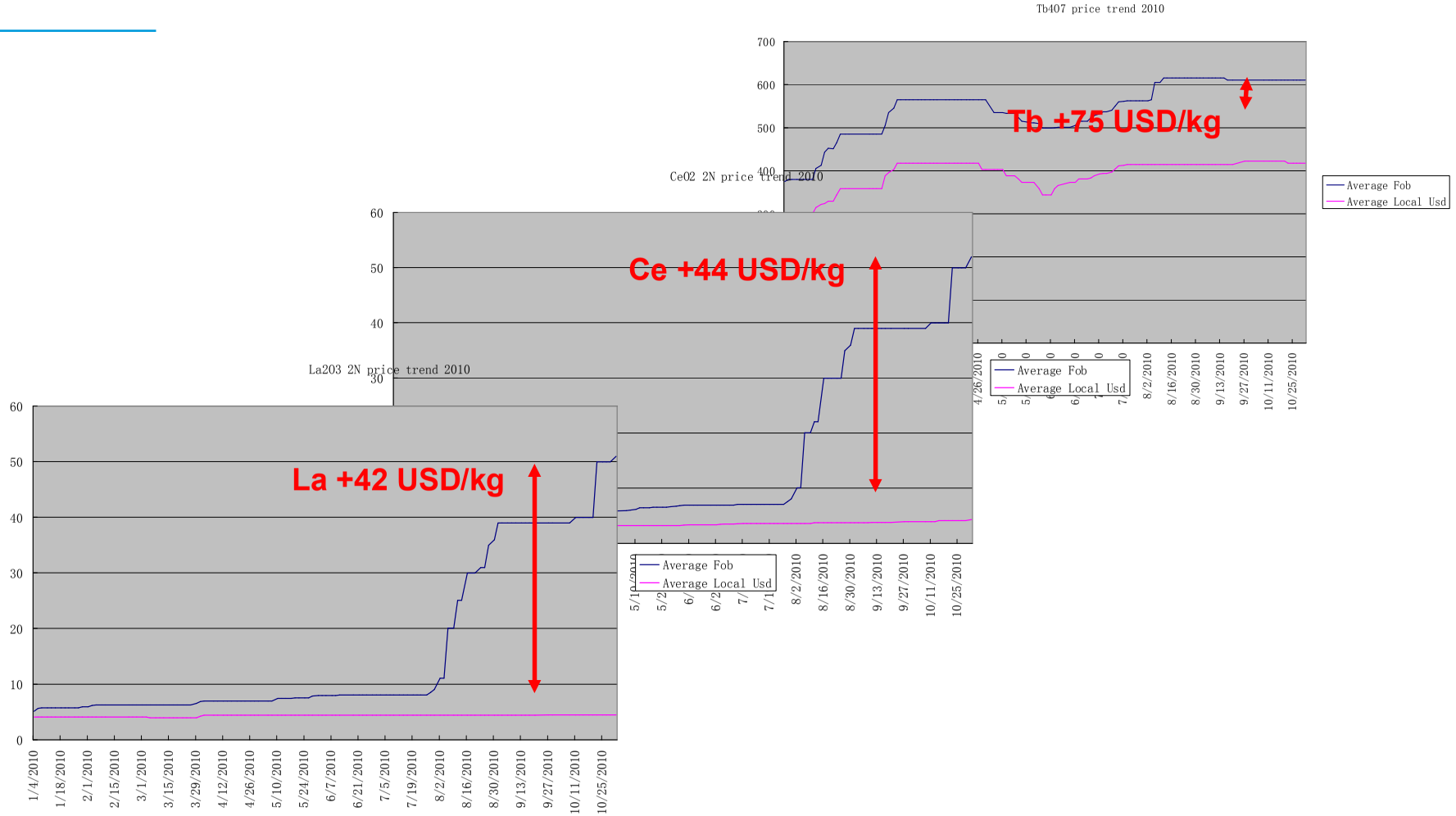


Export Quotas in 2005 ~ 2010



- Export quota is reduced by 40% from 50, 000 tons in 2009 to 30, 000 ton in 2010. In particular, massive reduction of 72% in second half of 2010 left downstream industries unprepared.
- Trend is not a surprise, has been announced years ago. Has triggered Rhodia strategy to partner to develop sourcing inside and outside of China
- 2011 S1 release consistent with Chinese government announcement

Illustration of recent market price evolution



- La & Ce : total disconnect in pricing between local Chinese prices and export prices
- Key is to close the gap between local and export prices

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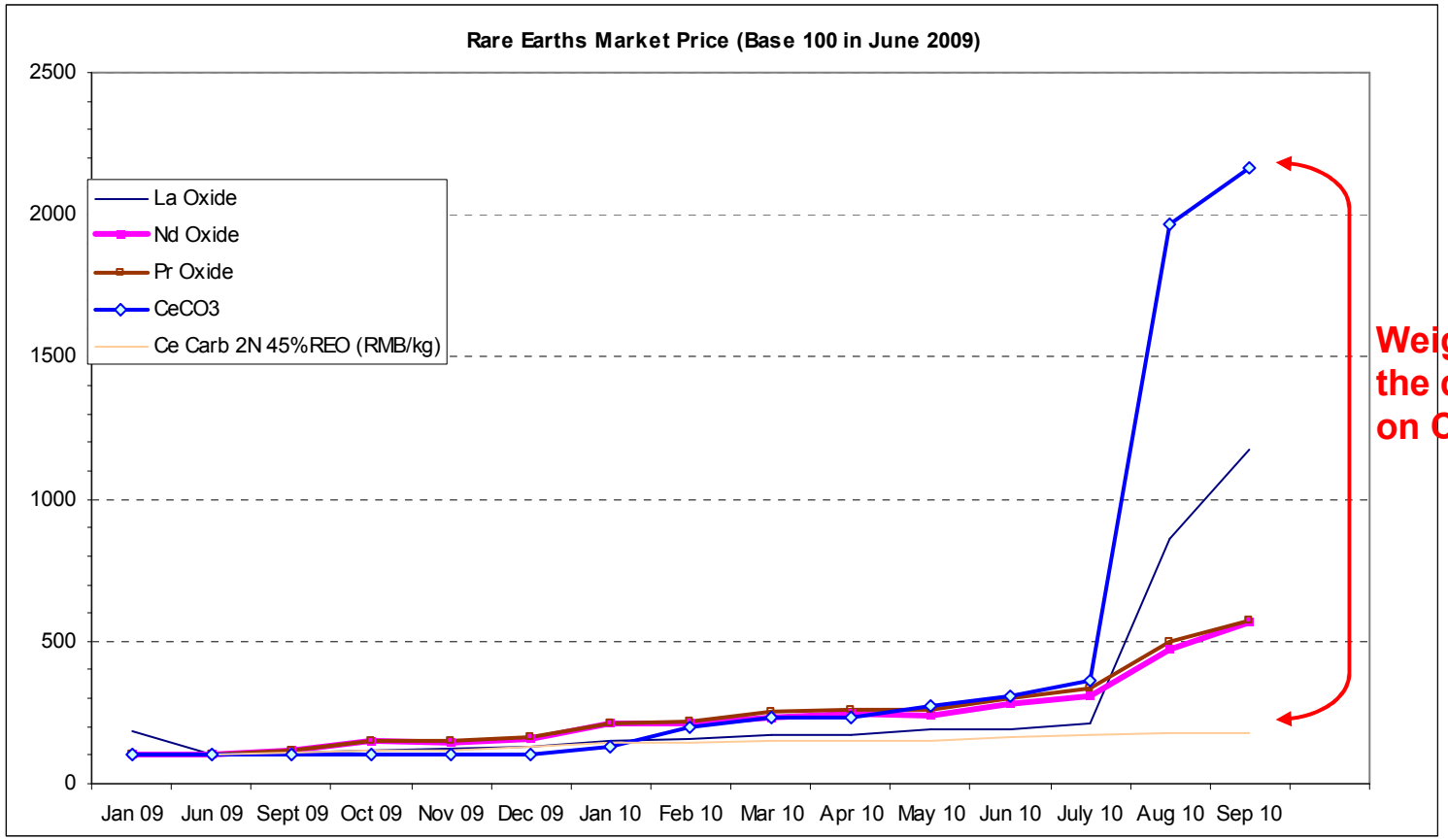
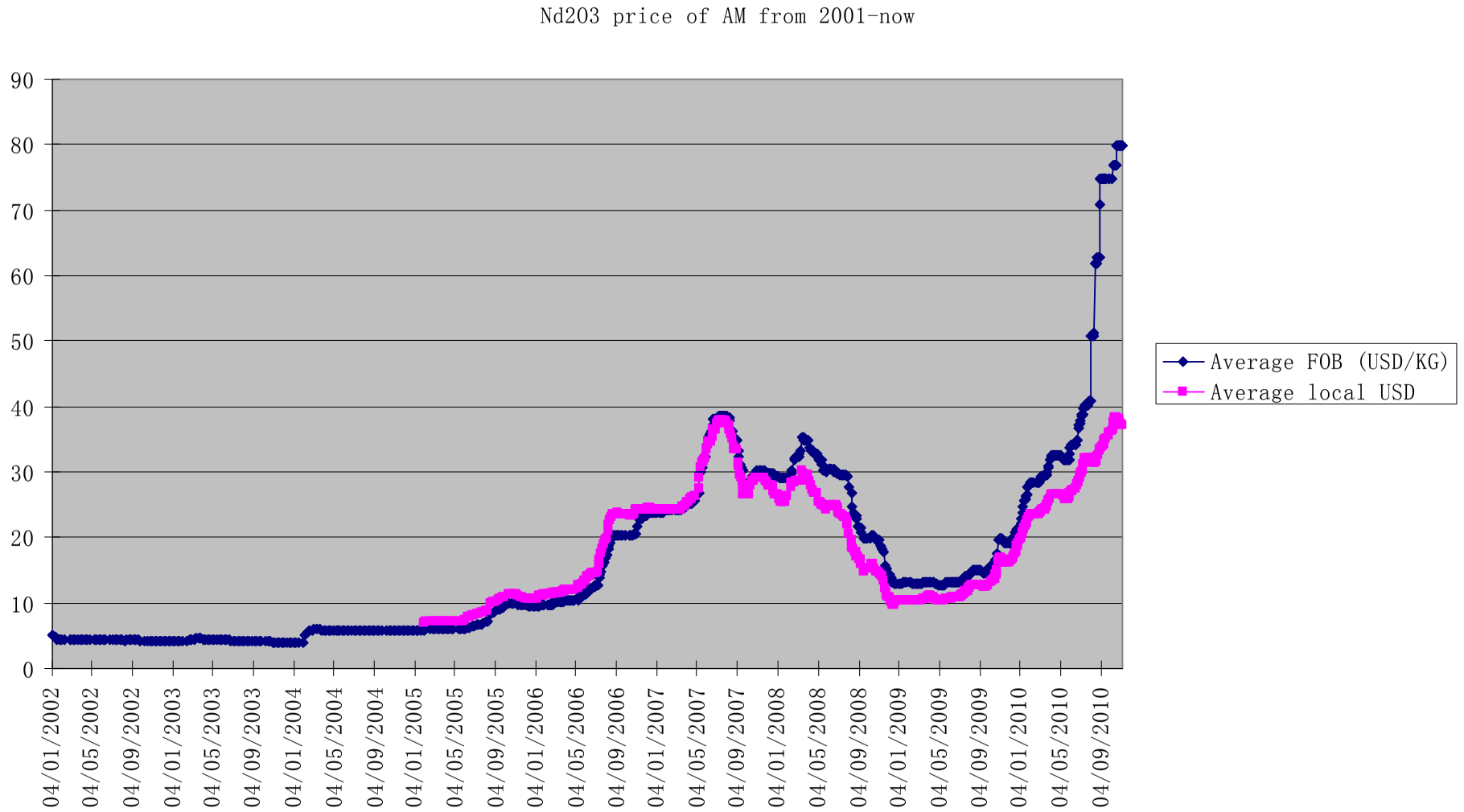
Evolution of the Market Prices – Ceric Elements

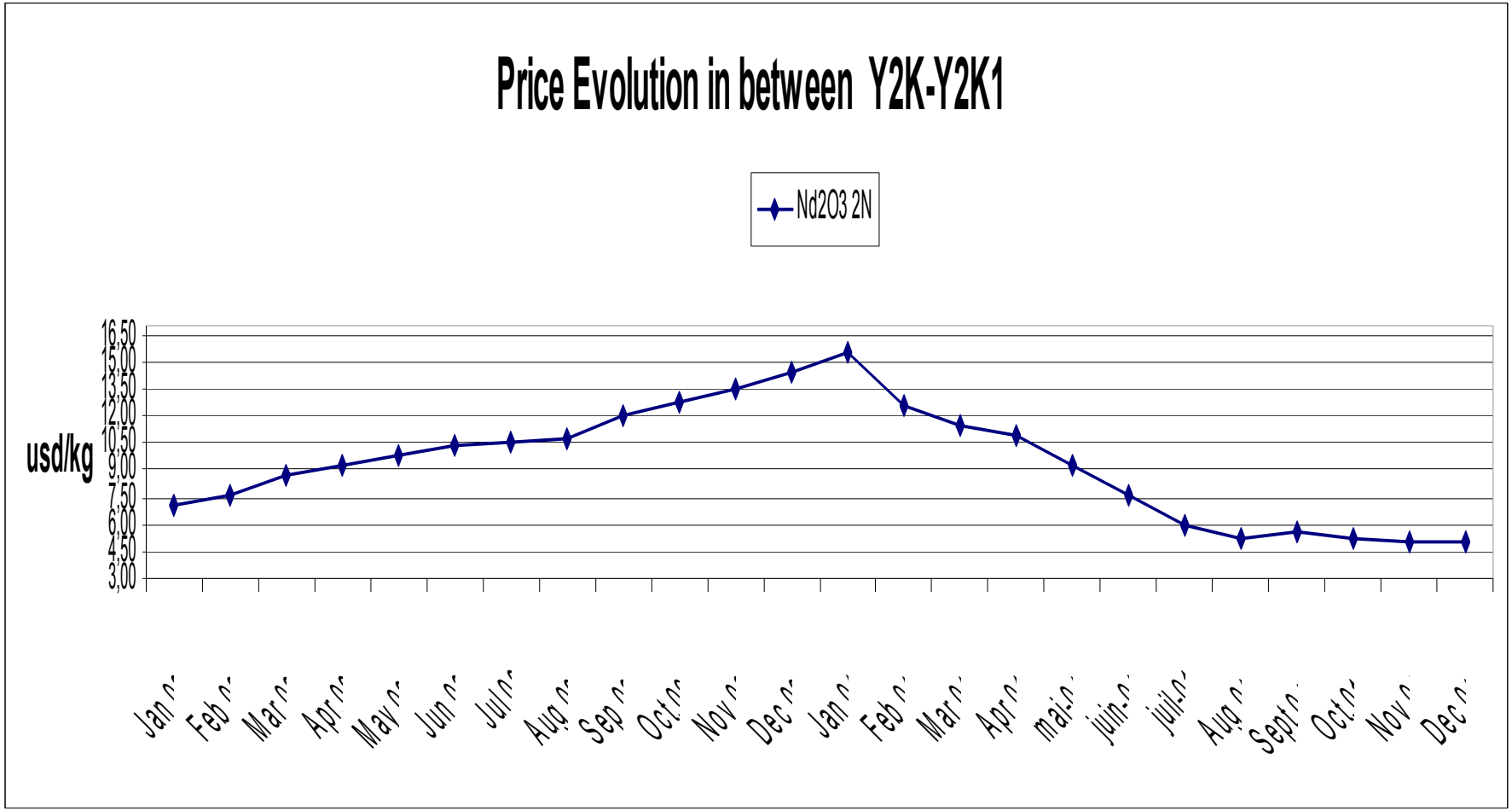


- **Sudden decrease of export quota allocation for H2 2009 do not let time to industry to reorganize**
- **Currently lack of quotas, not a lack of resources – especially for La & Ce**

Nd2O3 price evolution : magnets are leading the market



2000 crisis : a several years impact on RE industry



10 years later, stability and balance remains key for market growth

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Conclusion

- Sudden decrease of export quota allocation for H2 2009 do not let time to industry to reorganize – but trend was already there.
- Currently pricing on non Chinese market reflects a lack of quotas, not a lack of resources – especially for Light RE
- Magnet applications are driving the growth, but this cannot be disconnected from a need of an acceptable balance in RE usage. How is this accounted in RE market projection ?
- Can anticipate a price new equilibrium, taking in account the willingness to implement sustainable environmental standard in china. Regulation already exists, it is a matter of enforcement.
- Once Lynas at capacity, the key for RE development will be heavy RE sustainable access; and recycling is a good option for Europe

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Conclusion

- Long term safety of supply for its customer is the foundation of Rhodia's strategy for years – Partnership with Lynas started in 2002 – Development of a new mine takes 8 to 10 years.

- Diversification - Complementarity :
  - Operation in China : LiYang Rhodia RE & BaoTou Rhodia RE with state of the art ore processing to finishing facilities in order to serve the Chinese market and benefit from growth dynamic in china
  - Operation outside China : La Rochelle, Anan Kasei, Cincinnati & Freeport with historical expertise on ore processing
  - 2 independent supply chain to stabilize market access.
  - No compromise on Rhodia sustainable development policy
  - Recycling is an attractive option to ensure selective access to RE.

- RE development require a long term view, speculative approaches are undermining market development.

Thank you
for your attention

Rhodia is certified
to the highest quality standard

ISO 9001 - Ed 2000
ISO-TS 16949 - Ed 2002 - 2