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UC RUSAL and China in the global aluminium industry: potential for co-operation

CRU 2008

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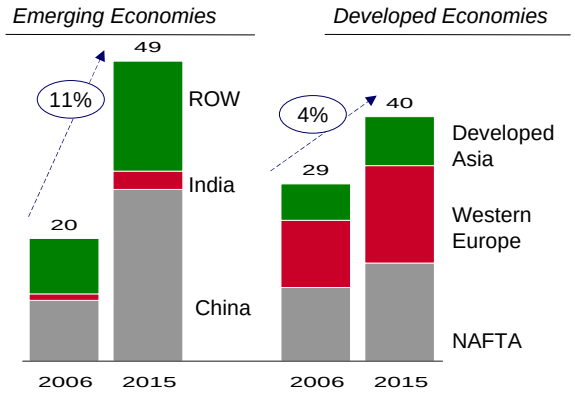
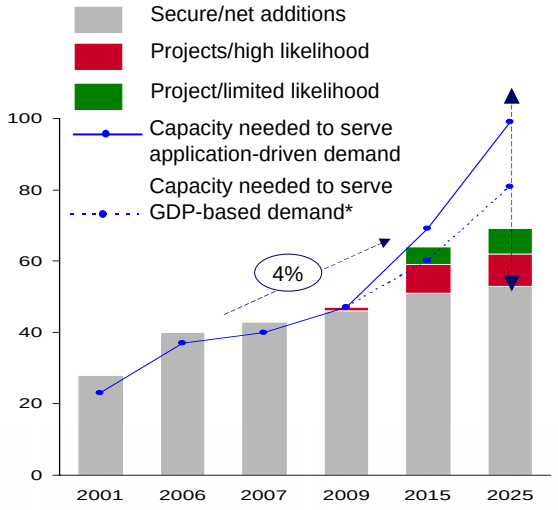
Bullish industry fundamental seen by experts

- Global aluminium supply is not catching up with the rapid demand growth.
- Demand in developing markets is expected to be markedly higher then in developed markets.
- BRIC aluminium demand is forecast to grow at 11% CAGR through 2015.

Demand for Aluminium By Region (MMt)

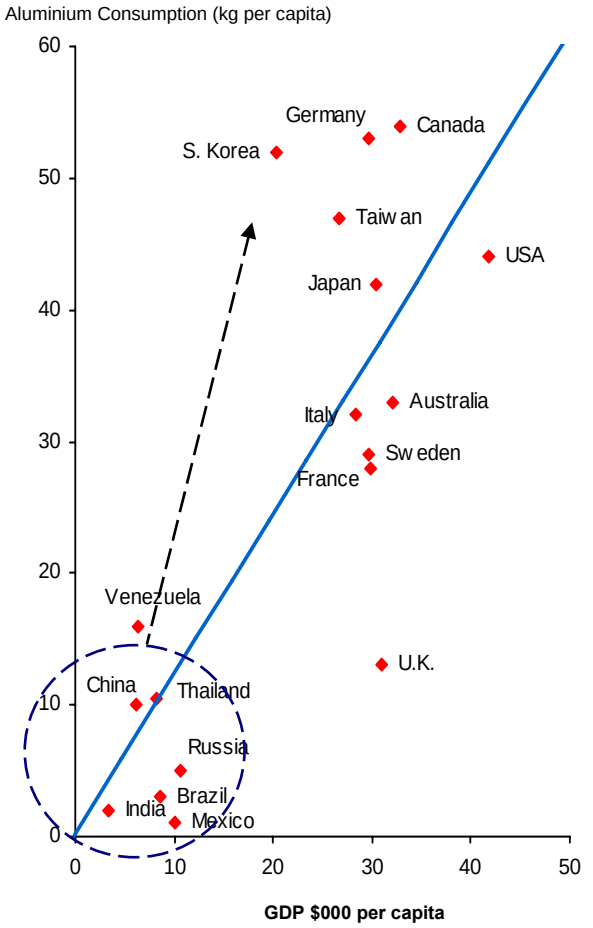


Need for New Supply with Risk of Scarcity (MMt)



Source: McKinsey

Aluminium consumption per capita vs GDP per capita

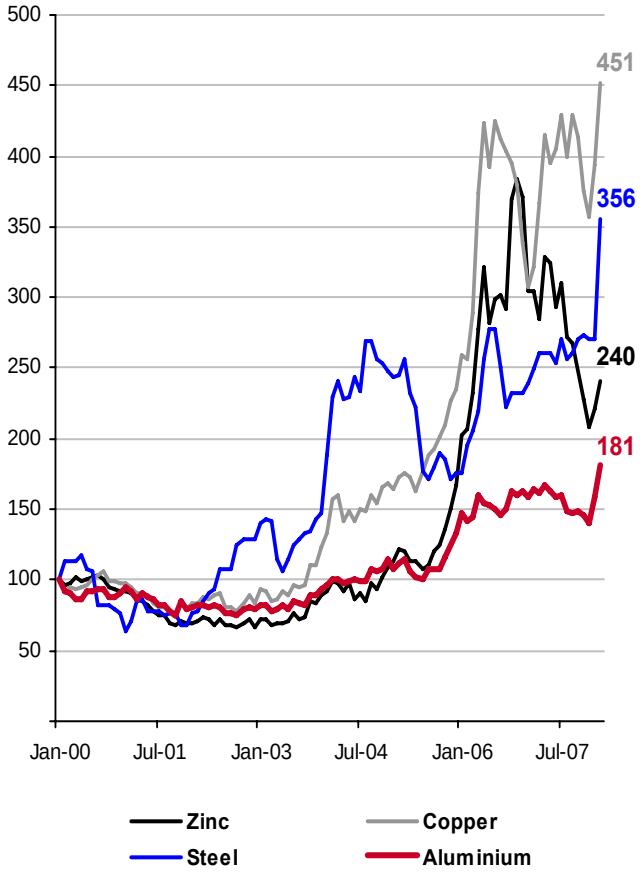


Source CRU, Global Insight

In the long term demand will double

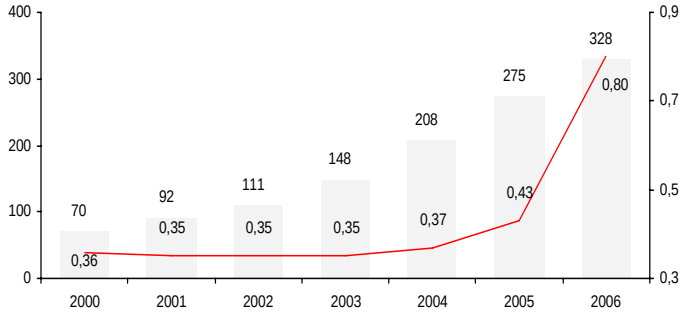
- Despite 2006 price rises, Aluminium prices have not kept pace with Copper, Zinc and Steel Prices
- As Copper and Zinc prices have risen, Aluminium has become an increasingly attractive substitute, further driving demand growth
- Steel prices have also out-performed Aluminium (albeit to a lesser extent than Copper), further stimulating demand for Aluminium as steel consumers look to Aluminium as a substitute

Relative Performance for Copper, Zinc, Steel and Aluminium (Rebased to 100 as of January 2000)



Source: Bloomberg

China's net imports and price – iron ore lump (a)



(a) Net imports of seaborne iron ore per CRU; Prices FOB CVRD lump

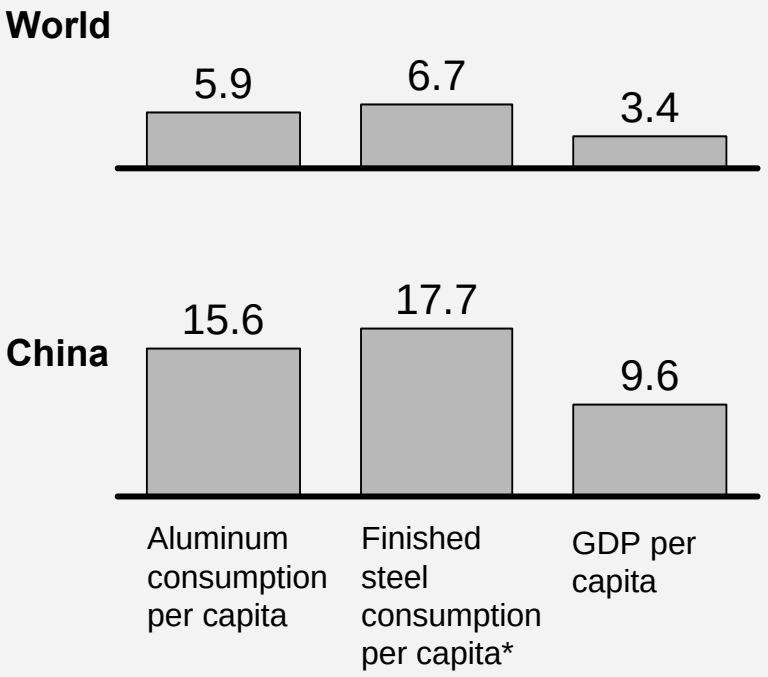
Sources : CRU, Datastream

Recent commodity price increases are partially driven by China's growing role as a net importer

China is the main engine of demand growth

- **Accelerating urbanization and industrialization in China (2001- 07):**
  - 90 million people moved into cities, 250 million expected to follow by 2025
  - GDP per capita grew at 9.6% p.a.
  - Spend on non-residential construction grew at 14.2% p.a.
- **Faster development in China today than in developed world in 1960s and 70s**
- Today's application technologies are **more Aluminum intensive** than those applied in 1960s and 70s in the developed world
- Decoupling of demand growth from GDP also occurring for other metals

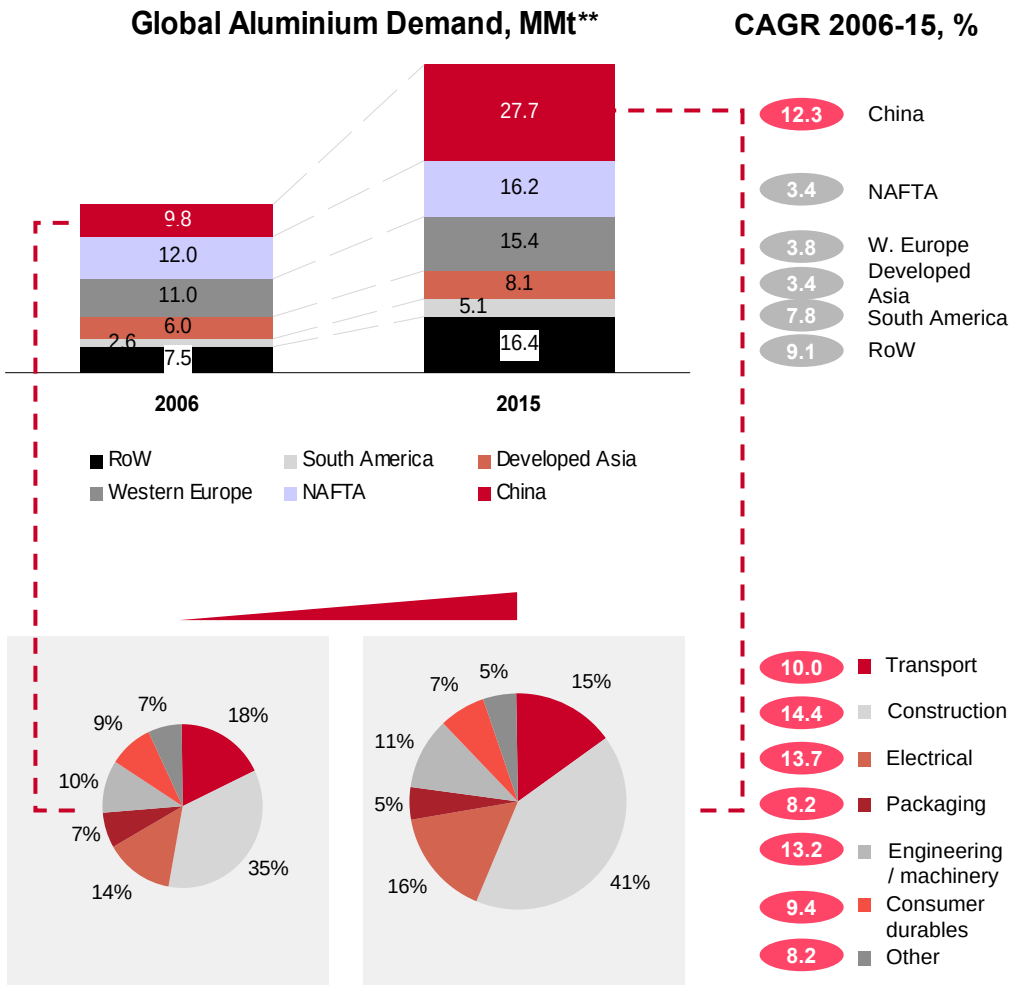
Annual growth rates, 2001 - 2007
Percent



*2001 - 2006 CAGR
Source: Global Insight, IISI, McKinsey

China converge with world's aluminum consumption patterns

- China is the key growth market compared to other regions of the world
  - China's share in global consumption is expected to increase to 31% in 2015 from 20% in 2006
- Construction*
  - non-residential construction outpacing GDP growth by 7%
  - aluminum intensity of total construction increasing by 9% annually
- Transportation*
  - number of cars produced increasing by 24% annually
- Electrical*
  - aluminum intensity of transmission line network additions increasing 19% annually
- Engineering*
  - aluminum intensity of engineering increasing 19% annually



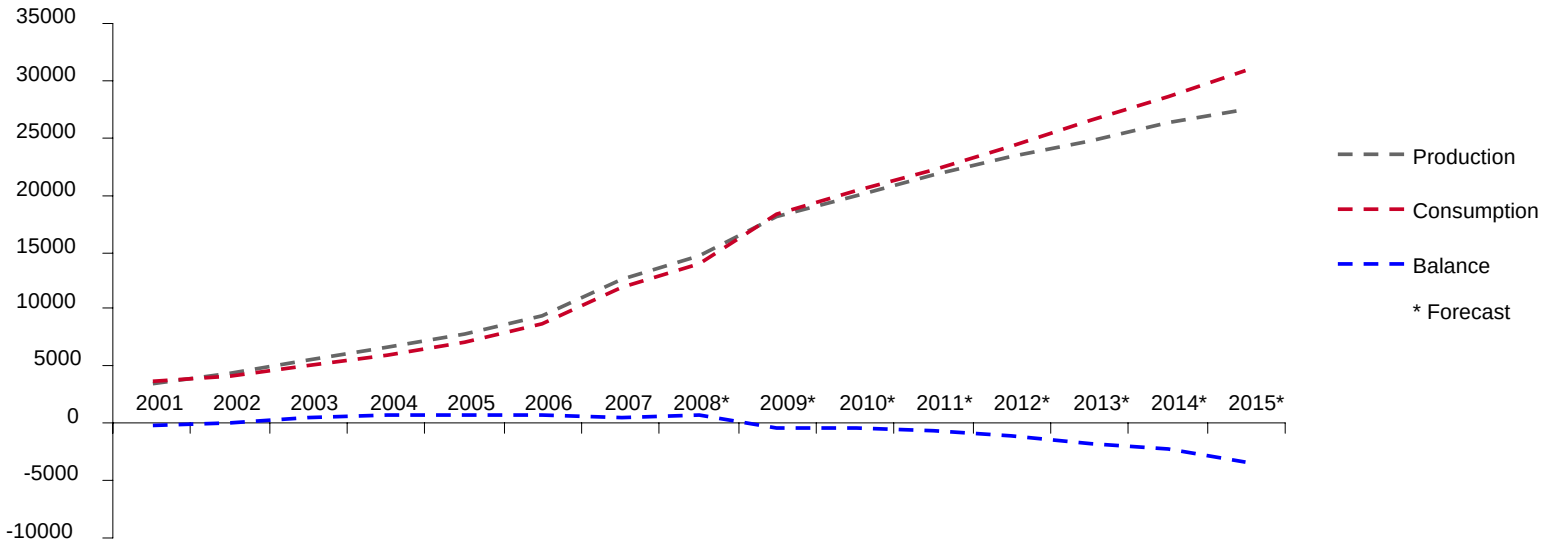
Source: McKinsey

* Based on 2001-07 data

** Including primary and secondary aluminium

Growth in aluminium production and consumption in China is unprecedented

Aluminium Production vs. Aluminium Consumption in China (thousands tonnes)



Future of demand looks bright but production can be constrained.

Future development of primary aluminium production in China

Advantages

- Low capex and short lead times
- China's aluminium industry is competitive in terms of low capex costs and resulting very quick payback period compared with aluminium smelters elsewhere in the world
- It takes 12 months to build 250 kty smelter with 320 Ka pots while it could take 3-5 years in other regions
- There are about 5,8 mtpy new aluminium smelting projects under construction to be finished by the end of 2009. More than 5 mtpy of this capacity is located in major coal producing areas. In addition there are another 2,4 mtpy of planned and proposed projects
- China with its own technological and construction resources may develop external assets building smelters and exploring bauxite deposits worldwide

Disadvantages

- High cash costs. Over 70% of Chinese production is based on coal-generated energy
- Low capex are under challenge (higher input costs for energy, cement and steel, higher equipment costs, higher prices for aluminium bus bars). Construction costs recently have been increased by 30% and expected to increase by 80% according to McKinsey
- Lack of raw materials base. China depends on imported bauxite for 43% of its alumina refining needs
- Energy deficits and environmental problem
  - 61% of the smelters have captive power stations
  - 21% is state owned with cheaper power
  - 17% individual investment without secure supply of power

Capacity and production growth will remain strong over the next few years but further growth of primary output may be constrained. Undersupply may emerge in the beginning of the next decade

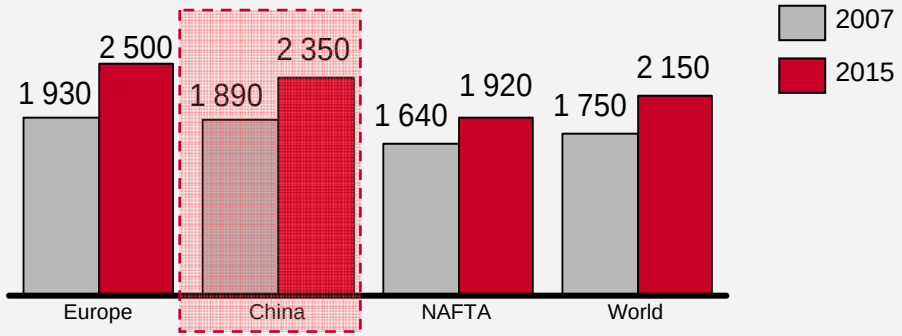
Rising Costs Are Slowing Down the Growth of Aluminium Industry Globally

- Capacity expansions are likely to be held back by increases in factor costs (energy, labor, alumina, including price effects on alumina, linked to expected higher LME)
  - purchased energy prices are expected to increase further in the EU and the US, driven by increasing CO2 cost
  - "Stranded" power locations are likely to disappear and low-cost opportunities will no longer be available
- Construction costs have been increasing dramatically during recent years and are expected to grow further
- China is increasingly vulnerable to the impact of global "scarcity factors"

Construction cost, USD per ton of capacity, USD/mtpy, real 2007

Region	Recent projects 2000 - 07	Announced projects 2008 - 15	Increase Percent
Middle East	3,800	7,500	100
South America	4,000	5,700	40
Africa	4,000	4,900	25
Southeast Asia	n/a	4,500	n/a
China	2,200	3,900	80
India	n/a	3,900	n/a
CIS	2,500	3,400	40

Average cash cost of existing capacity 2007 - 2015, USD/mtpy real 2007

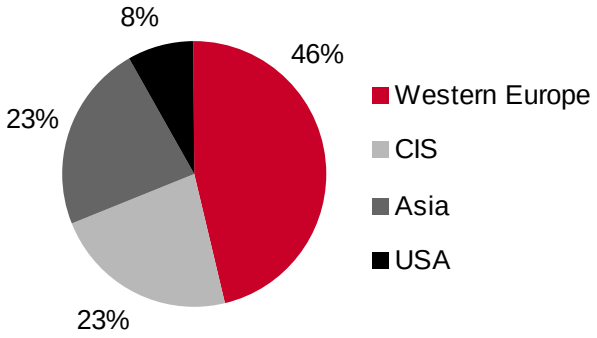


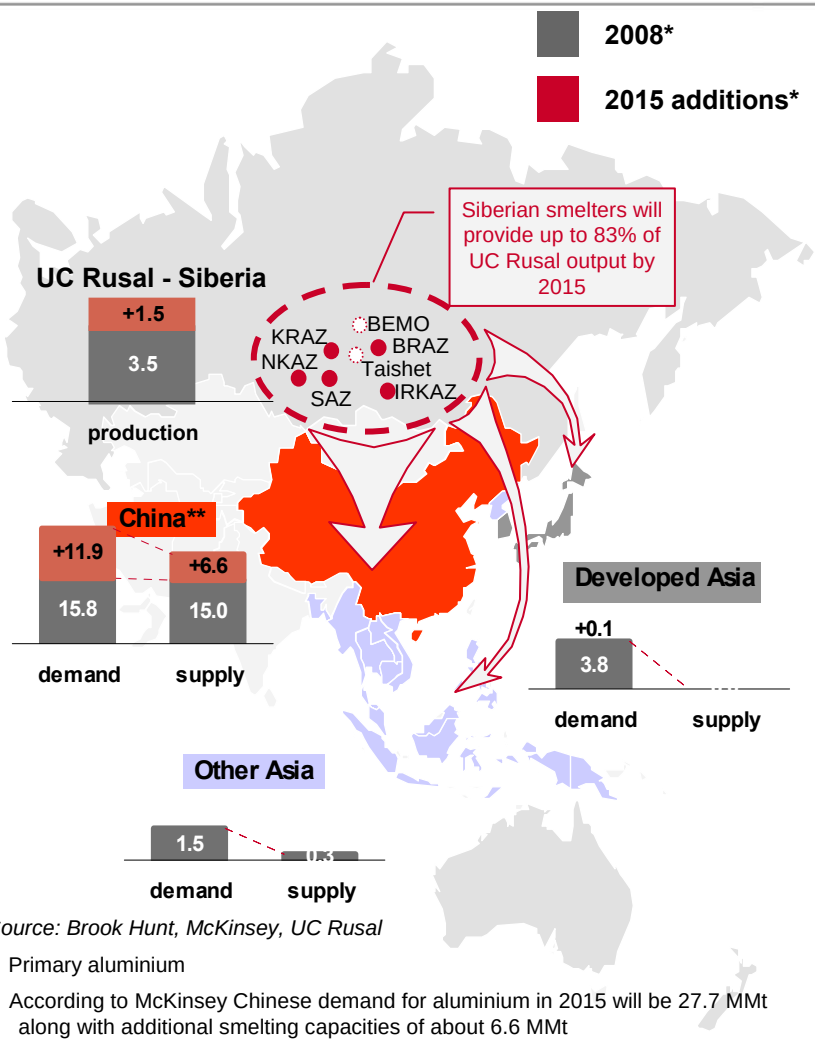
Source: McKinsey

UC RUSAL a natural partner for China as strategic supplier

- UC RUSAL existing and prospective capacity is concentrated in direct proximity to China and key Asian markets
- UC RUSAL utilizes environmentally-friendly, sustainable and plentiful supply of hydroelectric power supply in Siberia
- UC RUSAL has alumina-long position sufficient to accommodate all planned capacity expansions

Breakdown of Aluminium Sales by Geography 2008A (by USD mln)





Source: Brook Hunt, McKinsey, UC Rusal

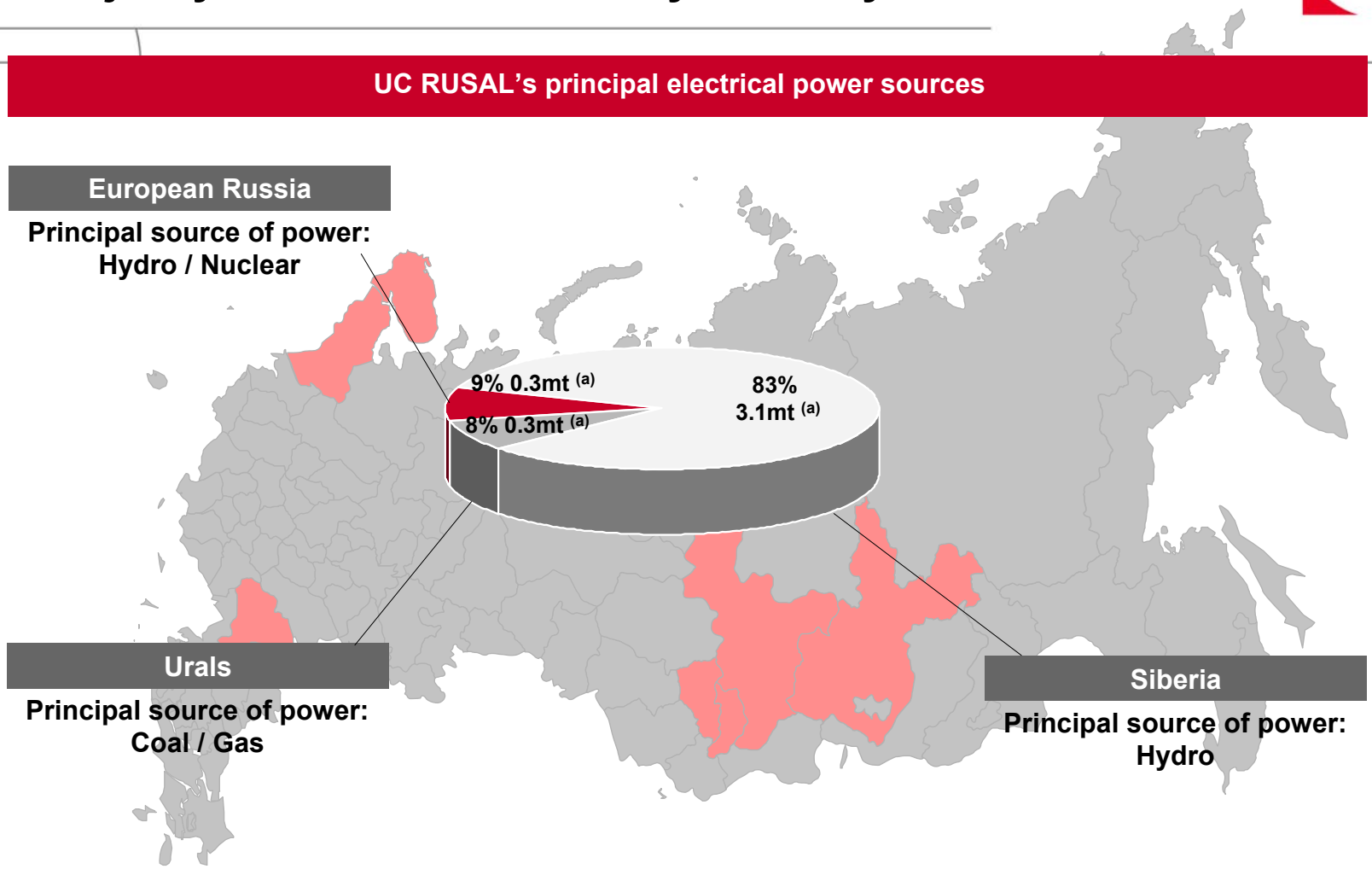
* Primary aluminium

** According to McKinsey Chinese demand for aluminium in 2015 will be 27.7 MMt along with additional smelting capacities of about 6.6 MMt

By 2015 UC Rusal expects to supply 50% of its output to Asia, of which 70% is projected to China

UC RUSAL: Access to globally competitive power with majority from environmentally clean hydro sources

UC RUSAL's principal electrical power sources



(a) Aluminium production (2006), excluding Zaporozhye (0.1mt) (Ukraine) and Kubikenborg (0.1mt) (Sweden)

Source: Hatch/SRK Technical Report, UC RUSAL

Unique upstream focused integrated asset base

RUSAL

Mining *

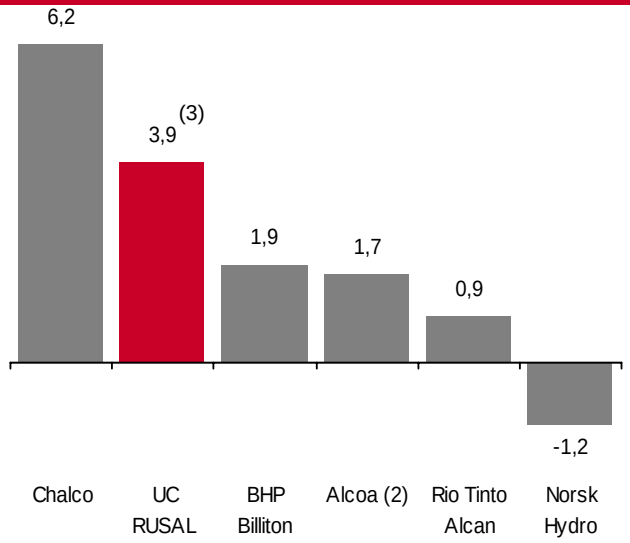
Refineries *

Smelters *

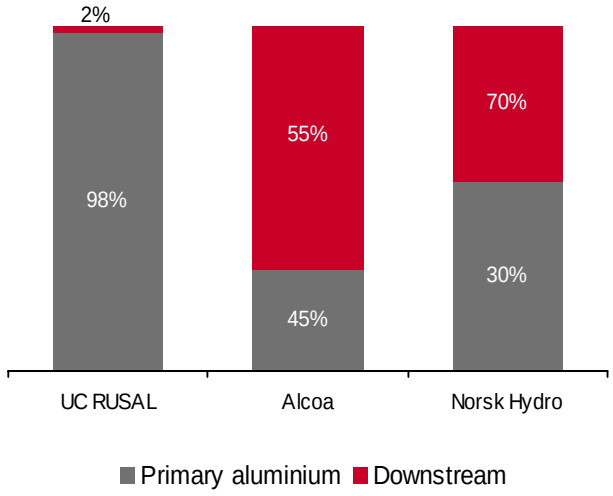
Downstream

* UC RUSAL 2007 aggregate attributable production

Net alumina balance 2007 (mt)(1)



Aluminium peers – 2007 revenue breakdown



1) Considering a ratio of 2:1 between the production of aluminium and the use of alumina

2) Includes assets not held via AWAC (Alcoa World Alumina and Chemicals)

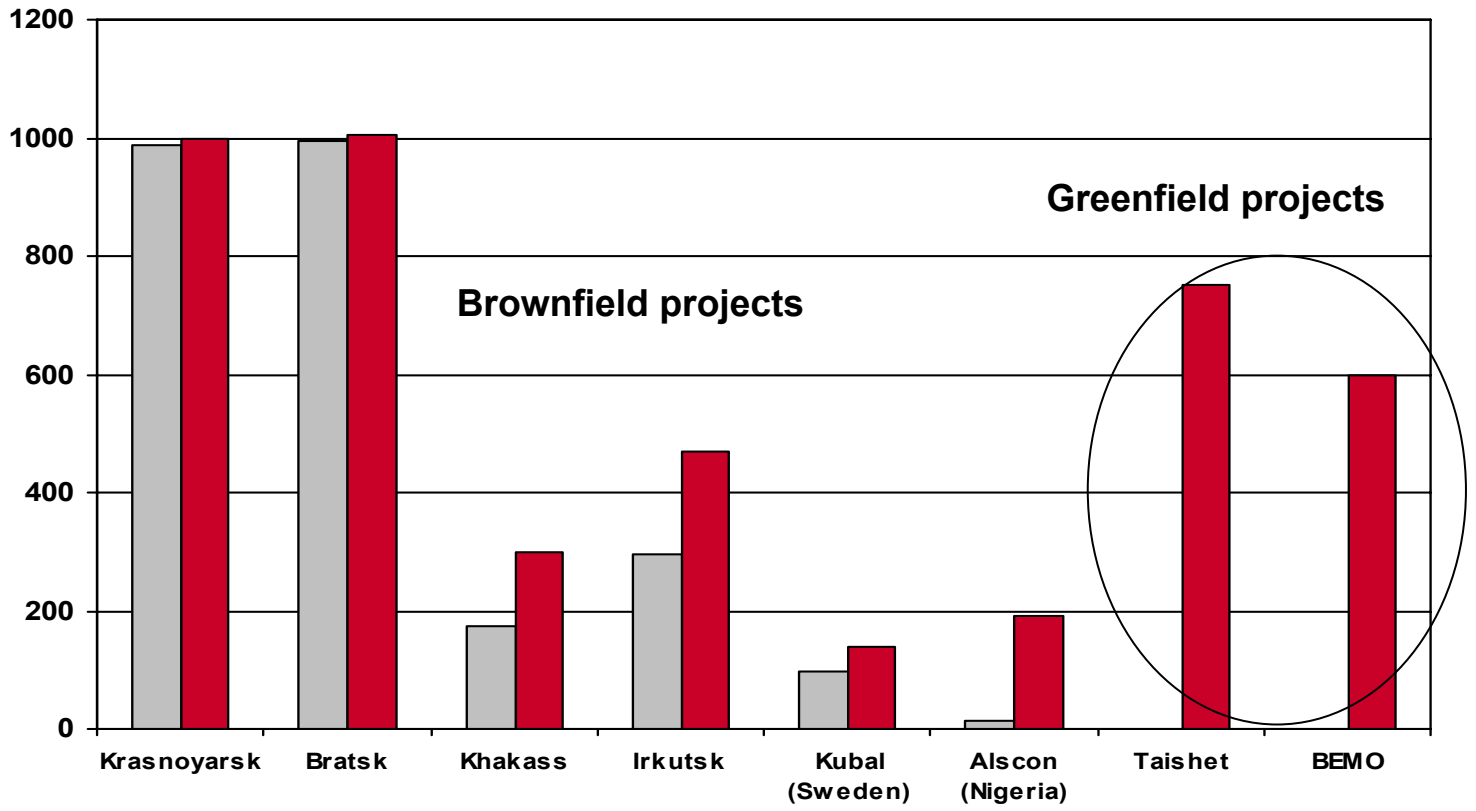
3) Including 1mt of alumina purchased

UC RUSAL has a unique asset base including proven bauxites reserves for over 100 years

Source: UC RUSAL, Annual reports

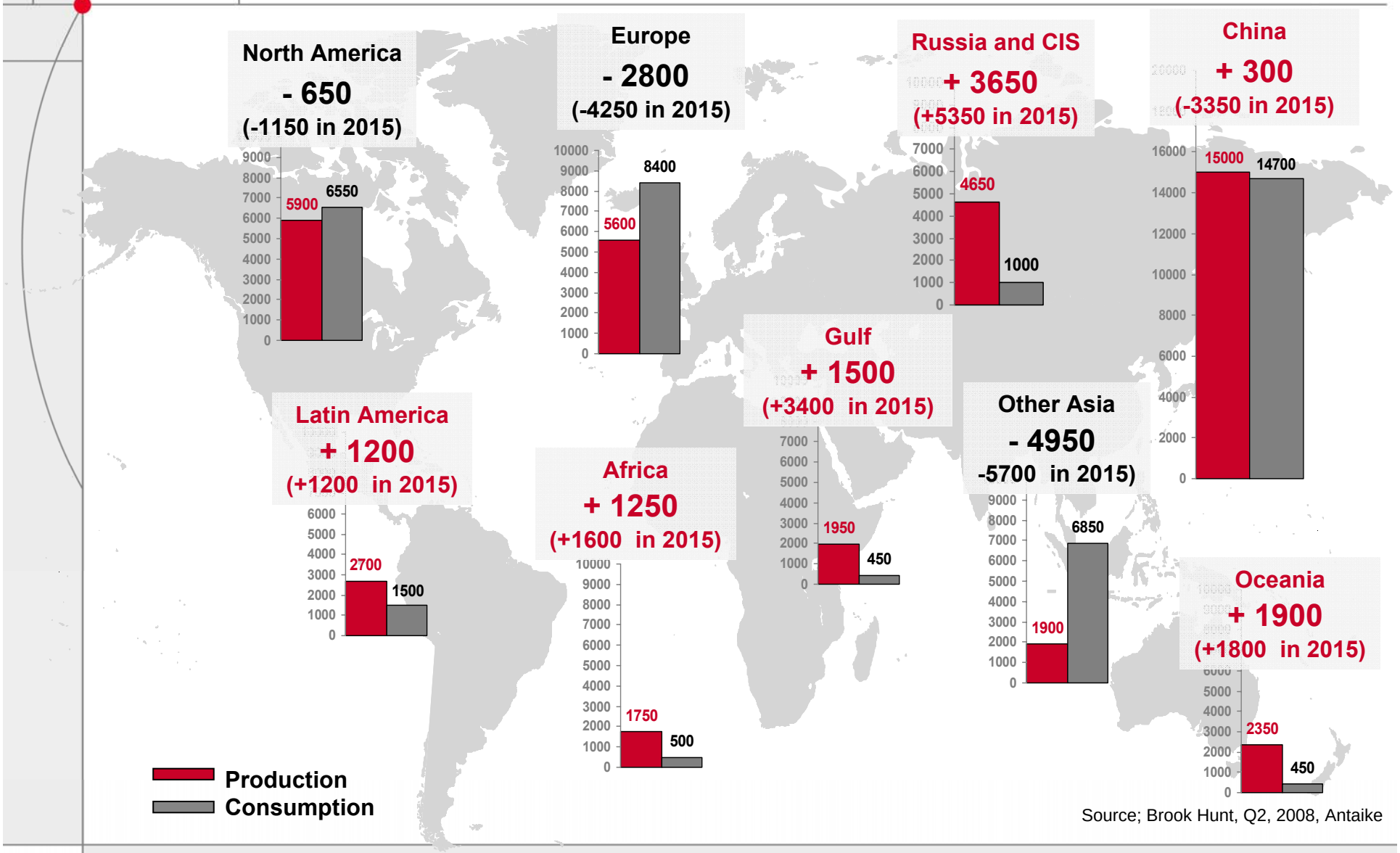
Pipeline of expansion projects to meet global aluminium demand

UC RUSAL aluminium production capacity expansion plans in thousand tonnes per annum



+ Over 2 million tpa by 2013

World aluminium balance 2008 - 2015



Source; Brook Hunt, Q2, 2008, Antaike

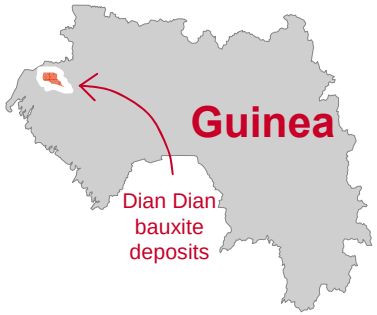
Existing projects in China

- Linshi cathode plant in Shanxi province with annual capacity 15 000 tonnes. Rusal plans to increase capacity up to 25 000 tonnes
- Cathode plant in Baoguan, Taiyuan administrative district, Shanxi Province. The plant's existing annual capacity is currently 9,300 tonnes of cathode blocks and the company plans to increase this to 20,900 tonnes by 2010.The total investment in the plant's development is planned to exceed USD 20 million.

Current cathode producing capacity in China will supply about 60% of UC RUSAL needs

MoU with China Power Investments

- In 2008 UC RUSAL and China Power Investments Corporation (CPI) signed a memorandum of understanding regarding future cooperation in bauxite mining, refining of alumina and aluminum smelting
  - CPI is a major Chinese vertically integrated energy company (coal mining, power generation, aluminum smelting)
  - Joint venture combining resources needed for aluminium smelting: bauxite mining and alumina refining in Guinea and hydroelectric power-based aluminium smelting in China
  - Mutually beneficial cooperation: China's access to raw material base in exchange for UC RUSAL's large-scale presence in the Aluminium industry



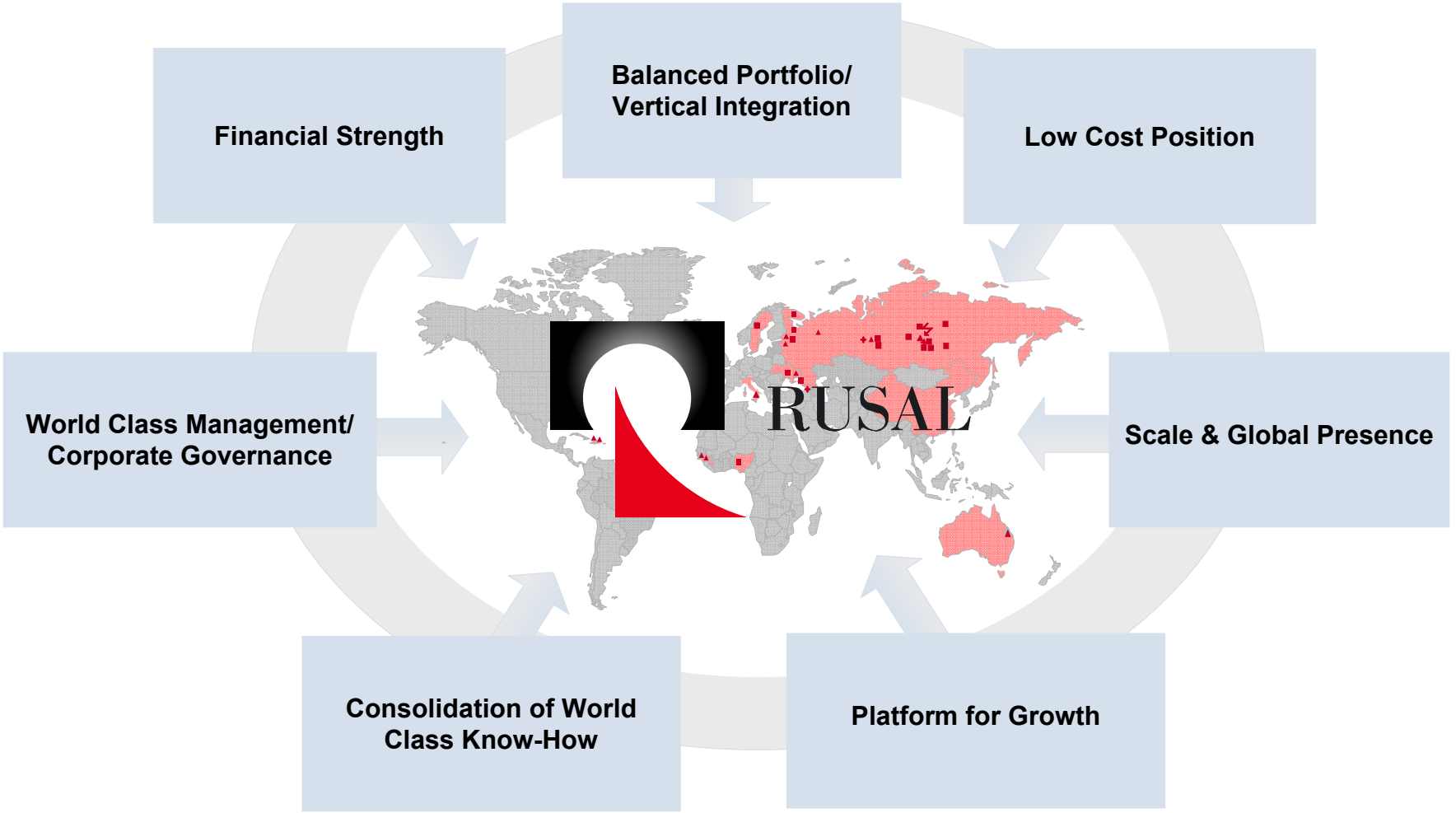
- Bauxite and Alumina complex in Guinea
- Proven reserves of 564 MMt of bauxites
- Bauxite quarry with planned annual capacity production of 13.4 MMt of bauxites
- Alumina refinery with planned annual capacity of 2.8 MMt

UC RUSAL / CPI JV

- Aluminium smelter of planned annual capacity not less than 500 kMt of aluminum in Qinghai province
- 2 potlines (270 cells each)
- Pre-baked anodes plant
- Electric energy from chain of hydro power plants at Huang He river

UC RUSAL has a long-term strategic commitment to China and represents a perfect fit for the Chinese partners – both consumers and producers of aluminium

UC RUSAL – A Platform for Growth



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