

RUSAL

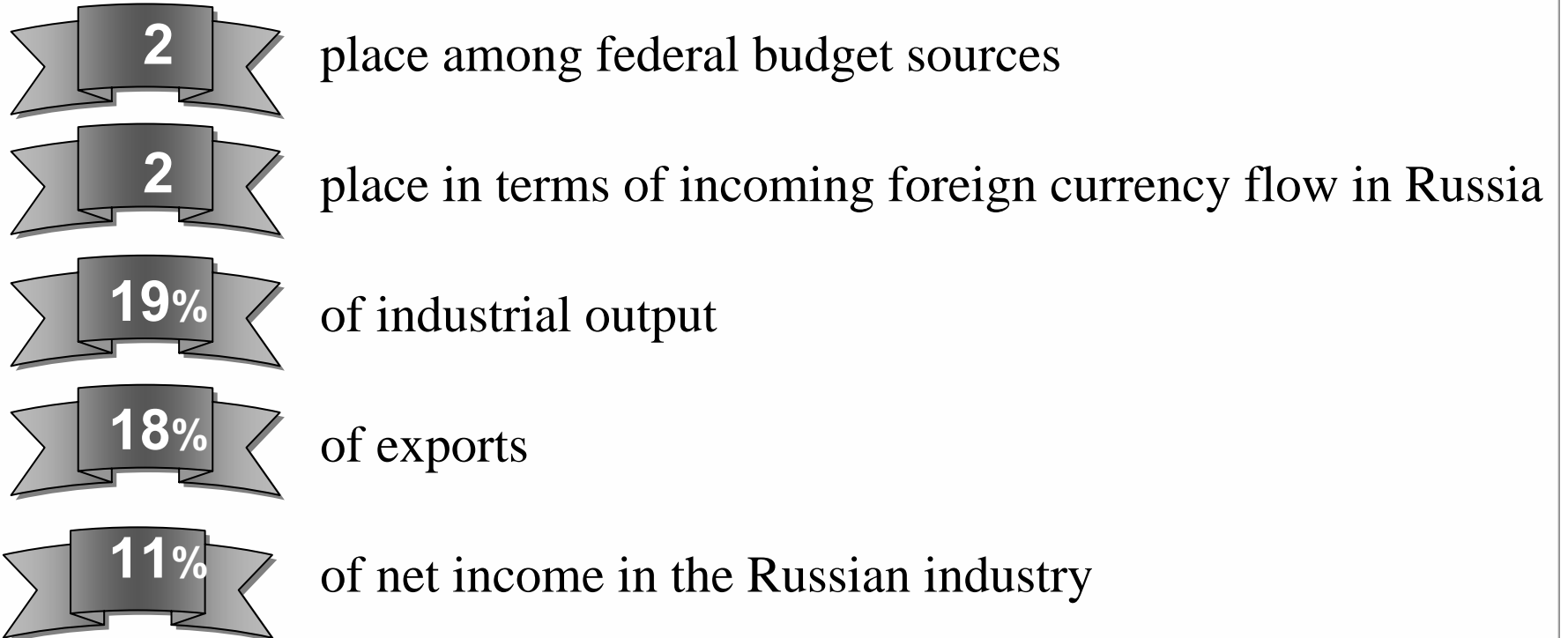
Russian Aluminum Companies in the Context of the Global Aluminum Industry Development

Victor Zhirnakov
Deputy Director General
of Aluminum Business

Russian Metallurgy: Strategy and Growth Restrictions
March 29th, 2006, Moscow



Russian Metallurgy Today

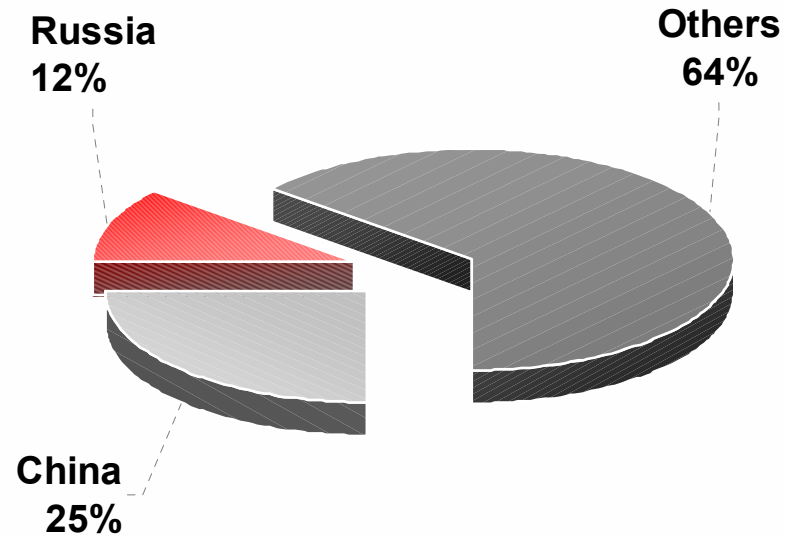


Source: Russian Federal Agency of Industry, *Successes and Problems of the Russian Metallurgical Industry Report*, May 2005

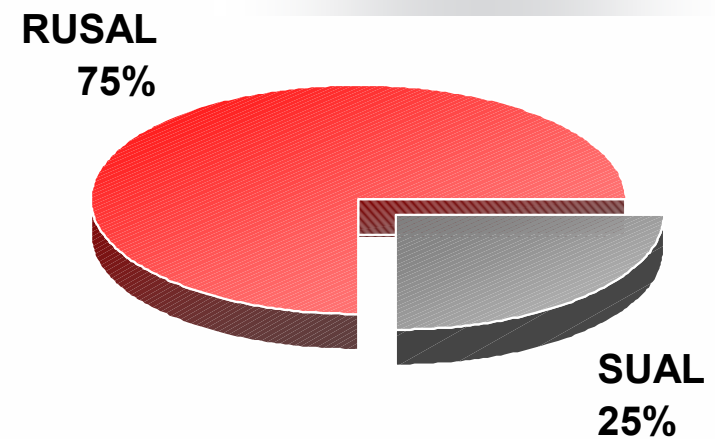
Russia as a Part of the Global Aluminum Industry



Worldwide



Russia

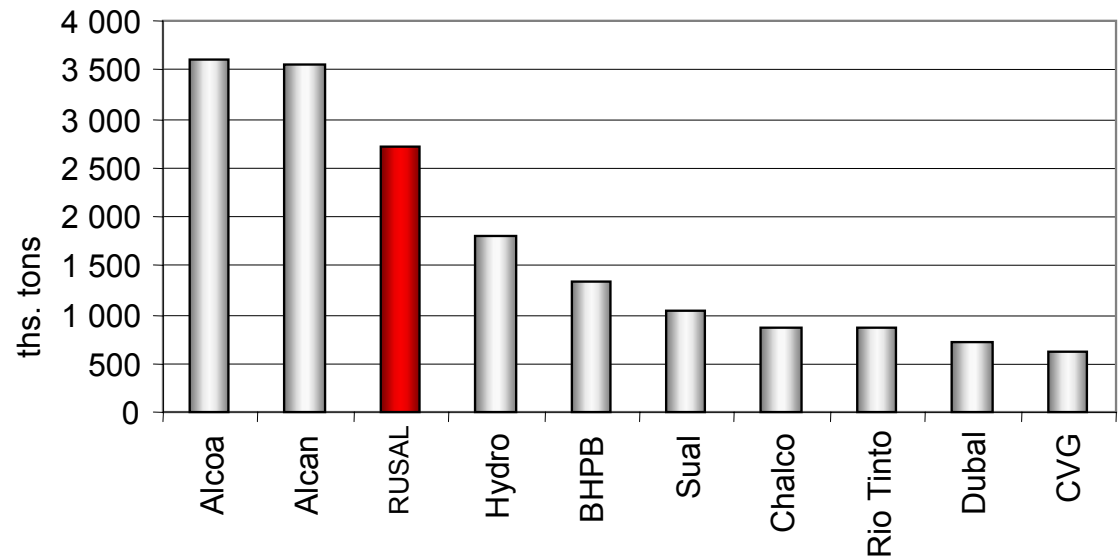


RUSAL's Position in the Industry



- RUSAL was established in 2000 as a result of consolidation of the largest domestic aluminum smelters
- Third place in the world in terms of aluminum and alloys output
- Company turnover in 2005 – USD 6.1 bln.
- Investments into production development in 2005 – USD 1.5 bln.
- 80% of the output is exported

Primary Aluminum Output by Company – 2005

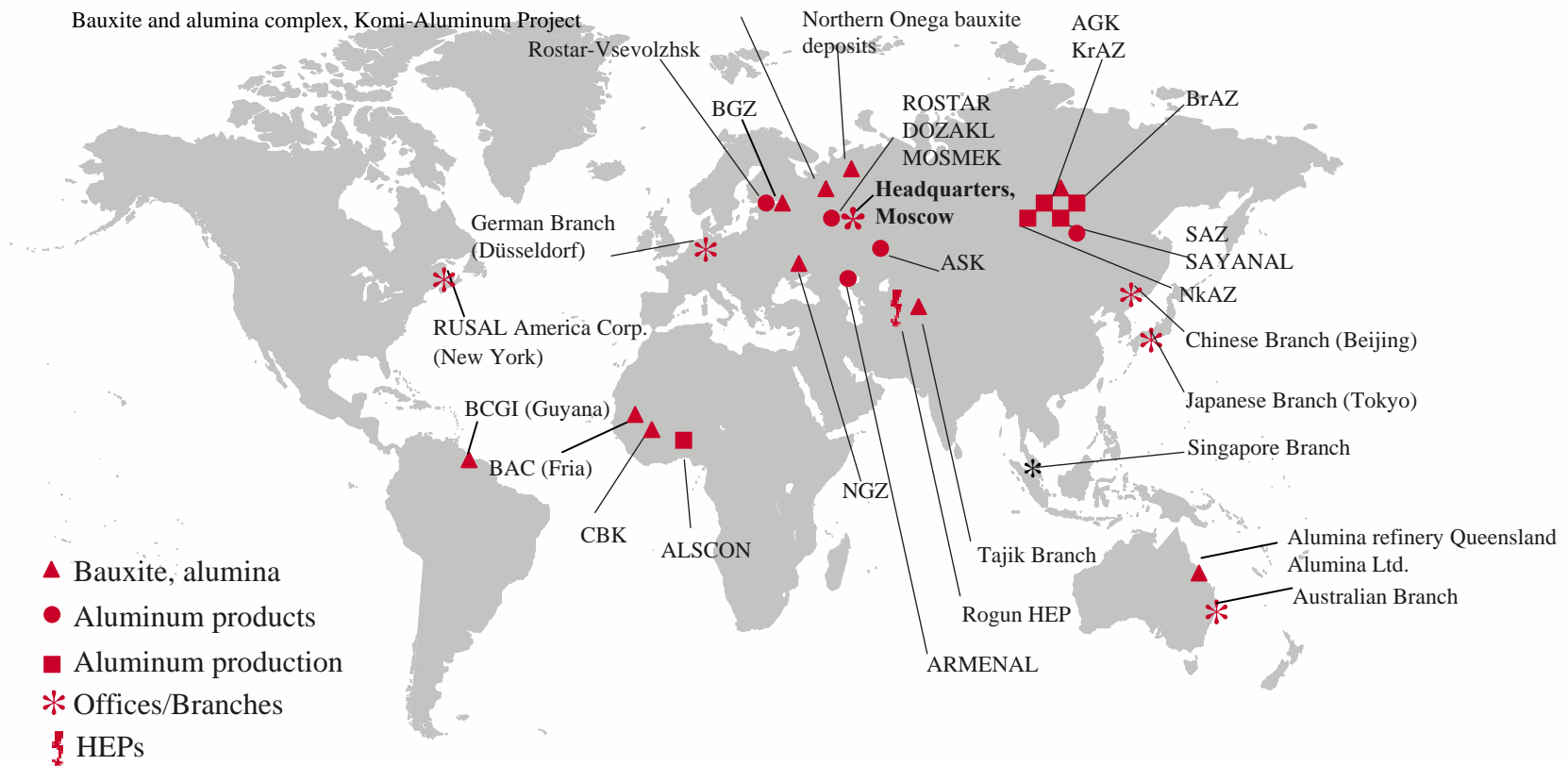


Source: Companies' press releases

RUSAL: from Siberia to Global Economy



We have our locations in 13 countries of the world and 9 regions of Russia, our products are exported to 50 different countries

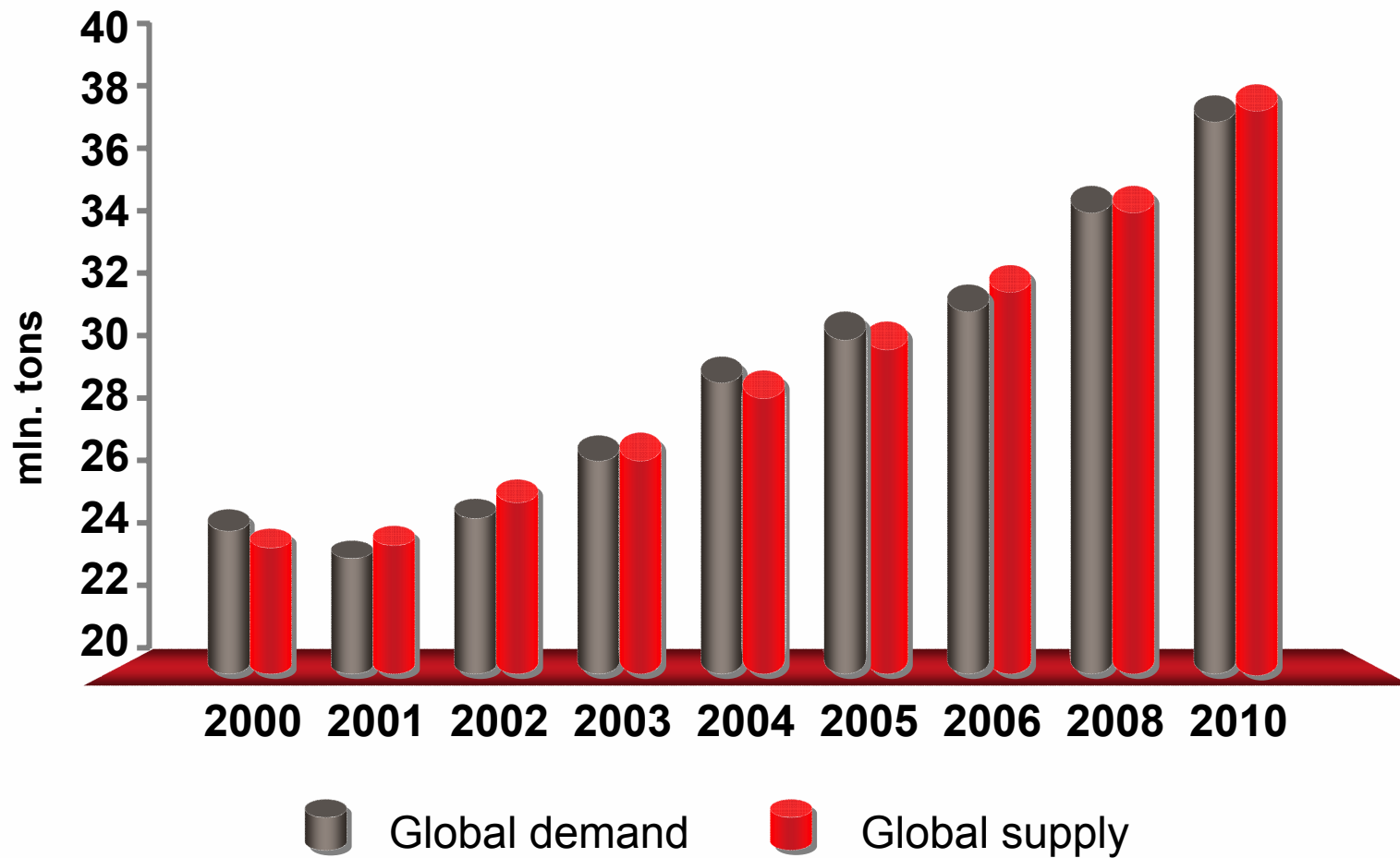


Basic Trends in the Global Aluminum Market



- Demand for aluminum growing worldwide
- Prices on energy resources rising
- Competition for access to raw materials
- Consolidation in the industry
- Inefficient facilities close down
- The “Chinese factor”

Aluminum Demand and Supply on the Global Scale

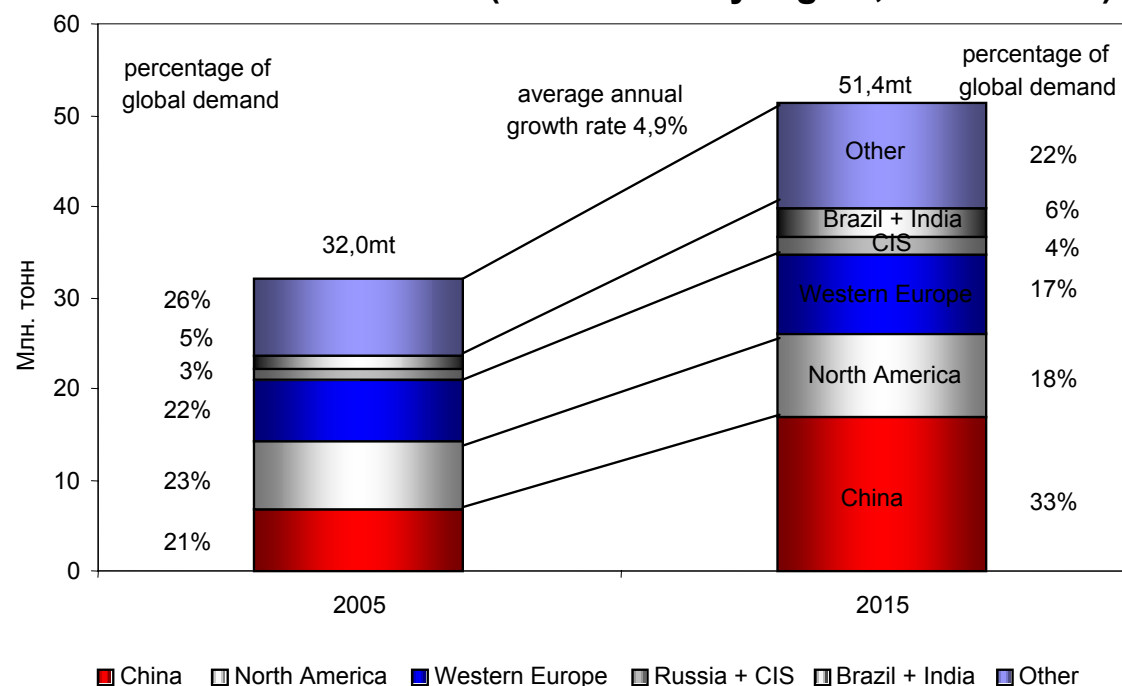


Increasing Demand by Regions

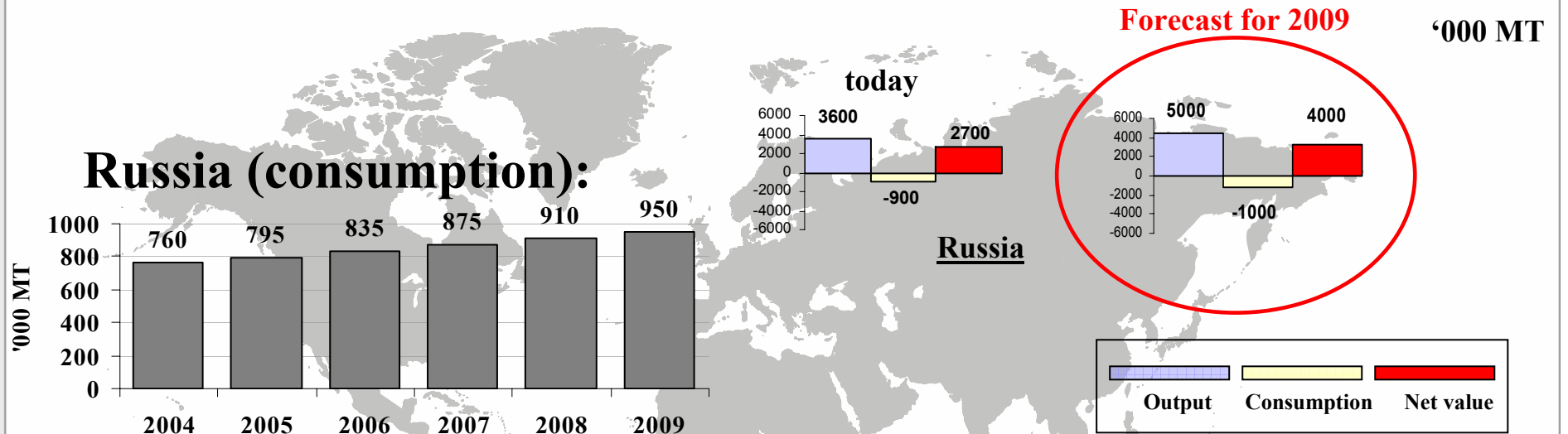


- By 2015 China will be consuming 33% of the global aluminum output (vs. 21% today)
- In the next 10 years, China will be responsible for 52% of the growing global demand for aluminum
- The demand in Brazil and CIS countries will be growing just as fast yet the starting point is much lower
- India is likely to surprise with unpredictable demand growth rate

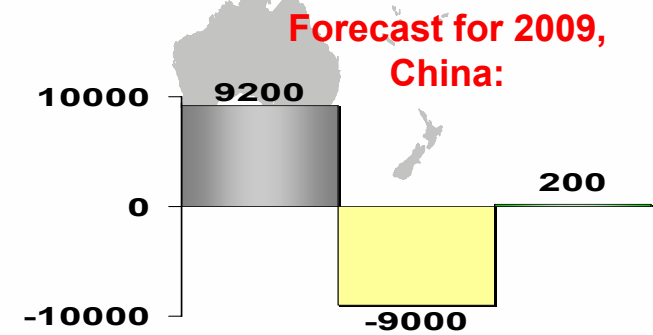
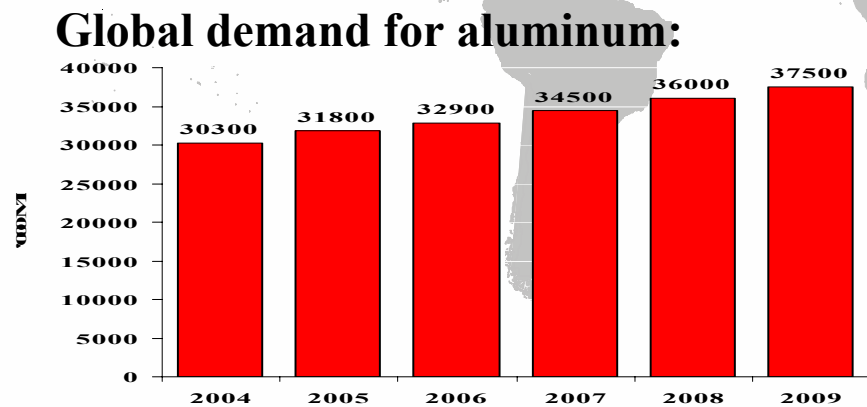
Demand (breakdown by region, 2005 – 2015)



Source: RUSAL data



Source: RUSAL, Brook Hunt



Establishing New Production Capacities



Khakas Aluminum Smelter

- Capacity 300 ths. tons per annum
- Cost USD 710 mln., the first newly built aluminum smelter in Russia in the last 20 years
- The first stage should be completed by 2006 creating over 1000 new jobs in the region
- Capital investments into the regional infrastructure – over USD 21 mln.
- New production and environmental standards

Smelter in Irkutsk Region

- Capacity 600 ths. tons
- Investments up to USD 2 bln.
- First output of metal in 2009
- Creating about 1700 jobs at the smelter and about 500 more jobs in auxiliary facilities



Modernization of the Operating Production Capacities



- **To reduce the environmental load and increase the output of primary aluminum**
 - Modernization of KrAZ, BrAZ, NkAZ (2005-2010)
 - Aluminum output increased by 300 ths. tons
 - Significant improvement of the environmental situation
 - Reduced production costs

Those who Have Access to Power and Raw Materials Rule the World



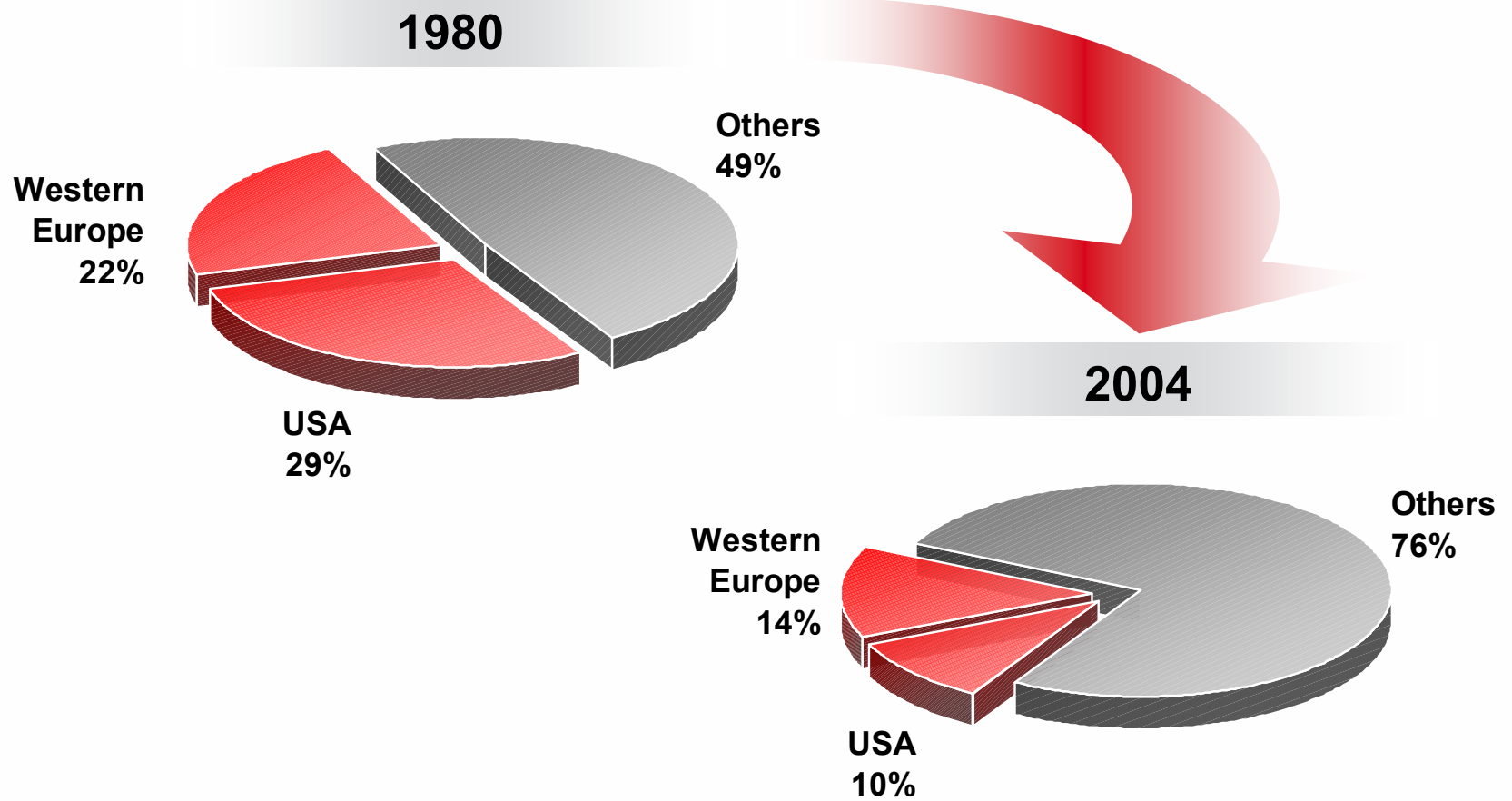
- 2 major components in the production cost of aluminum:
 - Electric power costs – (25% - 40%)
 - Raw materials (alumina) - (40%-60%)

Power Factor



- 150% - average power tariffs growth rate for aluminum companies worldwide in the last 4 years
- 514 ths. tons – reduction of aluminum output in 2005 due to the close-down of unprofitable facilities in the USA and Europe
- 765 ths. tons – expected reduction due to the unprofitability of production in 2006
- Search for new projects in regions rich with power resources

Changes in Aluminum Production Capacities



RUSAL – Power and Metallurgy Company



RUSAL's Investments into New Hydropower Projects



Rogun HEP

- Joint Project with the Tajik Government
- HEP capacity 4 bln KWh
- Base for industrial development of the Republic and electric power export

Boguchansk Power and Metallurgy Complex

- Krasnoyarsk territory
- HEP capacity 17.6 bln. KWh
- New aluminum smelter, capacity 600 ths. tons
- Building infrastructure and creating preconditions for the Downstream Angara region development



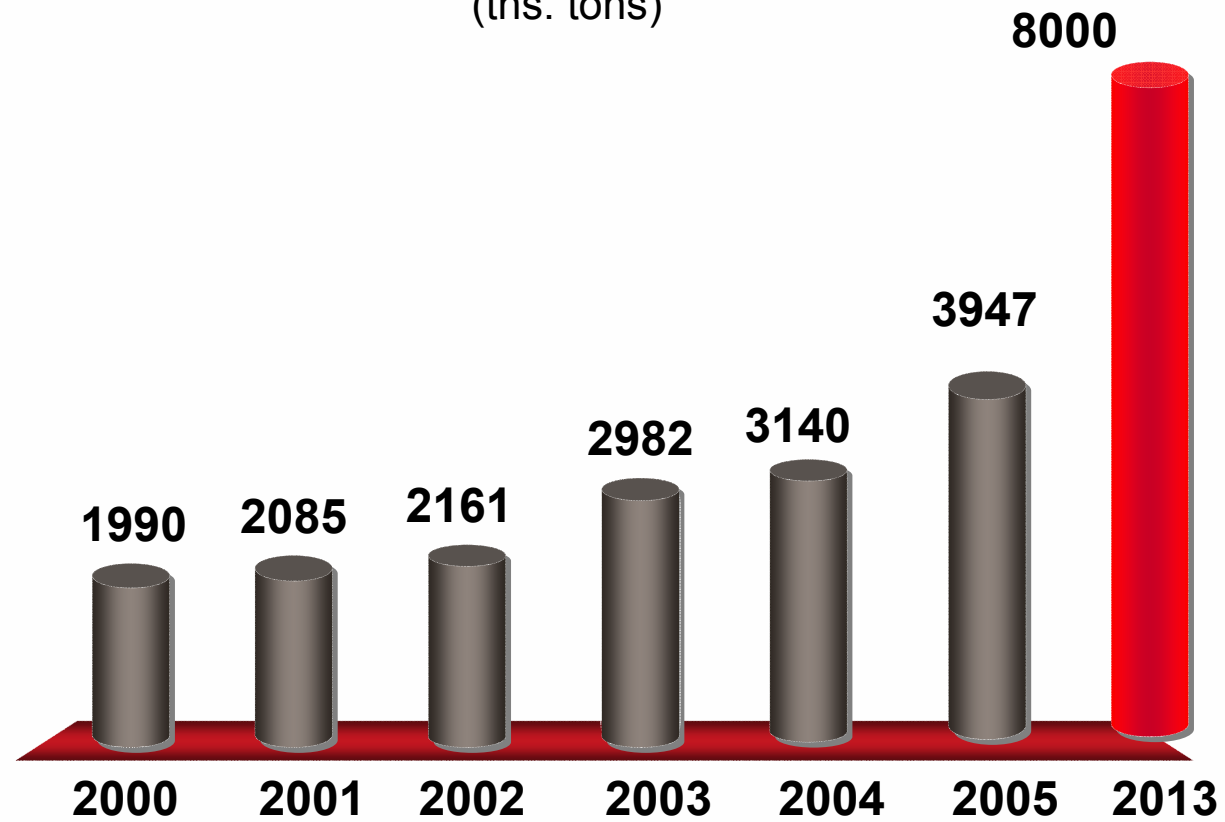
Access to Resources

- Up to 80% of bauxite resources belong to 5 countries - Guinea, Jamaica, Brazil, India, and Australia
- About 20 bln. tons of bauxite prospected worldwide
- The majority of deposits are in concession of large international aluminum companies
- In the last 2 years, the spot price on aluminum has increased 4 times and it keeps growing
- The main reason is the active development of the Chinese aluminum industry

RUSAL's Prospects for Self-Sufficiency in Terms of Raw Materials Supply



Alumina Output (ths. tons)



RUSAL's Investments into New Projects Related to Raw Materials



QAL Aluminum Smelter (Australia)

- Largest smelter in the world
- RUSAL's share 20%
- 22% increase of RUSAL's self-sufficiency in terms of raw materials supply

Komi-Aluminum Project

- Joint project with SUAL
- Output – 6 mtpa of bauxite, 1.4 mtpa of alumina
- The share of domestic resources increases from 40% to 80%



Pluses and Minuses of the Russian Aluminum Industry



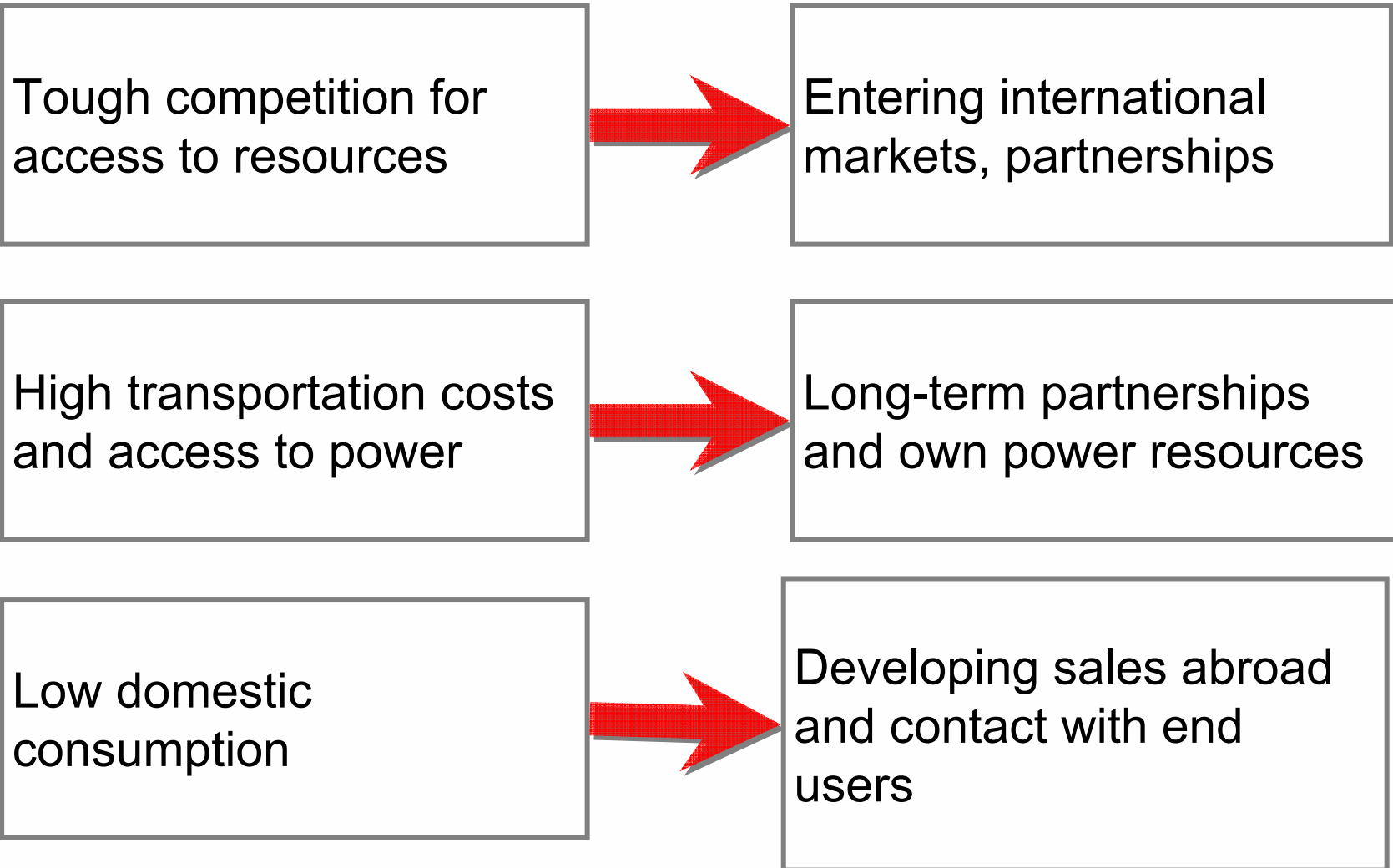
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- Abundant hydroresources
- Technology and domestic scientific developments
- Low capital investments into aluminum projects

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- High transportation costs
- Limited resources of raw materials
- Underdeveloped domestic market

Three Keys to Success



RUSAL Today



№ 1

producer of aluminum in the world

№ 1

in terms of output and performance

5

mln. tons of aluminum

8

mln. tons of alumina

\$ 8

bln. of investments over 10 years

Growth Strategy



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