

**Perspectives sur le Plomb et le Zinc –  
Previsions a Court Term et  
Developpements Futurs**

**Don Smale, Secretary-General, ILZSG**

**Journees Nationales du FDIM**

**23-25 November 2005,  
Marrakech**

# **ILZSG Overview**

**Established by UN in 1959**

**28 member countries**

**Promotion of market transparency**

**Provision of forum for industry and governments**

**In-depth research into issues of interest/concern**

**ILZSG**

# **ILZSG 50<sup>th</sup> SESSION**

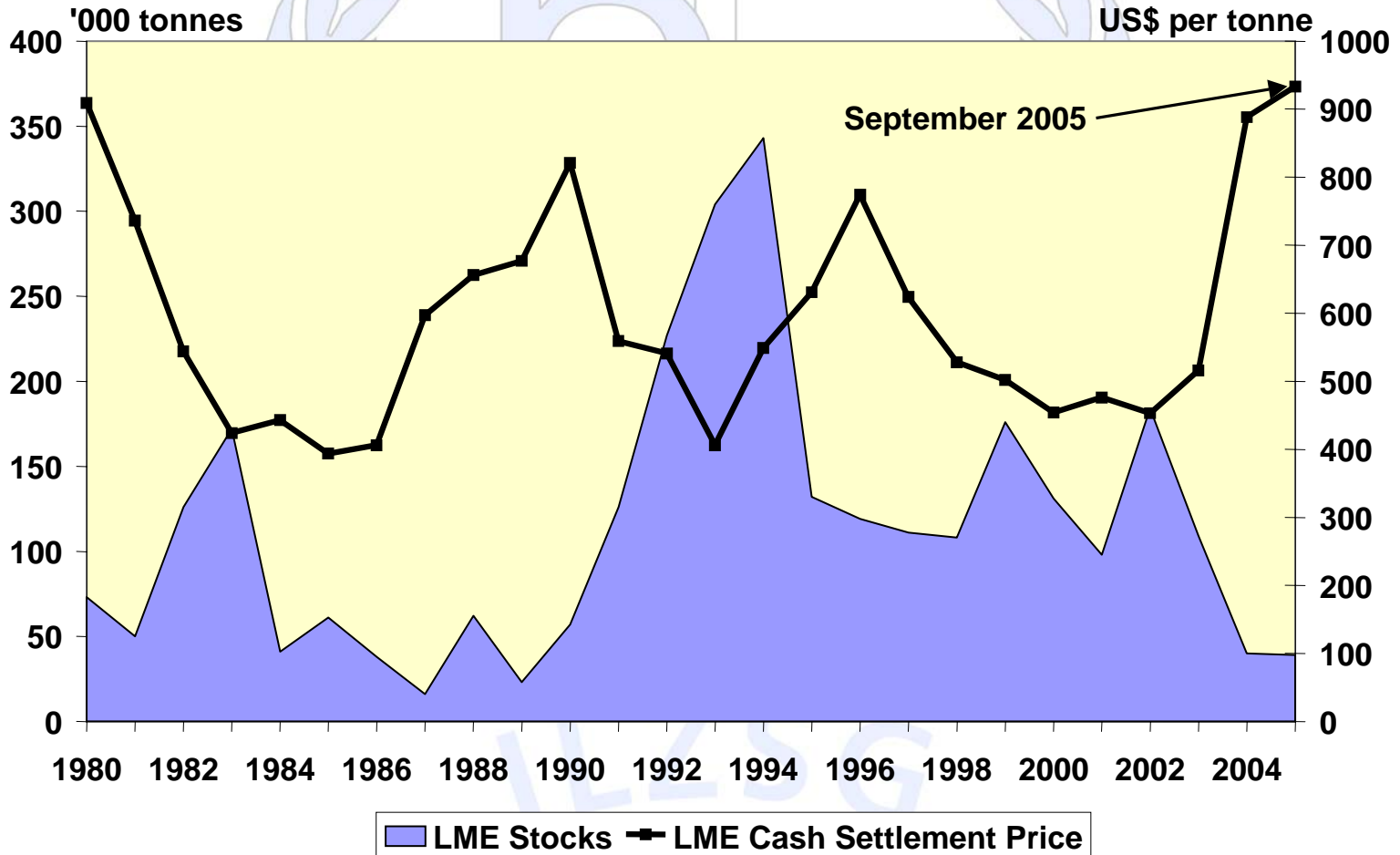
**London, 26 to 28 October 2005**

**Around 200 government and industry  
representatives attended  
Moroccan industry well represented**

**Please contact ILZSG Secretariat at  
[root@ilzsg.org](mailto:root@ilzsg.org) for information**

**ILZSG**

# Lead Stocks and Prices

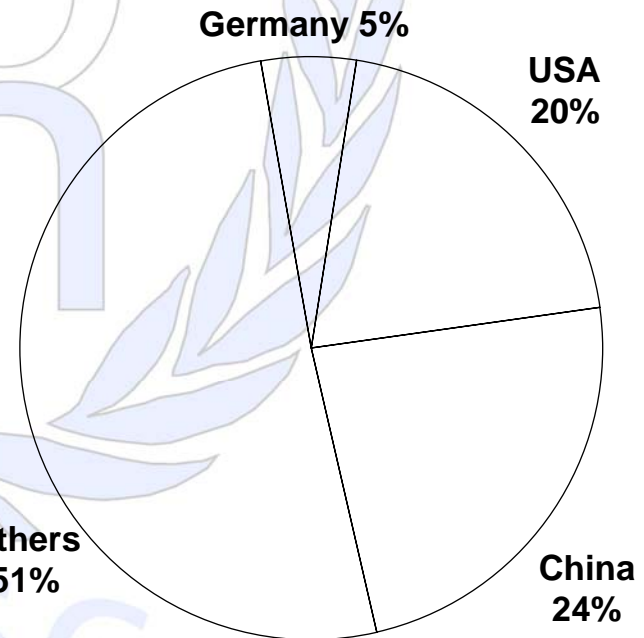


# World Lead Metal Usage

## Annual Change:

- 2005 +3.9%
- 2006 +3.0%

## 2006 Distribution



## World Lead Metal Usage

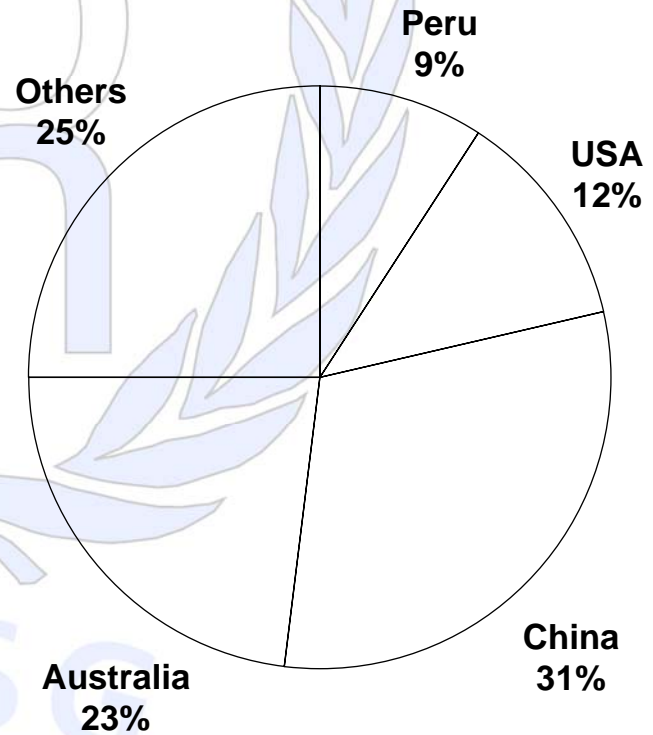
- Further growth in China of 20% in 2005 and 9% in 2006
- Continued decline in Europe
- Partial rebound in US

# World Lead Mine Output

## Annual Change:

- 2005 +8.1%
- 2006 +3.4%

## 2006 Distribution



# World Lead Mine Output

- 22% rise in Australia in 2005
- Increases in China and India
- Reopening of Kassandra and Trepca operations in Europe

## World Lead Metal Output

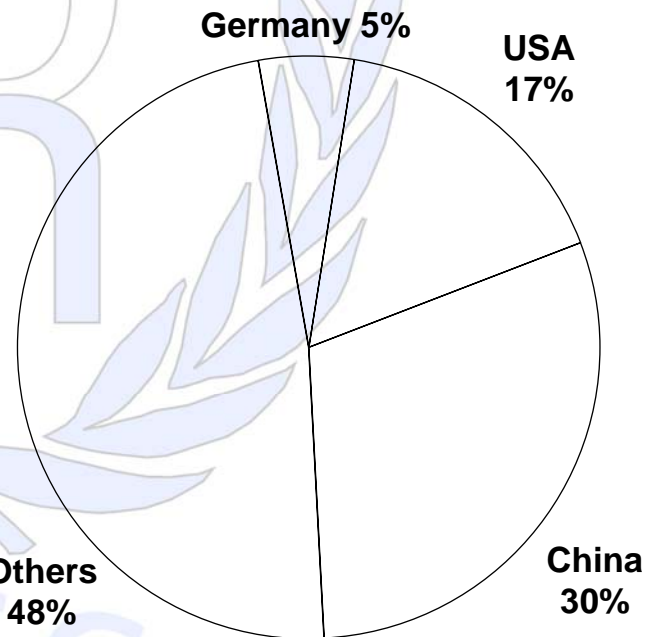
- 7.6% rise in Europe in 2005
- Increases in China, India, Korea and Malaysia
- Recovery of Canada and Morocco in 2006

# World Lead Metal Output

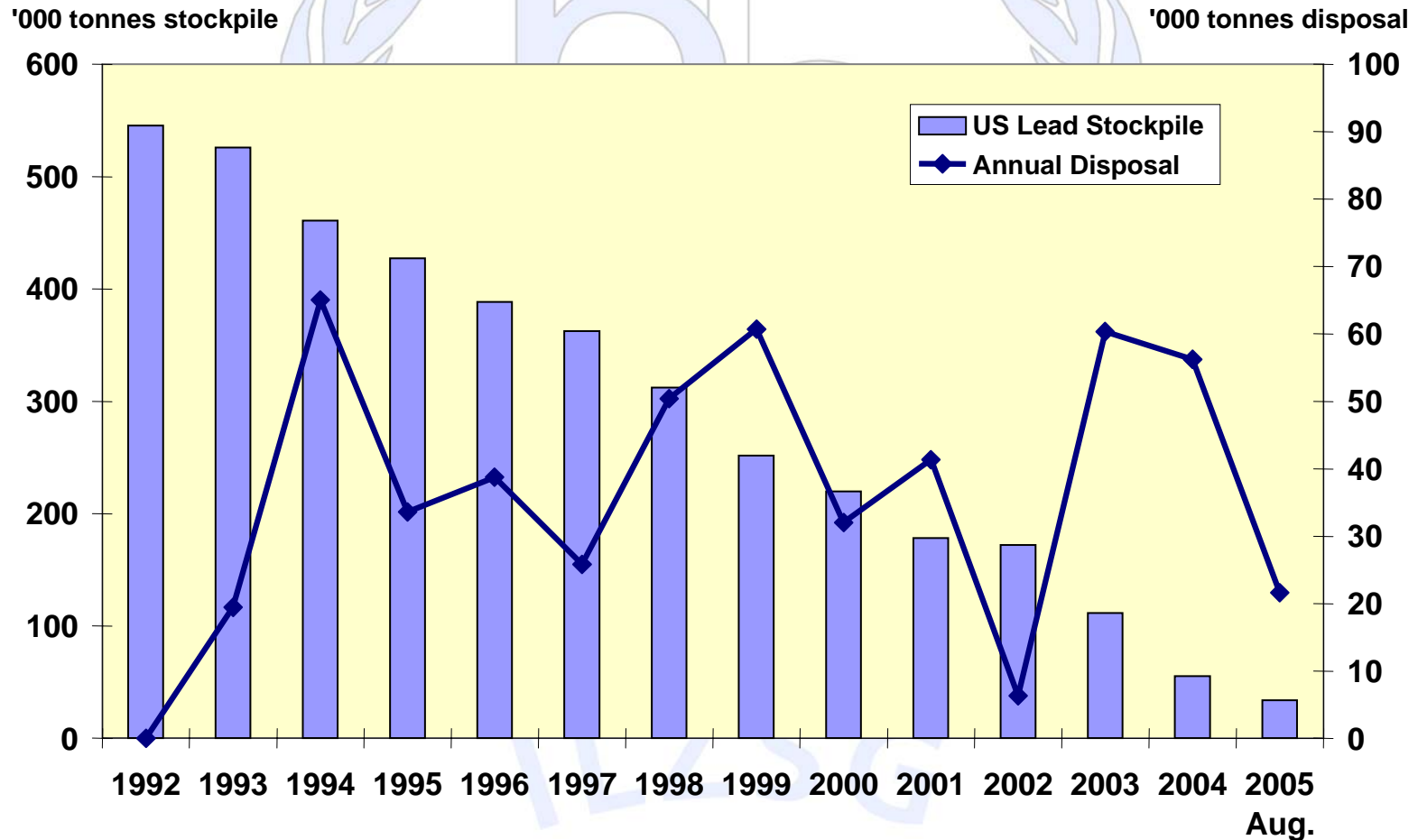
## Annual Change:

- 2005 +7.8%
- 2006 +3.4%

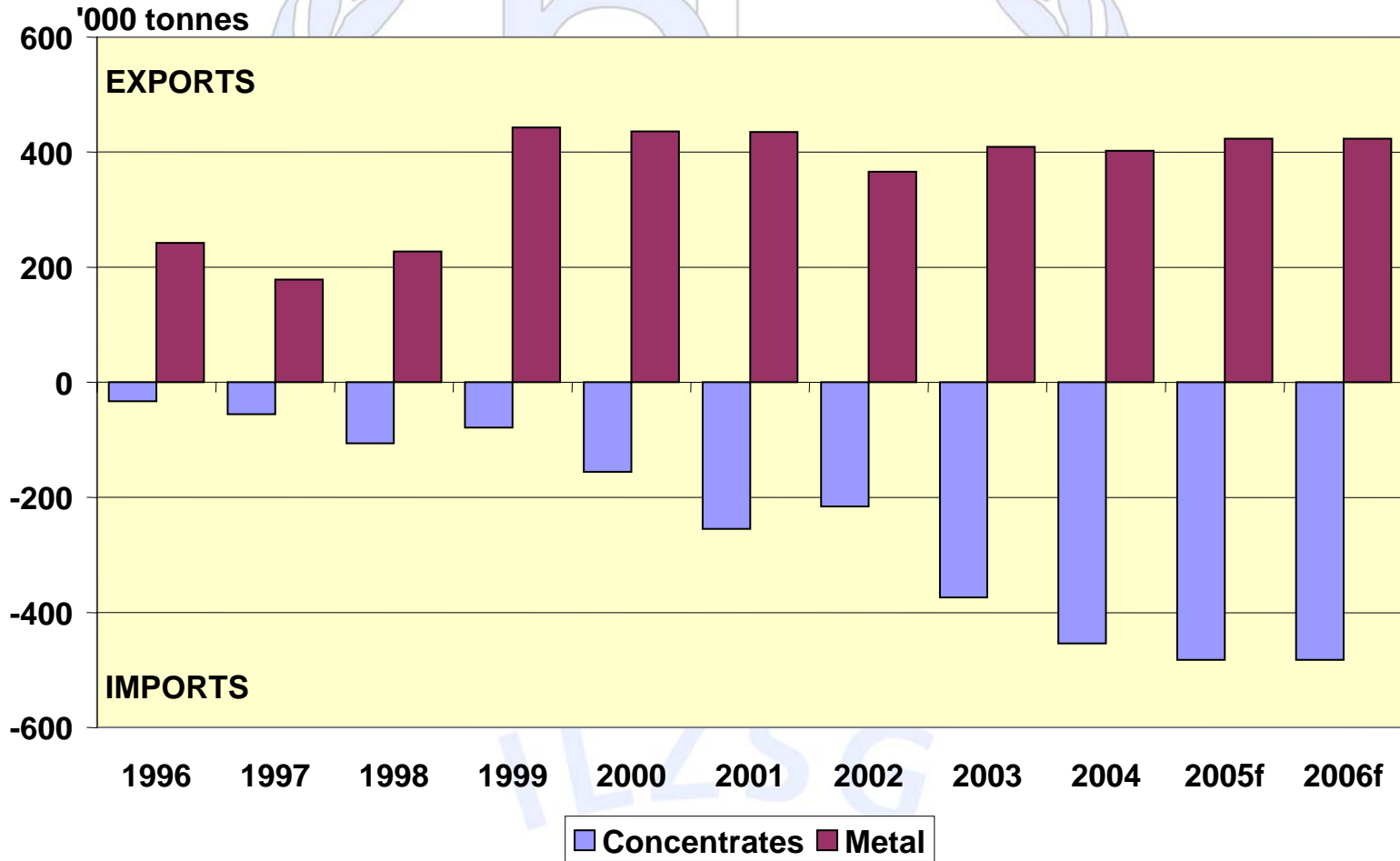
## 2006 Distribution



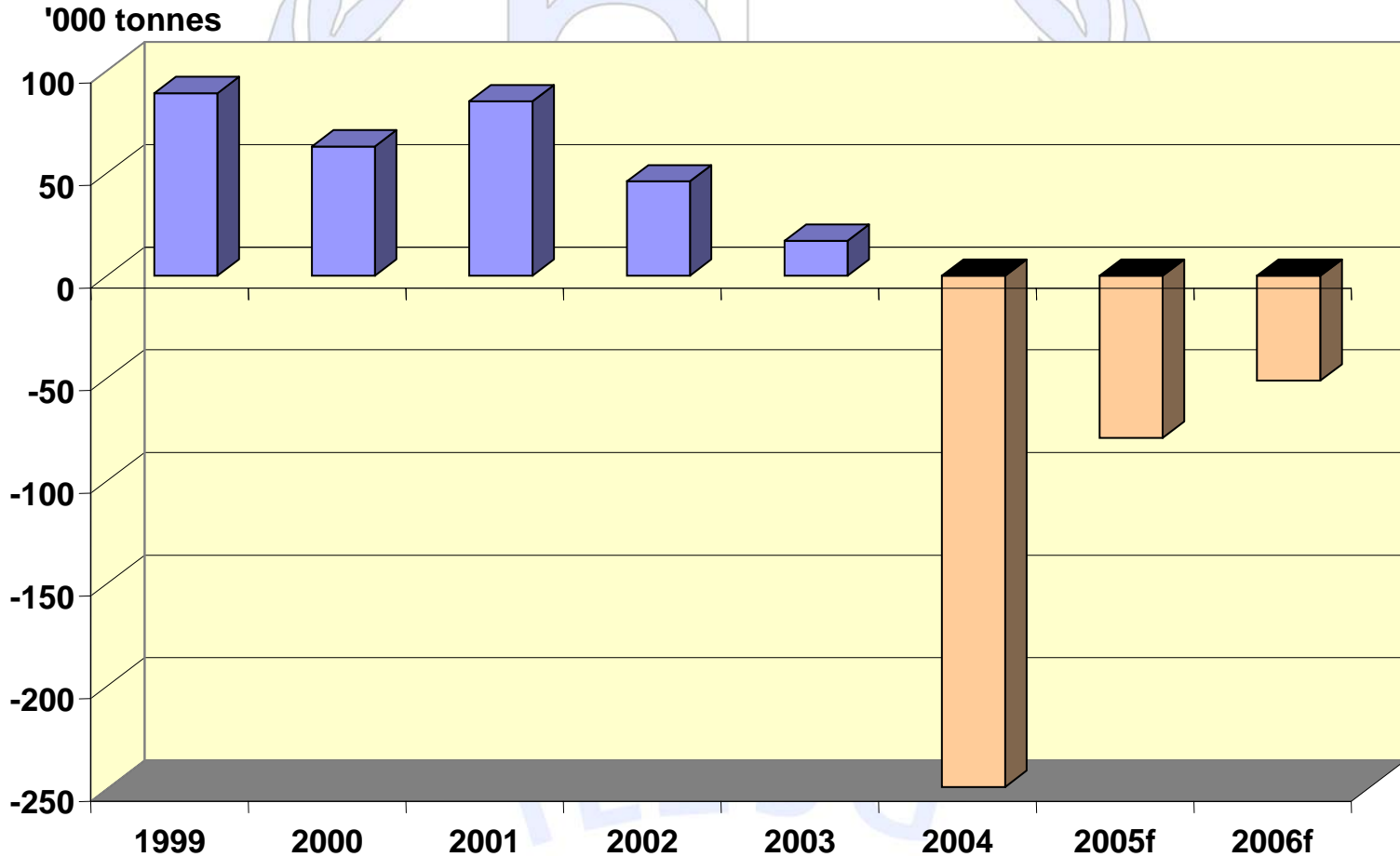
# US Lead National Stockpile



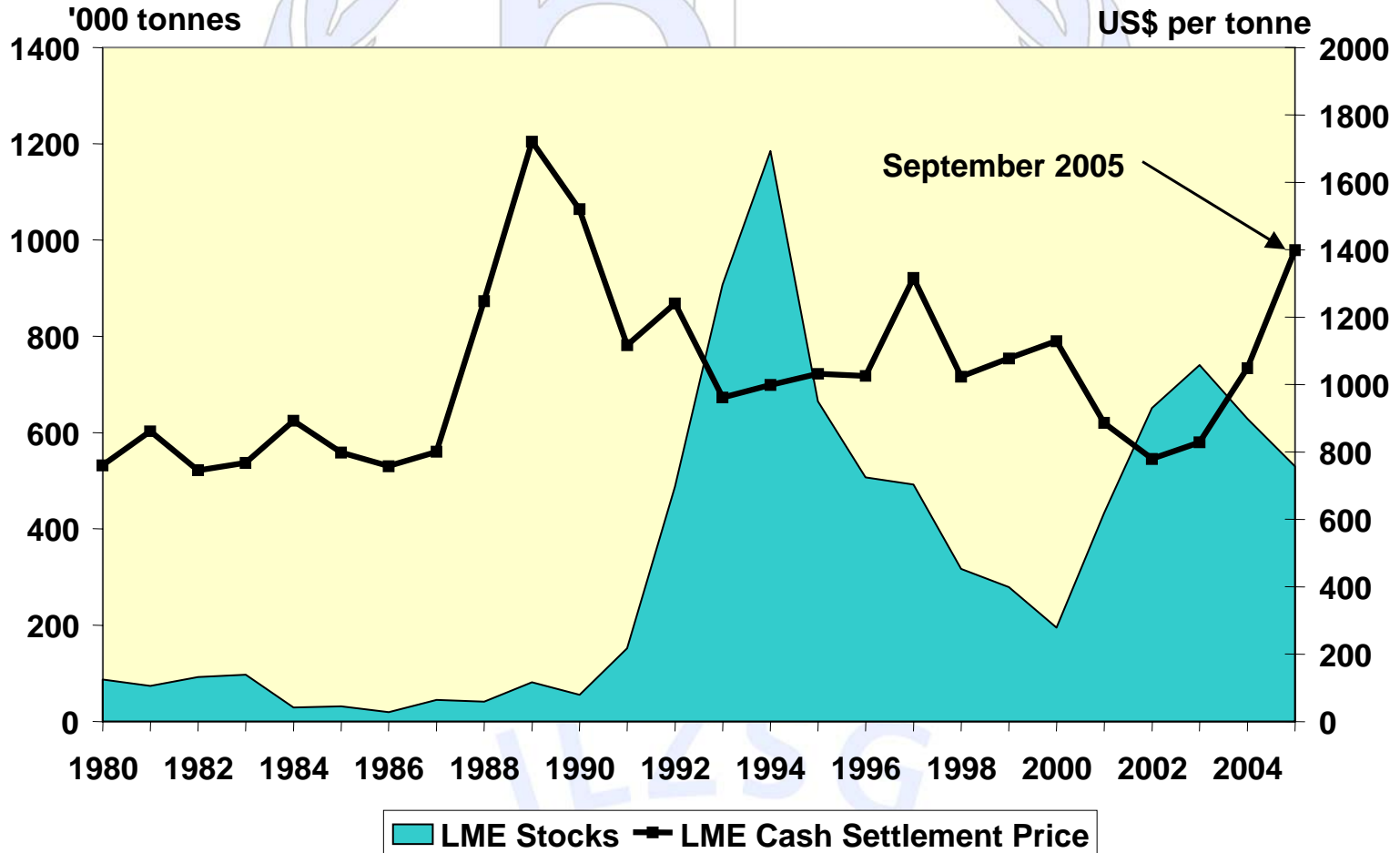
# China Lead Trade



# Lead Metal Western World Balance



# Zinc Stocks and Prices



# World Zinc Usage

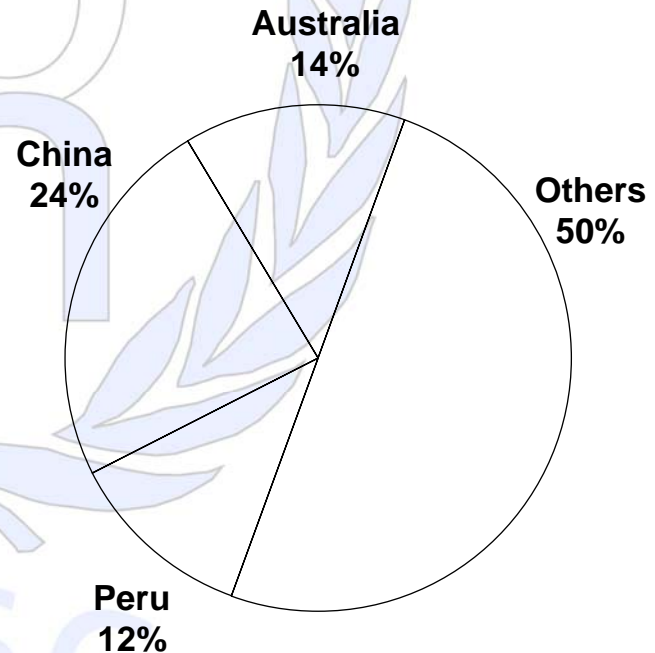
- In 2005 growth in China, India and Rep. of Korea will be balanced by reductions in Europe and USA
- Growth of 5.7% forecast in 2006

# World Zinc Mine Output

## Annual Change:

- 2005 +3.6%
- 2006 +4.2%

## 2006 Distribution



## World Zinc Mine Output

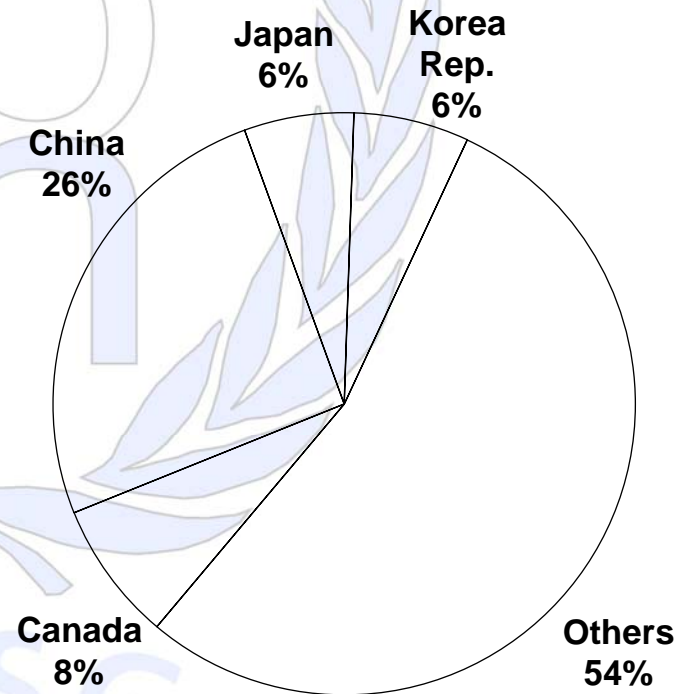
- Opening of Mount Garnet and Black Star in Australia and Lanping in China
- Expansion of Hindustan Zinc's Indian operations
- Production in Mongolia and Philippines

# World Zinc Metal Output

## Annual Change:

- 2005 +1.5%
- 2006 +3.5%

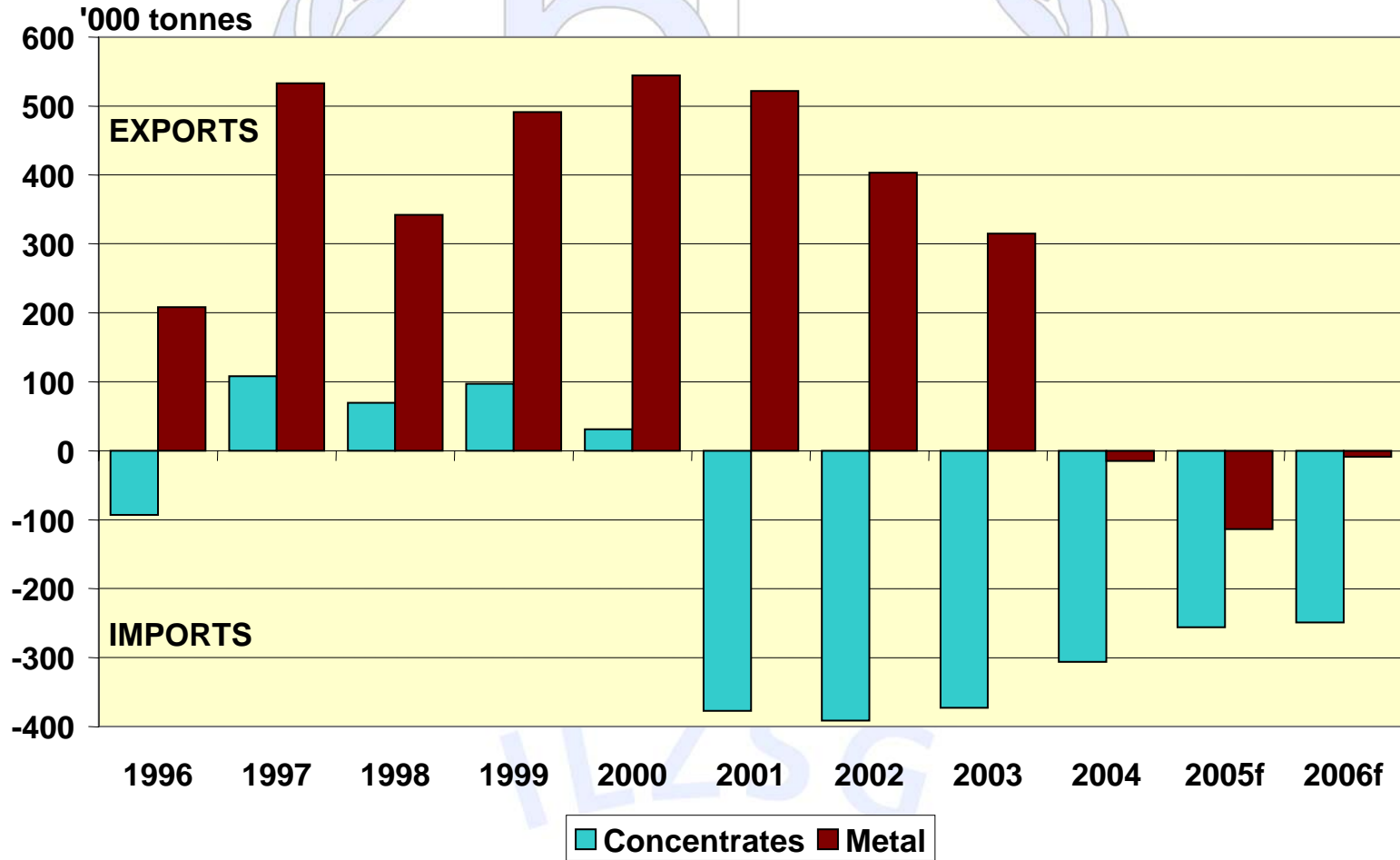
## 2006 Distribution



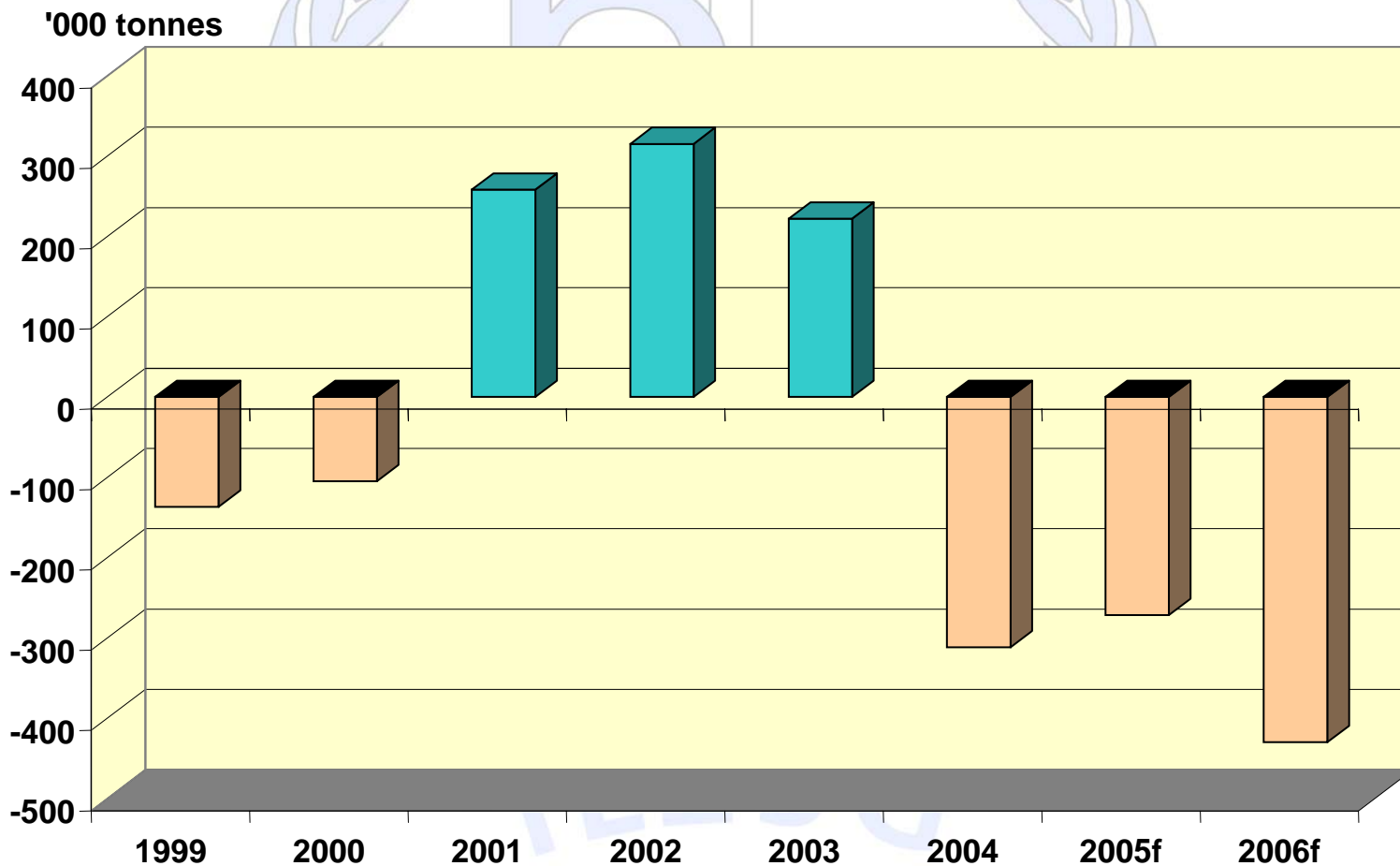
# World Zinc Metal Output

- Opening of 100kT refineries at Lanping and Jiyuan in China
- Commissioning of 170kT refinery at Chanderiya in India
- Increases in Brazil, Japan, Kazakhstan, Namibia and Vietnam

# China Zinc Trade



# Zinc Metal Western World Balance



# China is No.1 in Zinc

2004 Metal  
Production  
(000 tonnes)

**China**

**2518**

Canada

805

Japan

635

2004 Metal  
Consumption  
(000 tonnes)

**China**

**2470**

USA

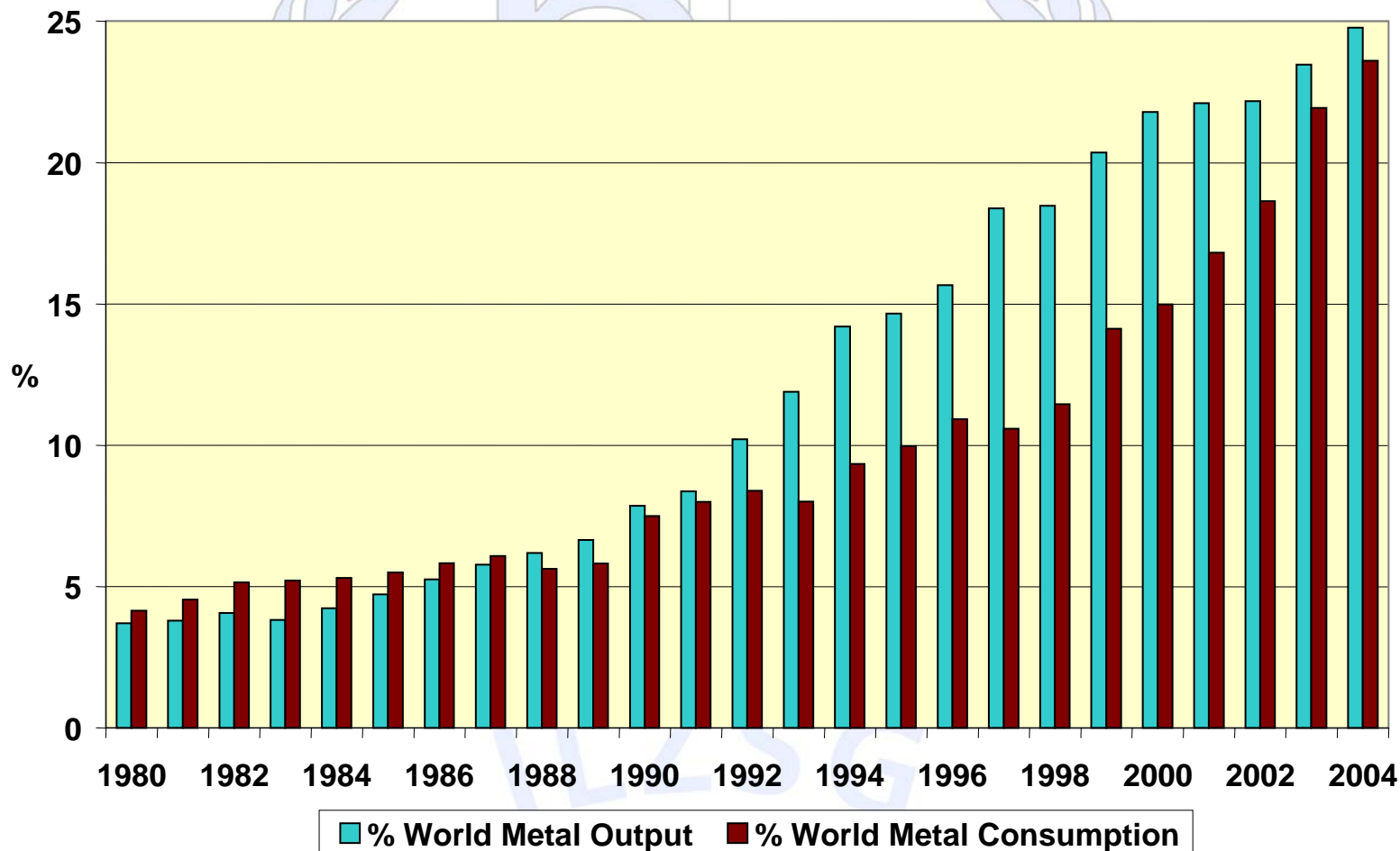
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Japan

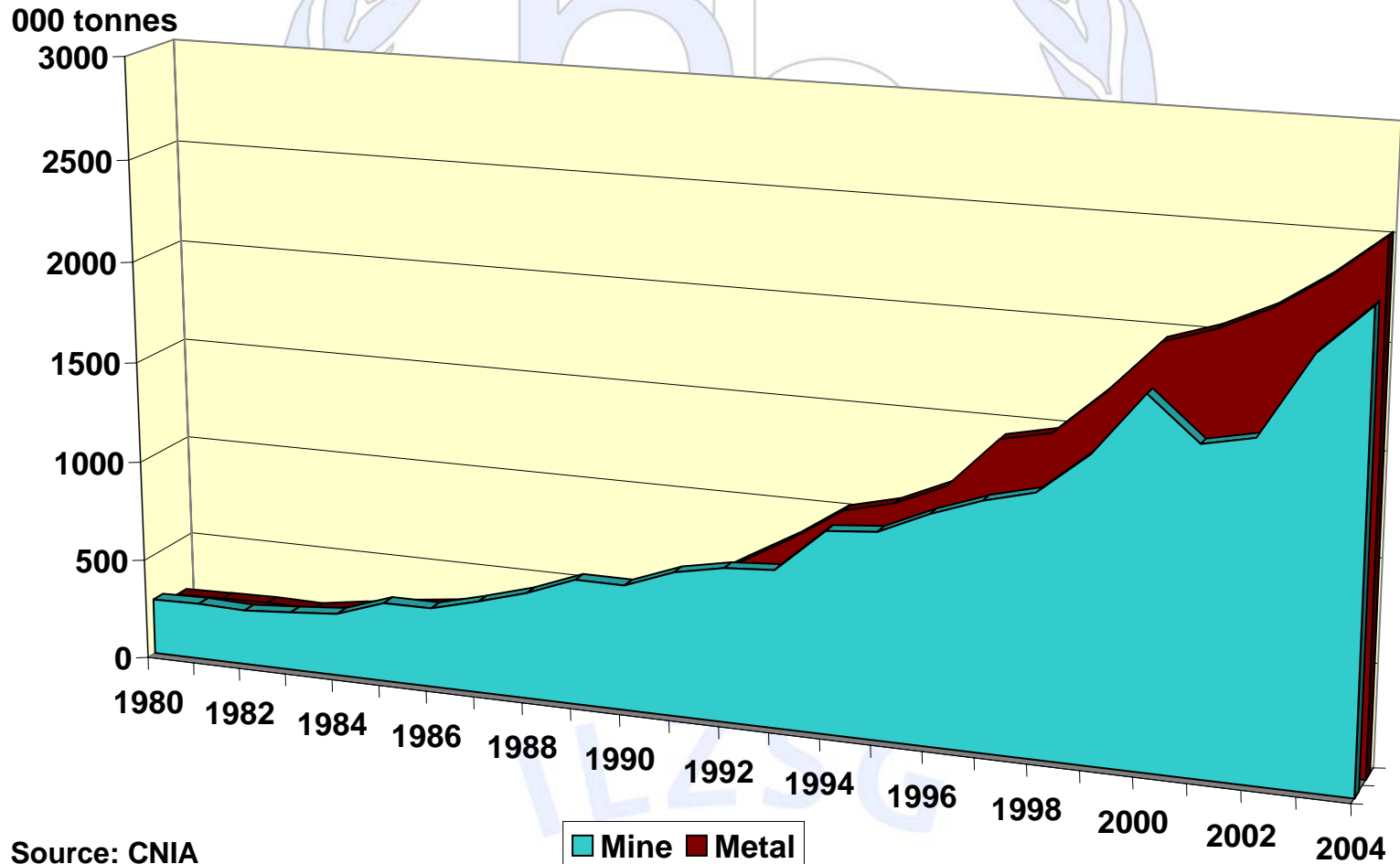
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# China's Growing Influence in Zinc



# Chinese Zinc Mine and Metal Production 1980-2004



Source: CNIA

# Unique Structure of Chinese Zinc Industry

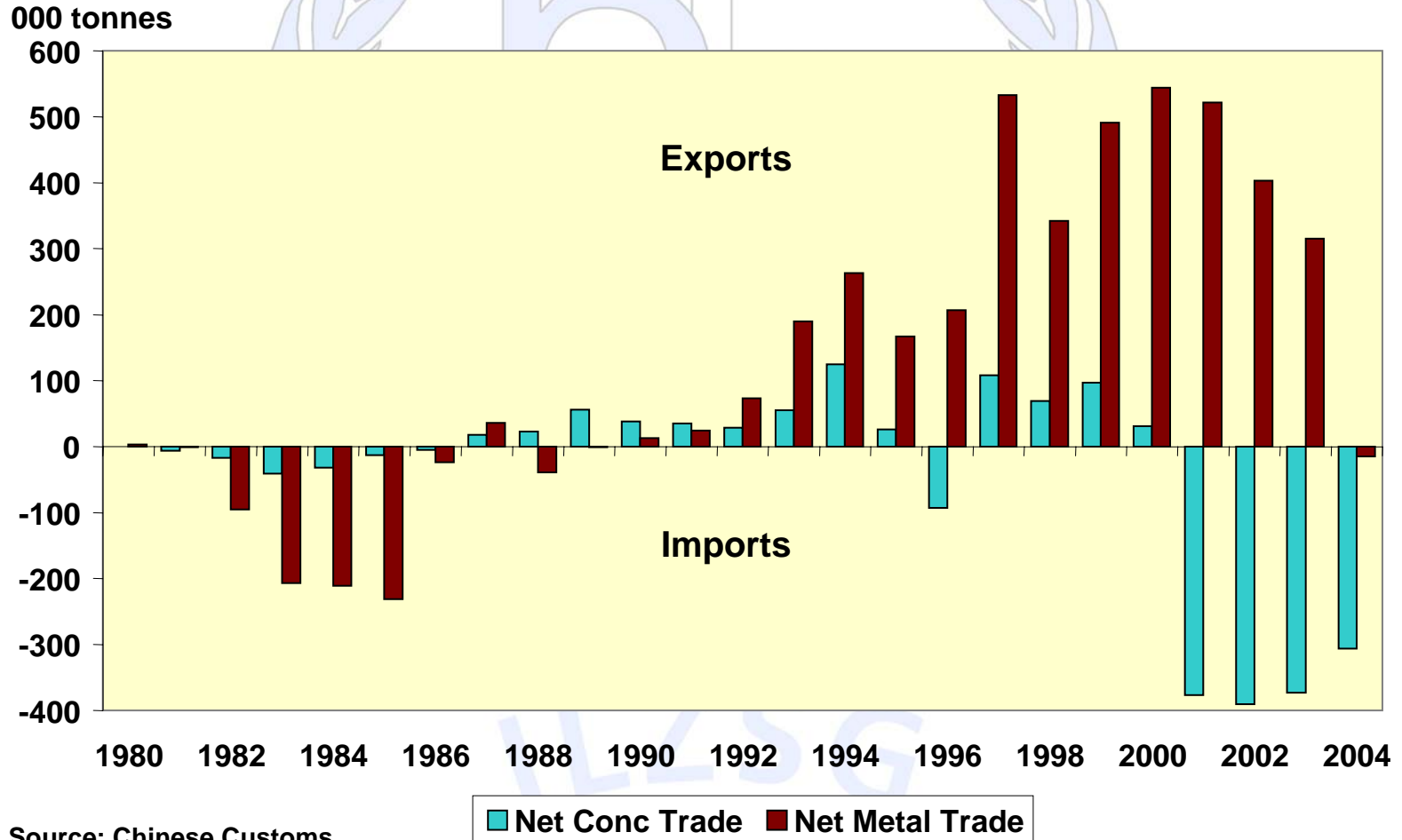
- More zinc mines and smelters in China than rest of the world combined
- Majority have capacity of less than 10,000 tonnes/year

# 'Big 4' Chinese Zinc Metal Producers

Producer	Province	Production (000 tonnes)		
		1997	2000	2002
Lingnan	Guangdong	118	167	170
Huludao	Lioaning	318	324	222
Zhuzhou	Hunan	243	277	266
Baiyin	Gansu	121	143	135
<b>Total Major Producers</b>		<b>800</b>	<b>911</b>	<b>793</b>
Total China		1434	1957	2106
%share of major producers		55.8	46.6	37.7

Source:CNIA/Antaike

# China's Net Trade in Zinc Concentrates and Metal 1980-2004



Source: Chinese Customs

■ Net Conc Trade ■ Net Metal Trade

## China Trade

- Chinese imports in 2005 are forecast at ¼ million tonnes
- Much of this will be sourced from Kazakhstan
- Exports will continue to decline

# Zinc First Uses in China



Source: Antaiko/ILZSG

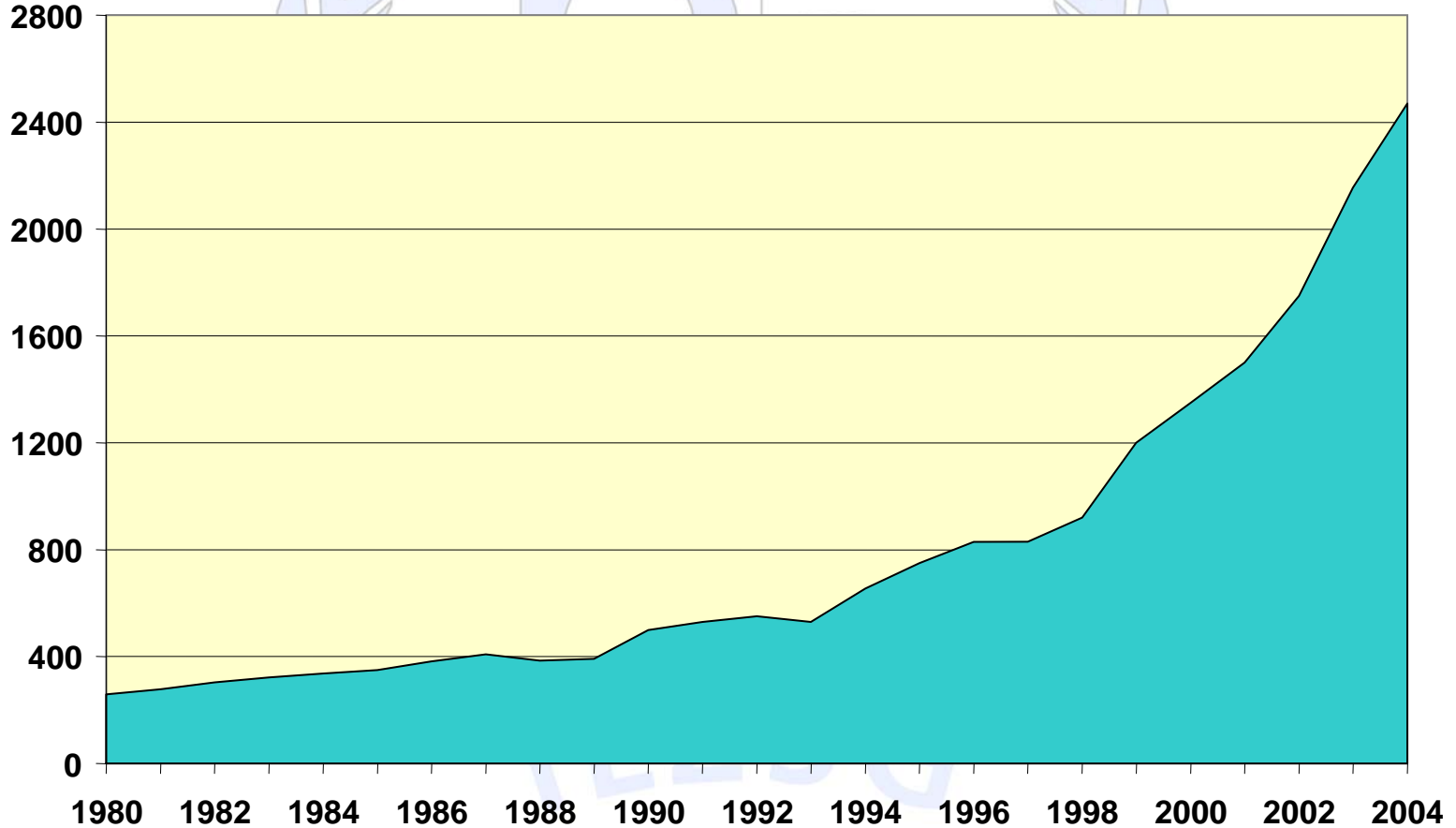
# Different Pattern of Zinc Usage in China

- Zinc strip consumed in dry battery industry (China accounts for 1/3 of world output)
- Lithopone used in rubber and plastics industries
- Growth in use of galvanized steel relatively recent

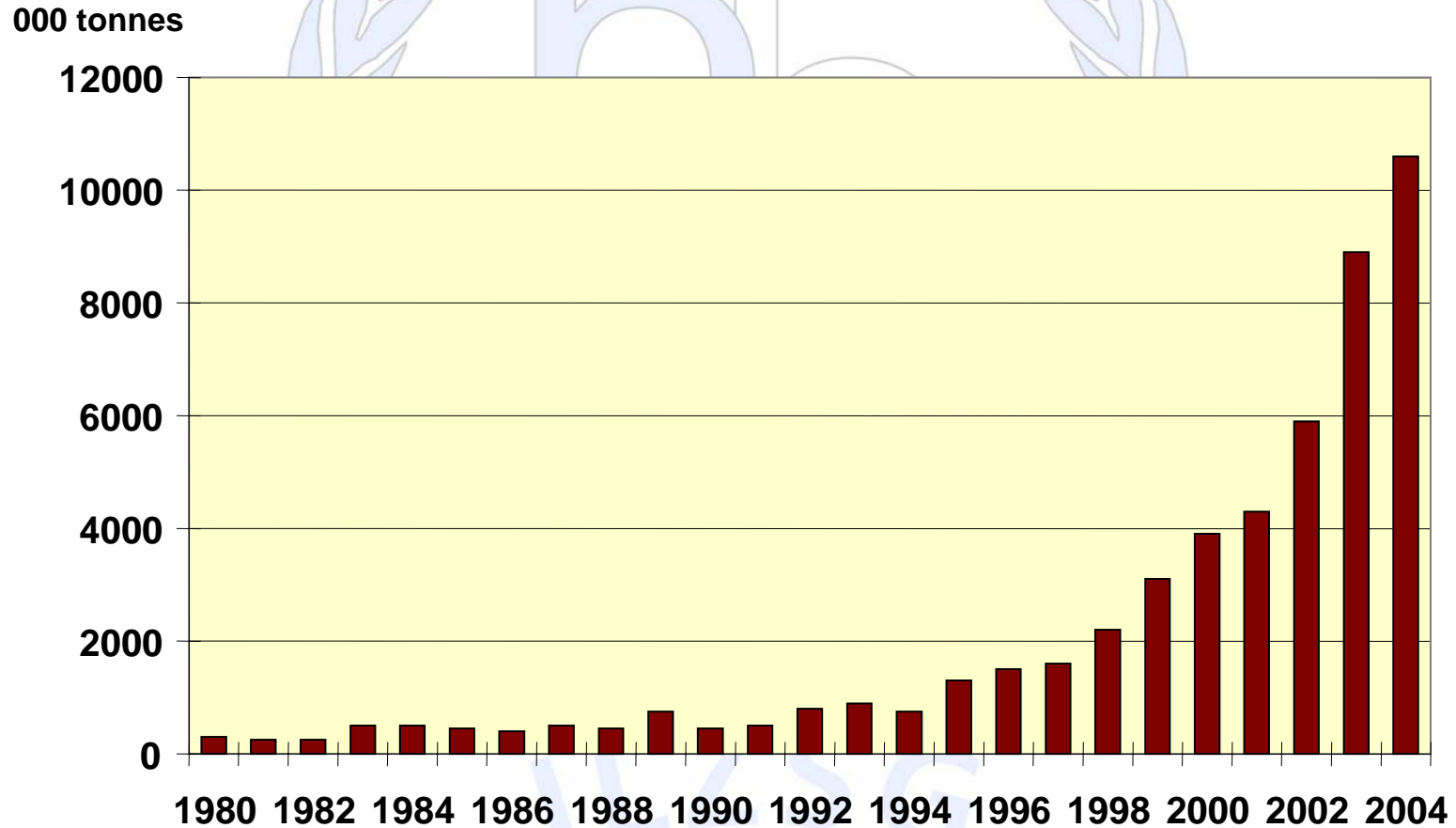
# Chinese Zinc Consumption 1980-2004

000 tonnes

Source: CNIA



# Apparent Consumption of Galvanized Steel in China

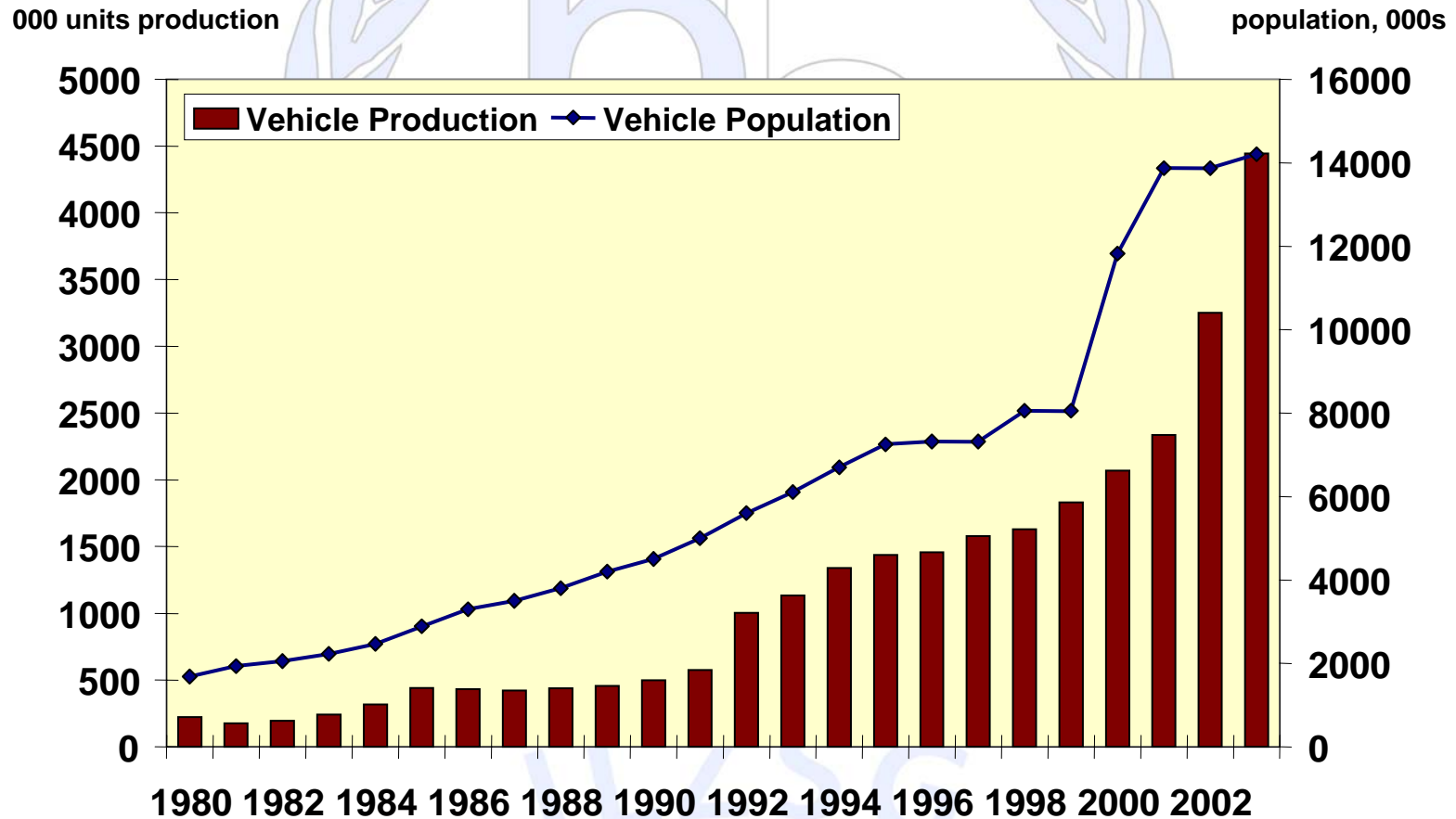


Source: China Metals

## Growth Prospects are Good

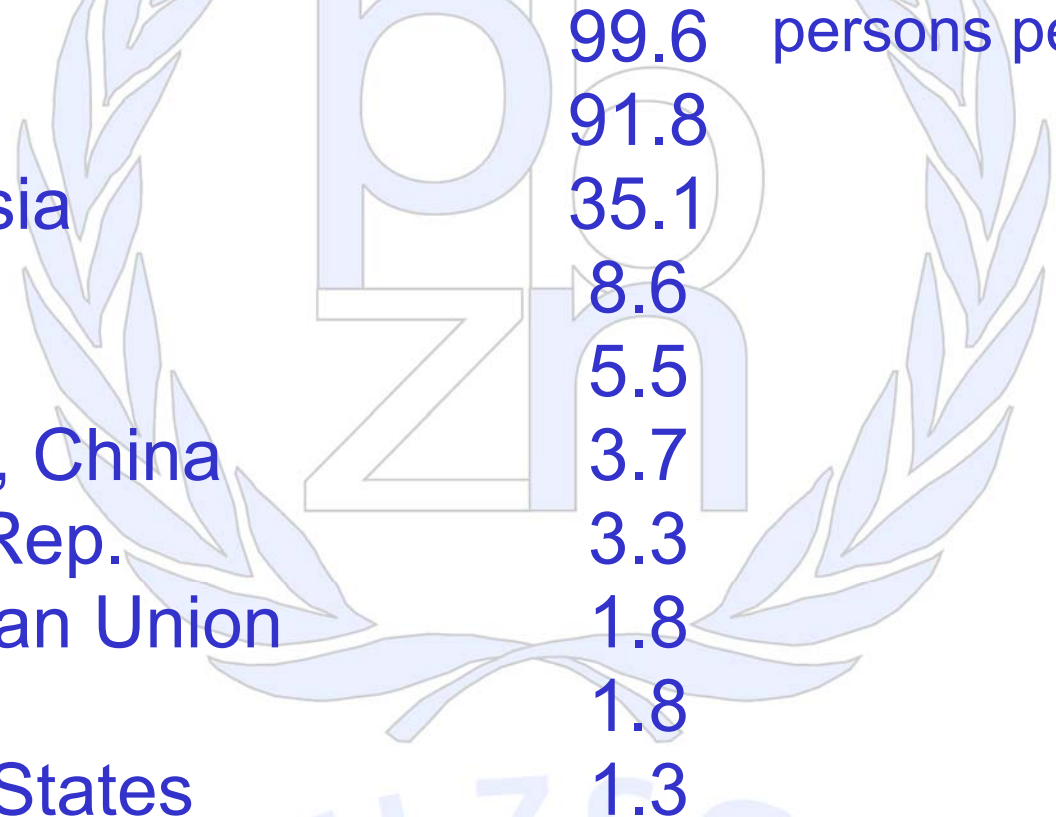
- In terms of floor space construction activity has doubled in past 5 years
- Housing starts have risen by  $\frac{1}{3}$
- 2008 Olympics in Beijing
- 2010 World Exposition in Shanghai
- Production of fridge freezers rising by 15% per year
- Production of air conditioning units rising by 30% per year

# Chinese Vehicle Population and Production 1980-2003



Source: China National Automotive Industry Corp/SMMT

# Vehicle Population Densities 2003



India	99.6	persons per vehicle
China	91.8	
Indonesia	35.1	
Brazil	8.6	
Mexico	5.5	
Taiwan, China	3.7	
Korea Rep.	3.3	
European Union	1.8	
Japan	1.8	
United States	1.3	

Source: SMMT

## Conclusions – for zinc & lead

- Market fundamentals to continue to be main price determinant
- China will be major influence on fundamentals
- Hedge/pension funds impact only on short term trends



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