



# Smelters

Capital Markets Day 6 September 2011

Svante Nilsson

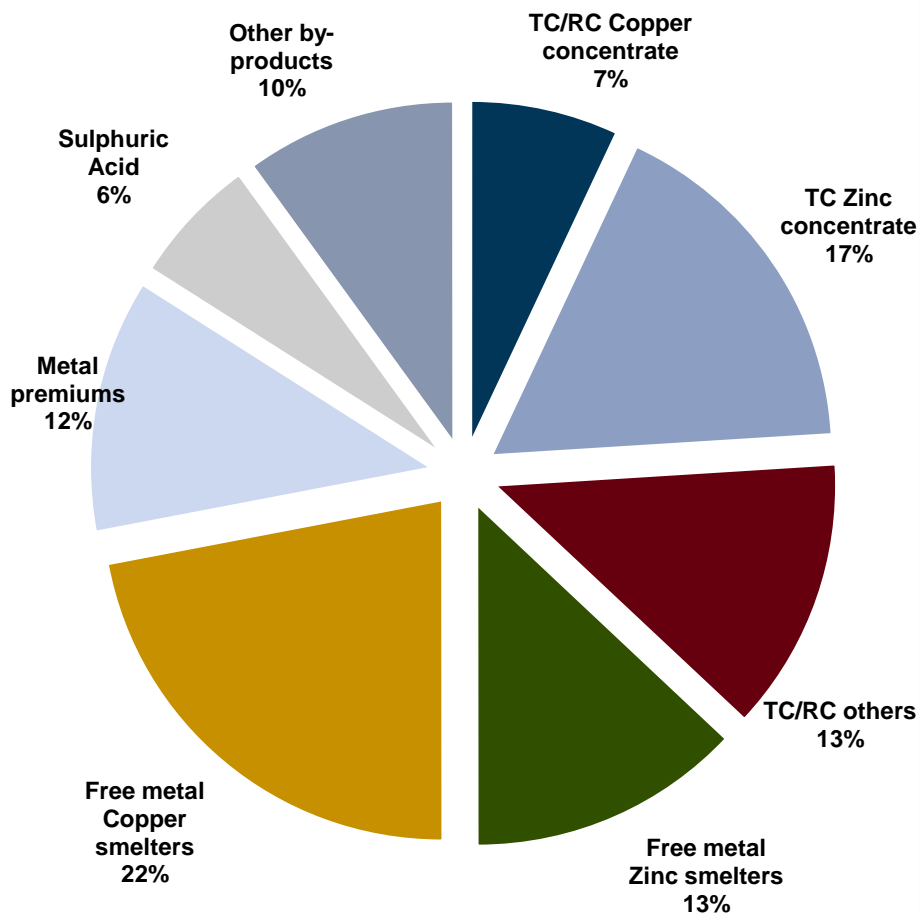
President Business Area Smelters

# Strategic Focus

- **Cost Position improvements**
  - New Boliden Way
- **Secondary Raw Materials**
  - E-scrap expansion
  - Continuous improvements

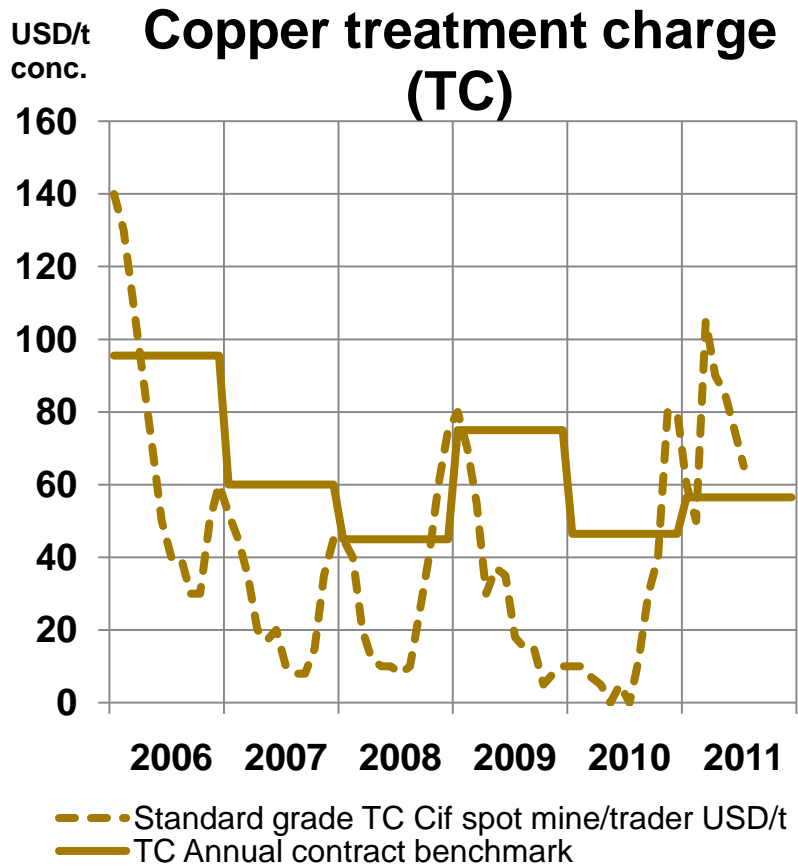


# Gross Profit distribution



Gross Profit component	Contains
TC/RC Copper concentrate	TC/RC on primary concentrate feed
TC Zinc concentrate	TC on primary concentrate feed
TC/RC Others	Mainly TC on Ni-concentrate and SRM
Free metal Zinc smelters	Over recovery in zinc smelters – mainly zinc not paid for
Free metal copper smelters	Over recovery in copper smelters – metals are copper, gold, silver, lead and zinc
Metal premiums	Paid above LME price
By-products	Acid, PGM-materials, Cu- and Ni-sulphate, Aluminium flouride

# Copper TC

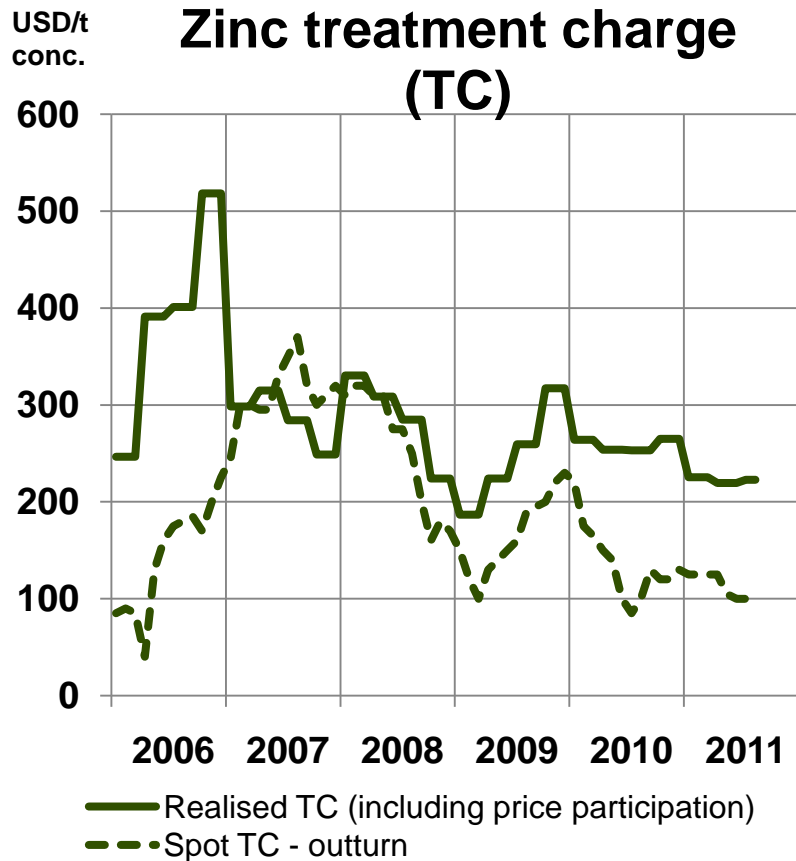


Source: © CRU (www.crugroup.com)

- Spot terms above bench-mark for one year.
- Chinese started to come back to the spot market in little scale

TC=USD/DMT (Conc.)  
RC= Usc/lb (Cu)

# Zinc TC

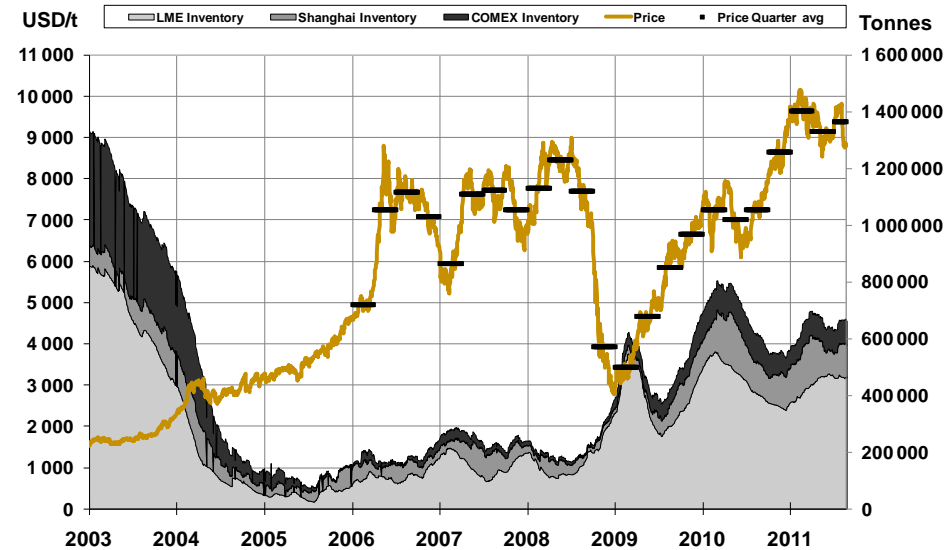
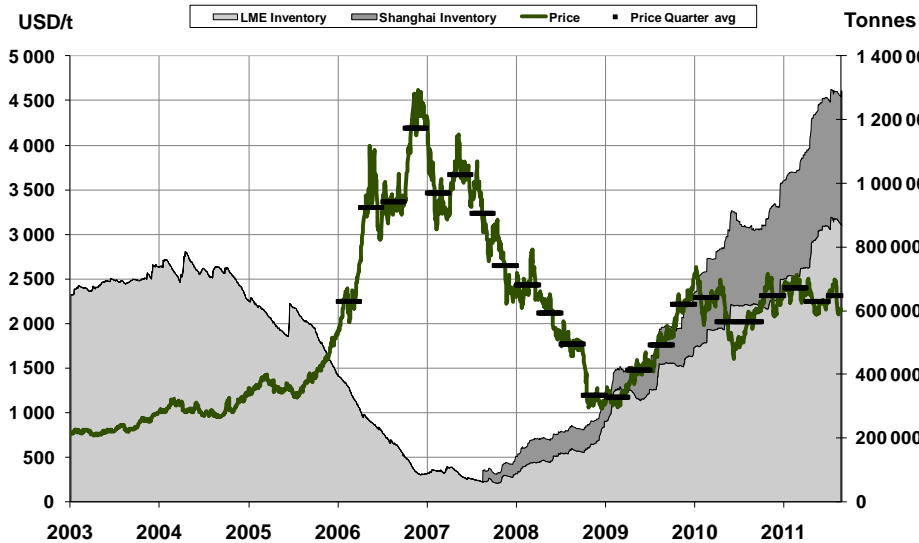


Source: © CRU ([www.crugroup.com](http://www.crugroup.com))

- Spot TC significantly below benchmark for a longer period

TC=BaseTC +- escalator  
USD/DMT

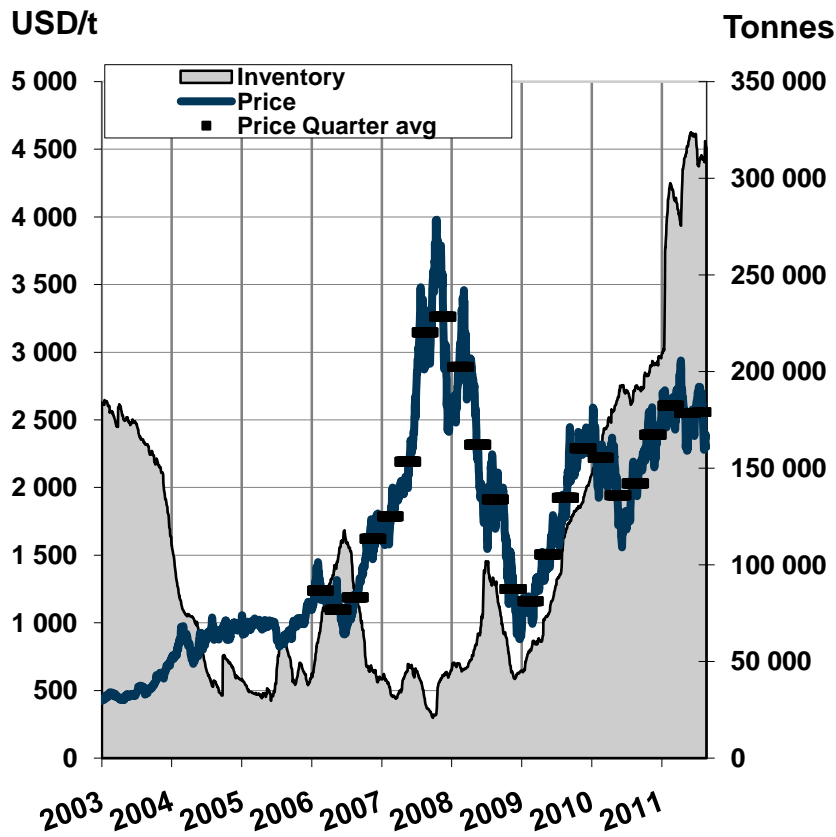
# Zinc and Copper Price



- Zinc price on high level in spite of growing stocks

- Copper price on high level. Stock levels stable

# Lead price



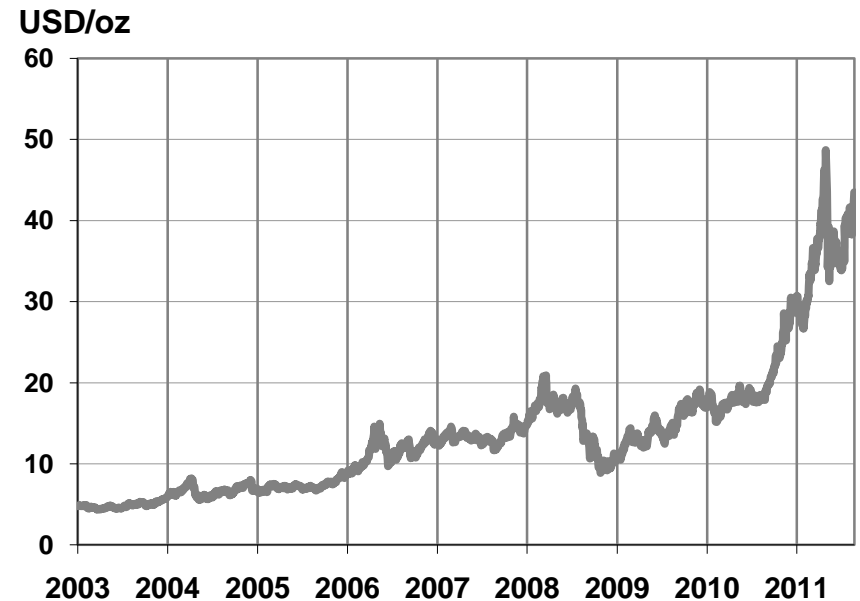
- Positive outlook for lead
  - E-bikes
  - More cars
  - AGM-batteries
  - Lead mines depleting



# Gold and Silver prices



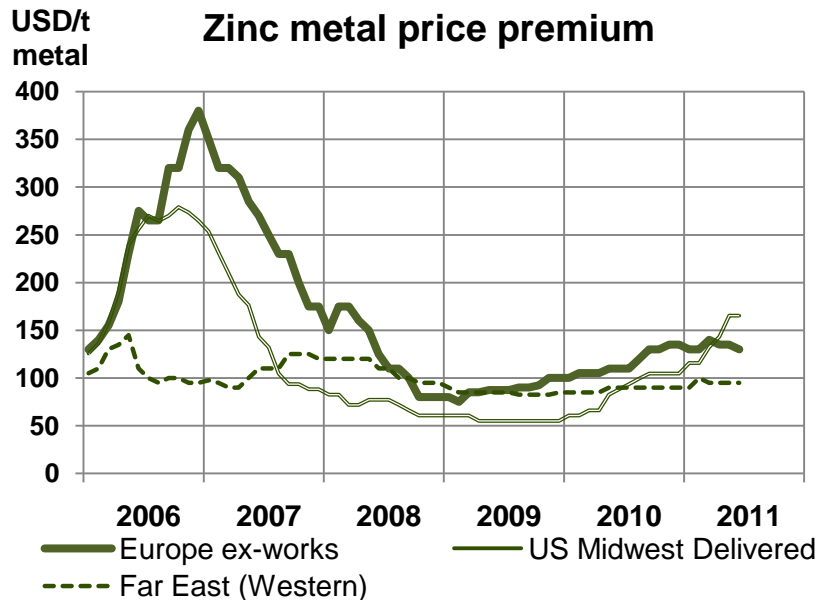
- Increasing Gold production
  - Kankberg
  - Aitik
  - Expansion in e-scrap



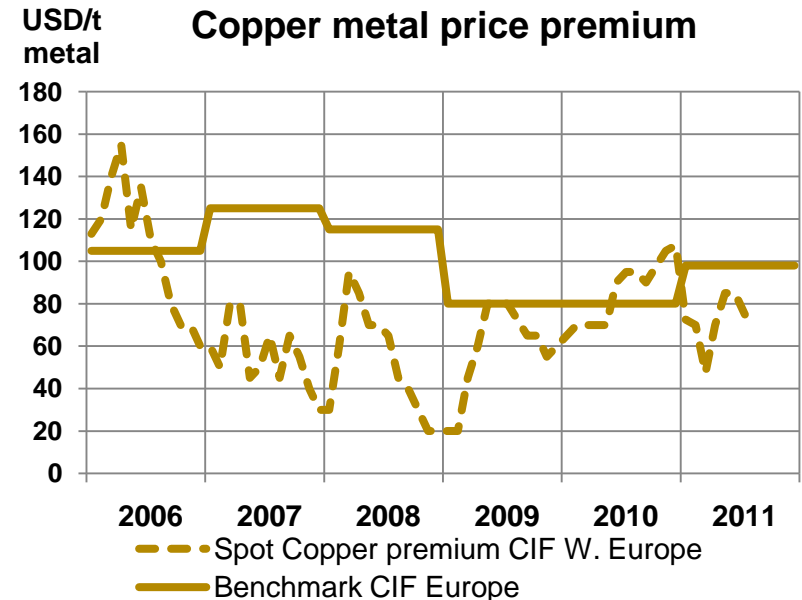
- Increasing Silver production
  - Garpenberg
  - Expansion in e-scrap



# Metal Premiums



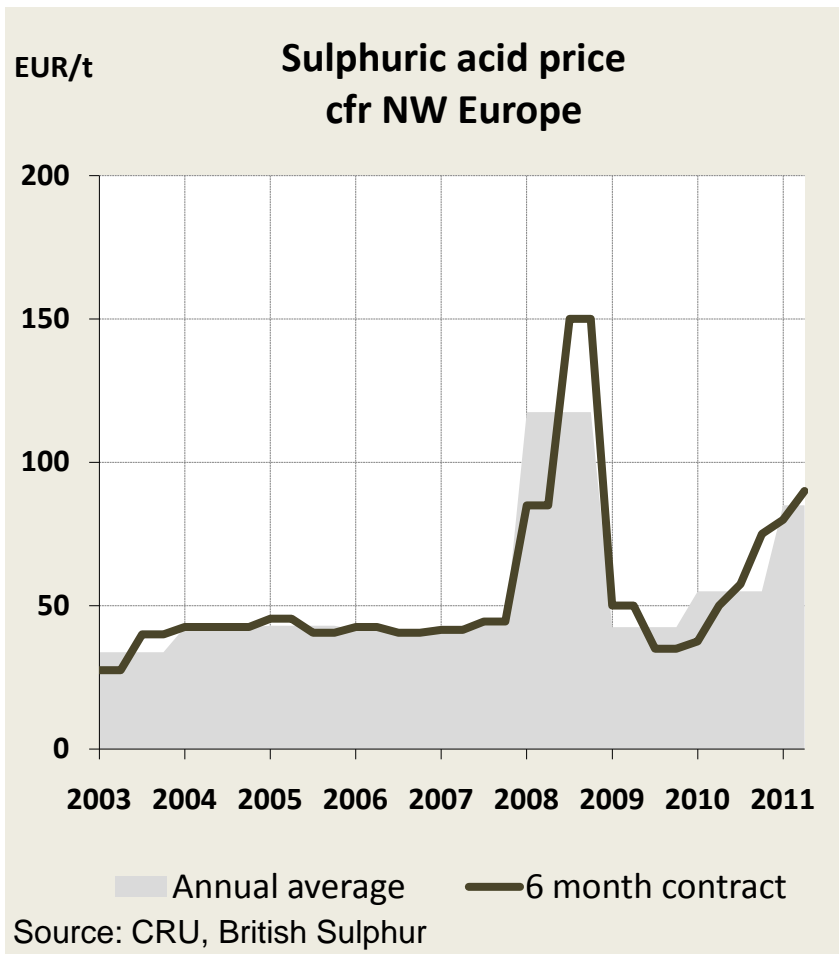
- Metal demand and premiums are holding up



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# Sulphuric Acid Price Development



- Sulphuric acid prices holding up
- Vulnerable for business climate and expansions in sulphur burning

# Rönnskär

- NBW
- Focus on Secondary Raw Materials
- E-scrap expansion
- Lead



# Harjavalta

- Improved stability
- Ni-concentrate
- Secondary Raw Materials



# Kokkola

- NBW
- De-bottle necking



# Odda

- Improved stability
- Cost improvements





# KPI's

- **Productivity improvements**
  - 7 % (R12 y-o-y)
- **Cost reduction**
  - 9 % (R12 y-o-y)
- **Increased secondary feed**
  - 16 % (y-o-y)





## Expansion of E-scrap at Rönnskär

**BOLIDEN**



# E-kaldo overview



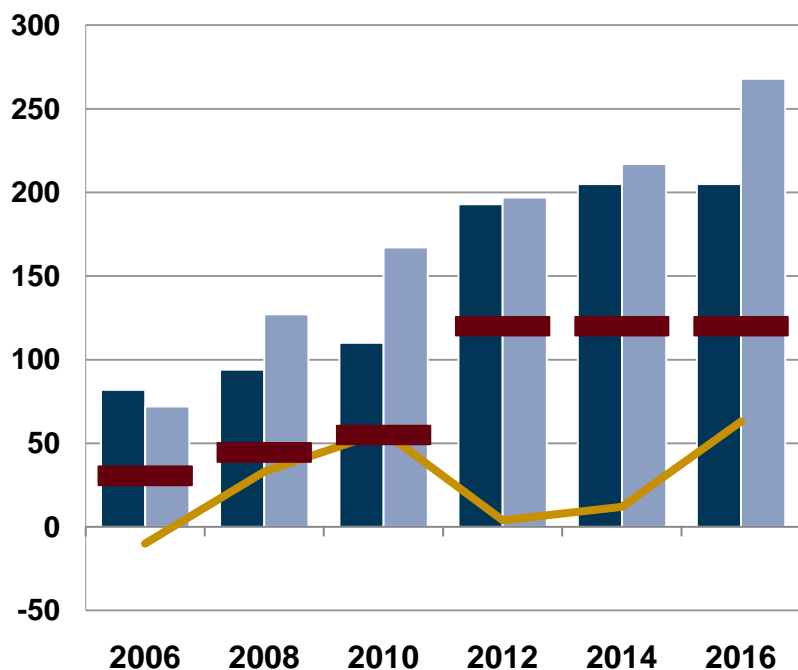
**BOLIDEN**

# Materials handling - overview



**BOLIDEN**

# E-scrap in Europe



- E-scrap capacity
- E-scrap availability
- Bolidens share of capacity
- Net availability

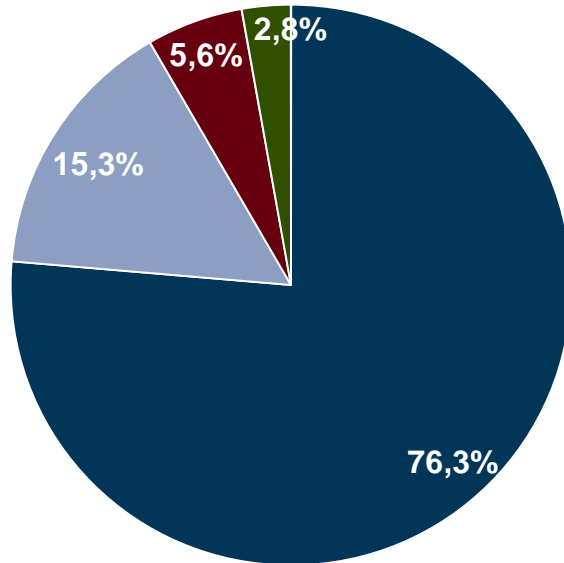
## Announced expansions in Europe

Capacity	2008	2012
Boliden	45,000	120,000
Aurubis	20,000	30,000
Umicore	27,000	40,000



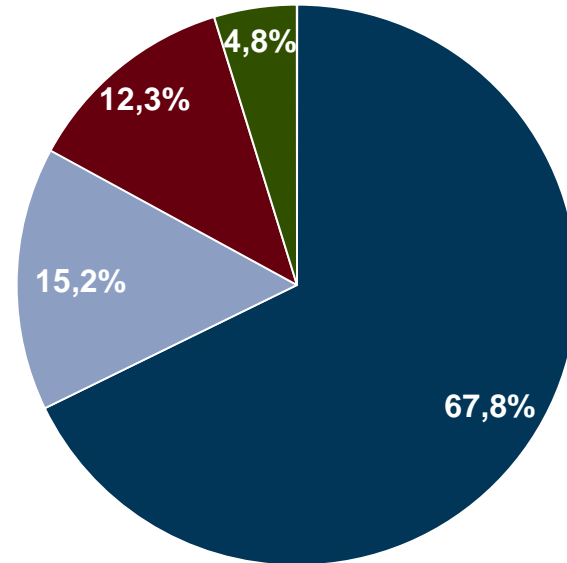
# Primary and secondary materials treated at Rönnskär

Before expansion



- Copper concentrate
- Other secondary
- E-scrap
- Lead material

After expansion



- Copper concentrate
- Other secondary
- E-scrap
- Lead material



# E-scrap expansion - project status

- Capex 1.3 SEK bn – on plan
- Commissioning Q1-2012 – on plan
- Pay-back < 4 years

