



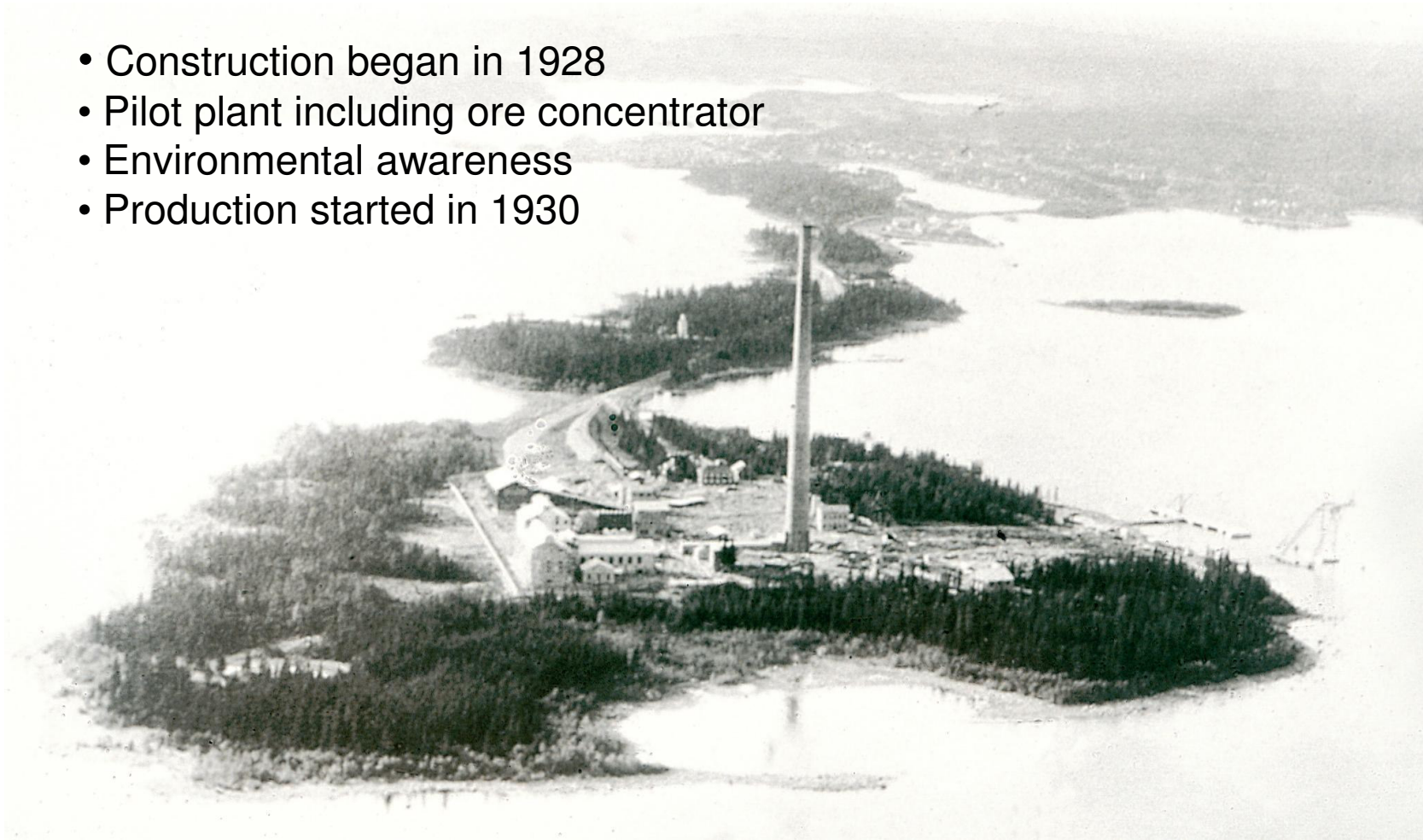
Welcome to Boliden Capital Markets Day

Roger Sundqvist
General Manager Rönnskär Smelter


 **BOLIDEN**

Rönnskär Smelter 1930

- Construction began in 1928
- Pilot plant including ore concentrator
- Environmental awareness
- Production started in 1930



Rönnskär – an important employer in the region



One of the world's most efficient and environmentally adapted smelters
Main product: Copper
Raw materials: Ore concentrates and secondary raw materials
Continuous improvements

Rönnskär

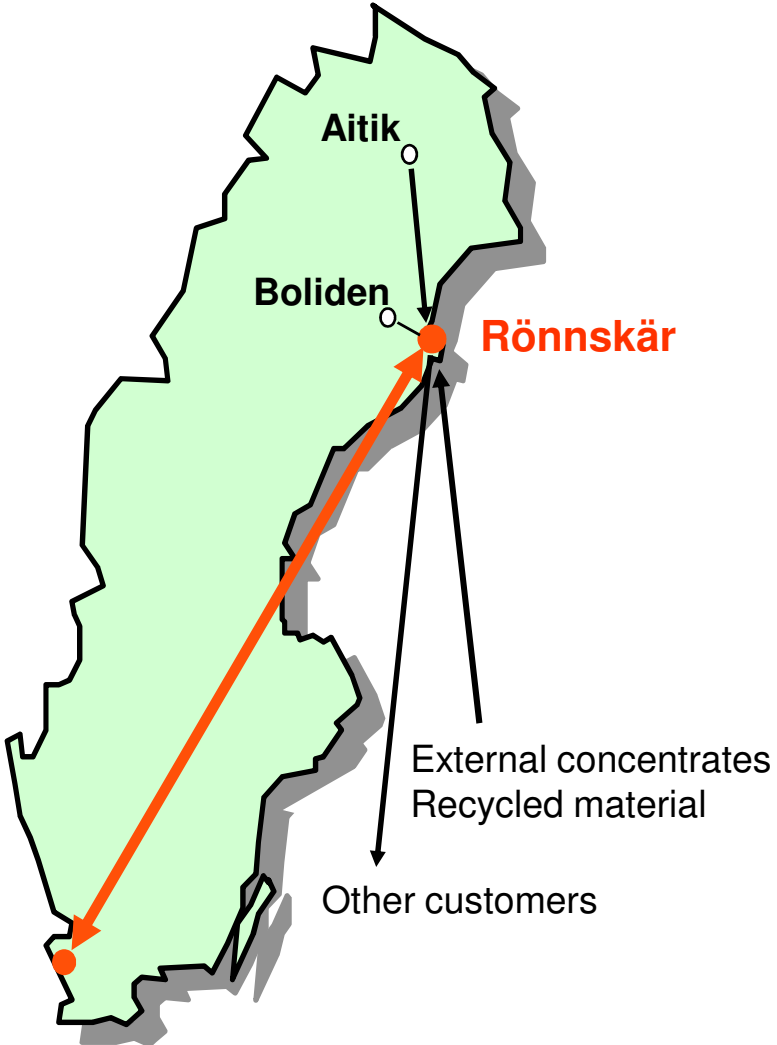
- Rönnskär, a world-class smelter, treats and refines metals from concentrates and various recycled materials
- Maintains high environmental standards and high resource efficiency

Production 2009

Copper	206 000 t
Lead	13 000 t
Zinc clinker	39 000 t
Silver	481 000 kgs
Gold	13 000 kgs
Sulphuric acid	515 000 t



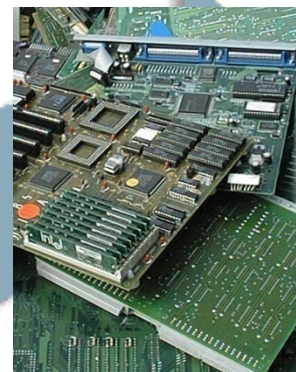
Logistics



Your old electronics might end up at Rönnskär

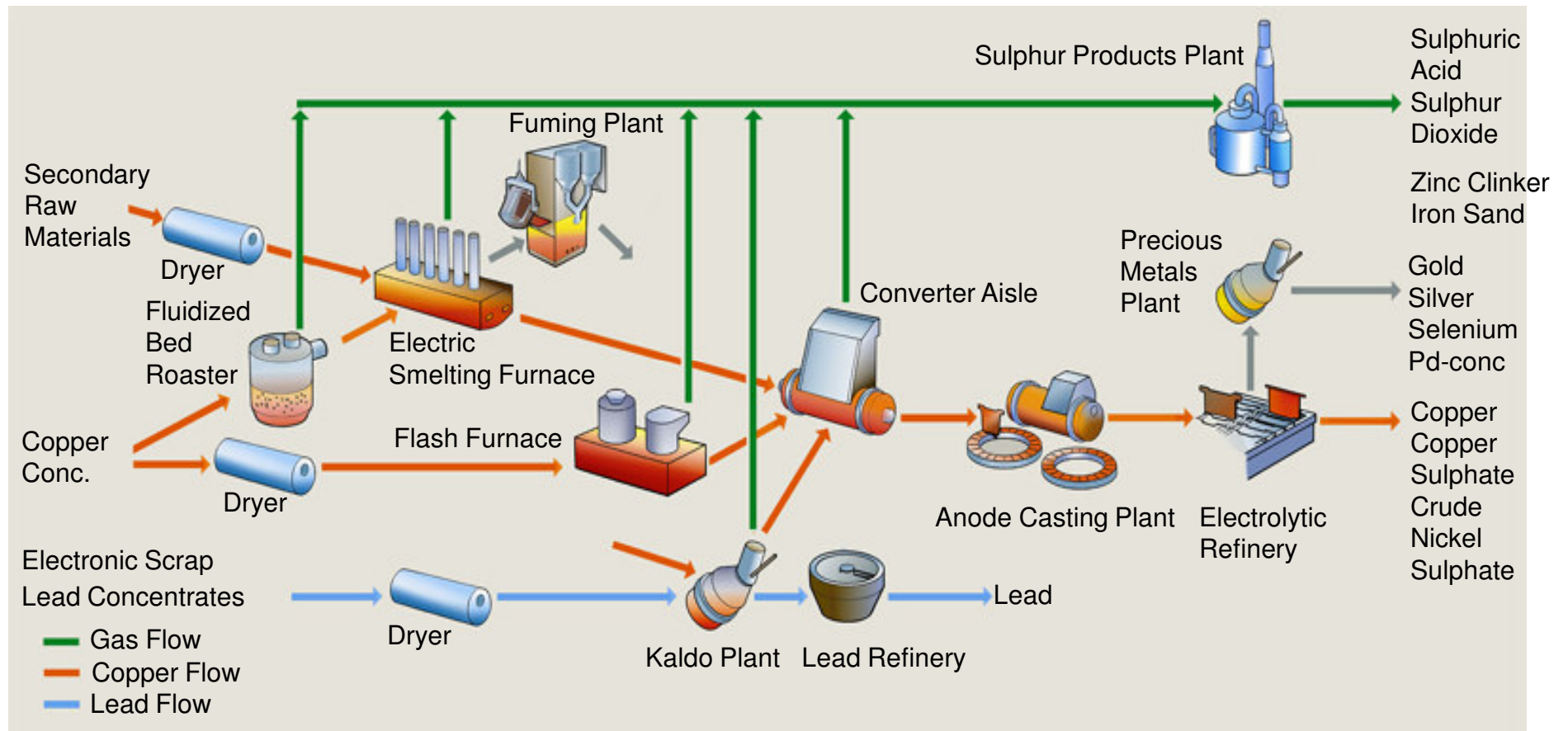
29 % of the copper production,
66 % of the gold,
36 % of the silver, and,
80 % of the zinc
derive from recycled materials.

We recycle electronic scrap,
residues containing zinc and
copper, steelmill dust and
copper scrap.



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Flow Sheet Rönnskär



Much more than gold...



Copper



Silver



Zinc



Lead



Iron Sand

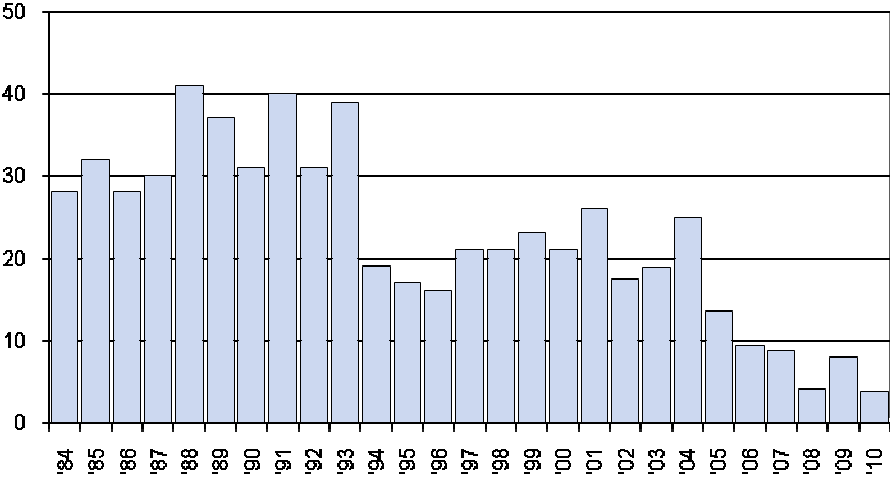


Sulphuric Acid
Liquid Sulphur Dioxide

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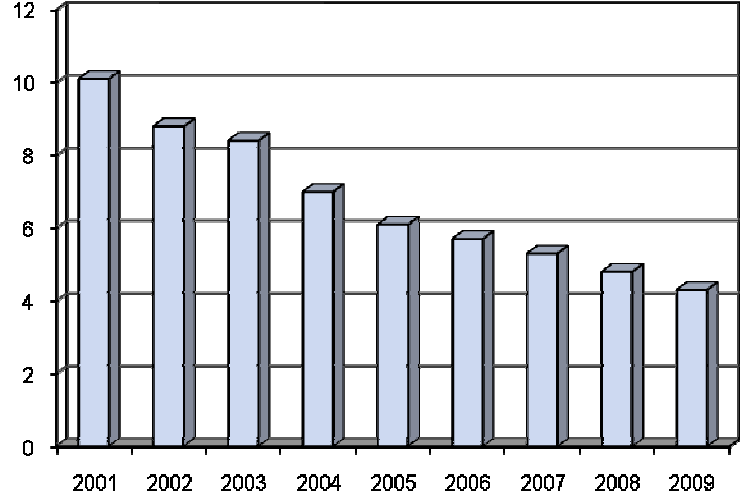
Zero tolerance for accidents

Accident frequency
Injuries per one million working hours



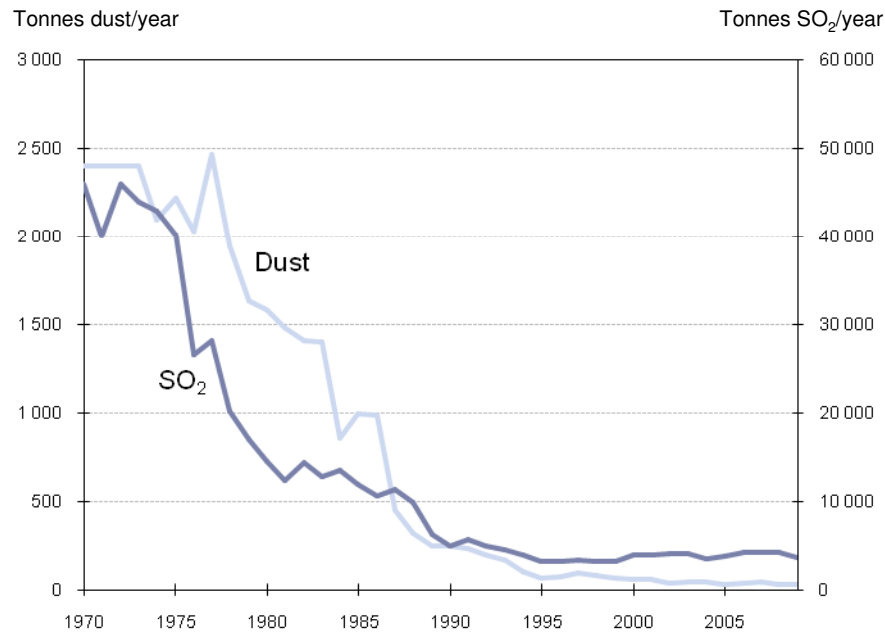
Sick-leave rate

%



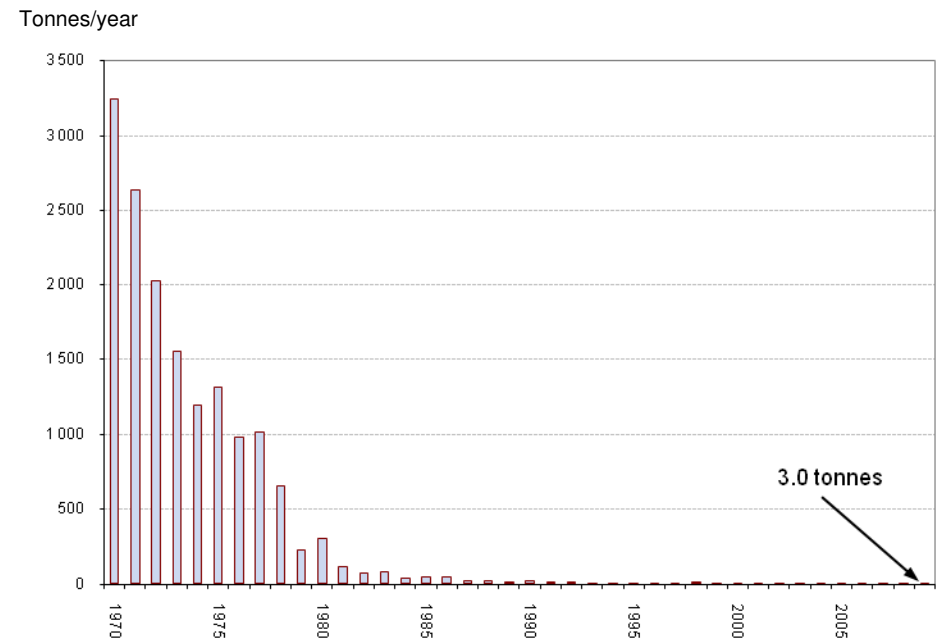
Emissions to air 1970–2009

90 – 99 % reduction

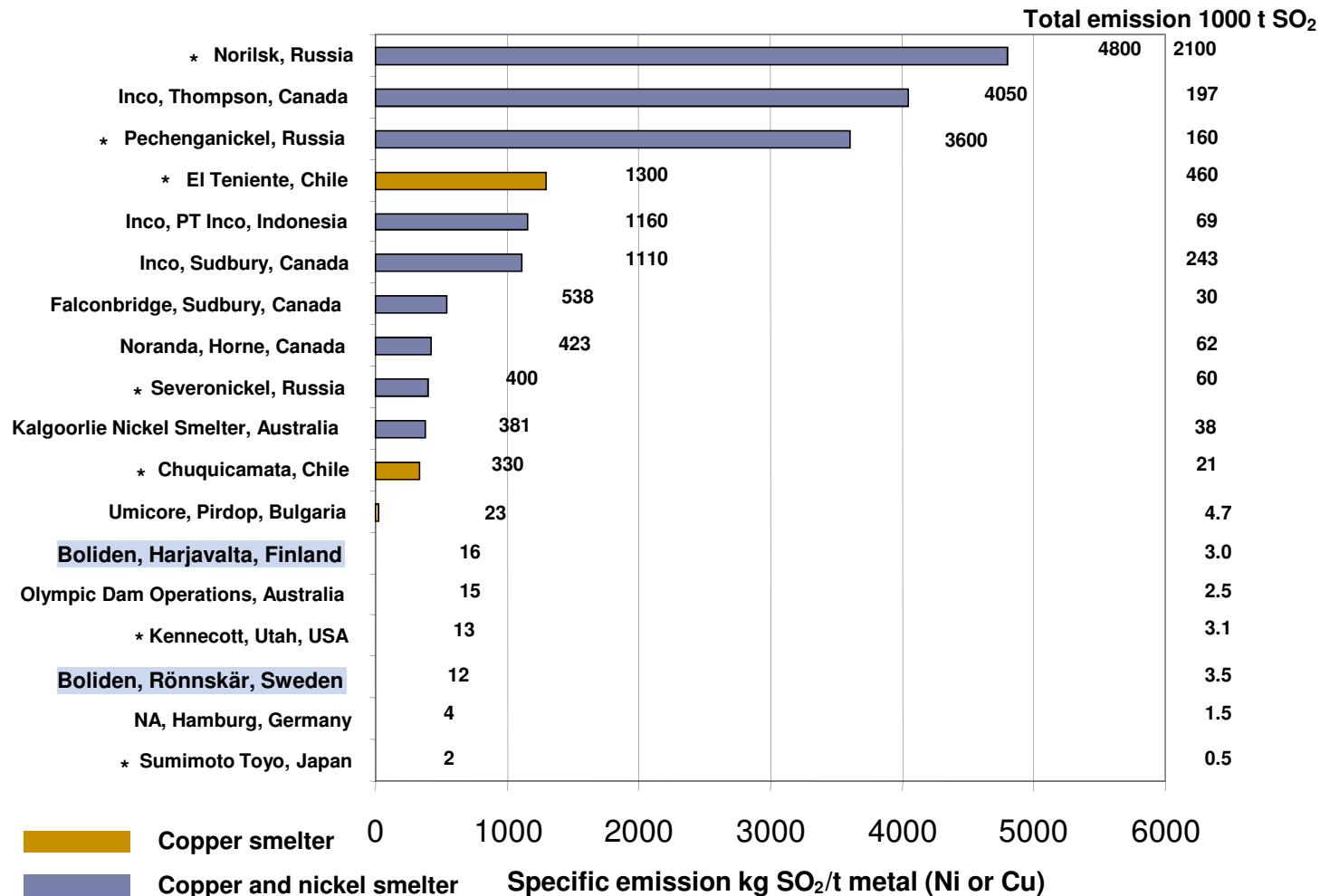


Discharge to water 1970–2009

99.9 % reduction



Emission of sulphur dioxide – Copper and Nickel plants

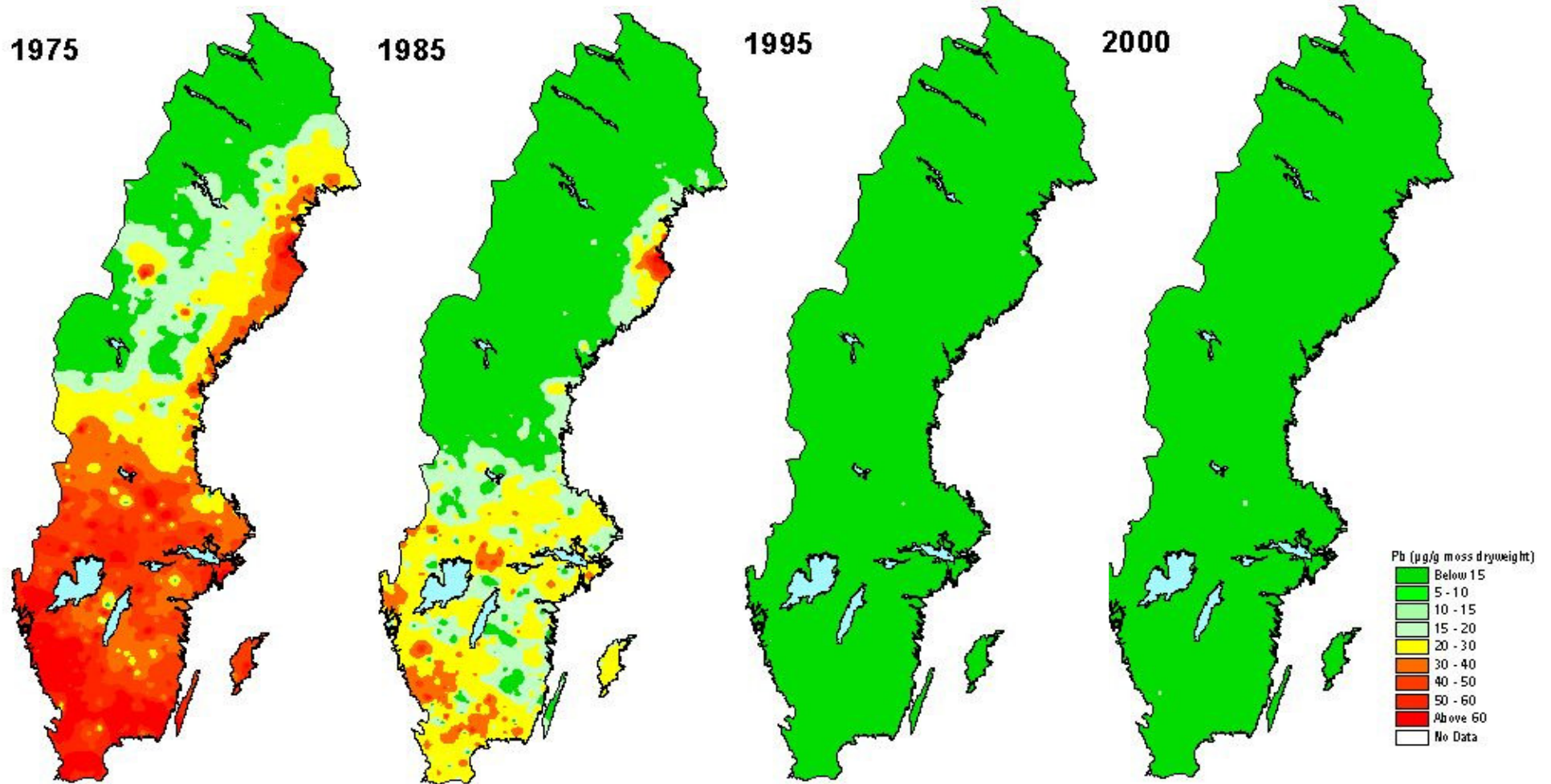


The 2001 - 2004 figures collected from internet pages published by the smelters

*) Not verified data from various sources

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Deposition of lead in Sweden 1975 - 2000



Source: IVL Swedish Environmental Research Institute



Corporate Social Responsibility

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- World class environmental performance
 - Recycling of metals
 - Supplier of district heating
 - Zero target for accidents
 - Skills development for all personnel