

Supply chain responsibility: A smelter's view

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Productivity, efficiency and environmental compliance, coupled with the capability to treat complex material, are the core of Aurubis' success



Aurubis: an integrated copper producer

Primary Copper Segment

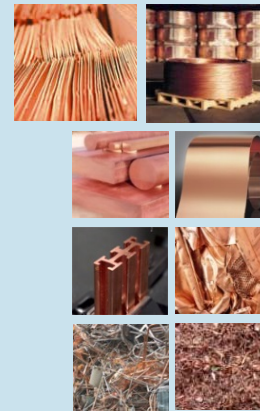
- » Cathodes
- » Sulfuric acid
- » Precious metals
- » Minor metals
- » Iron silicate



Primary smelting
Hamburg (D), Pirdop (BG)

Copper Products Segment

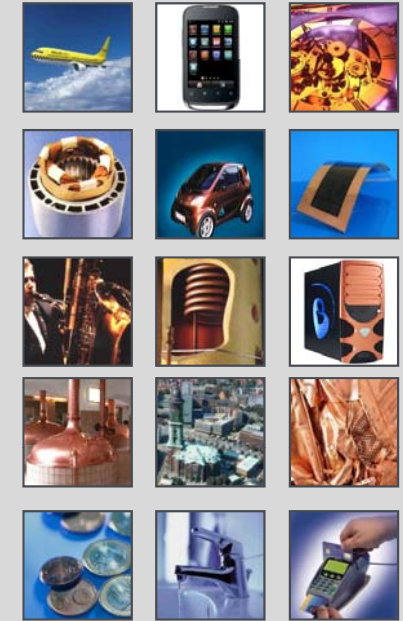
- » Cathodes
- » Wire rod
- » Shapes
- » Flat rolled products
- » Bars & Profiles
- » Closing-the-loop solutions



Secondary smelting
Lünen (D), Olen (BE)

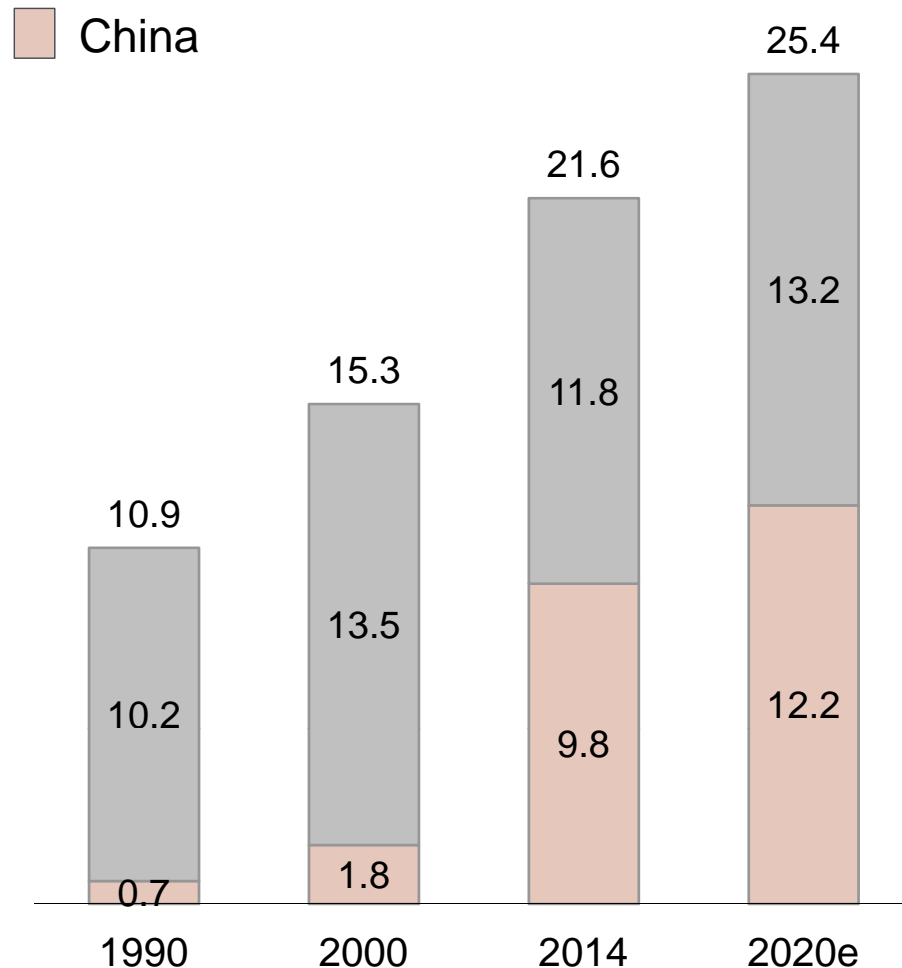
Main product sites
Hamburg, Emmerich, Stolberg (D), Zutphen (NL), Buffalo (US), Avellino (I), Olen (BE), Pori (F)

Processors and end users



Global copper demand

(in million t)



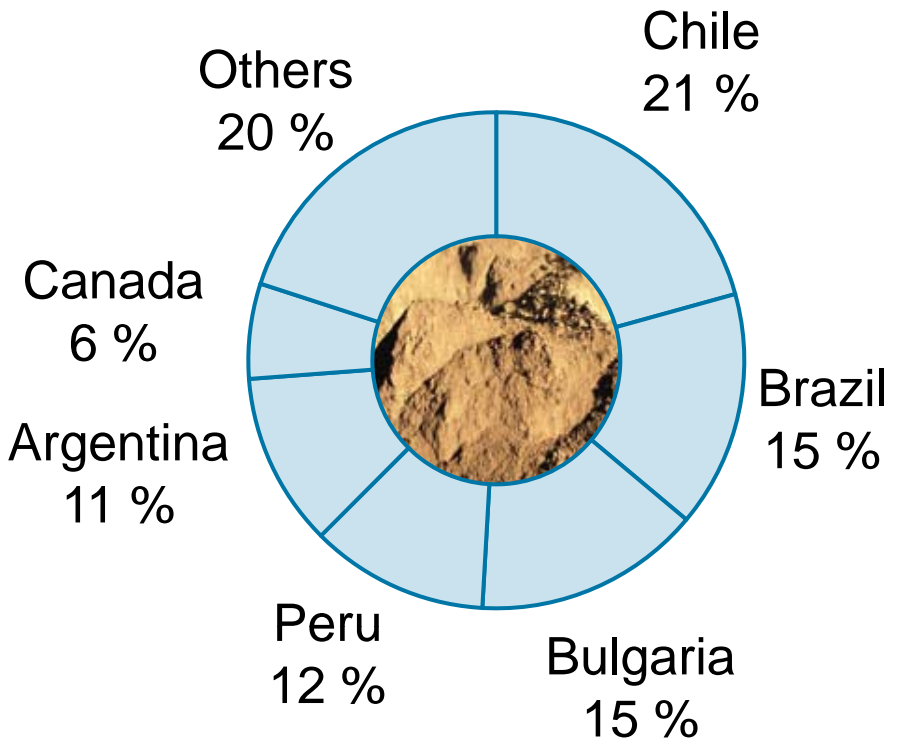
Source: Wood Mackenzie 06/2015

- » Development in emerging countries and the use of new technologies will push copper demand in the future as well.
- » The main drivers of demand are the infrastructure sector and consumer goods.
- » Central applications include construction, energy production and distribution, electronics, cars and air conditioning.
- » China is still the key source of copper demand growth; share of global demand expected to increase from 45 % (2014) to 48 % (2020) – CAGR = 7 % p.a.

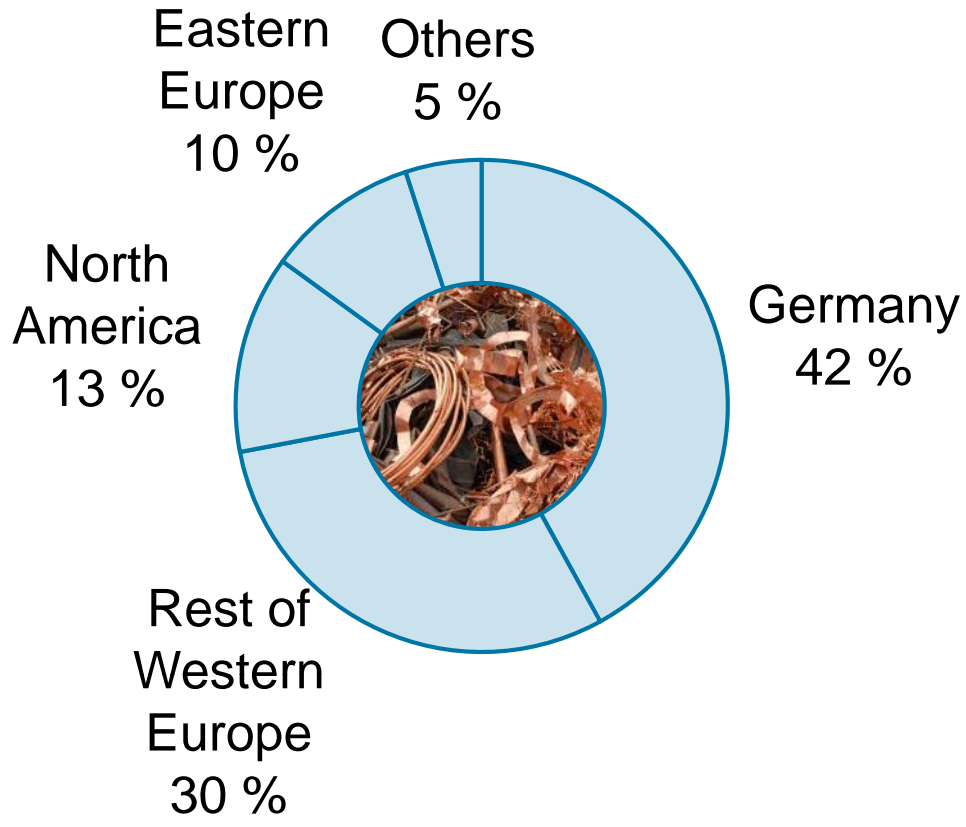
Aurubis holds a leading position in the raw material supply markets



Copper concentrate



Recycling materials



Source: Aurubis FY 2013/14

Aurubis has been committed to the internationally recognized United Nations Global Compact since December 2014



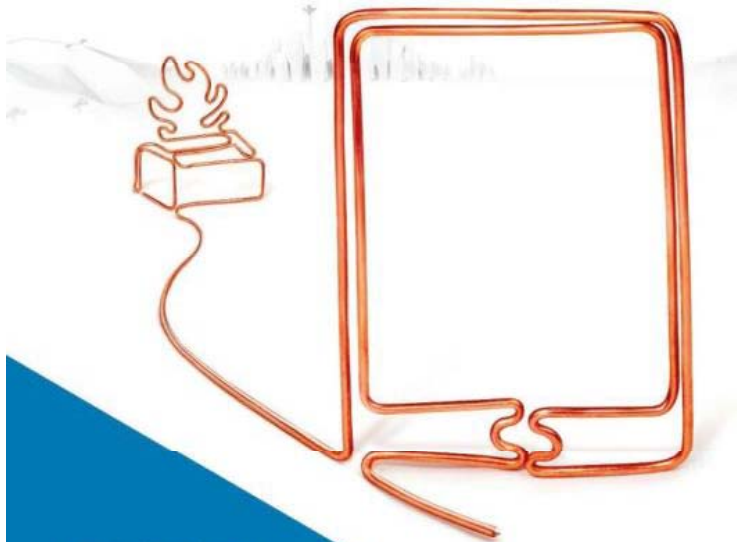
- » In addition to the basic principles of the International Labour Organization (ILO), this standard includes the areas of human rights, the environment and anti-corruption.
- » The UN Global Compact has more than 12,000 participants from 170 countries (companies and other stakeholders).
- » Participating companies commit to aligning their business practices and strategies with 10 principles:
 - » Principles 1 and 2, Human Rights
 - » Principles 3 – 6, Labour
 - » Principles 7 – 9, Environment
 - » Principle 10, Anti-Corruption





- » Aurubis is **successfully audited for conflict-free gold production** pursuant to the London Bullion Market Association (LBMA) audit standard
- » A **group-wide Gold Supply Policy** outlines our efforts since 2013
- » Recently Aurubis added a sophisticated **Business Partner Screening** to the formalized process, which further improves the neutral judgment of business partners
- » No source of supply was considered critical or blacklisted since introduction
- » High administrative expense for internal and external effort
- » EU legislation is currently being discussed with differing demands, creating another auditing process with additional costs

We help turn your toaster into a tablet.



Aurubis, the number one
copper recycler.

From toaster to tablet, copper can be found in many electrical devices. We recycle copper and other metals without a loss of quality so that they can be recycled into new products. As a multi-metal recycler, we make a significant contribution to environmental protection and secure a long-term supply of valuable resources.

You can find more about our recycling services at www.aurubis.com/recycling

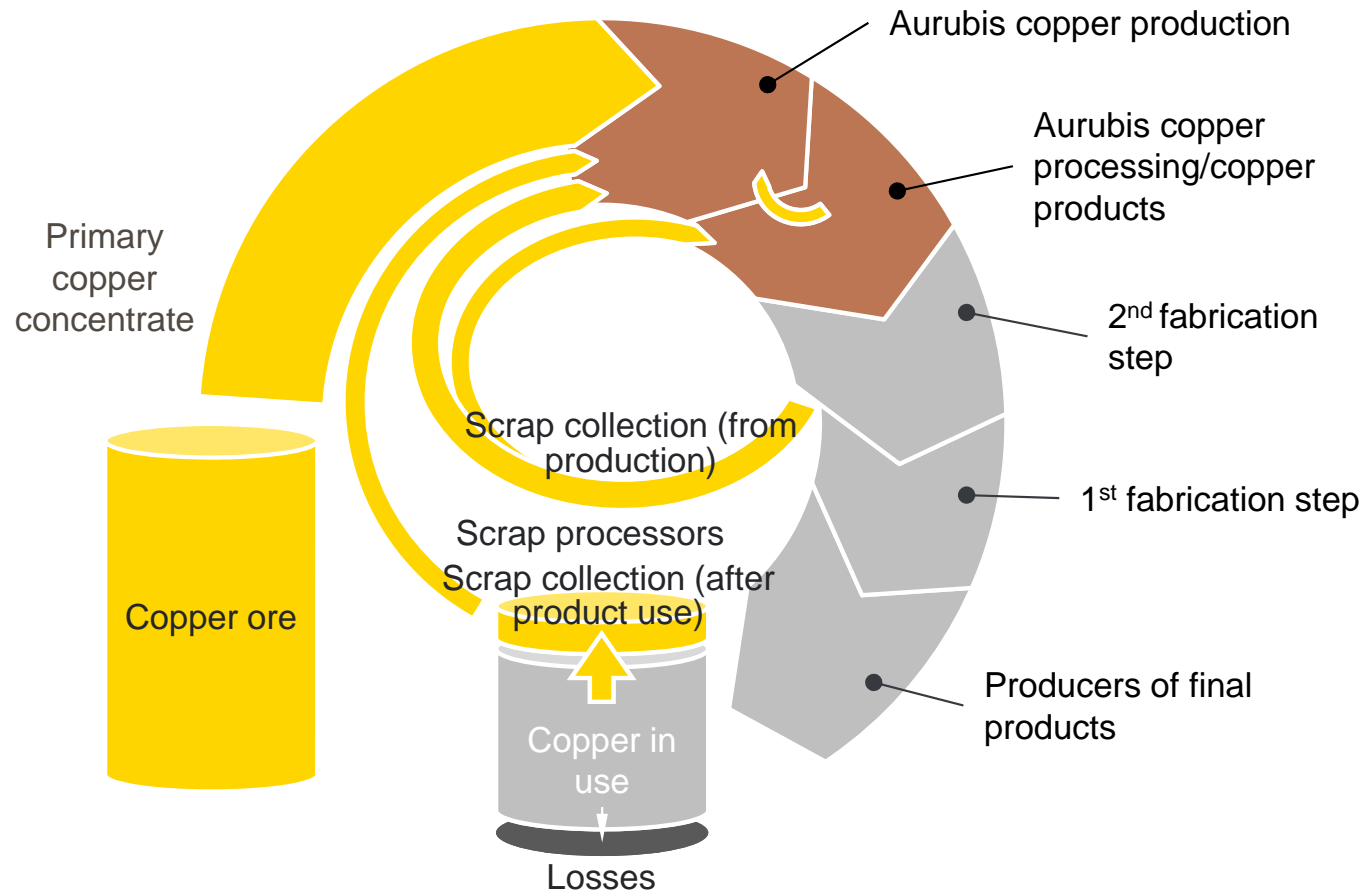

Our Copper for your Life

Overall: Recycling is essential:

- » Returns copper, precious metals and trace elements back to the economic cycle
- » Copper and most other metals can be recycled an unlimited number of times and without losses
- » Preserves natural resources
- » Saves energy
- » Is basically politically accepted
- » Continuous investments and adaptations to changing recycling materials are required
- » High demands on EHS must be implemented on a continuously ambitious level

The Aurubis solution: Primary and secondary copper production complement one another and ensure the highest flexibility.

The target must be a far-reaching, closed value chain and increasing sustainability



The more effective a society is with scrap collection and recycling, the less it needs to base growth and progress on primary resources.

Global copper in use and estimated recycling potential

- » Global copper in use is estimated between 350 – 500 million tons ^{1) 2)}
- » Availability of scrap with different CU content is linked to the volume of copper-bearing products installed/purchased and their life cycles
- » Landfills in North America are estimated to contain between 50 – 85 million tons of copper³⁾ (Germany 0.9 – 1.2 million tons⁴⁾)

Global Copper Stock in Use per Market Segment ²⁾

More Developed Countries*

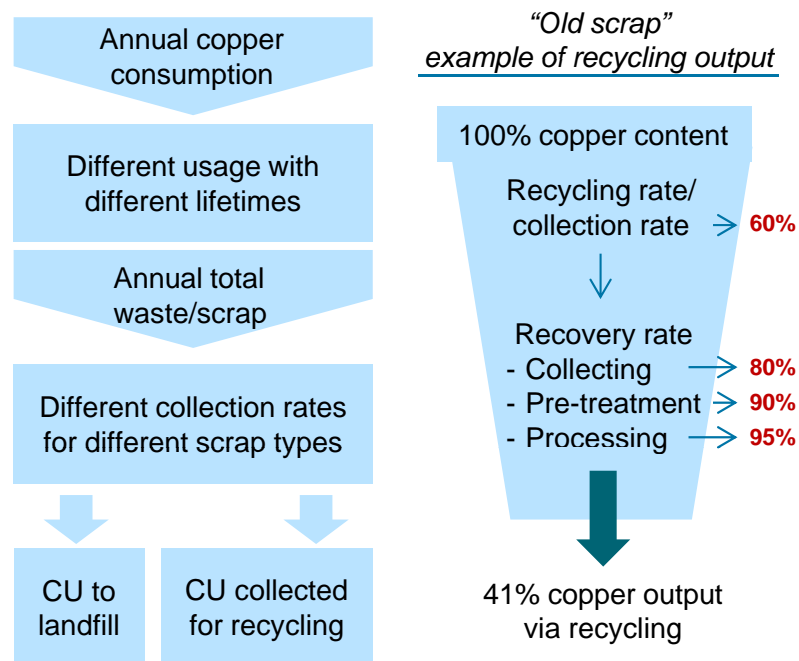
120 – 250 million tons

Less Developed Countries

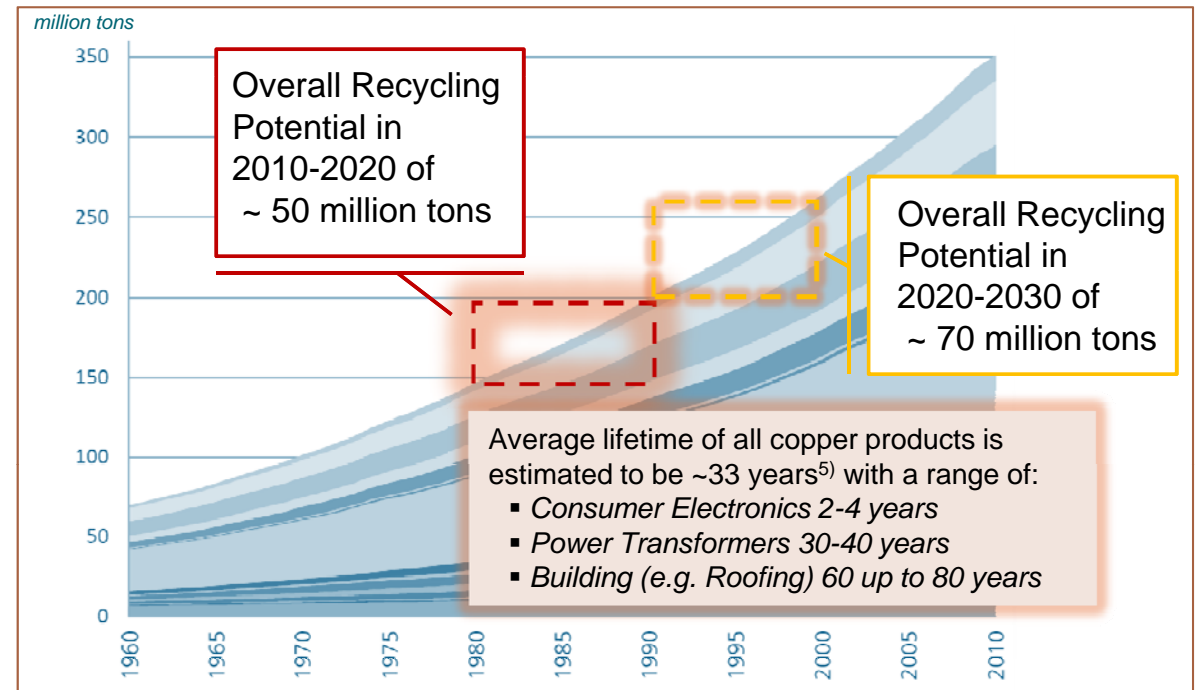
170 – 230 million tons

*Australia, Canada, EU15, Norway, Switzerland, Japan, New Zealand and the United States

Recycling Rate



Global Copper Stock in Use¹⁾ and Estimated Recycling Potential



1) Fraunhofer, Global Copper Flow Model 2012

2) International Panel for Sustainable Resource Management, Management Metal Stocks in Society 2008

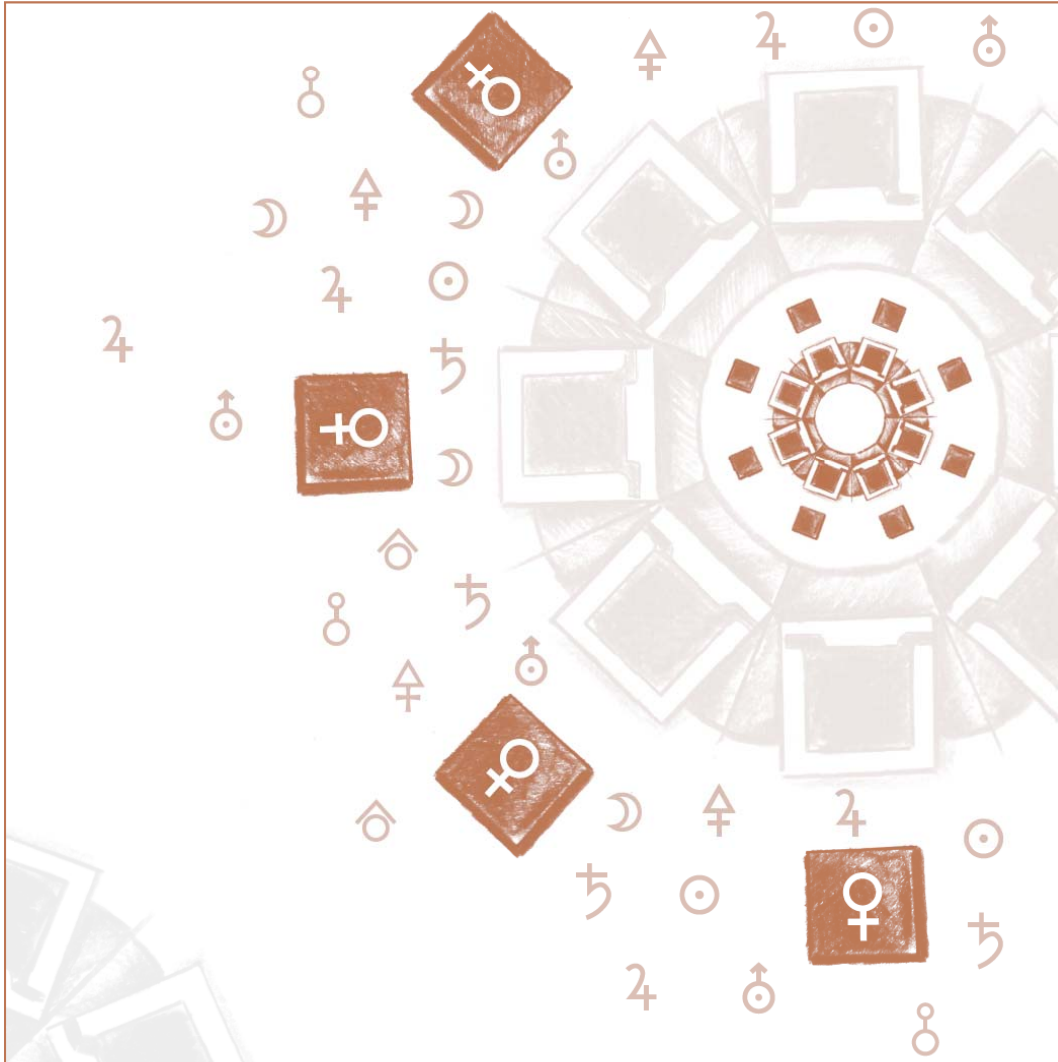
3) Environmental Science & Technology, Copper Mines Above and Below the Ground 2006

4) Recycling Magazin, Issue 17/2012

5) Deutsches Kupferinstitut, Recycling von Kupferwerkstoffen 2010



- » We support self-certifications for responsible importers – also from conflict-affected areas – since they are evidently effective.
- » Increasing the use of recycled material guarantees material efficiency. Easy access, trade and use should be enabled.
- » Responsibility in value chains does not stop at buying the raw material: Aurubis stands for the highest standards in environmental protection, safety at work, energy and material efficiency – throughout our entire value chain and beyond.
- » Responsibility in value chains does not stop at smelters. Upstream and downstream industry should meet our responsibility jointly.
- » Copper is infinite & irreplaceable.
- » Copper enables progress & efficiency in all aspects.



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