Refined Copper Demand in the EU

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Legal Disclaimer

The purpose of this presentation is to guide programs benefiting the copper industry and to provide attendees with information to make independent business decisions.
What is the IWCC

The IWCC is the representative organisation for the semis fabricating industry worldwide
Where is the IWCC
IWCC member companies & their subsidiaries each year use more than 70% of refined copper and copper scrap annually.
Europe in a Global Context
Europe's share of global copper demand has declined from 21.1% in 2012 to an estimated 18.3% in 2016.

Source: IWCC
Refined Copper Demand

Source: IWCC
In tonnage terms the decline in Europe since 2012 has been less than 100kt, or less than 2%.

However, over the same period global refined copper demand has increased by almost 13.5%.
Europe
Refined Copper Demand

Source: IWCC
The share of total Europe refined copper demand accounted for by the EU-28 has risen from 72.9% in 2012 to an estimated 75.2% in 2016. This growth has been at the expense of Russia, whose share has declined from 15.5% in 2012 to an estimated 11.7% in 2016.
Refined Copper Demand

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<th>Year</th>
<th>EU-28</th>
<th>Russia</th>
<th>Other Europe</th>
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<td>2012</td>
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Source: IWCC
Refined Copper Demand

EU-28 demand for refined copper is expected to:

- Increase by 1.4% in 2015 to 3.08Mt
- Little change expected for 2016

Source: IWCC
What Makes the EU-28 Perform?
Refined copper (and scrap) is used for the production of semi-manufactures
What makes EU-28 Perform?

Source: IWCC
What makes EU-28 Perform?

Refined copper is used mainly for the production of copper semis.

Scrap is used mainly for the production of copper alloy semis.

Source: IWCC
What makes EU-28 Perform?

Copper Semis Production

Source: IWCC
Wire Rod
Copper Wire Rod

- Production in the EU-28 in excess of 2.2 Mt
- Almost all is produced from refined copper
- Continued strong demand for wire & cable in Europe and in the export markets
  - A life-saver for Greece, Italy & Spain...
- Impact of changes in Russian export tariffs
  - Easier to export cathode rather than wire rod from Russia
    - Hence the decline in refined copper demand in Russia, most of which is used to produce wire rod

Source: IWCC
Substitution by aluminium

- Main driver of substitution is price
- Slight easing of substitution pressure in 2015 due to lower commodity prices
- Nevertheless, cable makers need to be able to offer full portfolio of cable types using different materials (Cu, Al, fibre optic) as...
- Material choice often depends on the final end-user
- Aluminium wiring harness - always a threat

Source: IWCC
Copper Semis
Copper Semis

- Mainly downside risks:
  - Miniaturisation - smaller and/or thinner components
    - Benefit is the copper retains material market share
    - But leads to reduced tonnage demand
  - Slow down in demand from China - in particular autos
  - Trend to higher value added semis which are lower volume products
  - Substitution - limited threat as much substitution has already been done
- VW!!

Source: IWCC
Conclusion

- Limited scope for improvement in demand
- Low scrap availability (a function of price) supports refined copper demand
- Long-term trend probably a slow decline
- Structural changes should lead to improved productivity but no increase in refined copper demand

Source: IWCC
Thank you!

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