International Copper Association
Copper Alliance

Copper Substitution Trending Low

Study Name: Global Substitution Indicators
Study Author: DMM Advisory Group
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According to research commissioned by the International Copper Association (ICA), substitution of copper stood at just 0.8% of total use in 2018. The annual substitution study—carried out by DMM Advisory Group—found copper remains the preferred material for a range of applications, versus a variety of alternatives.

Overview

The study also showed China—the largest area of copper demand globally—uses copper as the material of choice in electrical applications. The country's net substitution is 0.6%, which is lower than any other region, primarily because of specific geographical product trends and the value placed on copper's ability to deliver quality and performance. Energy efficiency standards have a strong positive impact on the preference for copper in electrical applications.

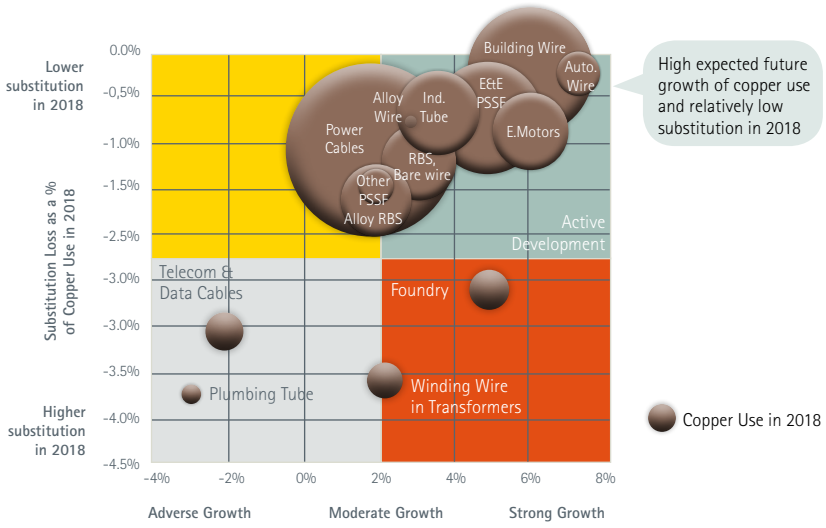
Key Findings

- As an aggregated impact of substitution loss and gain, net substitution is relatively stable at 0.8% of total copper use in 2018.
- 'Loss' to miniaturization has declined by 16.9% and the total loss (substitution and miniaturization) stands at 1.2% of the copper use in 2018.
- Energy efficiency standards have a strong positive impact on the preference for copper in electrical applications.

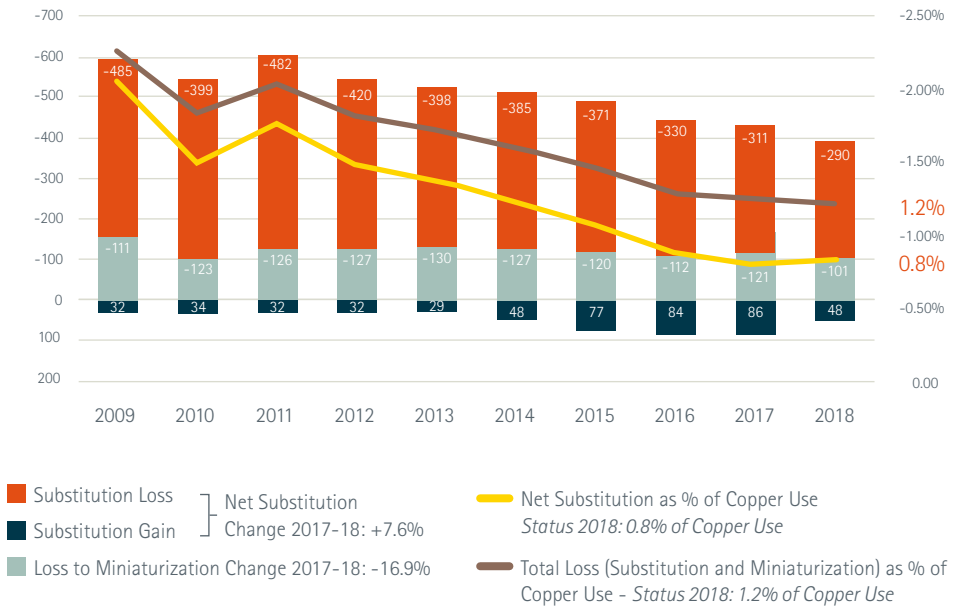
Total Demand

The impact of substitution on total copper demand is forecast to be mitigated by the moderate to strong future growth forecast for most copper products. Among others, automotive wires, electrical motors and building wire show signs of significant growth in the next five years.

Expected Future Annual Growth of Copper Use (CAGR 2018–2023) in %



Substitution Loss, Gain, and Loss to Miniaturization in Kilotonnes and % of Copper Use in 2018



For more information on copper demand or ICA, visit www.copperalliance.org. For details of copper's sustainable credentials, visit www.sustainablecopper.org. Follow us on @ThinkCopper. For enquiries, email colin.bennett@copperalliance.org.uk or bryony.samuel@copperalliance.org.uk.