



Copper demand to increase as energy consumption falls

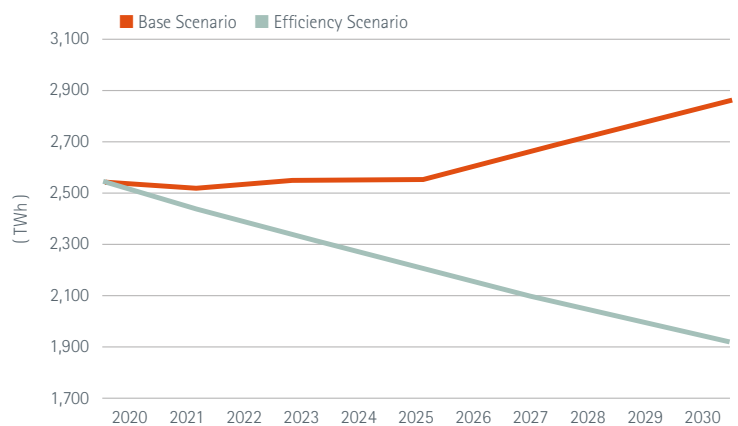
Study name: Energy efficiency
Study author: Navigant/Guidehouse
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Under a scenario where global energy consumption reduces by three-percent annually, through energy efficiency improvements, copper demand would experience a cumulative increase of 17,672 kt over ten years against a base level, according to a study by Navigant/Guidehouse Research. Based on the activity of the Three Percent Club, a collaboration of governments and supporting organizations that commit to working together to put the world on a path to three-percent annual efficiency improvement, the new research found copper demand would grow in six technology groups across transport, buildings and industry sectors.

Energy consumption: base vs. efficiency scenario

Under the base scenario, energy consumption is expected to grow 13 percent between 2020 and 2030. In the efficiency scenario, energy consumption declines 24 percent between 2020 and 2030.

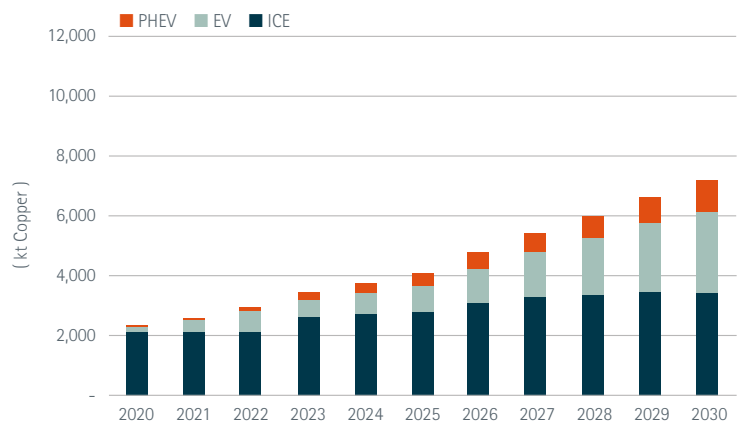
Energy consumption from shipments by scenario, World markets: 2020-2030



Transportation sector

The research, which was commissioned by the International Copper Association (ICA), found that the largest opportunity for demand gains originates from increased energy efficiency in the transportation sector, driven by growth in electric vehicles and plug-in hybrids. In the three-percent scenario, demand would increase at an 11.8 percent compound annual growth rate Compound Annual Growth Rate (CAGR) in the transport sector. Transport is also the sector most likely to achieve the three-percent scenario due to existing and expected transportation electrification policy in several countries.

Demand from light duty vehicles by technology, Efficiency scenario: 2020-2030



Building industry

In the building industry, Air Conditioning (AC) copper demand is expected to grow at a 6.6 percent CAGR in the three-percent scenario due to increasing use of copper in a variety of components that would be required to meet higher efficiency standards. Lighting is expected to represent fastest growth in copper demand in buildings at a CAGR of 8.2 percent in the three-percent scenario due to accelerating adoption of LEDs. Within industry, the replacement of transformers with more efficient alternatives in the efficiency scenario results in growth in demand at a CAGR of 2.8 percent.

Demand from buildings by technology, Efficiency scenario: 2020 - 2030

