Insight Copper's intrinsic characteristics are emerging more widely as the world moves to a more sustainable future

Copper is emerging as an ultimate material of choice for a more sustainable future, stimulating demand for the metal in a new era of innovation in industrialisation and electrification. The role of copper in sustainable development has to be actively managed by industry stakeholders. Among the emerging markets of Africa and Asia, there is an expectation that developing markets such as the Democratic Republic of Congo and some other countries in Africa will also play an increasing role in the evolving and use of copper to support the sustainable agenda from the high carbon to a low carbon environment. One of the advantages would involve a move away from existing fossil fuel energy to alternative energies such as wind power and photovoltaic.

Another decarbonisation strategy is to replace diesel powered factories with renewable – battery/hybrid solar panels. As the world moves to more sustainable use of energy, copper, as a green metal is going to have its role to play in the manufacture of energy storage, battery manufacture and on- and off-shore renewable energy sectors, which are developing by the day, as well as electric vehicles (EVs), which offer opportunities for reducing carbon emissions and are also fundamental to sustaining the long term growth of copper production. Cobalt, which is often a byproduct of copper mining, is also an integral component of EVs, a market that is growing rapidly.

Copper is incredibly **versatile**, durable, corrosion resistant and is forever recyclable. Interestingly, as much as 70% of all copper is recycled in the world today, with two-thirds of all mined copper mined still in use today. Copper is environmentally friendly and copper mining produces the greenhouse gasses; adding 1 ton of copper can reduce Co2 emissions by between 100 - 7500 tons. Copper's more commonly known characteristics include being the best conductor of electricity of all non-precious metals. After copper and its alloys, the next most antimicrobial metal is silver, but it is a lot more expensive. Here, metal ions are thought to play a key role in how metals like copper destroy microorganisms.

Amount of copper used per EV*

Conventional fuel	20-25 kgs
Hybrid	30-35 kgs
Electric battery	75-80 kgs



*Source CRU Group

The significant demand for copper is being driven by the growth in sectors from transport which accounts for only 10% of copper consumption* to construction and utilities being the leading copper consuming sectors.

"Over the past few months of the Covid-19 pandemic, copper has overall, in China and elsewhere, rebounded, and is looking positive at the moment. By, investing, being responsive to disruptions and managing our supply chains in the future, we can ensure a sustainable supply of copper to our customers and in the process we can help to ensure copper plays its role in the global transition to clean energy, says <u>Brian Ahern</u>, Gerald's Head of Refined Copper Trading.

Gerald Group has nearly six decades of experience dealing in the international copper market. The Group is one of the world's biggest traders of copper in various forms, from raw to refined, and copper blister to copper concentrate. Our North American business, GT Commodities, mainly markets a range of copper cathode grades and brands internationally.



International Copper Association World Energy Outlook 2017 Industry in Focus: Copper