

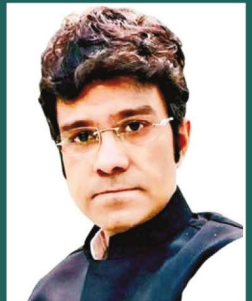
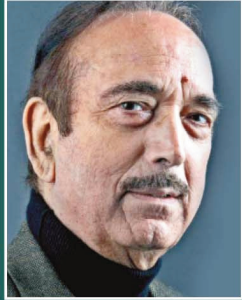
Voice of the Nation

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#CONGRESSXODUS

CONGRESS CHHODO, BHARAT JODO!

AS IF RESPONDING TO RAHUL GANDHI'S BHARAT JODO CALL, DOZENS OF CONGRESS LEADERS AND HUNDREDS OF LAWMAKERS HAVE EMBARKED ON A MASS EXODUS FROM THE GRAND OLD PARTY IN PURSUIT OF NATIONAL UNITY AND INTEGRITY. FROM GHULAM NABI AZAD TO ANIL ANTONY,

EX-CONGRESS LEADERS EXPLAIN WHY THEY LEFT THE PARTY



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Copper for Safe, Healthy,

By Mayur Karmarkar

With India entering the 'Amrit Kaal', the efforts made in the next 25 years will determine the country's transition to a developed economy backed up with sustainable growth as the nation completes 100 years of independence. Our aspirations of becoming a \$5 trillion economy, Atmanirbhar Bharat, or achieving 'Net Zero' goals among other milestones largely depend on the actions that we take now. One such area that India must focus on is sustainable resourcing and utilization of critical minerals, especially copper which has unique properties and applications across areas crucial for India's sustainable growth. Copper is traditionally familiar metal, with varied use, for us in India

Green transition

India has set an ambitious target of 500 GW of renewable energy by 2030. The Government has also set targets to reduce India's total projected carbon emission by 1 billion tonnes and reduce the carbon intensity of the economy by less than 45% by 2030, and achieve zero carbon emissions by 2070. Copper will play an essential role if India wants to achieve these targets.

Copper's role in combating the issue of rising global temperatures is often underestimated. The metal, largely used in electrical wiring, motors and transformers, is an excellent material to increase electrical energy efficiency and thereby, reduce emissions. A recent data released by ICA globally says that incorporating 1 tonne of copper saves between 100,000 to 3,750,000 kgs of Greenhouse Gas (GHG) emissions making copper not only an energy efficient but also an economic metal. Copper lowers both the amount of energy required to generate electricity as well as the CO2 emissions. Additionally, copper contributes to high energy efficiency, and saves about INR 2 million to 200 million during the lifespan of these systems. The metal plays an important role in ensuring a reliable, safe and efficient power supply.

Renewable energy sources provide nearly 25% of the world's power, and copper plays an important role in making it as efficient as possible while minimising the impact on the environment.

India needs a robust copper value chain to aid the country's green transition.

Safe India

Another area where Copper's role is non-negotiable is fire safety. As India continues to keep pace with growing real estate demand with vertical expansion, it is important to accord fire safety the utmost priority.

Fire safety is a critical feature of any structure, especially high-risk buildings which include high-rise constructions, offices, educational institutions, hospitals, and public buildings in densely populated areas as accidental fires pose a serious threat.

According to the National Crime Records Bureau (NCRB), India witnessed close to 63,557 fire-related accidents resulting in 62,832 deaths with 35



Green - Sustainable India

people on average getting killed by fire every day between 2016-2020. Electrical short circuits were identified as the prime reason for most of these fires.

Copper can ensure safe and quality growth as India looks at rapid urbanisation in the coming years.

Copper wiring makes a building safer as it is not only easy to install, but also serves as a better conduit and lasts longer than any other material. Copper conductors reduce energy losses, leading to lower CO2 emissions and lower utility bills. In addition to offering excellent performance, Copper is also economically attractive to recycle at its end of life. While there are other electrical conductors in the market, all have much lower conductivities with reduced system safety, durability and increased end-user electricity costs.

Moreover, strict adherence to the National Building Code of India (NBC 2016) and National Electrical Code of India (NEC 2023) can ensure overall electrical safety of our buildings. A collective effort is required to provide safe buildings as India continues to witness a rise in urban spaces.

The metal has been a part of Indian culture for centuries and it's beneficial properties are well known to each one of us. Copper vessels/utensils are a common sight in Indian homes because of the metal's antimicrobial properties.

Long-term vision

As per industry estimates, per

Copper and Health

Apart from safety, copper plays an important role as an essential nutrient for the health of living beings. Copper is a nutrient that is present and is needed in trace amounts in the body to regulate essential functions such as production of red blood cells, regulation of heart rate and blood pressure, absorption of iron, boosting immunity and improving bone density, among others. Whether it is the ability to fight pathogens in the body via bloodstream, through water borne infections or transmission of pathogens through external surfaces, copper is one of the most efficient metals that curbs the transmission of potentially menacing viral infections including COVID-19.

capita copper usage in India will grow to 3 kg by 2047 from the current average of less than 1 kg per capita. Overall, we are approaching the flex point on the S-curve accelerating the metal demand further.

Copper being a global commodity is mined largely in the southern hemisphere whereas the northern hemisphere is the bigger user of the metal. Currently, copper mining in India contributes only 2.5% to the total Indian demand. The availability of locally smelted and refined copper is ~50% of the current demand of 1.2 million metric tonnes.

As India will become the 2nd largest copper consumption market (4-5 Mn MT) after China, we need to encourage and build our own primary smelting industry, or we run the risk of being reliant on China. On the other hand, copper concentrate is more widely traded and available across a wider range of friendly countries, and hence more strategic for India to source.

The Amrit Kaal vision of the Prime Minister will further accelerate copper's need in achieving various policies such as being Atmanirbhar, delivering Panchamrit to mitigate climate change, and improving rural

infrastructure development & urbanization for attaining new heights of prosperity for citizens of this great civilisation. In this backdrop, it is important that India develops a copper resource strategy to ensure that the country's Amrit Kaal vision is achieved successfully.

(Writer is Managing Director, International Copper Association India)

