

Cover Story.



Driving the Green Shift: Decarbonizing India

India's clean energy transition is usually told through its technologies: electric vehicles, solar farms, wind turbines, battery storage. But every one of those technologies rests on a material story that rarely gets told. A single electric vehicle carries around 67.5 kg of copper, running through the battery pack, the drive system, the motor and every cable and connector in between. NITI Aayog projects cumulative copper demand of 66,069 kilotonnes between 2025 and 2070, far exceeding the requirement for most other minerals.

What makes copper different is what happens after that. One tonne of copper cathode represents 4.6 tonnes of CO₂e, yet the same tonne goes on to abate far more emissions across the clean energy systems it enables. And because copper can be recycled indefinitely without losing its properties, 75% of all copper ever mined is still in use today. Our latest blog looks at why decarbonisation and circularity cannot be separated, and why copper sits at the centre of both.

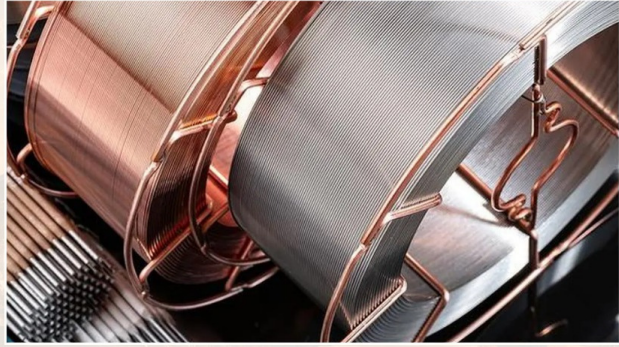
[Explore the full blog >](#)

Industry Perspectives

Demand rising, India needs 500,000 tonnes refined copper capacity addition every 5 years

THE ASSOCIATED
businessline.

Exclusive Interview with Mayur Karmarkar
Managing director, ICA India



India's copper demand is growing rapidly, driven by infrastructure development, building construction, clean energy and emerging technologies. Demand rose **9.3% to 1,878 KT** in FY25, while ICA India expects around 9% growth in 2026. According to ICA India Managing **Director Mayur Karmarkar**, the country will require **approximately 500,000 tonnes** of additional refined copper capacity every five years to keep pace with rising demand. While new and restarted smelting capacities will improve domestic cathode availability, current additions remain modest compared with overall demand. Sustained investment in refining, smelting and recycling will be essential to support India's long-term growth and energy transition.

[Explore the full blog >](#)

ICA India Events



ICA Positions Copper Cables as Reliable Choice for Plant Engineers

Marathwada Industrial Cluster | Western India

ICA India engaged 60 members of the Marathwada industrial cluster on the benefits of copper-based cabling, showcasing case studies on copper's ability to mitigate thermal failures, cable melting, and conductor overheating associated with aluminium cables, while encouraging plant maintenance engineers to advocate for copper-based specifications.



ICA and FSAI Mobilize 120+ Electrical Professionals for Copper Cabling in Revised Building Code

6-City Awareness Campaign | First Stop: Hyderabad

At a workshop under ICA India's six-city awareness campaign with the Fire Safety Association of India (FSAI), ICA highlighted copper's role in enhancing electrical and building fire safety. The session also addressed risks from non-standard aluminum cabling and the revised NBSC recognition of copper as the preferred material for building electrical systems.



ICA Promotes Standardized Copper Installation in Battery Energy Storage Systems

Battery Summit 2026 | Closed-Door Roundtable

At a closed-door roundtable at Battery Summit 2026, ICA India advocated standardized and safe deployment of copper cables and busbars in BESS. As a member of the Bureau of Indian Standards technical committee, ICA has initiated a new Code of Practice for electrical energy storage system installations.



ICA Presents on the Role of Copper in Decarbonizing Automotive Value Chains

SIAM Conference | 'Decarbonizing the Automotive Value Chain'

At a conference organized by the Society of Indian Automobile Manufacturers (SIAM), ICA India represented the copper industry and highlighted its decarbonization pathway, positioning copper as an "abatement multiplier" with infinite circularity. ICA also highlighted that scrap met 42% of India's 1.8 million-tonne FY25 copper demand, with responsibly recycled copper capable of matching the quality of primary

ICA India Events



ICA Shares Copper Demand and Supply Insights on India's Metal Security Panel

GREENS Expo & Summit 2026 | 'Building India's Metal Security'

At the GREENS Expo & Summit 2026, ICA India highlighted copper's critical role in India's energy transition, infrastructure, and grid modernisation, with demand projected to grow 5.4x by 2047. Meeting this demand will require both primary copper and stronger recycling ecosystems supported by improved standards, refining capacity, and enabling policies.

