FOCuS

International Copper Association India

March 2025

**Cover Story**

# Why Your Parents' Fan Still Works? And Yours Won't!

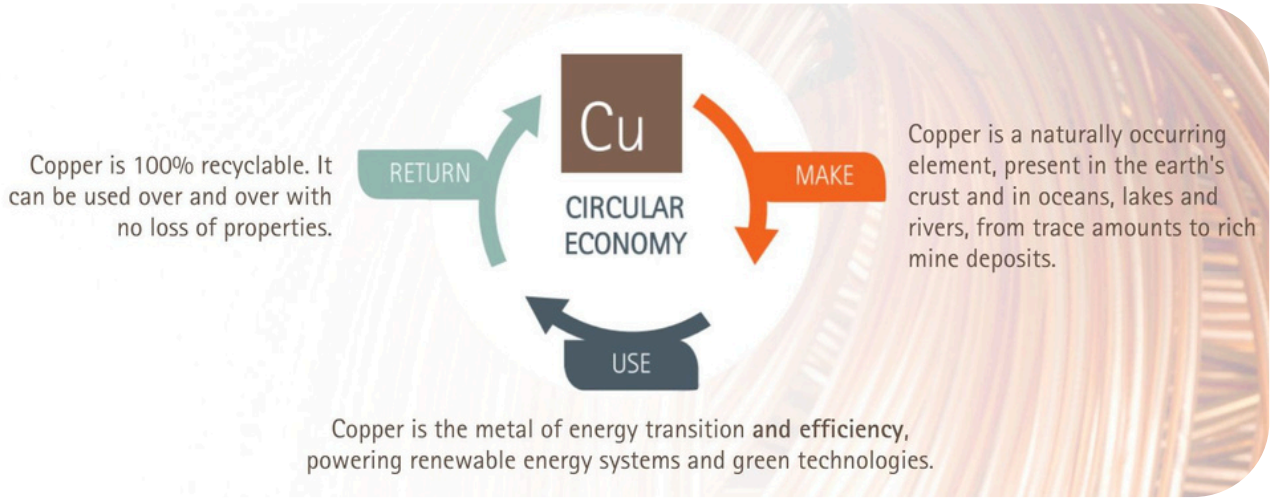
In many Indian homes, ceiling fans from the 1990s are still being used—often without much complaint. These fans are a testament to a time when appliances were built to endure. But take a closer look at modern homes, and there is a shift: new-age fans, sleek in design but short in lifespan, are being replaced every few years. What changed?

**As per ICA India's study, the average life cycle of a ceiling fan with quality copper winding is 15-20 years, while the same with substitute or substandard winding material is less than 10 years.**

The earlier generation fans, made with copper windings, easily exceeded a life span of 20–30 years with minimal maintenance. Those fans were designed to last long and focused on reliability and durability.

Today's fans are designed to aesthetic trends and often ignore mechanical and electrical endurance. **They often feature aluminum or copper-clad aluminum (CCA) windings, are built lighter, and are designed for short-term performance barely exceeding the warranty period.**

Further, **fans with copper winding also provide a strong base for a circular economy, as copper is one of the few metals that can be 100% recycled infinitely without losing its original properties.** This aligns with circular economic principles, where products and materials are kept in use for as long as possible.



Shorter fan lifespans mean higher volumes of e-waste, which results in environmental degradation. **Copper's use not only extends the lifespan of fans but also supports sustainability beyond their end-of-life. As a highly recyclable material, copper enables the recovery and reuse of resources, promoting a circular economy and reducing environmental impact.**

Industry needs to adopt a design approach that makes efficient use of **copper and prioritises quality-centric manufacturing. Copper, with its excellent electrical conductivity and thermal properties, ensures consistent performance over time, which builds consumer trust in the long-term value of the fans.** Beyond the direct consumer benefits, the usage of copper in fans aligns with broader environmental interests. Durable products reduce the frequency of replacements, curb material waste and lower the volume of discarded electronic waste.

This translates into better-performing, longer-lasting fans with lower lifetime costs for consumers. For the environment, it means reduced resource extraction, lower emissions, and a more sustainable production cycle. Adopting quality-driven design is not just a manufacturing improvement. **It's a long-term investment in economic, environmental, and consumer well-being.**

## ICA India Facilitates First-Ever Round Table on IndiaChile Copper and Critical Minerals


International Copper Association India organized the **India-Chile Mining Round Table, chaired by Hon'ble Minister of Coal & Mines, Government of India (GoI), Mr G. Kishan Reddy and Hon'ble Minister of Mining, Government of Chile, Madam Aurora Willams.**

The Indian delegation, led by **Shri V. L. Kantha Rao, Secretary, Ministry of Mines, Govt of India, included CxOs from leading Indian companies such as Hindalco Industries Limited, Adani Metals, Vedanta Limited - Sterlite Copper , Hindustan Copper Ltd, JSW, Jindal Steel & Power Ltd. and Coal India Limited.** The discussions, facilitated by **Mayur Karmarkar (ICA India)**, explored key areas of collaborations including:

- Expanding copper exploration and mining
- Sustainable mining practices & technology sharing
- Strengthening India-Chile mineral supply chain

The **Chilean delegation emphasized their country's leadership in copper and lithium production**, showcasing opportunities for Indian companies across mining projects. They also expressed a strong commitment to sharing data and providing continuous support to foster collaboration. The dialogue highlighted the **potential for technology transfer and sustainable mining best practices to deepen bilateral ties**.

This marks the **beginning of a strategic bilateral dialogue to strengthen India's copper resource security and copper trade between both nations.**

Read the PIB Release

## Thought Leadership


As India moves ahead with its clean energy and industrial ambitions, copper is quietly becoming a foundational element across sectors—**from solar and EVs to data centres and urban infrastructure.**

In this perspective, **Mayur Karmarkar highlights how strengthening domestic copper readiness—through better recycling, responsible sourcing, and resilient supply chains—is key to meeting long-term goals.** The focus isn't just on demand but on building the systems that can support it consistently and with quality

Watch Video

## ICA India Events

### Pan-India AC Campaign with ISHRAE

**February–March 2025 | Across 31 cities**

ICA India engaged 2,300+ HVAC technicians and retailers on copper's advantages to counter aluminium-based AC launches.


### Workshop on Copper in Building Wiring

**March 6, 2025 | Ahmedabad**

Addressed 500+ industry experts on copper's role in fire safety and updated wiring code compliance.

## ICA was invited as one of the jury members

**March 11, 2025 | New Delhi**

ICA was a jury member promoting copper use in safe, energy-efficient buildings.

## Industrial Cluster Workshops on copper-intensive IE4 Motors

**Feb 28, 2025 | Surat**
**Mar 24, 2025 | Belgaum**

Promoted copper-based IE4 motors as efficient alternatives to rare-earth-based PM motors.

## Industrial Cluster Workshops on copper-intensive ICA delivered the copper message at the workshop on Surya Ghar Muft Bijli YojanaIE4 Motors

**March 5, 2025 | Vijayawada**

Reinforced copper-only cable compliance under IS17293 for rooftop solar reliability and safety.