ICA’s President Anthony Lea reflects on the organization’s major developments in 2022, including the completion of the 2020 – 2022 strategic plan, the strengthening of key partnerships and the completion of the decarbonization roadmap.
ICA Membership

- ICA has 31 members
- Representing 50% of the world's copper production
- With operations on 6 continents

ICA’S NEWEST MEMBER
Headquartered in Vancouver, Ivanhoe Mines is a leading Canadian mining company committed to becoming a global leader in the supply of resources required to transition the world to a low-carbon, renewable future.
Teck Resources’ Shehzad Bharmal becomes ICA Chairman of the Board

“Copper is essential for modern life, particularly the transition to renewable energy and electrification. As the leading voice for the copper industry, ICA is well positioned to support members’ ambitions to responsibly produce this essential metal.”

Shehzad Bharmal, Senior Vice President of Base Metals, Teck Resources, has been elected ICA Chairman of the Board, a role he will hold for two years.

Freeport’s Steven Higgins completes term as ICA Chairman

“Copper is essential for a resilient global economy and is a major enabling material for decarbonization, but we must also work toward mitigating our own greenhouse gas emissions and carbon footprint to do our part.”

Steve Higgins, Senior Vice President and Chief Administrative Officer of Freeport-McMoRan, stepped down as ICA Chairman after two productive years.
ICA by the Numbers
ICA chaired, moderated or spoke at 138 events in 2022

ICA published

9 peer-reviewed academic articles
14 new commissioned studies or research presentations
24 position papers and joint letters
43 thought leadership, op-eds and member case studies
24 infographics
13 newsletters

WATCH THE RECORDINGS:
- International Chamber of Commerce

LISTEN TO THE PODCASTS
- COP27—Transformers: Empowering Africa
- Horizons Live: Red Metal, Green Demand

READ THE EVENT REPORTS:
- COP27—Climate Action Driven by Ambition
- Copper Demand Workshop: Future Sustainability Trends in Copper Demand
- Concordia Annual Summit: Understanding the Energy-Efficiency Challenge

PARTNERSHIPS
ICA believes the power of partnerships remains critical to impact the global sustainable development agenda.

Interorganizational
ICA’s strong partnerships with organizations, such as the UN Environment Programme (UNEP), the Alliance to Save Energy (ASE) and the Carbon Trust are evidence of the true power collaboration provides.

Industry
Partnerships across the copper value chain help ICA and its members decarbonize copper industry operations, while partnerships with other sectors allow those industries, such as energy and transportation, to reduce their own emissions.

Members
When ICA and its members work together, speak in one voice and act in unison, not only is the industry expanding its reach, but it is strengthening copper’s reputation as a solution for sustainability goals and application challenges.
Programs

ICA's programs deliver insight and action to members and provide opportunities for the copper industry to share its vision with a global audience.

CLEAN ENERGY TRANSITION

- The Electric School Bus Coalition, founded and managed by the Copper Development Association (CDA U.S.), influenced and promoted two recent pieces of U.S. federal legislation—the Infrastructure Investment and Jobs Act and the Inflation Reduction Act. This legislation provides up to $5 billion in direct funding for school districts to purchase electric school buses, as well as tax incentives for each electric bus purchased.

- An initiative by the European Copper Institute (ECI) and other strategic partners has received €1M funding as part of the EU’s Horizon Europe programme to promote the replacement of old and inefficient electric motors in Europe with copper-intensive high-efficiency drive systems.

- Under the guidance of ICA China, the Shanghai Electric Apparatus Research Institute adopted the copper rotor as the only technical solution in the small frame motor section for IE5 efficiency, which accounts for more than 25 percent of the total number of small and medium-sized motors (0.55kW – 375kW) in China.

GREEN AND HEALTHY BUILDINGS

- ICA China helped develop four standards for rural electrification, strengthening copper’s position in the market. The standards will support improved living conditions for 500 million Chinese citizens.

- The EU team organized four online debates on the Energy Performance of Buildings Directive (EPBD), bringing together key stakeholders and Members of the European Parliament (EP) to discuss this essential policy. The EP’s position on the EPBD includes several recommendations from ICA, particularly around electrical installations and wastewater heat recovery.
CDA U.S. launched a seminar series entitled **Copper: Key Element in Sustainable and Resilient Design**, illustrating copper’s value to the economy via responsible production, low carbon buildings and circularity. The seminar was delivered over 26 times and reached more than 700 participants.

**ICA China’s Wire and Cable** program has promoted an increase in the minimum cross-section of incoming service lines from 6mm² to 10mm² and the indoor branch circuit from 1.5mm² to 2.5 mm² in the new national mandatory code. The proposed code will improve safety and efficiency and ensure copper remains the material of choice.

**GLOBAL PARTNERSHIPS**

- In its first year of operations, the **Cornerstone of Rural Electrification (CORE)** partnered on 14 energy access projects (more than 3x its original goal) and provided training and certification to more than 1,000 individuals to install and maintain copper-intensive decentralized renewable energy systems.

- **Grid Efficiency and Resilience (GEAR)** was launched in May 2022 and aims to increase the electricity supplied to African homes and businesses by up to one-third—without increasing power generation or associated CO₂ emissions. Three African utilities’ associations are already partnering with GEAR, providing access to more than 20 countries in the region.

- United for Efficiency’s (U4E) first-ever projects funded by the **Green Climate Fund** were completed in eight African countries. ICA helped implement these projects in four of those countries: Malawi, Namibia, Zambia and Zimbabwe. Future GEAR initiatives will expand on these projects.

- In 2022, ICA spearheaded the creation of the **Mission Efficiency Marketplace**, which began with a formal agreement by the global finance and energy-efficiency communities to work together to scale up investments in this space. All ICA Global Partnership projects—CORE, GEAR, U4E, etc.—will use Mission Efficiency Marketplace as a critical pathway to third-party co-funding.
INDUSTRY REPUTATION BUILDING

- The modern mine website gives nontechnical audiences an in-depth look at today’s mine, including exploration, environmental sustainability, worker safety, efficient mining practices and mine reclamation. To date, the website has received 64,000 visits.

- During Climate Week NYC, ICA engaged in panel and roundtable discussions with executives from Siemens USA, Veracity Worldwide, UNICEF, the Business Council for Sustainable Energy, American Forests and Enel North America. An article focused on the power of partnership also appeared in Climate Week Magazine.

- ICA China works to build trust with organizations such as the Chinese Nonferrous Industry Association (CNIA) and the Chinese Association of Circular Economy Cooperation. From highlighting the role of copper at the 2022 Beijing Winter Olympics to ICA’s involvement in energy-efficiency, renewable energy and sustainability initiatives, ICA continues to be active in strategic outreach.

- ICA participated in six speaking events around COP27, including President Tony Lea’s participation in a discussion of the role technology plays in empowering a climate resilient Africa alongside Emmerson Dambudzo Mnangagwa, President of Zimbabwe and Mokgweetsi Masisi, President of Botswana.

MARKET STRATEGY

- ICA promoted the benefits of copper-wound distribution transformers in India’s Orissa Province on a life cycle cost basis to upgrade transformers for rural and peri-urban areas. The new provincial standards require transformers with a capacity of 100 kVA or higher to improve efficiency and system reliability.

- ICA worked with the China Wind Power Association to initiate development of a cost-optimized up-voltage wind power cable system that will reduce overall cost and increase the power transmission capacity of the cable, securing the copper power cable's position in the offshore wind power market.
The IEC Technical Committee 82 has accepted a guide, produced by European Copper Institute, on photovoltaic cable standards, which will lead to the extra-sizing of PV cables, specifically Class 5 flexible copper conductors, to adjust for increased operating temperatures.

MARKET INTELLIGENCE AND OUTREACH

- Research, sponsored by ICA, shows market demand for natural aggregates is larger than the available supply of iron silicate, and the price of natural aggregates is increasing, providing an expanding market for copper producers and smelters.

- A global study commissioned by ICA anticipates copper demand in auto wire harness will grow over the next 10+ years due to automotive technologies, such as BEV, HEV, PHEV and ADAS. Copper will continue to be the material of choice.

- From growing demand for electric cars to a rise in ownership of autonomous cars, research commissioned by ICA shows demand for copper in passenger vehicle systems will increase markedly into the foreseeable future.

MATERIAL STEWARDSHIP

- After 10 years of scientific research and engagement by the European Copper Institute (ECI), the European chemicals Agency’s Risk Assessment Committee agreed that copper in massive form, defined as copper with specific surface area below 0.67 mm²/mg, should not be classified for environmental hazards.

- ICA developed best practice guidance as a first step toward a harmonized and consistent approach for determining the carbon footprint of copper products and sites, filling a gap in available methodologies.

- ICA China continues to gather domestic industry data and perform high quality ISO-compliant life cycle assessments (LCA) on copper cathode and semi-fabricated products along the value chain, including the completion of an LCA on wire rod produced in China to support market development.

- CDA U.S. added 22 new alloys to Toxnot, a shared and open platform for product transparency reporting, to help downstream users make informed decisions about material sustainability.