

COPPER AT THE CORE OF DRIVING EUROPEAN SUSTAINABLE ENERGY GROWTH

Copper has been pushing the boundaries of innovation since the dawn of civilization. Today copper is more relevant than ever as we move toward a low-carbon economy. Copper plays a crucial role in our homes, in our workplaces, in transportation, in infrastructure and in our industries.



COPPER AND CLEAN ENERGY FOR ALL

Europe's sustainable energy future depends on the twin pillars of energy efficiency and renewable energy. Energy efficiency continues to deliver as the "first fuel": the more efficiently energy services are delivered, the more effective and significant contribution renewable energy has in primary energy production.

The European Commission's Clean Energy Package provides an excellent opportunity to ensure the EU takes a big step in the direction toward integrated energy systems, facilitating the uptake of renewable energy sources and increasing levels of energy efficiency.

Once the package is adopted by the EU institutions, copper will continue to contribute to the innovative solutions needed to implement it and unleash its potential across the EU. Through the DecarbEurope initiative, we are promoting, with a number of partners, the most cost-effective ways of decarbonising Europe's economy.

COPPER AS A FACILITATOR OF A LOW-CARBON ECONOMY

The energy systems of the future require copper. It has the highest thermal and electrical conductivity of any engineering metal. It reduces electrical energy and heat transfer losses and improves energy efficiency. As a result, it can reduce lifetime operating costs. Products containing copper tend to operate more efficiently and reliably.



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Our member companies have committed **EUR 20 billion** in sustainability improvements.

The copper industry has long been at the forefront of implementing low-carbon energy solutions.



CLIMATE ACTION:

Power systems utilising copper generate, transmit and use energy with high efficiency and reliability, thus reducing greenhouse gas emissions and optimising life-cycle costs. Copper plays a key role in at least 10 green technologies, which together can each reduce greenhouse gas emissions by over 100 million tonnes of CO₂ per year.



ENERGY EFFICIENCY:

As copper is the most efficient conductor available, having more copper in electrical equipment helps it run cooler, saving energy and money. Typical cost-effective reductions in energy use are in the range of 20 – 30 percent.



RENEWABLE ENERGY:

Copper plays an important role in all renewable solutions, such as solar, wind, tidal, hydro, biomass, and geothermal. Wind power accounted for 51 percent of the EU's new power capacity in 2016, and Europe is the most solarized region in the world with 100GW installed solar panels. Copper is critical to growing these numbers.

DRIVING AN AMBITIOUS SUSTAINABILITY AGENDA—FOR OURSELVES AND OTHERS

The European copper industry is heavily invested in facilitating the move toward a more sustainable future, not just through enabling others, but through reducing our own energy footprint. Thanks to innovative process technologies and waste-heat recovery, we have reduced our per-unit energy consumption by 60 percent compared to 1990 levels. We are continually doing research and testing new concepts to deliver a steady stream of innovations that can dramatically transform how things are made and how they work. As part of the copper industry's efforts to help achieve the UN Sustainable Development Goals, our member companies have committed EUR 20 billion in sustainability improvements.

VERSATILITY AND RECYCLABILITY

Copper is one of the planet's most versatile resources and an important facilitator for low-carbon energy solutions. Add to this copper's ability to be recycled, again and again, without loss in performance, and it becomes obvious why copper is the material of choice for building our sustainable world of tomorrow.

Cu Copper Alliance®

About the Copper Alliance®

The Copper Alliance® is a network of regional copper centers and their industry-leading members. It is responsible for guiding policy and strategy and for funding international initiatives and promotional activities. Headquartered in New York, the organization has offices in four primary regions: Europe and Africa, Asia, Latin America and North America. Copper Alliance programs and initiatives are executed in more than 60 countries through its regional offices and country-level copper promotion centers.



About DecarbEurope

DecarbEurope is a multichannel media campaign initiated by European Copper Institute, a member of the Copper Alliance, with the support of 10 industry associations and two media partners. The goal is to engage decision makers in policy and industry with cost-effective technical solutions that each reduce European GHG emissions by 100 to 500 million tonnes per year.



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