

Copper Recycled Content

What OEM Procurement Professionals Need to Know

Copper Development Association | copper.org

WHY COPPER REQUIRES SPECIFIC EXPERTISE

- Copper recycling is a proven industry strength and already works well
- CDA has aligned manufacturers on the standardized recycle content definitions and reporting boundaries – so you can trust the numbers.
- This guide explains what those numbers mean and how to use them.

WHAT YOU NEED TO KNOW: 4 ESSENTIALS

1

Keep the metrics distinct. Recycled content IS important — but it's not the whole story.

Recycled content indicates one aspect of circularity: recovered material use. Material recovery is also key to circularity. Carbon footprint is the primary climate metric and depends on energy sources, processing routes, and scrap quality.

2

Scrap supply is limited. More demand for recycled copper does not create more scrap.

In 2020, scrap supplied ~42% of global semi-finished copper demand. If ALL scrap were collected, that would reach ~59%. Scrap collection is often constrained by product design and application—not demand. Bottom line: primary and recycled copper are both essential.

3

Recycled content numbers are now standardized — so you can compare apples to apples.

CDA's published framework (*Recycled Content in Copper: Practical Definitions for Real-World Applications*; copper.org) defines a clear, consistent reporting boundary aligned with ISO 14021, ISO 14040, ISO 59020, and EN 45557. OEMs should confirm their suppliers comply.

4

Reward system benefits – not just product-level attributes

The opportunity is to make recycled-content claims transparent and climate-relevant so buyers reward expanded recovery, lower-carbon pathways, and a resilient copper system - not simply a reshuffling of existing scrap flows.

HOW THE COPPER SEMI-FABRICATION WORKS: THE CASTING BOUNDARY

Key rule: Scrap that is generated WITHIN the casting process and returned to that same casting process does NOT count as recycled content. Scrap generated AFTER casting (during metalworking) that is returned to casting DOES count.

STEP 1: CASTING

Cathodes + scrap melted into wire rods, cakes, slabs, or billets



STEP 2: METALWORKING

Rolling, drawing, extrusion, cutting/sizing, and further shaping or assembly into semi-finished and/or end-use products— by semi-fabricators or downstream customers.



Scrap from metalworking that returns to casting = **RECYCLED CONTENT**



Result: Operational structure does not change the accounting = comparability across suppliers

COMMON CONCERN: SCRAP INFLATION

Could manufacturers deliberately generate excess scrap to inflate results? In practice: unlikely.

Excess scrap means higher material costs, more energy for remelting, and lower yield — all of which hurt profitability. Manufacturers have strong financial incentives to minimize scrap, not maximize it.

PRODUCT AND VALUE-CHAIN REALITIES

Feasibility

Feasibility varies by product category and alloy. Magnet wire, rod, tube, flat-rolled products, alloys, and precision components can have different impurity tolerances, conductivity requirements, fabrication scrap profiles, and performance specifications.



Value Chain

Primary producers, secondary refiners, fabricators, and product manufacturers play different but complementary roles. A growing market needs both recovered copper and primary copper because available scrap is bounded by product lifetimes and recovery constraints.



Geography

Geography matters. Scrap generation, refining capacity, fabrication, end-use demand, logistics, and energy mix are often located in different places, which can change the carbon and supply-resilience value of a recycled-content target.



PROCUREMENT CHECKLIST

YES – ASK FOR THIS	NO – DO NOT ASSUME THIS
✓ Pair recycle content with lifecycle carbon data	✗ Recycled content as a carbon proxy
✓ Improved collection and better scrap separation	✗ Shifting existing scrap will increase recovery
✓ Product-specific feasibility requirements	✗ Uniform thresholds across all copper products
✓ Consistent and comparable reporting	✗ Claims measured in different ways

RECOMMENDED PROCUREMENT LANGUAGE

Suppliers should disclose recycled content using the standardized definitions and boundaries developed by the industry and published by CDA. Procurement decisions should prioritize verified carbon reduction and net recovery expansion while recognizing product-specific technical requirements.

BOTTOM LINE: Ask for both metrics. Compare like-for-like claims. Reward recovery and carbon reduction.