Fastmarkets

# Scrap metal recyclers explore options to tap into 'green premium'

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**Scrap metal products were being repurposed as part of the green solution to achieve decarbonization, and some major market participants at the beginning of the recycling chain have been exploring ways to get a slice of the so-called 'green premium,' Fastmarkets has heard.**

The use of scrap metal in aluminium and copper production consumes less energy than primary smelting, and less carbon is emitted during the secondary smelting process as a result.

Many metal producers were now taking pride in using an increasing proportion of secondary raw materials.

At the Bureau of International Recycling (BIR) conference in Dubai, October 17-18, aluminium producer EGA presented to delegates its plan to build the first aluminium recycling plant in the United Arab Emirates, while marketing its recycled aluminium under the name EternAL.

Aluminium production consumes the most power among the base metals, and has already seen surcharges built into contracts for specific low-carbon material and scrap-produced foundry alloy.

## Green metal premiums

Last month, copper producer Montanwerke-Brixlegg introduced a premium of €295 ($289) per tonne for its copper cathodes on an fca basis for 2023, targeting a group of "climate-sensitive" clients.

That was notably higher than Aurubis' 2023 offer of $228 per tonne, and Codelco's offer in the low-mid $230s per tonne for the European copper market.

The differential was said to be justified by a lower carbon footprint.

Brixlegg's cathodes are produced entirely from copper scrap, and the verified product carbon footprint is 0.739 tonnes of carbon dioxide per tonne of copper cathode produced - the lowest in the industry. That compared with the industry norm of 4.1 tonnes per tonne of copper, according to the International Copper Alliance.

According to a verification statement that Brixlegg presented earlier this year at Fastmarkets' copper conference in Barcelona, Spain, the carbon footprint was "calculated from acquisition of copper scrap until the completion of the copper cathode production process."

Swedish producer Boliden, meanwhile, separately markets its low-carbon copper products that produce less than 1.5kg of carbon dioxide per kg of copper.

**Recycler constraints**

At the moment, smelters were the major advocates of a green metal premium, while suppliers of scrap metal were not. This included upstream recyclers such as scrapyards that collect, dismantle, process and shred scrap metal.

"Copper smelters sign long-term contracts to fix their premiums - they need to do that to plan production," a source with a major non-ferrous metal recycler in Europe said. "A green premium can be charged on a one-off basis. But recyclers don't like to have annual contracts. Our production is fast and flexible all the time, in response to market changes."

Nonetheless, there were still fresh efforts among recyclers to better position their scrap metal products to clients that care about their carbon footprints.

One of the biggest metals recyclers in Europe was currently in the process of adding carbon certificates to its diverse range of products, two sources with direct knowledge of the subject told Fastmarkets at a recent industry conference.

**Carbon emission benchmarking**

But this was not expected to become an industry norm because it was too costly for small and medium-sized scrapyards to apply for their own carbon certificates, the sources said.

The BIR was now in the process of updating benchmark values for carbon emission savings in secondary copper, aluminium and ferrous production, compared with primary smelting, the BIR's director general, Arnaud Brunet, said on October 16 at a press briefing.

The association's "Report on the Environmental Benefits of Recycling (2016 edition)" said that the benchmark carbon footprint savings between primary copper production (via the pyrometallurgical route) and secondary copper production was 81,000 tonnes of carbon dioxide emissions per 100,000 tonnes of copper.

In aluminium, the benchmark carbon footprint saving between primary and secondary production was 354,000 tonnes of carbon dioxide emissions per 100,000 tonnes of aluminium. And in ferrous metals, the gap between primary and secondary production was 97,000 tonnes of carbon dioxide emissions per 100,000 tonnes of steel.

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