## Strategic Insights From World Steel Dynamics



is a leading steel information service in Englewood Cliffs, N.J., USA

WSD's steel experience, steel database and availability of steel statistics are the principles for performing steel forecasts, studies and analysis for international clients. WSD seeks to understand how the "pricing power" of steel companies the world over will be impacted by changes in the steel industry's structure. The views and opinions expressed in this article are solely those of World Steel Dynamics and not necessarily those of AIST.





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## Steel scrap price cardiac arrest: Sizable, and often unpredictable, rapid changes in price

In 2019, the estimated global supply of steelmakers' metallics will be about 2.3 billion metric tons, consisting of about 1.4 billion metric tons of pig iron production, 100 million metric tons of direct reduced iron production and 795 million metric tons of steel scrap consumption. The scrap figure includes estimated recovery of about 350 million metric tons of obsolete (or old) scrap (that will be growing substantially in the next decade as the 10- to 40-year-old reservoir rises sharply in China), about 220 million metric tons of new scrap returned to the steel mills by processors and manufacturers, and about 225 million metric tons of home steel scrap generated in steel plants as part of the production process.

Global steel production in 2025 is forecast to be little changed from the present time as a decline in China, due to lower steel demand, is offset by gains elsewhere. Hence, in 2025, the generation of new and home scrap will be slightly lower than in 2019 because of improved yields in the steel plants and further efficiencies on the part of manufacturers as they make more use of lighter weight and stronger steels.

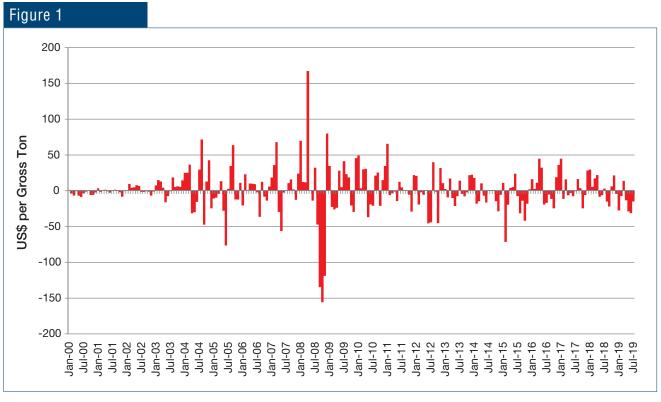
In contrast, the generation of obsolete steel scrap is forecast to rise about 130 million metric tons per annum by 2025 due largely to much higher recovery in China, where the 10- to 40-year-old reservoir of obsolete scrap is rising sharply reflecting the sizable steel production gains since 2000.

Obsolete steel scrap is subject to sharp price swings because it's consumed last — i.e., it's the industry's most marginal product. This characteristic is well apparent in Fig. 1, which depicts the percentage change in steel scrap prices from month to month.

The price of steel scrap is a function of: (a) swings in the price of finished steel products; (b) swings in steel marketplace psychology; (c) shifts in foreign exchange rates that impact steelmakers' costs and the price of scrap in home markets; (d) swings in scrap usage due to changes in steel production; and (e) the extent to which the scrap is overpriced or underpriced relative to the prices of iron ore and coking coal (the two major cost inputs in blast furnaces).

If there's a strong recovery of the global steel market in late 2019 or early 2020, steel scrap may rise sharply.

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Steel buyer/seller cardiac arrest: USA shredded scrap (% change month to month). Source: PriceTrack, AMM and SteelBenchmarker™.

