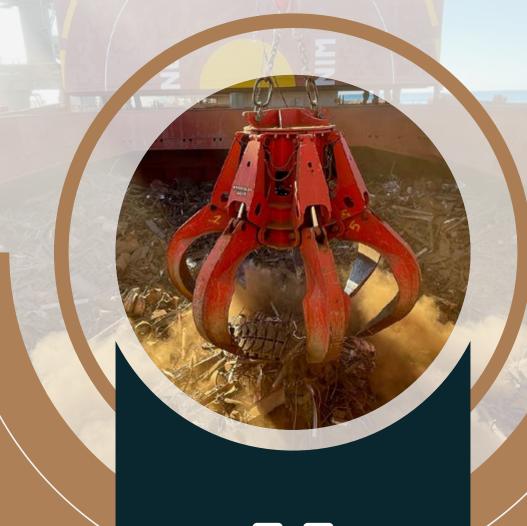


GLOBAL SCRAP EXPORTS RESTRICTIONS

2025

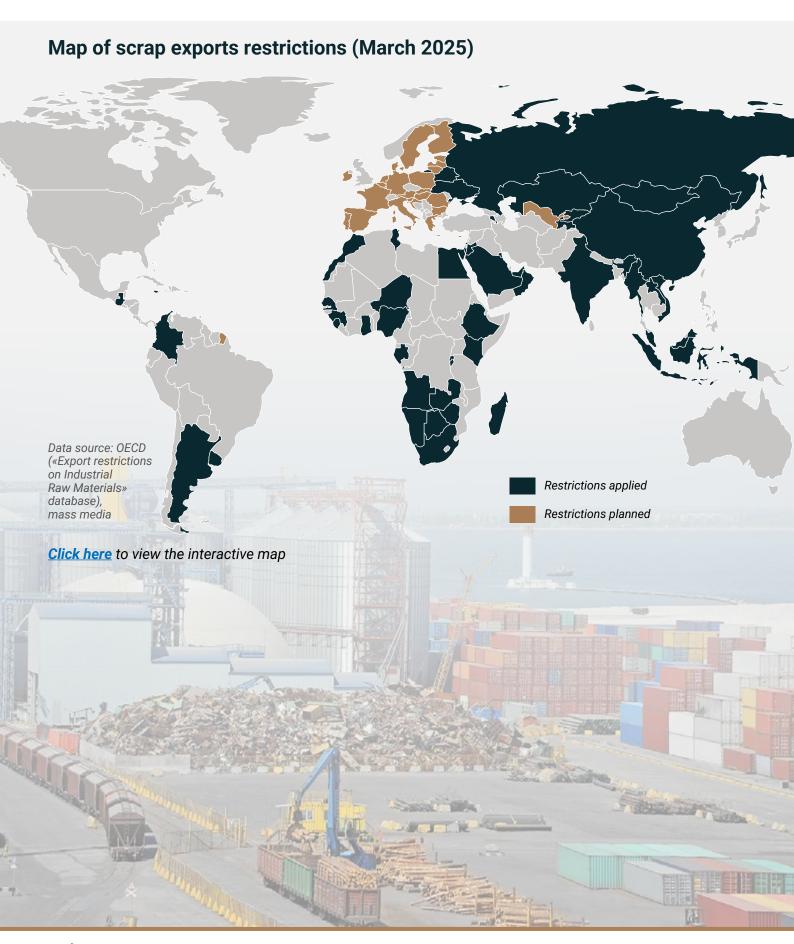






KYIV April 2025

RESTRICTING SCRAP EXPORTS IS BECOMING A GLOBAL TREND



IN LONG TERM SCRAP WILL BE LOSING STATUS OF EXPORT COMMODITY AMID TRADE BARRIERS

48

countries
have restricted
the export of
ferrous scrap, 38%
of them banned
scrap export
(March 2025)

Every 3rd

country around the world, or 76 countries will have barriers for ferrous scrap export after the enforcement of changes to the Waste Shipment Regulation in the EU (May 2027) and introduction of export duties in Uzbekistan (July 2025) 77%

of crude steel globally, or 1.5 billion tons is produced by countries that have introduced or are planning to introduce measures to limit the export of scrap

Main reasons for tightening scrap trade restrictions:

- Scrap is viewed as a strategic resource for decarbonization, so countries want to limit scrap exports to secure enough supply for domestic needs.
- ► Scrap as raw material cannot be produced in necessary quantities at necessary time.
- ➤ Affordable scrap prices on domestic market are necessary condition for ensuring competitiveness of domestic "green" steel industry.
- ➤ Additional scrap supply is needed to increase recycled content in goods that is an element of circular economy models and necessary condition for development of "green" steel market.
- Restricting scrap exports helps level the playing field with countries that have already introduced similar trade barriers.

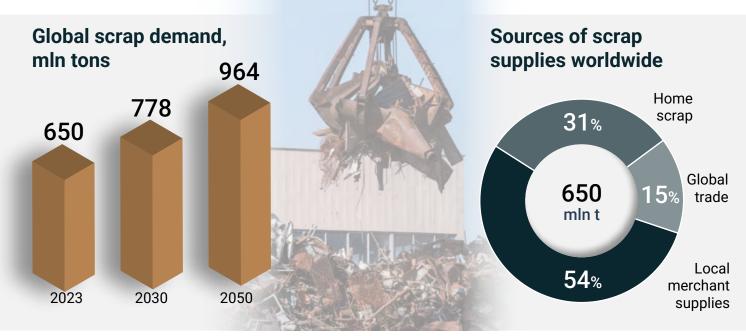
GMK Center foresees the next key future trends on the global scrap market:

- ► The number of trade restrictions for scrap exports will increase over time.
- Countries will develop new types of scrap export restrictions, aligned with climate policies.
- Volumes of global scrap trade will decrease as this material will be more used domestically. Scrap will no longer be a common export commodity.
- Scrap consumption in the EU will grow because of decarbonization trend and CBAM. Other countries will also increase scrap consumption.
- Availability of scrap on global market will decrease pushing global scrap prices higher.
- ➤ On local markets scrap prices will be regulated through trade restrictions. Differences between local and global prices for scrap will become the norm.



Data source: OECD («Export restrictions on Industrial Raw Materials» database), mass media, GMK Center calculations.

GLOBAL RISING SCRAP DEMAND WILL BE DOMINANTLY MET BY DOMESTIC MERCHANT SCRAP SUPPLIES



Data source: Posco Research Institute, GMK Center estimate.

Data source: UN Comtrade, OECD, GMK Center estimations.

Global demand for steel scrap is projected to rise by nearly 50% by 2050. As the industry moves toward decarbonization, steel producers in major scrapgenerating regions – especially the EU and the U.S. – are expected to increase their scrap usage. At the same time, leading steel-producing countries like China and India will also boost their scrap consumption.

For example, the China Association of Metal Scrap

15 mln tons
gap between demand
and supply on global
scrap market in 2030
(Boston Consulting
Group)

Utilization expects scrap use in China to grow by 63% – from 215 million tons in 2022 to 350 million tons by 2030. According to Kallanish Commodities, India's scrap consumption is set to double, from 34 million tons in 2024 to 70 million tons by 2030.

There are two key drivers behind the growing demand for steel scrap:

- ▶ rising share of scrap in metallics used in steelmaking. According to scenarios by the Mission Possible Partnership, IEA, and E3G, this share is expected to grow from about 30% today to 45% by 2050.
- ▶ the expansion of EAF capacities. The OECD predicts that scrap use in EAFs could more than double from 360 million tons in 2019 to 820 million tons by 2050.

As a result of these trends, the availability of ferrous scrap on global market will decrease in the

future and countries are already concerned about scrap supplies for local steel production. Boston Consulting Group estimates that global scrap demand will increase at about 3.3% compounded annual growth rate (CAGR) through 2030, while scrap supply will rise at about 3% CAGR. As a result, scrap market could face 15 mln tons deficit instead of surplus which is observed now (9 mln tons).

According to our estimates, in 2023 global scrap consumption amounted to 650 mln t. Only 15% of this volume was supplied through global trade (exports & imports). Remaining needs were satisfied by domestic merchant supplies and home scrap (generated during the steel production). As there is no big potential for increasing home scrap generation, local merchant supplies become very important in meeting increasing scrap demand.

VOLUMES OF GLOBAL SCRAP TRADE REMAIN STABLE AND HAVE NO PROSPECTS TO INCREASE

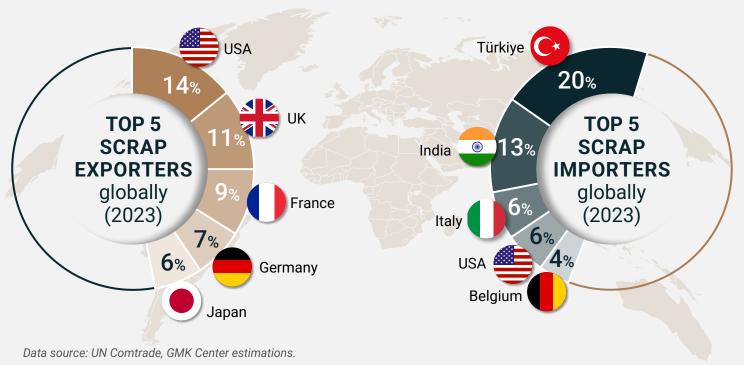


Data source: UN Comtrade, World Steel Association, GMK Center estimations.

Global scrap trade is relatively stable – its volume fluctuates around the average (99 mln tons). Global scrap trade did not reflect rising trend in global steel production that was clearly observed in 2015-2021. Steelmakers traditionally rely more on domestic sources of scrap.

Both exports and imports of scrap are highly concentrated. The top 5 exporters supply 47% of scrap. The top 5 importers buy 49% of supplies. Turkiye as the largest scrap importer is reliant on scrap supplies from the EU, USA, the UK and Russia. Some Turkish steelmakers even have established sourcing units in North America to ensure scrap supplies.

USA is both a large exporter and importer of scrap. The country has shortage in prime scrap and turns to Canada to fill it. Japan exports its excess prime to South Korea, Southeast Asia, and China.



DECARBONIZATION CHALLENGES SPUR INTRODUCTION OF SCRAP EXPORTS RESTRICTIONS IN THE EU

Scrap exports from the EU to third countries, mln tons

X2

(12.3)

(13.4)

(15.1)

(15.6)

(17.5)

(19.4)

(17.6)

(18.8)

(16.7)

(20%

EU share on global

2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024

Data source: Eurostat, calculations of GMK Center.

Scrap exports from the EU to third countries (extra-EU supplies) reach almost 20% of global scrap trade. In this term, the EU is the largest scrap exporter in the world. From 2015 to 2021 scrap exports from the EU doubled. Growing scrap exports prompt steel associations to discuss scrap leakage as separate phenomenon. It means that scrap instead of local consumption is exported to third countries, some of them provide subsidies to expand recycling capacities, creating unfair competition and contributing to overcapacity. Steel producers in such third countries can afford to pay higher prices for scrap, that leads to its leakage. This situation means missed opportunities for European green transition and decarbonization.

Decarbonization plans of European steelmakers are largely focused on building new EAF capacities.

Based on publicly announced projects, EAF capacity in the EU is expected to grow by at least 60% compared to 2024 levels. Since not all companies have disclosed their plans, the actual increase may be even higher.

New EAFs will need additional scrap supply, even If company plans to construct DRI plant.
Scrap and DRI are complementary resources, which are used together. The EU doesn't have its own resources to meet potential DRI demand, but it has enough scrap generation. The future of European EAF-based "green" steel industry will depend on possibility to ensure domestic scrap supplies at affordable prices supporting competitiveness of steelmaking operations.

Recognizing the strategic importance of scrap for decarbonization, the European

Commission has amended the Waste Shipment Regulation to ban scrap exports to non-OECD countries which do not demonstrate the ability to environmentally manage waste. This regulation will take effect on May 21, 2027. From that date, export to countries not included in the list of countries eligible to import nonhazardous "waste" from the EU will stop.

scrap market

(extra-EU supplies)

Additionally, the recently announced European Steel and Metals Action Plan envisaged that by Q3 2025 at the latest, European Commission will consider trade measures to ensure sufficient availability of scrap in the EU. Implementation of scrap export restrictions in the EU (major scrap exporter) will become a trigger leading to implementing similar restrictions in other countries and changing scrap global trade flows.

EAF capacities in the EU

ву **QЗ** 2025

European Commission may propose new scrap export restrictions 79.4 mln tons

operating EAF capacities (March 2025) 21.3 mln tons

addition of new EAF capacities in 2024-2026 26.3 mln tons

addition of new EAF capacities in 2027 and later (announced projects)

Data source: Global Energy Monitor, OECD, companies' data, GMK Center calculations.





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prices forecast

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