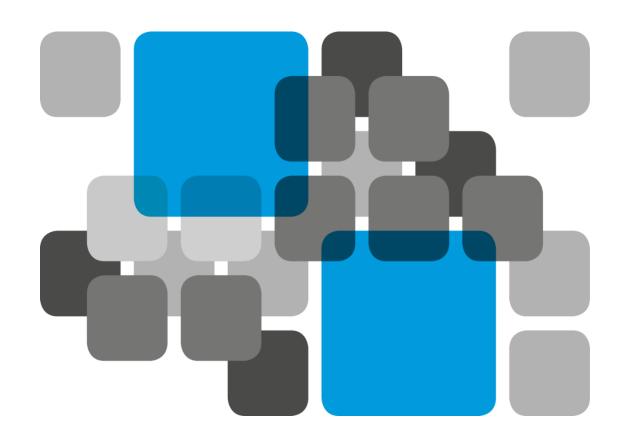


Inflation and recession make 2023 a challenging year for longs

Steel Long Products Market Outlook

2022 Q4 Edition





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Global Overview



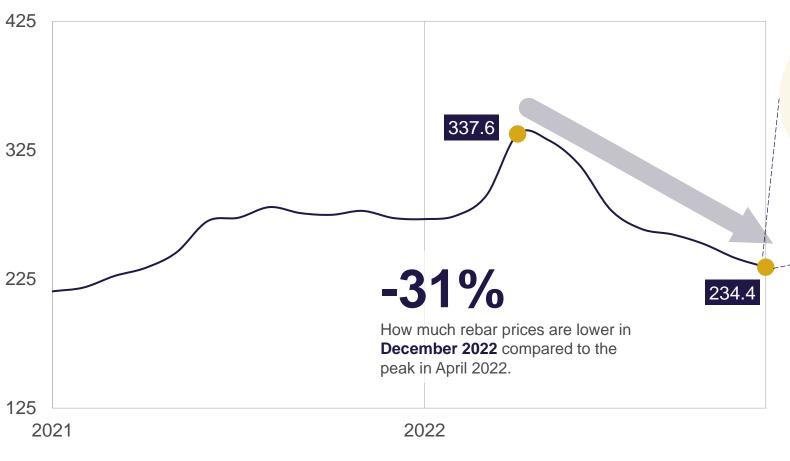
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Summary

- 1. Weak demand and destocking caused longs prices to close 2022 at below the 2021 average. Prices in Asia rebounded in December on gradual roll back of pandemic control measures in China. Demand reduced in most parts of the world during 2022 Q4, though a few bright spots have emerged. We have also confirmed our expected broad price trends for longs though now at a higher equilibrium level.
- 2. We continue to expect that demand in China will continue reducing as the government focuses away from speculative building permits. We do expect, however, some measure of stimulus and policy support will be maintained which will help cushion a demand crunch in China.
- 3. Demand will be weak in 2023 before growth accelerates in 2024. China is no longer the driver of global growth which will be felt the strongest in developing Asia – namely India and Southeast Asia. Production will grow outside China, but the growth will not be equal, and some countries will continue to depend on imports.
- 4. There are multiple risks to this forecast. High energy prices and inflationary pressures are likely to impact both end-use demand as well as cost of steel making. Scrap supply poses an operational risk to longs production. As we move into the medium term, the cost of carbon will become increasingly important.

Weak demand and destocking drive prices below 2021 levels

CRUspi Longs, Index, Apr 1994 = 100



Asia

Germany

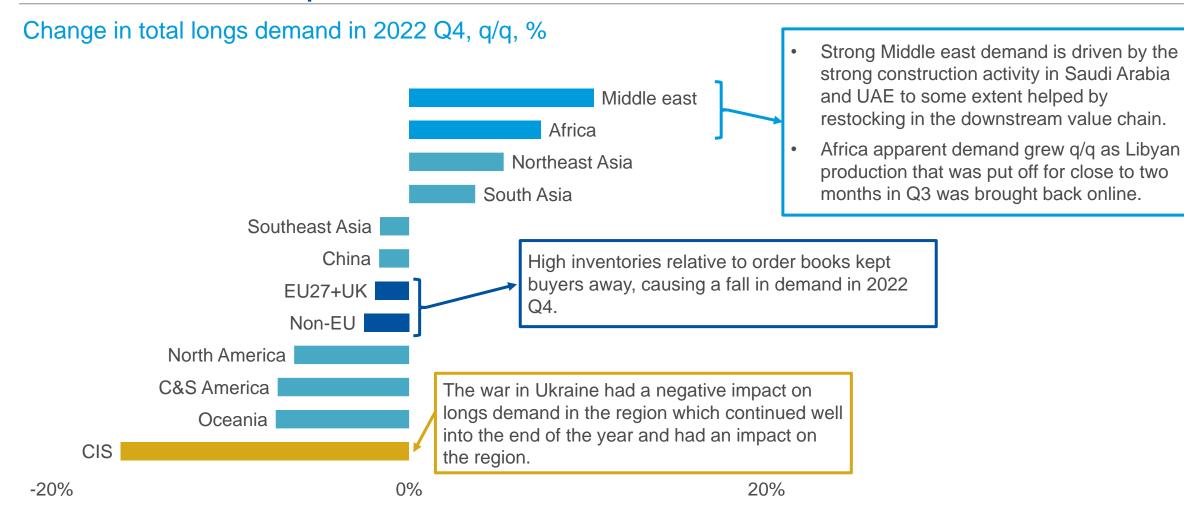
USA

Iower

- Continued weak demand and destocking cause longs prices to close 2022 at below 2021 average.
- Overall, CRUspi Longs fell by 3% m/m to 234.4 in December 2022.
- The decline was led by US and European markets. Prices in Asia rebounded on gradual roll back of pandemic control measures in China.

DATA: CRU Long Products Monitor 4

Demand in most parts of the world decreased in 2022 Q4

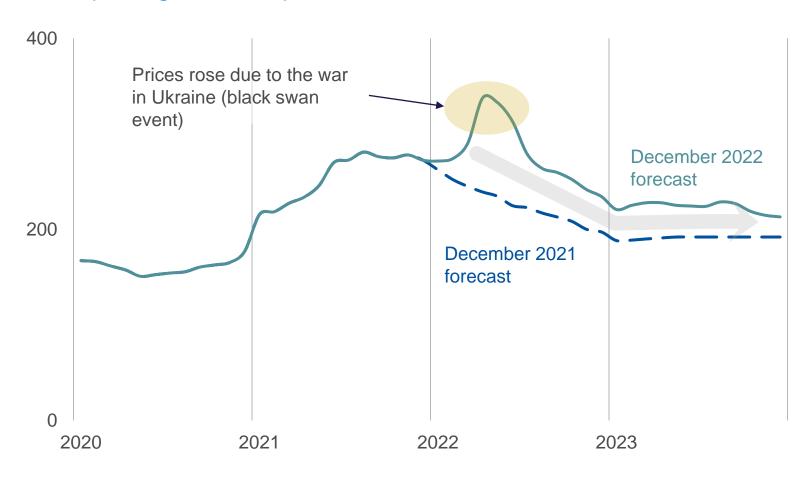


DATA: CRU, World Steel Association, S&P Global

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Expected broad price movement confirmed though now at higher level

CRUspi Longs, Index, Apr 1994 = 100

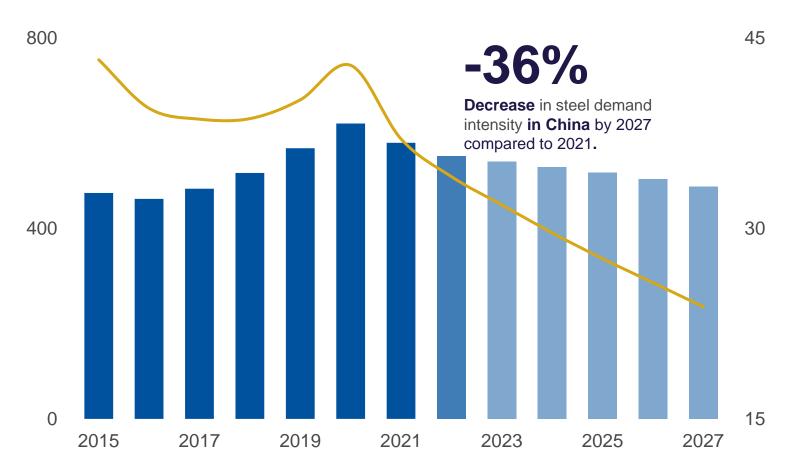


- Baring the black swan even of the war in Ukraine, our price forecast from a year ago accurately predicted the broad movements of longs price during 2022.
- Over the near term, we have raised our price equilibrium levels to account for structurally higher input costs.
- We now expect that on an average, our current 2023 price forecast will be 17% higher than that predicted a year ago. This again is a function of the war in Ukraine which has pushed up energy prices.

DATA: CRU Long Products Monitor

Favourable housing policy to cushion demand crunch in China

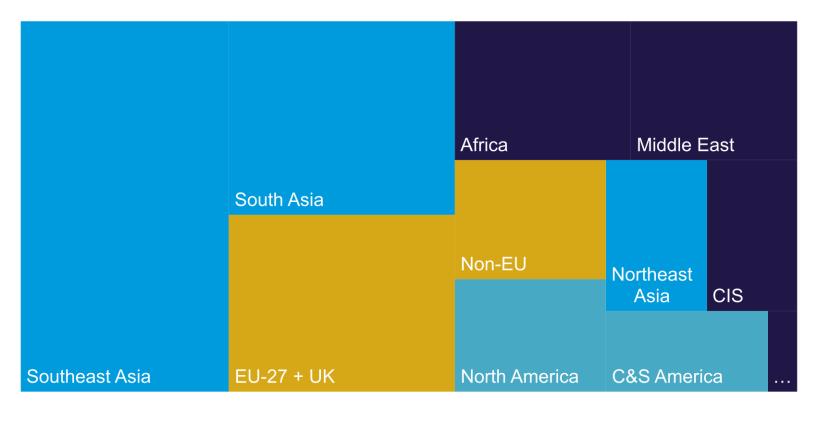
LHS: Total longs demand, Mt (bars); RHS: Intensity of demand, kg/GDP (line)



- We expect construction steel demand in China to continue declining though the fall will be cushioned b favourable housing policy.
- The target of high-quality growth is likely to encourage more investment in consumption / manufacturing.
 Stabilisation of the housing market and ensuring housing completion will be the near-term focus.
- We also consider in our forecast, consideration of infrastructure stimulus package, further support for housing and loosening Covid-19 restrictions.

Developing Asia to support longs demand in the medium term

Share of world ex. China growth in demand, 2022 – 2027

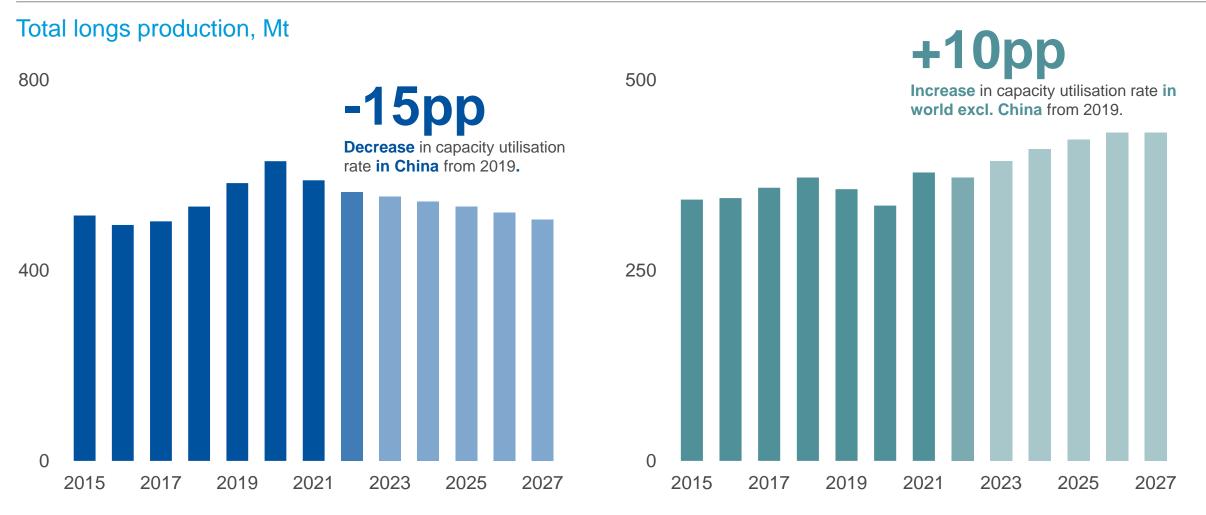


- Going forward we expect Developing Asia to drive growth of longs demand. Growth will be stronger from 2024 as both Southeast Asia and South Asia face a challenging 2023.
- Demand in Southeast Asia will become equal to Northeast Asia demand by 2027.
- Despite having lower growth than Developing Asia, Europe will still maintain its position as the highest longs demand outside Asia.

Legend Europe Americas
Asia Rest of World

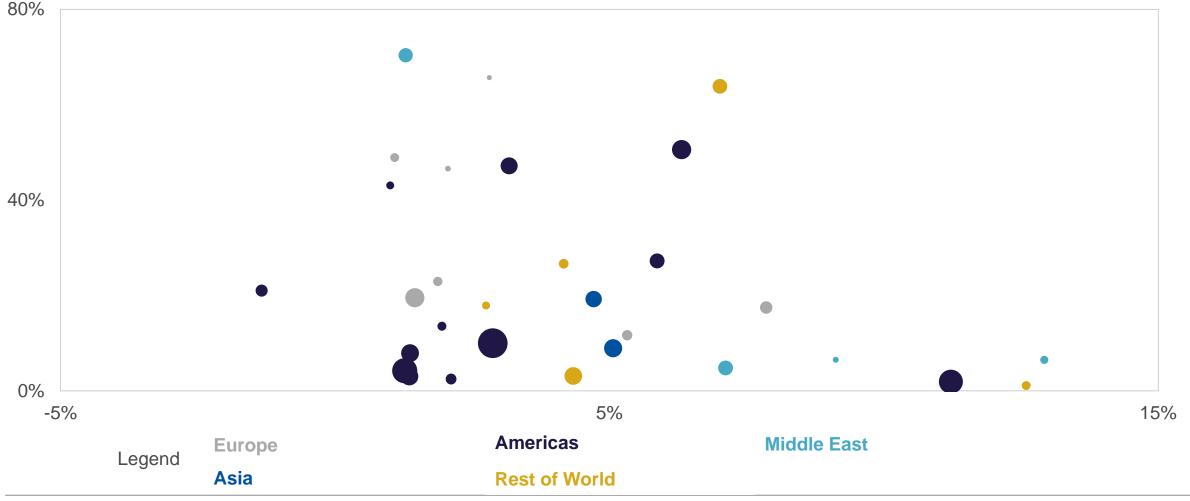
DATA: CRU

Capacity utilisation will increase outside of China as production rises



Opportunities exist for penetration into new markets

Y-axis: Import penetration in 2027; X-axis: CAGR growth (2022–2027), total longs demand in importing countries Bubble (each bubble is a country / region) size: Demand in 2027 in the respective country / region



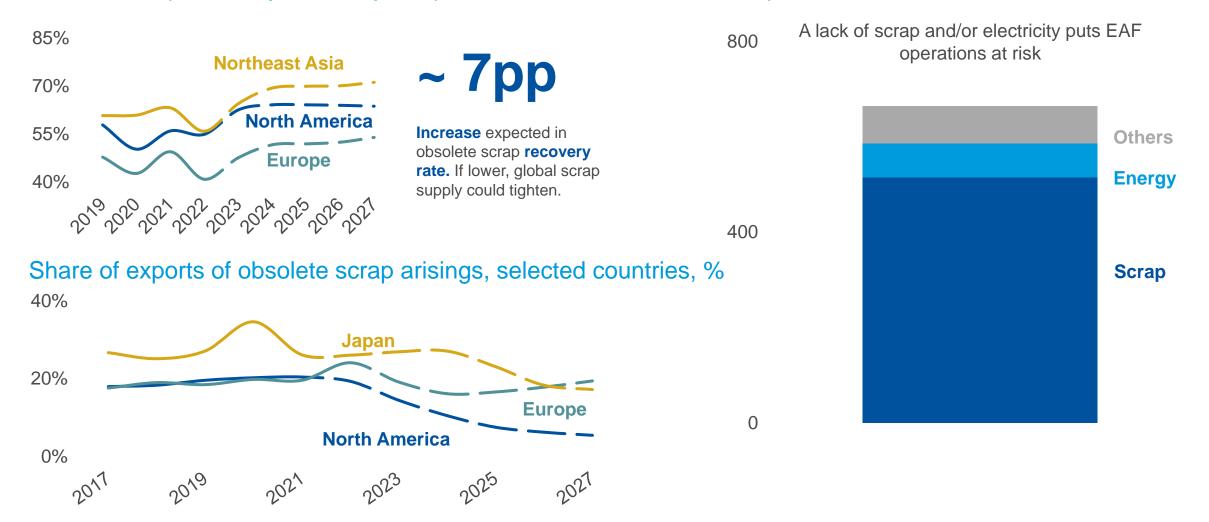
DATA: CRU



EAF operational risks: Lower scrap availability and energy supply

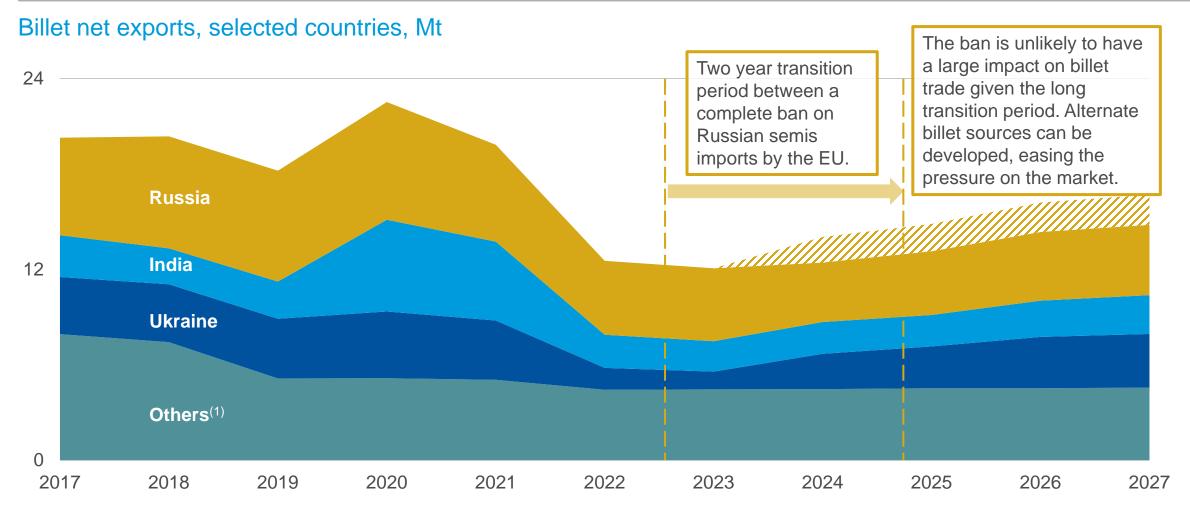


EAF cost of production, World excl. China, 2022, \$ /t



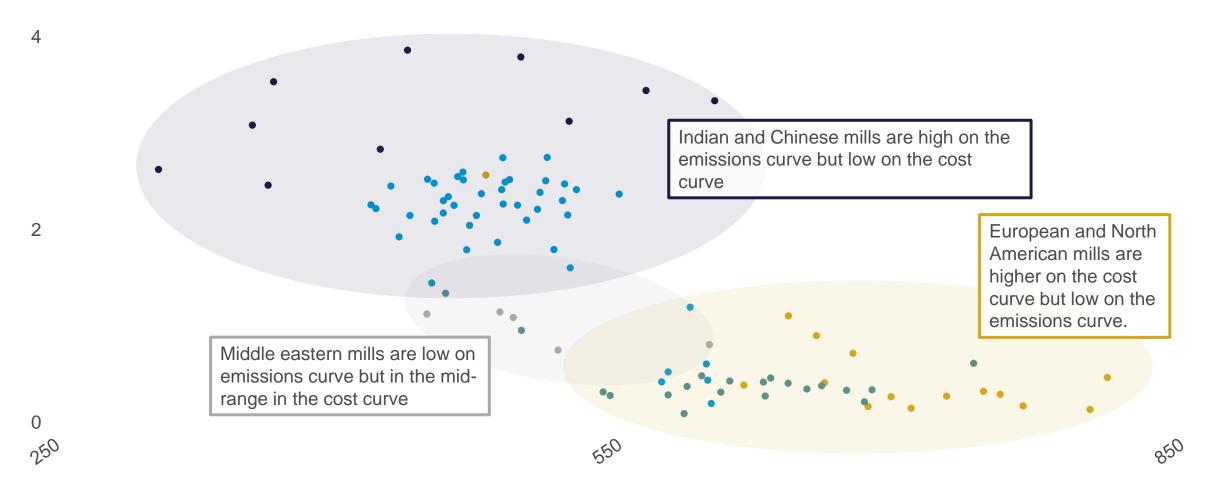


Delay on Russian sanctions helps avoid an even tighter billet market



Emissions will be an important sourcing consideration in medium term

Y-axis: Scope 1+2 emissions, CO₂ /t; X-axis: Cost of production, \$ /t (Rebar in 2027) (data by mills)



Cost of carbon alongside other factors will impact on long term prices

Rebar prices, \$ /t

