

INSIGHT



Steel: 5 things to look for in 2023



Akin to 2022, 2023 will also be a tale of two halves for steel. The steel demand will remain muted in the first half, marred by macroeconomic challenges and peaking Covid infections in China. The second half would fare relatively better with a projected rise in global economic activity as inflation tapers, consumer spending recovers, and Chinese construction activity garners momentum.

The steel industry will ring in the new year with a mixed bag of opportunities and challenges. The baton to pull steel consumption out of the doldrums will lie on India, the US and China as EU+UK and CIS region will continue facing extended macro headwinds in 2023. We have taken a dovish stance on recovering Chinese property markets as we feel the worst is not over yet, and there is a threat of self-caution among the Chinese population if Covid cases take more time to peak.

The expectation of a pick-up in Chinese economic activity and the uncertainty surrounding the Russia/Ukraine war pose a downside risk to our 2023 steel outlook. The insight lists a few noteworthy mentions to look out for in 2023.

Opportunities will arise from:

- renewed optimism around recovery in Chinese property markets as Covid restrictions end
- steelmakers hoping for margin expansions as cost pressures subside
- elevated role of government initiatives in aiding steel consumption in the US
- Decarbonisation push and supply security to create new investment opportunities in green metallics supply hubs

Downside risks prevail in the form of:

- macro headwinds from continual inflation woes, interest rate hikes, tightening of government purse strings and energy security concerns
- the threat of permanent trade disruptions from the ongoing Russia/Ukraine war
- peaking of Covid infections in China

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1) Are the gloomy days over for Chinese property markets?

China's property markets witnessed a sharp downfall in 2022. Property starts fell 40% year-on-year, and completions were down by 20% year-on-year. Supply-side issues such as liquidity crunch for developers and high inventory were further exacerbated by demand slowdown amid strict Covid restrictions. Government effort to ease credit tightening, lower home loan rates, and remove home purchase restrictions, was essentially in vain.

China's unexpected and abrupt reopening in late 2022 caused a massive wave of infections that strained the healthcare systems. However, we believe the abandonment of the zero-Covid policy will support economic activities and boost the demand for the troublesome housing sector in 2023. Covid restrictions were the primary cause for property sales plunge throughout 2022. The uncertainties emanating from frequent lockdowns and income loss urged households to increase savings and postpone home purchases. With these risks eliminated, we expect to see more property buyers enter the market in 2023, mainly from Q2, when the infections are expected to peak, as per epidemiological forecasts.



We suppose it will still take a few months for consumer confidence to revive. Therefore, we have taken a slightly more dovish stance and are hoping the property sector will benefit from pent-up spending in the second half of 2023. The record-high household savings accumulated during the 3-year pandemic implies a lot of pent-up demand to be released after reopening. Overall, we estimate a 10-15% rise in property starts this year.

This builds a strong case for an upward revision in our property sector outlook. However, we foresee the demand to stay much lower than 2021 peaks due to prevailing inventory, supply-side issues and weakening demography. The envisaged uptick in the property sector, in addition to a 5% year-on-year growth in government infrastructure investments in 2022 and a rise in pent-up consumer spends, will pose an upside risk to our previous outlook of 2% year-on-year growth in steel demand for 2023.

2) Russian semis to adjust to a new norm as sanctions take effect in 2023

To set the context, global imports of Russian finished steel halved in 2022, however, semis fared better registering only a 22% drop year-on-year. The European Union led sanctions against Russia amid the ongoing war, was the key contributor towards the decline in Russian steel exports. In October 2022, Europe expanded its sanctions from finished to semi-finished steel (semis) imports but subject to a transitional period of 2 years, given the EU's heavy reliance on Russian billets and slabs. The latest round of sanctions will hurt Russia as it is largely a semis exporter. Prior to the war, Russia exported 15.6Mt of semis in 2021, with 30% going to EU27+UK (4.8Mt), followed by 12% to Turkey and only 4% to China.

The full import ban will come into effect in April 2024 for billets, with import quotas dropping significantly from September 2023. Slab importers have been given more time to adapt given that 85% of total semis imports from Russia are slabs (4.1Mt in 2021). The ban on slab imports will come into effect from October 2024 and till then EU has fixed a 3.7Mt/year cap on Russian slab imports. Although this quota is unlikely to be met given the self-sanctioning behaviour seen among many European importers. The year-on-year European slab imports from Russia were down 20% in 2022.

So how will the EU fill this supply gap as the sanctions take effect? And what does this mean for Russian semis exports and the global semis trade landscape in 2023?

As European buyers looked to reduce their reliance on Russian semis, cost-effective Chinese and Indian imports, quickly grew to fill the gap. We expect to see import volumes from Russia drop off more sharply toward the latter part of the year as the cut-off date for the ban draws closer. In 2023, China in particular, will be best placed to serve the EU's continued import requirements, both in terms of the import price and volume, compared to others.

Russia has already begun to diversify its semis exports. China increased its semis imports from Russia by 275% year-on-year during January-November 2022 from a low base of 0.6Mt to 2.3Mt. Given that Russian semis are the cheapest globally, they will remain lucrative for importers in China, Turkey, Brazil and other CIS countries. We expect China to increase semis imports from Russia compared to 2022, given its expected steel demand recovery this year. However, it is unlikely to import very heavily from Russia in the long term given China has reached its steel demand peak, and is comfortably capable of covering its domestic steel requirements.

Despite Russia's efforts to displace exports that once went to the EU, Russian semis exports will fall significantly in 2023 and that will be a new normal as Russia will not be able to fully replace the volumes lost due to sanctions. We expect sanctions to stay in place for longer, even post the resolution of the war and do not expect Russian semis exports to go back to pre-war levels in the short term.

3) Optimism grips new green metallic hubs

The supply risks emanating from trade disruptions, cost inflation and energy security will continue to weigh on steel markets, at least in the first half of 2023. We witnessed steelmakers, especially in Europe, announcing plans to gradually switch to greener technologies and ascertain alternate routes to secure their supply chains amid the Russia/Ukraine war. However, new green



technologies will take a long time to commercialise, the only exception being the H-DRI-EAF route. We believe the void in decarbonisation options in the near term creates an opportunity for alternate supply routes.

The top priority of steelmakers would be to decarbonise the iron-making stage, as it accounts for more than two-thirds of the total carbon emissions from steel. This would necessitate an overhaul of existing mills or the development of an alternate green metallics hub. Upgrading existing mills is easier said than done due to a high dependency on raw material imports and uncertainty surrounding the availability of green feedstock. These limitations, in addition to cost economics and the need to decarbonise and secure supply chains, would aid the creation of alternate supply hubs.

We have witnessed baby steps towards developing green metallics projects in Brazil, Australia and the Middle East. Vale's biomass-based green pig iron plant in Brazil, Emirates Steel-Itochu-JFE's green metallics plant in the United Arab Emirates, and POSCO-Hancock joint venture to produce hydrogen-based DRI/HBI plant in Australia beg a mention.

We believe more players will commit investment in green pig iron and direct reduced iron manufacturing hubs in 2023. These investments would bear fruit 3-4 years later, the typical gestation period for these projects. Regions such as Australia and Brazil are the obvious choices for these hubs as they are raw material powerhouses with access to renewable resources and favourable industrial policies. The Middle East is the new entrant looking for sustainable manufacturing opportunities to diversify from hydrocarbon-linked revenues. Middle East benefits from the availability of cheap natural gas, clean power and supportive government regulations and investments.

Additionally, these regions are witnessing government and private investment in green hydrogen projects. The availability of green feedstock (including biomass in Brazil) would also be a differentiating factor. These attributes would favour the development of cost-effective green pig iron and direct reduced iron in these regions.

The green metallics produced in these regions would create seaborne trade opportunities in mature economies such as the US, EU, Japan, South Korea and China. The metallics seaborne trade accounts for 10-20% of the overall consumption. We believe these new green metallics project initiations and collaborations will garner pace in 2023 and create trade opportunities for the long term.

With only a small stratum of the top 25 steelmakers committing capital to achieve decarbonisation goals, the stage is set for others to follow in their footsteps. We believe greening the existing iron-making routes via intermediary supply hubs will create opportunities for new technologies and investments and play a pivotal role in accelerating carbon abatement.

4) Steadying the nerves of steelmakers: Easing supply disruptions to suppress costs aiding margin expansion

Steel prices skyrocketed in 2021. Prices rolled back in 2022 but stayed above the pre-2021 levels. The Russia/Ukraine war led supply-side disruptions pushed up costs – particularly in the western economies. EU HRC and US HRC prices in 2022 averaged US\$944/t and US\$1140/t, respectively – 1.8x times the 2020 average.

Steel consumption saw a 3% decline in 2022, owing to the weak economic landscape and credit tightening – compelling steelmakers to lower prices. Couple this with high costs, we witnessed steel margins squeezing worldwide, with several countries recording historic lows.

We expect the weakness in steel prices will ensue in 2023, with most European countries entering or having entered recession on the back of an acute energy crisis, interest rate hikes and weaker than ideal fiscal support. We expect clouds of optimism to hover over steel demand in the second half of 2023 led by improving macroeconomic situation in Europe and US and opening up of Chinese markets following the removal of Covid restrictions. As a result, steel prices will firm up in the latter months of 2023 in sync with the demand.



While the Russia/Ukraine war is still on, the world is trying to find alternate routes to secure supply chains. Supply disruptions have begun to ease and trend will continue in 2023 – a massive relief for the raw material markets. A higher inflow of Russian coal and climbing Australian production will aid coking coal supply, subsequently lowering coking coal costs for steelmakers by nearly 35% year-on-year. Iron ore prices will stay elevated. However, compared to the exorbitantly high base of last year, the 2023 average iron ore cost to steelmakers is projected to fall 20% year-on-year.

Another talk of the town in 2022 was the soaring power costs. The ongoing war put the global gas and power markets under extreme pressure. However, we believe that the worst has passed. Economic slowdown in western countries suppressed oil demand and causing prices to lower. Oil prices (Brent crude) are already hovering around US\$80 per barrel and are expected to decline year-on-year in 2023 as fear of shortage eases and the market adjusts to reduced Russian volumes. Lower fuel prices and warm weather in Europe have led to markets rebalancing and sparking hopes of correction in gas and power prices – albeit still at multiples of historical averages and structurally high levels.

Overall, the raw material (excluding scrap) and power costs, which account for nearly 60% of the total steelmaking cost, are slated to plummet by 25% in 2023. As against this, steel prices will witness a smaller and more gradual fall, causing steel margins to expand by a whopping 1100-1300 bps – realign with 2021 levels. With bumper profits, most steelmakers will try to recover from the tumultuous times seen in 2022. While there is also a possibility of some of these profits being diverted towards expansions, it is likely that steelmakers would stay away from pursuing it at this point when the grey clouds of prolonged recession, high inflation and uncertainty around the Russia/Ukraine war looms.

5) IJJA: the make or break for US steel consumption

The fate of steel in the US in 2023 will be inevitably tied with the country's most crucial infrastructure law in history: the Infrastructure Investment and Jobs Act (IJJA). The bill, enacted in November 2021, authorises US\$1.2 trillion for transportation and infrastructure spending, with US\$550 billion of that figure going towards new investments and programs until 2026.

Despite the initial enthusiasm, over a year has passed since the IJJA was signed into law, and so far, it has not materially changed the outlook for construction (and steel) in the US. Inflation, supply chain bottlenecks, labour shortages and unexpected project licensing delays are among the top factors behind IJJA's sluggish first year.

We think 2023 will be a different story. Not only because curbing inflation became the utmost priority for the White House but also because the government has been taking concrete steps to address project licensing delays. For instance, 2022 saw the Federal Reserve running a cycle of six consecutive interest rate hikes, a series not seen in four decades. Also, in May 2022, the Biden administration passed the Permitting Action Plan, a roadmap to assist agencies in accelerating the Federal permitting and environmental review processes. Those are all positive news for IJJA and, consequently, steel.

We expect steel demand in the US to escalate by around 8% in 2023, to 105.4 Mt, with half of this growth directly triggered by the IJJA.

Still, we see risks associated with the bull scenario. Firstly, lingering supply chain bottlenecks can ultimately place a cap on construction activities. Secondly, recessionary pressures, as by fighting one evil (inflation), the government will inevitably slow down spending, which may lead to a recession. And lastly, let's recap that the IJJA talks more about 'fixing' and 'modernising', things that don't bode so well with steel consumption akin to 'building'. This may mean our steel estimates are skewed to the upside, and concrete may become a distant key beneficiary of the policy rather than steel.

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