

The CRU logo is a white square with rounded corners containing the letters 'CRU' in a bold, white, sans-serif font.

CRU

**Data, Insight,
Strategy &
Communities**

The background of the entire page is a dark blue gradient with a large, sweeping, abstract shape made of many fine, parallel, glowing blue lines that curve from the top right towards the bottom left, resembling a comet's tail or a high-speed light trail.

Outlook for 2025: Global Commodity Markets Trends

Independent *expert* intelligence

www.crugroup.com

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Global Themes

“ The world today is more volatile and uncertain than ever before. Climate change, the energy transition, and shifting geopolitical dynamics are creating significant challenges, but also extraordinary opportunities for the metals, mining, and commodity sectors.

At CRU, we've identified the key trends that we believe will shape 2025, and we are delighted to share these insights in this commodity trends report.

”



Mark Jeavons

Head of Sustainability - CRU Group

Macroeconomics & geopolitical landscape

Here we set out our Top Ten Calls for the world economy in 2025. CRU Clients can access these in further details in our [November Global Economic Outlook Report](#).

CRU's Economics Top Ten *Calls* for 2025



Global GDP will grow at 2.6%, roughly the same as in 2024



Global industrial production will grow at 3.3%, faster than in 2024



Any recovery in global trade volumes will be short-lived



China will struggle to pivot away from construction as a growth driver



Interest rates will diverge between the US and Eurozone



Residential construction will return to growth in the US and Europe



Birth rates will continue to decline



EV sales will grow more rapidly in Europe than in China



Growth in global oil demand will continue to be weak



The CRU basket of commodity prices will rise modestly in 2025

Here we explore several of our Top Ten Calls in more detail including our calls on trade, the Battery Electric Vehicle (BEV) transition, and global oil demand.

Any recovery in *global* trade volumes will be short-lived

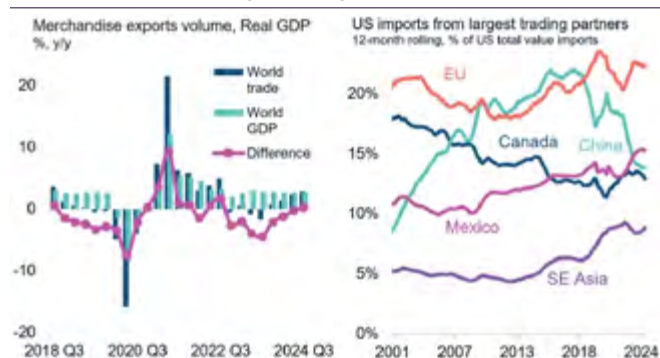
Global trade has seen subdued growth for most of the past two years, consistently lagging behind world growth (see chart below). However, world trade seems set to pick up in the second half of this year, and the surge could continue until potential tariffs on world imports by the incoming US administration materialise.

In the short term, impending tariffs can encourage buyers to 'front-run' shipping goods before tariffs come in. But over the long term, we expect trade to stagnate once the tariffs are in place, so any immediate surge will be temporary.

Import tariffs raise trade costs, thus deterring trade volumes exported from the levied country. This situation manifested during the trade war between the US and China, which led to the introduction of tariffs by both sides in 2018 and has resulted in the slow displacement of China as the top US trading partner.

Nearshoring efforts accelerated by the Covid-19 pandemic – and derisking measures amid the war in Ukraine – have worked in the same direction of splitting trade into geopolitically aligned blocs led by the US or China, respectively. Any escalation of trade tensions among these economies will continue to fragment the world's trade landscape.

Global trade has trailed GDP, with trade restrictions leading to fragmentation



Data: CRU, CPB, Global Trade Tracker, Oxford Economics.

Note: South East Asia includes Indonesia, Malaysia, Philippines, Thailand and Vietnam.

BEV sales will grow more rapidly in *Europe* than in China

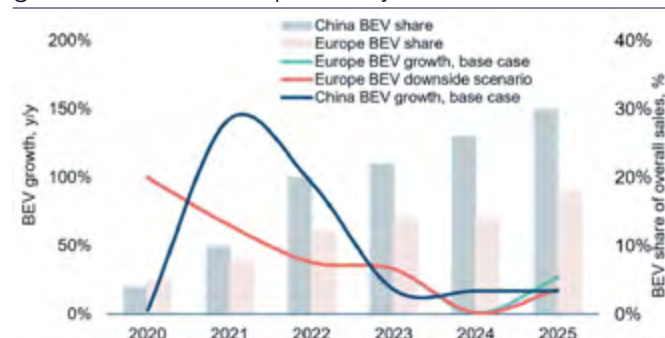
Despite BEV growth stalling in Europe this year and accelerating in China, we expect the rate of BEV sales growth in Europe to surpass that of China next year (see chart below). Feeding this demand, Chinese BEV exports to Europe will continue to grow.

This year, the demand environment in Europe has appeared weak, with reports of rising inventory levels, fewer incoming orders, and shorter lead times. These challenges have led to production downtime and BEV model launch delays. However, we anticipate automakers will increasingly prioritise BEV deliveries next year, launching more affordable models and offering discounts to meet more stringent emission standards and avoid potentially large fines. It is also noteworthy that BEV sales outside of Germany (which removed a purchase subsidy) have mostly been up y/y even in 2024.

In addition, low base effects are set to favour European growth next year, as the level of BEV penetration is significantly lower than in China. The current scrappage scheme – which concludes at the end of the year – is also likely bringing some Chinese demand forward from 2025.

That said, risks remain from macroeconomic headwinds and political backsliding on emission standards.

Base effects and emission rules will support BEV growth rates in Europe next year

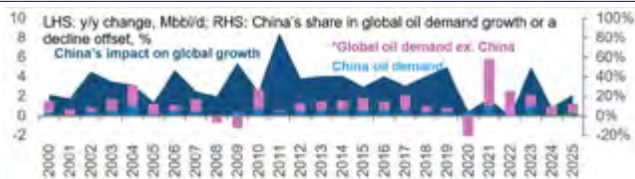


Data: ACEA, CAAM, CRU

Growth in *global oil* demand will continue to be weak

- China shows signs of slowing growth in oil demand, potentially peaking before the decade ends. This year, the decline is largely driven by the end of post-pandemic pent-up demand and weaker global economic conditions. A prolonged slump in China's property market (n.b. investment in construction has been falling for two years) has further suppressed diesel demand, while the rising adoption of LNG trucks has displaced a significant share of diesel-powered HDVs.

Since the 2000s China has, on average, contributed half of growth in global oil demand



Data: CRU, EIA

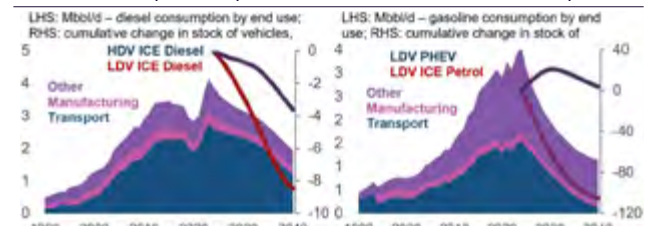
Note: The scale on the LHS axis of the graph visually cuts off the data point in 2020, -9.58 Mbb/d

- The rapid rise of electric vehicles across the transport sector has been transformative. ICE vehicle stocks are expected to decline

sharply, reducing both diesel and gasoline consumption, which together account for nearly half of crude oil demand. Although car density remains low, further rapid growth is unlikely, particularly as China's expansive high-speed rail network continues to reduce reliance on road transport.

- For global oil consumption to sustain its growth, regions like Africa, India and Southeast Asia will need to take on a larger role, as mature markets such as the US and Europe are also nearing peak oil demand.

Rise in hybrid vehicles at the expense of pure ICE will depress petrol and diesel consumption



Data: CRU, JODI, UN Energy Statistics Database.

- Throughout 2025, we will closely monitor these issues as they arise and observe their impact on the global economy.



Base Metals

Here we bring together *key industry insights* from our global team of analysts and the trends to watch in light of the macro economic outlook, geopolitical landscape and dynamics driving demand and supply for the following markets: Battery Materials; Wire and Cable; Copper; Stainless Steel; Lead; Zinc and Precious Metals.

Battery Materials

As we look forward to another interesting year in the battery materials space, we outline our top calls for 2025, relating to prices, policy, corporate strategy, supply and demand.

Battery Materials Top *Calls* for 2025



Lithium price recovery to be driven by LFP



Energy storage to account for a fifth of global battery demand



Higher tariffs and weaker policy support to dampen demand



Mergers and acquisitions to heat up



Low-voltage applications: Pb-acid out, LFP in

Lithium price *recovery* to be driven by LFP

When will lithium prices recover? This is the question on everyone's lips, after a year in which carbonate prices averaged nearly two-thirds lower than in 2023. Though market sentiment varies, we expect that lithium prices will recover in 2025 amid strong demand and substantial curtailments to lithium supply. Since the start of last year,

CRU has downgraded its forecast by 14% for mined lithium supply in 2025, with [CRU's Lithium Asset Service](#) indicating that even more operations are underwater at current prices. Of these curtailments, Australian operations have been hit particularly hard, with Mineral Resources' Bald Hill becoming the latest casualty of the weak price environment.

On the demand side, ternary cathode output is expected to grow modestly in 2025. However, oversupply and overcapacity mean that price support for cobalt is unlikely to materialise, while a nickel price rebound will be dependent on Indonesian ore quotas. In contrast, LFP cathode production is at record levels, growing 94% y/y in November. Soaring LFP output, powered by strong Chinese EV sales and booming energy storage demand, will be a key driver of the lithium price recovery in 2025.

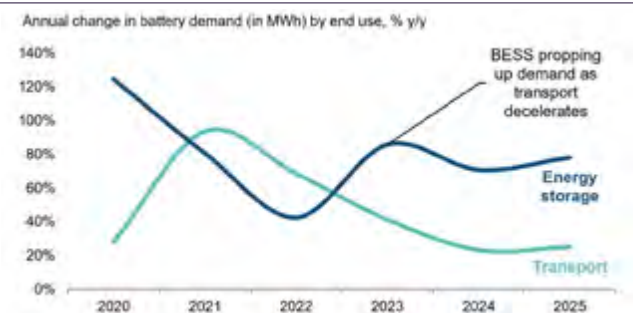
Energy storage to account for a *fifth* of global battery demand

- While it has been widely publicised that global EV sales growth is slowing, booming demand from the energy storage sector has largely flown under the radar. Since 2022, BESS demand has grown sevenfold, far outpacing e-transportation. Much of this growth is being driven by the economics of power storage, new supportive tender mechanisms, longer term contracts, arbitrage and grid stabilisation services – with a third of last years' installations in major markets not directly connected to renewable energy installations. In addition, BESS demand will benefit from solid growth in the solar PV sector, with solar module costs and prices expected to remain low in 2025.
- BESS usage has also benefitted from LFP overproduction, with storage system bid prices falling below the \$100/kWh level in China. Although LFP alternatives like sodium-ion will start to proliferate, cost parity is not likely to be achieved until later in the decade.



- Overall, CRU expects BESS demand to grow more than 70% y/y for the third consecutive year.

BESS demand has grown sevenfold since 2020



Data: CRU Battery Value Chain Service

Higher tariffs and weaker policy support *to dampen* demand

Policy is a key topic of discussion moving into 2025, not least because of the upcoming inauguration of President-elect Trump. While Trump's US is particularly at risk, weak macros and EV sales are forcing many governments to consider pulling one or more of three key levers – each of which could dampen demand.

■ Removing subsidies

It seems increasingly likely that Trump will scrap one or both of the 30D and 45X IRA tax credits. The Clean Vehicle Credit (30D) is believed to be at higher risk of repeal compared to the Advanced Manufacturing Production Credit (45X), with the latter drawing significant foreign investment and creating jobs primarily in Republican states. Although Germany's late-2023 removal of consumer subsidies prompted a significant decline in BEV sales, a similar US move is unlikely to be as impactful under the IRA's current guise. This is because Foreign Entity of Concern (FEOC) rules around critical minerals are so stringent that barely any EVs will qualify from January 2025.

■ Relaxing emission standards

Trump may also consider relaxing emissions standards, which could incentivise OEMs to shift back towards more profitable ICE models. Rollbacks of European emissions standards, or the US' CAFE and EPA rules would be a major blow, although probably over longer timescales given that OEMs operate across multi-year development cycles.

■ Tariffs

Even before Trump is sworn in, the escalating Sino-American trade war has seen the US place tariffs on a range of Chinese materials – while China is reportedly considering tightening export controls on various battery-related technologies, including DLE, as well as those that are used to produce CAM (LFP and LMFP), lithium chemicals and lithium metal. As a result, government approval would be required for technology transfers, including overseas investments and joint ventures – a move aimed at impacting both demand and supply growth outside China. Across the world, we are likely to see even more trade barriers this year.

Trump 2.0 could deepen profitability challenges for US OEMs and battery producers

		Scrap 30D	Scrap 45X	Relax emission standards	Tariff hike
	 Direct impact  Indirect impact				
Risk profile		High	Low	High	High
Time to implement (optimistic)		2-4 months	1-2 months	2-3 years	Immediately
Sales/production	 	 	 	 	 
Cost	 	 	 	-	 
Raw materials demand	 	 	Chinese producers US/FTA producers	 	 

Data: CRU Battery Value Chain Service

Mergers and acquisitions to *heat up*

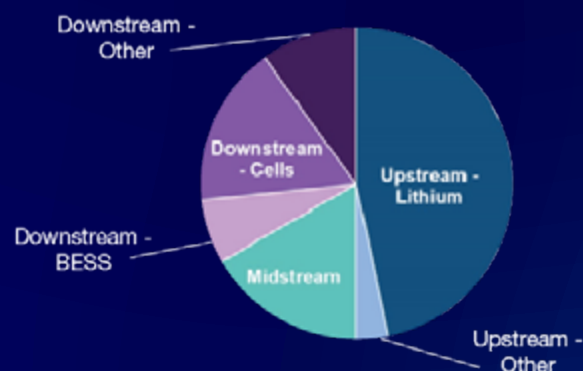
Booming demand from energy storage and interest in the wider battery industry have precipitated a wave of mergers and acquisitions. Since 2022, most M&A activity has been directed in the upstream or downstream, with less than 20% in the less-profitable midstream.

In particular, the lithium market has been a hive of activity, with Rio Tinto's October \$6.7 B acquisition of Arcadium the most valuable transaction this year. The acquisition comes nearly 18 months after the estimated \$10.6 B merger of Allkem and Livent that formed Arcadium, highlighting both Rio Tinto's belief in lithium's bright future, and that the market is bottoming out.

CRU anticipates that 2025 will bring even more mergers and acquisitions in the battery industry. Chinese players in particular may see this as an opportune time to buy up bankrupt western companies as part of an effort to diversify and onshore supply chains. In November, CATL were rumoured to be interested in rescuing beleaguered Swedish battery manufacturer Northvolt, before later denying these reports. Similarly in the upstream, China's Norinco were set to acquire struggling Congolese Cu-Co miner Chemaf Resources, though the sale has since been blocked by state miner Gécamines. US government opposition to the deal was reportedly a key factor, amid rising protectionism and an escalating Sino-American trade war.

Lithium producers have been most active in M&A

M&A activity since 2022 by supply chain segment



Data: CRU Battery Value Chain Service



Low voltage applications: *Pb-acid* out, *LFP* in

Cost reductions have enabled LFP cell prices at record lows, enabling LFP usage in ever more applications. The world's largest EV manufacturer, BYD, recently announced that they have now equipped more than 2 million new energy vehicles with LFP starter batteries, instead of the incumbent Pb-acid – reportedly reducing lead consumption by 20,000 tonnes. LFP batteries are lighter, and while initially costlier than Pb-acid, may have last up to ten times longer – meaning lower costs over the battery lifespan.

12 V LFP batteries have been particularly popular among Chinese smart EV producers. NIO, Xiaomi Auto and Li Auto, some of the world's largest smart EV manufacturers, have already swapped Pb-acid for LFP. Outside China, incumbent 12 V Pb-acid batteries are likely to remain dominant. Clarion, a leading Pb-acid auto battery maker, says that a multiple-battery solution will be required to meet increasing demands in all powertrains. Such a solution would include advanced AGM batteries (which have higher lead contents), alongside conventional Pb-acid and LFP.

LFP batteries are lighter, cheaper and last longer than Pb-acid for starter batteries

Feature	LFP	Pb-acid	Why?
Cycle life	✓		Up to 10x higher for LFP
Energy density	✓		Around 3x higher for LFP, reducing size & weight
Efficiency	✓		Higher charge/discharge efficiency
Environment	✓		Lead contamination risk
Cost	✓		LFP is comparable or lower
Upfront cost		✓	Upfront cost is lower for Pb-acid
Safety		✓	Perceived safety risk from LFP
Temperature		✓	LFP requires thermal management at low temperatures
Recyclability		✓	Pb recycling infrastructure is more advanced
Supply chain		✓	Vehicle designs have been catered to Pb-acid batteries

Data: CRU Battery Value Chain Service, CRU Lead Service

CRU Battery Services

Navigate the complex interplay of material supply, costs and technologies.

Key features:

- Raw material demand forecasts: Anticipate future material needs and pricing trends.
- Supply chain analysis: Optimise sourcing and logistics across the battery value chain.
- Cost modelling: Detailed cost breakdowns for battery materials and technologies.
- Market intelligence: Insights into global battery market dynamics and opportunities.
- Sustainability strategies: Guidance on meeting environmental and sustainability targets
- Technological advancements: Updates on cutting-edge battery technologies and innovations.

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Wire and Cable

CRU's Wire and Cable team is the leading global, third-party independent provider of market analysis and forecasts for metallic and optical cable supply and demand.

Wire and Cable Top Ten *Calls* for 2025



Data centre applications to drive highest growth levels

China's domestic demand for metallic cable continues decelerating



Cable trade to slow as protectionism ramps up

Localisation increased to gain market access



EV applications to underperform everywhere ex. China

Offshore wind to grow in Europe, weak elsewhere



China optical cable demand shrinks, mergers imminent

Price pressure and geopolitics set to dominate optical cable



US optical cable volume growth to be globe's strongest

BharaNet Phase III will grow Indian market by double digits



CRU's Wire and Cable team is the leading global, third-party independent provider of market analysis and forecasts for metallic and optical cable supply and demand. Our services also offer insights into trade statistics, global construction, manufacturing, and power generation, transmission, and distribution.

This insight reviews the wire and cable industry's key developments from the past year and identifies ten key trends that we expect will shape the market throughout 2025.

2024 in review:

Weakness in Europe and China offset by *demand in US* and *emerging markets*

For metallic wire and cable, 2024 was a year with clear regional winners and losers. The major demand hubs of Europe and China both struggled with consumption in certain end-use sectors as the construction industries were incredibly weak. In Europe, high interest rates and recessions in many economies were to blame, while in China, weak real estate sector, low consumer confidence and structural financing challenges caused headaches. The US showed greater strength, but by far, South Asia, Southeast Asia and the Middle East proved to be the most resilient regions for metallic cable demand based on high levels of government investment as well as young populations, which are rapidly urbanising and industrialising.

2024 was a challenging and transition year for the optical fibre and cable industry. Global demand contracted as competition intensified, putting significant pressure on pricing.

As some of the major regions have largely completed their fibre-to-the-home (FTTH) buildout, the demand for this application was lower, as evidenced by trends in China and Europe, painting a picture that new, innovative solutions will be needed in the future for optical cable demand to maintain strong levels. One of them has been the accelerated development of hyperscale data centre driven by artificial intelligence applications.



Meanwhile, rising protectionism and geopolitics – driven by several anti-dumping and anti-subsidy investigations – significantly affected export markets in China and India. The US remained the only developed market to show strong growth in 2024, rebounding from a challenging 2023, while the Middle East and Africa offered pockets of optimism.

Forecast versus reality:

Review of *selected calls* from 2024

- **China will continue to support the economy via state-owned enterprises (SOE's)**

China struggled with weak domestic demand in 2024. As private enterprises lost steam amid weak consumer demand, China's state-owned enterprises compensated for the weakness to provide stabilisation. We expect to see this continue into 2025.

- **Consolidation to take place as smaller cable producers struggle**

2024 was a challenging period for many cable makers. Despite this, most of the high-profile M&A activity was longer-term, strategic acquisitions rather than distressed players.

- **AI uptake drives data centre demand for cables**

Cable demand for data centres, fuelled largely by AI and cloud applications, has been one of the fastest growing applications in 2024. Though data centre cables are estimated to comprise only 4.4% of optical cable demand and 1.2% of metallic cable demand in 2024, this share is expected to grow exponentially over the coming years.

CRU Wire and Cable top ten *calls* for 2025

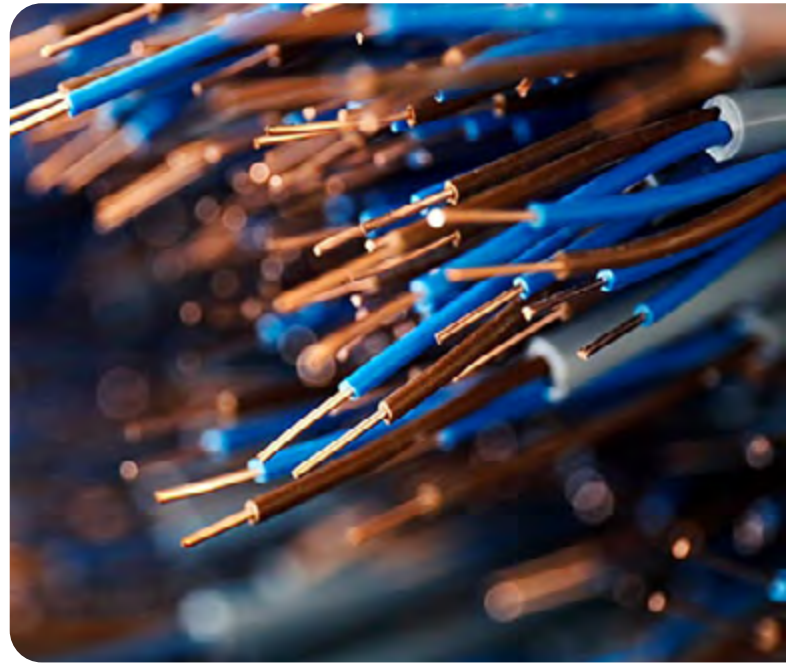
CRU's top ten calls for 2025 are outlined below. These topics will be covered in detail throughout the year in our [Wire and Cable](#) and [Optical Fibre and Cable](#) services.

- **Data centre applications to drive highest growth levels**

Data centre applications will continue to be the fastest-growing application for both metallic and optical cables. Data and power demand will grow exponentially as AI continues to see more application in daily life and business operations.

- **Offshore wind to grow in Europe, weak elsewhere**

Driven by ambitious green energy transition goals, Europe will see nearly 10% increased demand in cables for offshore wind, with volume being the highest around the globe. Slowdowns in projects are expected in other key regions such as China and North America.



- **China's domestic demand for metallic cable continues decelerating**

Demand for metallic cables in China has slowed in recent years as the residential construction market faced debt and demand-related challenges. Companies will look overseas to Southeast Asia, the Middle East and Africa as new export markets as trade barriers in the US and Europe increase.

- **China optical cable demand shrinks, mergers imminent**

China's fibre-to-the-home (FTTH) rollouts have reached a point of saturation, where the market looks to overbuilding, inherently causing a shrinking market. As the world's largest producer of optical cable, we expect consolidations to start throughout the country.

- **Cable trade to slow as protectionism ramps up**

China supplied 38% of US metallic cable imports in 2015, this has fallen to 16% in 2024. Other countries such as Brazil, Mexico, Saudi Arabia and the EU are also bringing in measures to support domestic manufacturing and stem low-cost imports.

- **Price pressure and geopolitics set to dominate optical cable**

With weakened optical cable demand in China and other key regions carrying over from 2024, we expect pricing to remain under pressure from imports and fierce competition for available projects. To protect domestic production, countries will continue to battle against imports via duties and tariffs.

- **Localisation increased to gain market access**

As trade barriers are raised, many cable-makers will be prompted to open facilities within countries or trading blocs in order to be considered as domestic supplier. CRU expects to see many new overseas facilities opening or strategic acquisitions.

- **US optical cable volume growth to be globe's strongest**

The US will have the strongest growth by volume as the federal Broadband Equity Access and Deployment (BEAD) program will begin to drive cable demand. As BEAD gains momentum, private equity will seek to gain market share via new broadband networks and subsequent subscribers.

- **EV applications to underperform everywhere ex. China**

Despite Tesla's proximity to the US presidency, 2025 will be a year of weak EV demand as subsidies are repealed in most major markets. However, cost-effective Chinese EVs will continue to boom with perhaps some local exports to other Asian markets.



- **BharatNet Phase III will grow Indian market by double digits**

The Indian market is set to have double-digit percentage growth due to the BharatNet Phase III FTTH roll-out program, of which deployments will begin in 2025. This program seeks to deploy approximately 5 M F-km annually, a strong increase from 2024's base of 16 M F-km.

Copper

Our Copper top calls for 2025 jump around the industry, from the perennial forecast of stronger World ex. China demand growth, to the prospect of more smelter approvals despite record low TC/RCs, and even the possibility of copper trading above nickel.

Copper Top Ten *Calls* for 2025



Highest World ex. China growth in a decade

China-GET stranglehold on copper demand to continue



Substitution will remain a threat to copper demand

US scrap exports to fall; China to support domestic generation



Spot TC/RCs to exceed 2025 benchmark by Q2

Smelter project approvals to continue despite concentrate market deficit



Mine disruptions to return to historic rates in 2025

DRC mine supply to increase by 8% in 2025 with potential for more



Expect more M&A and possibly an increase in project FIDs

Could 2025 be the year that copper trades above nickel?



■ Highest World ex. China growth in a decade

The Covid-19 years aside, 2025 should witness the fastest rate of annual growth in World ex. China copper demand in over a decade. In particular, this will be welcome news for those sales managers at European semi-fabricators, who have been struggling to conclude annual contracts and are budgeting for zero growth. Indeed, if the economists are right, there should be evidence of a recovery in Europe's industrial and construction sectors as soon as Q1.

■ China-GET stranglehold on copper demand to continue

In the last five years, 100% of the growth in copper demand by geography has come from China and by end-use from the green energy transition (GET). Those percentages are expected to decline in 2025, but only to 67% and 80% respectively, and if the Chinese government decides to enact greater policy support for the economy, both could end up higher. The downside risk comes from US tariffs and any rollback of green energy policies, which is also a possibility elsewhere outside China.

■ Substitution will remain a threat to copper demand

Even though the copper to aluminium price ratio in early 2025 is x3.5 and well within historic norms, longer term expectations are for it to reach x5. Consequently, the question of substitution (and thrifting) is unlikely to go away this year, especially in some of the new applications for copper. Declining copper usage in battery electric vehicles is well known, but we are seeing the same phenomenon in solar generating capacity. Here copper power cable intensities in China have fallen by 12% since 2020 with, conservatively, a further 17% reduction expected by the end of the decade. It is also worth noting that this cable type accounts for three quarters of the copper used in last year's copper demand sensation – data centres.

■ US scrap exports to fall; China to support domestic generation

US scrap exports increased by ~10% in 2024, with ~40% directly, and up to another 25% indirectly, going to China. However, the spillover from potential increases in US-China trade barriers and the start-up of new scrap processing capacity in the US (at Wieland, KY and Aurubis, GA) suggests exports will be sharply lower in 2025. Ostensibly, these changes to trade flows will make life more difficult for the Chinese smelting/refining sector, which hitherto has been using scrap to plug gaps in the supply of copper concentrates. Needless to say, China is not standing still. Outstanding scrap import duties have just been removed, and the recently established China Resource Recycling Group (CRRG) will begin formalising the domestic scrap industry this year



- **Spot TC/RCs to exceed 2025 benchmark by mid-year**

Despite Tesla's proximity to the US presidency, 2025 will be a year of weak EV demand as subsidies are repealed in most major markets. However, cost-effective Chinese EVs will continue to boom with perhaps some local exports to other Asian markets.



- **Smelter project approvals to continue despite concentrate market deficits**

Despite forecasts showing concentrate market deficits stretching out until the end of the decade, 2025 could see smelter project approvals as countries seek to increase security of supply and/or add value to domestic mining activities. There is a raft of domestic Chinese projects that could be given the green light relatively quickly. In the World ex. China, there are plans to build smelters in at least ten countries over the medium term, including current non-producers such as Saudi Arabia. Equally concerning to incumbents will be the desire of new players to enter the fray in existing markets, for example in India.

- **Mine disruptions to return to historic rates in 2025**

Mine supply grew by less than 400,000 t in 2024 – the smallest increase since 2020. The closure of Cobre Panama at the end of 2023 was a major contributing factor to this. Otherwise, the mine disruption rate at 3.9% was the lowest since 2018, admittedly helped by relatively conservative guidance from the top tier miners. 2025 could be more challenging, as 45% of the potential 1.5 Mt forecast additional mine supply will come from projects, including the technically problematic El Teniente NML and the isolated Malmyzh in Russia. However, if disruptions do continue at last year's lower level, this would increase 2025 mine supply by a further 370,000 t versus the base case.

- **Expect more M&A and an increase in project FIDs**

2023 and 2024 saw two failed mining sector mega-mergers – Glencore-Teck and BHP-Anglo American. 2025 may be a case of 'third time lucky' as we see a combination between two or more of the mining majors as likely. The base case is that top tier producers are still more interested in buying growth through acquisitions, rather than committing billions of dollars to capex-intensive large-scale projects. However, some companies will need to show a willingness to invest in replacement capacity in order to avoid a shareholder-scarring decline in future mine production profiles. In addition, there are several projects that (on paper) are close to a final investment decision (FID), but it may take a price level of ~\$10,000 /t to get them across the line. Sulphide leaching projects in the Americas will remain an attractive option due to low upfront capex commitments.

■ **DRC mine supply to increase by 8% in 2025 with the potential for more**

Democratic Republic of Congo (DRC) mine production is expected to increase by 8% in 2025. This may even prove to be an underestimate if hard-to-track small projects – often owned by low profile Chinese companies – continue to proliferate; although we have started trying to front-run such capacity additions in our forecasts. The larger mines shouldn't be forgotten either – recent outperformance by Tenke Fungurume (TFM) and Kisanfu (KFM) suggests CMOC Africa's production could have exceeded 630,000 t in 2024, 10,000 t above the CRU base case. With the DRC now the world's second largest copper producer (annual output exceeding 3 Mt), a 5% 'miss' to the upside in 2025 would be equivalent to another 150,000 t of copper.

■ **Expect more M&A and an increase in project FIDs**

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■ **Could 2025 be the year that copper trades above nickel?**

In a market that is expected to be in a very modest surplus this year, there is no obvious reason why copper should move out of a trading range somewhere in the high \$8,000s /t or low \$9,000s /t. However, with sidelined investors still believing in the long-term bull story, a rapid run-up in the price to new nominal record highs – and even the upper end of CRU's medium-term forecast – should not be discounted. The latter would put copper at ~\$15,000 /t and possibly within touching distance of nickel, which is a market facing several years of surplus and a price supported only by costs of production.



CRU Copper Smelting and Refining Asset Service

Comprehensive *data* and *insight* to drive efficiency, maximise profitability and optimise returns

- Market-leading asset-level production coverage providing the most comprehensive sector view for superior benchmarking.
- Scenario modelling tools for evaluating cost sensitivities, managing risk, and identifying upside opportunities.
- Asset-level mass balance calculations enhancing model accuracy.
- Granular cost modelling per unit operations for transparent cost management.
- CRU expert analysis and industry insights delivered through webinars, reports, and direct analyst interactions.
- Data access via web/cloud platform, DataLab & API integration for streamlined workflows and enhanced efficiency.
- Breakeven TC/RC assessments to aid profitability analysis.

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Stainless Steel

CRU's stainless steel top calls for 2025 have been shaped by the impacts of new capacity, the need to secure raw materials at a competitive cost, and ongoing structural developments in supply chains and downstream sectors.

Stainless Steel Top *Calls* for 2025



Macro: Global industrial production will strengthen



China: Stainless Steel output will grow, albeit at a slower pace

Cr

Chrome: South Africa will export less FeCr and more ore

Stainless Steel: Consolidation pressures will intensify



Nickel: NPI flows into Europe will persist

Ni

Molybdenum: Auto Sector and BEVs will impact European demand

Mo

CRU's stainless steel top calls for 2025 have been shaped by the impacts of new capacity, the need to secure raw materials at a competitive cost, and ongoing structural developments in supply chains and downstream sectors. Economic and geopolitical factors will continue to pose risks, potentially undermining demand and strengthening the regionalisation narrative.

Our base case forecasts for 2025 suggest more balanced stainless steel production growth across regions relative to 2024. While China's stainless steel output growth is set to decelerate, output in key producing regions elsewhere is likely to recover to the extent geopolitics and the economic cycle allow. We expect new stainless steel capacity to weigh on existing mills' competitive position and to intensify consolidation pressures worldwide. Against this backdrop,



European mills will see NPI imports as a lever to keep nickel unit costs (including stainless steel scrap) competitive. In chrome, with more cost-competitive smelting capacity onstream in China, higher-cost South African FeCr production will decline, and integrated operations will opt to increase ore exports instead.

Demand for molybdenum will remain strong in China as the country further rebalances towards more advanced steel grades but will be undermined by a weaker-than-previously-expected ICE sector in Europe, and the broader global transition to BEVs that are less molybdenum-intensive than ICEs.

■ **Macro: Global industrial production will strengthen**

Global IP growth has underperformed that of GDP for the last two years but is expected to strengthen in 2025. IP growth is set to broaden out from China, partly due to a downswing in the interest rate cycle. Nevertheless, downside risks remain, with potentially more restrictive trade policies undermining global trade flows. There is also uncertainty around the post-pandemic 'new normal' in terms of how consumer spending is split between durables, non-durable goods, and services.

■ **Stainless Steel: Consolidation pressure will intensify**

As more production capacity continues to be brought online, many producers have come under pressure from excessive supply. In China, numerous players are now facing serious financial difficulties, struggling to compete with larger players that benefit from lower costs and higher vertical integration. In 2025, the factors leading to industry consolidation will intensify. Consolidation pressures will not be limited to China but will affect other regions as well.

■ **Nickel: NPI flows into Europe will persist**

We expect nickel pig iron to continue flowing to Europe during 2025 in order to support a recovery in European stainless steel output. Market players do not see scrap and FeNi supply able to respond to increasing demand in 2025 and thus, NPI will be needed to fill the gap. In 2024, a tight scrap market and resulting higher prices made it attractive for some European stainless mills to import NPI. The presence of NPI in Europe will also help to dampen any upward pressure on stainless scrap prices.

- **Chrome: South Africa will export less FeCr and more ore**

We expect South African ferrochrome production to continue falling in 2025 as European stainless production recovery stalls and China moves closer to self-sufficiency for ferrochrome. Integrated operations in South Africa will continue to see more profitability in selling chrome ore to China rather than trying to find a market for ferrochrome, particularly as smelting costs in South Africa will continue to rise, driven by higher power tariffs.

- **Molybdenum: Auto Sector and BEVs will impact European demand**

European molybdenum demand will be hit most by a weaker automotive sector. We have downgraded our 2025 forecasts for European LDV ICE production by 10%, given cost-cutting measures announced by major automotive players. Intensity of molybdenum consumption in automotive units will also decline, given growing production of BEVs which use less molybdenum than comparable ICEs. When combined, these effects pose a significant downside risk to molybdenum demand in 2025.

- **China: Stainless Steel output will grow, albeit at a slower pace**

Supported by increasing exports, we saw another year of strong Chinese stainless steel output in 2024. As domestic demand from end-use sectors improves, the momentum in stainless steel production will likely sustain.



Lead

CRU has picked out ten key lead market calls for 2025. Despite resilient demand and a tight concentrate market, a bigger 'micro' lead market surplus and broadly bearish 'macro' narrative could see LME lead price touch fresh lows.

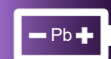
Lead

Top Ten *Calls* for 2025



Auto Lab demand to stay resilient in face of LFP threat

Lower Asian battery exports to revive lead demand elsewhere



Pacific two-way scrap battery flow to slow

Contract TCs to fall again



European smelters to export or cut

Chinese lead exports to modestly lift again



LME stocks to step up again

Downside tests ahead for steadier lead price



Trade war rekindles inflation and fires up dollar

Tight and costly antimony: A big lead market concern



■ **Auto LAB demand to stay resilient in face of LFP threat**

Dominant lead-acid battery (LAB) low 12 V starter/auxiliary auto use will face headwinds from growing 12 V LFP use, mainly in China. However, the far greater LAB volumes used to replace failed units in existing vehicles on the road will ensure auto LAB demand stays resilient this year.

■ **Chinese lead exports to modestly lift again**

Having tightened last year, China will return to surplus in 2025 to prompt an arb reversal to favour exports again. However, the turnaround will be modest, with feed tightness limiting the rebound in output. 2025 exports will not return to the 2023 high.

■ **Lower Asian battery exports to revive lead demand elsewhere**

Higher LAB exports from Asian countries have taken share from local LAB makers to dampen lead demand within the USA and Europe. An escalating US-led trade war could curb this trend and lift local LAB production and lead demand.

■ **LME stocks to step up again**

Singapore has been a focal point for LME stocks surging to 11-year highs, with more than half of the inflow from India. A persistent Indian surplus amid a wider Asian glut could see LME stocks rise and potentially challenge the record October 2011 highs.

■ **Pacific two-way scrap battery flow to slow**

A decrease in Asian battery exports could lead to reduced competition for scrap materials faced by local US smelters from Asian buyers. This may result in a slowdown of the two-way trans-Pacific flow of failed batteries moving west and finished batteries returning east. This should prompt scrap prices to fall from recent highs.

■ **Downside tests ahead for steadier lead price**

The 'closed loop' cycle is key in steadying lead's price path compared to other LME and battery metals, as well as its struggle to play a bigger role in energy transition. Yet, a bigger 'micro' lead market surplus and a broadly bearish 'macro' narrative could see lead prices touch fresh lows this year.



- **Contracts TCs to fall again**

Having tightened in 2024, a larger concentrate market deficit in 2025 will be driven by a second step-up in smelter demand more than offsetting a weak recovery in mine output. Contract TCs will fall for a fifth year in a row.

- **Trade war rekindles inflation and fires up dollar**

A second Trump presidency – promising higher tariffs, tax cuts and tighter labour – threatens to rekindle inflation and lift interest rates. Alongside greater geopolitical uncertainty, the US dollar stays stronger for longer, dampening dollar-denominated metal prices.

- **European smelters to export or cut**

Faced with weak demand, lower premia and lower TCs, an easier European market could see higher exports to Asia and fresh flows to the USA, in a repeat of the 2021 spike to the latter destination. Or the tough market conditions could prompt smelter cuts to retighten this market.

- **Tight and costly antimony: A big lead market concern**

A Chinese-driven supply squeeze, as they consume more antimony to make PV glass for solar panels, could lift prices to fresh 2025 highs. While lead recyclers recover ‘free’ antimony in scrap feed, many still need to buy top-up volumes, putting more upward pressure on ‘hard’ antimonial lead alloy premia.



Zinc

This Insight covers the five most important calls regarding the supply and demand fundamentals for the 2025 zinc market from a recovery in mine supply, increasing smelter overcapacity, a potential record low benchmark TC to the challenges of demand recovery

Zinc

Top *Calls* for 2025



Global mine supply to bounce back



China will significantly boost its smelter capacity



Benchmark TCs expected to reach a record low



Zinc demand will underperform other metals



Substitution will remain a significant threat to demand

■ Global mine supply to bounce back

After three years of contractions, global mine output is set to increase in 2025, with an expected growth of about 2% y/y. Chinese mine supply is likely to remain essentially flat y/y in 2025 despite Huoshaoyun – a 500,000 t/y mine which started production in 2023 – continuing to ramp up. Meanwhile, ex. China mine output is forecast to grow by 3.3% y/y. This is due to the ramping up of recently started operations in Mexico, Russia and DRC, as well as restarts of previously idled operations. However, the main driver of 2025 growth is expected to be the Antamina mine in Peru returning to 2023 output levels.

■ China will significantly boost its smelter capacity

China is expected to deliver an 8% y/y increase in smelter capacity in 2025 – the strongest in 14 years. This is largely because Kunlun Zinc is expected to start operations at its new integrated 560,000 t/y zinc smelter in Xinjiang in late Q3.

The ramp-up of the Kunlun Zinc smelter and several other new ones is expected to add 600,000 t/y of capacity in 2025. Given the flat Chinese mine supply outlook, this is anticipated to result in higher concentrate imports to China, relative to the 2024 level, therefore adding to the factors keeping the TCs low. Low utilisation rates and an extended period of uneconomic TCs will likely result in some curtailments in 2025. Europe remains particularly vulnerable due to high energy prices and other cost inflation.

■ Mine disruptions to return to historic rates in 2025 Benchmark TCs expected to reach a record low

Given the historical pattern between spot TCs and the established benchmark terms, we expect that the exceptionally low current spot TCs will lead to a new record low for contract terms in 2025.. The smelting industry is expected to continue struggling with its profitability, given significant overcapacity relative to the available concentrate. If utilisation rates, and consequently TCs, were to revert to the healthier level seen in 2023, approximately 1000 kt of smelting capacity (equivalent to 7% of the global total) would need to be shut down in 2025. While, we are expecting curtailments, they are likely to be on a much smaller scale, and thus, the pressure on TCs coming from the large overcapacity will remain.



■ Zinc demand will underperform other metals

Global zinc demand has been on a negative trajectory for the past seven years, equivalent to a 0.6% average annual decline. CRU Economics forecasts a recovery in industrial production (IP) for all world regions in 2025 after 2 years of contraction. Zinc demand has been, on average, lagging IP and will likely continue this trend in 2025. Zinc consumption does not benefit much from the energy transition, while a boom in construction and infrastructure applications that constitute the primary zinc consumers has largely come to an end globally. Although we may see some demand growth in 2025 in China on new stimulus measures, in North America due to re-industrialisation efforts and in Europe on a possible bounce back from a very low base – zinc demand outlook remains less attractive compared to the other base metals. Zinc usage by the fast-growing renewables sector is still too small to have a meaningful impact on the total demand.

■ Substitution will remain a significant threat to demand

Substitution and thrifting trends will likely become more important in zinc applications in 2025. Zinc prices remained, on average, 20% higher (in real terms) during the period 2017 to 2024 compared to the eight years before on the back of tight supply. Our forecast is for the prices to remain on the upward trajectory. The economic situation will face challenges in many world regions in 2025, both for individual consumers and businesses, thus making users more price sensitive. Also, prices for stainless steel, the main alternative to galvanized steel, are forecasted to stay at historically low levels (in real terms) in Europe and the US and at the lowest level in 20 years in China – thus making stainless steel a more attractive alternative in long-lasting applications compared to galvanised steel. And finally, new cheaper corrosion-resistant materials – such as powder-coated steel – are getting better functionality and are able to capture market share from traditional solutions using zinc.

Precious Metals

2025 looks to be a year of highs and lows for precious metals. Lower interest rates and geopolitical tensions will support gold and silver, though silver's gains may be limited. Meanwhile, PGMs look bearish due to the transition away from traditional petrol-powered vehicles and oversupply.

Precious Metals Top *Calls* for 2025



Macro environment: Lower interest rates are supportive for prices

Gold: A rollercoaster year ahead?

Au

Ag

Silver: Bullish sentiment to prevail but gains will be limited

PGMs: No fireworks expected

PGMs

■ **Macro environment: Lower interest rates are supportive for prices**

Monetary easing by major central banks, especially the US Federal Reserve, will continue to support the precious metals complex. A further escalation in geopolitical tensions may enhance gold and silver's appeal as safe-haven assets. However, the outlook for PGMs remains weak due to ongoing challenges in their fundamental drivers.

■ **Gold: A rollercoaster year ahead?**

- Geopolitical developments, US Fed's monetary policy decisions, and Donald Trump's economic and trade policies will be key drivers for gold prices in 2025.
- Central bank gold buying, expanding government deficits, together with rising public and private debt, are expected to support the price of gold.
- The new US administration's focus on digital currencies, coupled with growing investor interest, will intensify competition between cryptocurrencies and gold.
- Risks are centered around inflation, the USD, economic slowdown and geopolitics.
- Gold mine production to hit an all-time high in 2025, largely due to new mines and expansions outweighing closures.
- Miners' margins will hit all-time highs, as prices rise and average global costs per ounce look likely to drop due to easing of tough economic conditions.

■ **Silver: Bullish sentiment to prevail but gains will be limited**

- Silver is expected to follow gold's lead but with greater upside potential.
- Tightening fundamentals and shrinking above-ground stocks will continue to attract investor interest in 2025.

- Demand from solar PV – one of the key growth drivers – may have peaked in 2024, as installations growth is now outpaced by thriftiness.

- The current expansion cycle in global silver mining is nearing its end, potentially as early as 2025.

- While silver may have regained its status as a reserve metal alongside gold (following Russia's central bank's decision to include silver in its list of eligible reserves) broader adoption remains uncertain.

- Key risks include the pace of the 'green energy' transition, base metals' mine supply dynamics which could influence availability of by-product silver, and potential economic recessions.

■ **PGMs: No fireworks expected**

- The supply overhang will remain a key challenge in the PGMs markets in 2025. With a few significant new industrial applications on the horizon and miners hesitant to cut output collectively, investor interest is likely to remain tepid.
- The shift away from traditional petrol-powered vehicles to the growing adoption of battery electric vehicles has been reducing demand for both platinum and palladium – a trend expected to continue in 2025.
- This growing imbalance between supply and demand will continue to weigh on PGMs prices, hindering a sustained recovery.
- Key risks center around the scale of production cuts, the pace of de-stocking by South African miners, the recovery of global car production, BEV adoption dynamics and broader geopolitical factors.

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Fertilizers

As a tumultuous year draws to a close, it has become traditional for CRU Fertilizers to make a few predictions for the year ahead.

There is huge risk almost everywhere we look. Events in the Middle East have dominated the headlines over the last 12 months, Russia's war in Ukraine is ongoing and a new US President is poised to shake up world trade with blanket import tariffs. With that in mind, our predictions for 2025 focus on what we can say with the highest degree of certainty in a very uncertain world.

Fertilizers

Fertilizers

Top *Calls* for 2025



No additional duties on Russian fertilizer into Europe



The flood of ammonium sulphate continues



Trump tariffs to take a delayed bite out of US fertilizer demand



China urea export barriers will be lowered (eventually)



More nitrogen closure and consolidation in Europe



Phosphate incentive pricing to spur investment



China continues to ramp up international potash investments



Blue ammonia continues advancing while green falters (outside of China)



- **No additional duties on Russian fertilizer into Europe**

We do not think that Russia is flooding the European market with cheap fertilizers. Russian imports into Europe have increased this year but they remain well within historical norms at around a third of all imports into the EU. We do not think restrictions on Russian fertilizer imports into Europe will be imposed next year, although with Poland taking on the presidency of the European Council in January, the noise around this topic is likely to increase.

- **The flood of ammonium sulphate will continue**

There has been consistent growth in caprolactam-based AS capacity in China and exports have grown about 20% year on year. There has also been growth from lithium iron phosphate use and AS output from that sector. In 2025 we expect AS exports from China to exceed 17 Mt, or around 80% of total global AS exports.

- **China's urea export barriers will be lowered (eventually)**

We expect China will step back into the export market for urea once their peak period for spring application has passed. Exports are likely to resume in the second half of the year. DAP and MAP fertilizers exports from China are also controlled but have not been curtailed in the same way as urea. Going forward we think DAP/MAP exports will be structurally lower but will not be restricted in the same way as urea.

- **More nitrogen consolidation and closures in Europe**

European nitrogen producers will remain under pressure in 2025. We expect global ammonia prices will decline in the year ahead with new ammonia capacity coming onstream. Gulf Coast Ammonia will commission, and Russian Black Sea exports will resume. Pricing of natural gas and ammonia in Europe will diverge incentivising ammonia imports over production, particularly in the second half of the year. Some producers will switch off ammonia production in favour of imports. Some gas-price relief will come in 2026 with new LNG production onstream, although the definitive phase of CBAM will start taxing fertilizer imports based on carbon intensity, which will bring some relief to European producers in 2026.

- **Phosphate incentive pricing to spur investment**

Granular phosphate prices are so high at present they have now intersected our long-run marginal cost (LRMC) for DAP. DAP prices are now high enough to cover not just operating costs but all also the recovery of capex suspended on a new facility. We expect phosphate prices to remain at these levels for the next two years. This should incentivise a producer to invest in new greenfield capacity outside the usual suspects of Saudi Arabia and Morocco. The question for prospective producers is whether the voluntary measures that have supported prices this year will last. Still, there are some good reasons to invest in new capacity, particularly in the US and Australia.

- **China continues to ramp up international potash investments:**

There is no prospect of further investment in China's domestic potash capacity as China has run out of undeveloped potash resources. China faces rising reliance on MOP imports. Capacity in Laos will rise from less than 1 Mt only a few years ago to more than 5 Mt from next year, making Laos a bigger producer than both Germany and Israel. These investments are all backed by China. China is also taking more product from this part of the world, where it feels it has a great degree of control over pricing. But China is also looking further afield, at potash investments in Thailand, Republic of Congo and even in Spain. CRU now has around 9 Mt of Chinese-backed potash investments in our 'probable-case' forecast, with a large chunk of that likely to enter our 'base-case' forecast pressuring prices in future.



- **Blue ammonia to continue advancing while green ammonia falters (outside China):**

There are many different cost estimates for green ammonia which CRU thinks are too low. There are a number of different green ammonia products on the drawing board which we do not think will advance. They will need significant supply-side subsidies. We do not think the price of blue or green ammonia will be high enough to incentivise many of these planned projects to operate in a free market. More clarity is needed over demand-side incentives in places such as Japan and South Korea. Blue ammonia has more potential than green and because it has a lower carbon footprint than grey ammonia is advantageous for sending product into Europe as CBAM is implemented in 2026. Greenfield blue ammonia projects will come into production over the coming years in the US and Qatar along with some brownfield retrofit operations using CCS in the US. The project pipeline supports our call that blue ammonia will be the focus of investments for the next few years. Green ammonia development will most likely focus on China.

*To watch the full webinar recording, please [click here](#).



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Aluminium

Our top ten calls for this year for aluminium cover the industry value chain, from key raw materials to LME prices as well as key risks. On an upbeat note, this includes that we forecast that the aluminium industry will achieve its largest ever percentage reduction in CO₂e emissions intensity in 2025.

Aluminum

Aluminium

Top Ten *Calls* for 2025



Scrap: There is a battle for scrap metal



Carbon product prices will rise due to demand from EVs for CPC



Demand will improve in 2025 in ex. China



The aluminium industry will achieve its largest ever % reduction in CO2 emissions



China: to invest more overseas in aluminium value chain.



Alumina prices will fall in 2025



LME price and premiums will rise in 2025



Russia to continue to export primary to China



Chinese semis exports will fall, but not dramatically



Risks: Alumina market remains an upward risk for LME price

- Scrap: Battle for scrap intensifies with China looking to import more, while Europe and US are looking to retain more scrap domestically. Watch for calls for scrap export taxes.
- Alumina bottlenecks to ease and API to move sharply lower. Alumina production to increase in Indonesia and India. Bauxite sourcing to remain a concern.
- In carbon products, the increasingly strong demand for battery anode materials from electric vehicles will push Green Petroleum Coke and Calcined Petroleum Coke prices higher.
- The LME price will rise in 2025 as the market tightens. Premiums should also increase, with potential for substantial rises in the US if Trump hikes tariffs.
- Demand will rise faster in 2025 than in 2024 in the world ex. China. Interest rates will fall and residential construction will improve in US and Europe. Despite headwinds, EV market will expand in Europe.
- Russia to maintain elevated levels of primary metal exports to China, even if the war in Ukraine ends.
- The aluminium industry will achieve its largest ever % reduction in CO2e emissions intensity; but remains on a >2°C course for global warming. Significant de-emphasizing of ESG in US likely with Trump.
- 2025 will see more trade flow changes with Trump, tariffs and geopolitics. Chinese semis exports will fall, but not as dramatically as some think.
- China: In alumina, the country will shift to being a net exporter; investments overseas to increase across the aluminium value chain.
- Risks: the longer the alumina price stays high – the greater the risk of more primary capacity being idled.



Steel

The topics which are a key focus in our top ten calls this year for steel are the evolution of global steel demand in 2025, how geopolitics will shift steel trade, what may come of global overcapacity, and finally how decarbonisation in steel may move forward, slow, or stall.

Steel

Steel

Top *Calls* for 2025



Global steel demand will rebound, even as Chinese demand continues to fall



Geopolitics will drive a change in steel trade trends



the rising trend of Chinese steel exports will end



Decarbonisation: Green steel investment delays will open the door for mass balanced solutions

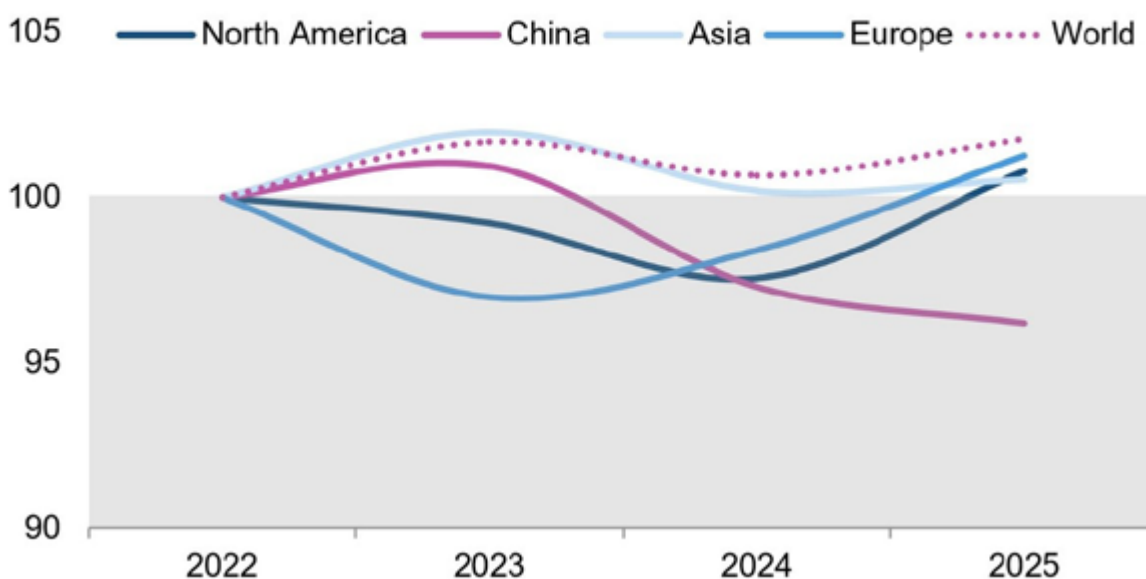
Global steel demand will *rebound*, even as Chinese demand continues to fall

Steel demand generally follows underlying trends in construction and industrial production. Our most recent Crude Steel Market Outlook (n.b. only available to [CRU Crude Steel Market Outlook](#) (n.b. only available to CRU Crude Steel Market Outlook clients) published earlier in 2024 Q4, forecasts that consumption of hot rolled steel products will end 2024 lower by 1.0%, primarily due to weakness in China. However, consumption in 2025 will rebound, supported by rising industrial production activity as well as stronger construction output across most regions.

While demand increases, the gain is limited to a growth of just 1.1% y/y, equal to approximately 20 Mt. This y/y increase in steel demand is small, yet it is noteworthy when accounting for Chinese finished steel demand falling by 10 Mt y/y in 2025. So even as global consumption appears slow to rise, underlying growth has clearly shifted away from China. A potential surprise here could be a larger-than-expected decline in China, which could keep global steel demand flat, if not lower, y/y.

Steel consumption in China is outlier as other major regions turn higher

Apparent consumption of hot-rolled steel products, index, (2022 = 100)



Data: CRU Crude Steel Market Outlook

Geopolitics will drive a change in *steel trade* trends

In November, we published two Insights on how President-elect Trump may utilise tariffs to influence his agenda. In [“Trump tariffs could stimulate steel demand”](#), we explored how he may use tariffs to support new manufacturing investments in the USA. In the second Insight titled [“Trump tariff threat signals early start to trade negotiations”](#), we focused on how he has already started to use the threat of tariffs to create both leverage and a sense of urgency on US trade partners to negotiate trade deals.

While any new tariffs put in place will likely cover more than just steel, the USA has been very aggressive in asking trade partners to implement tariffs on Chinese steel exports. We expect this US-led trade influence to continue, and further barriers will be installed across multiple regions to limit excessive steel exports from China.

In Europe, 2025 is the final year before CBAM arrives. For those buying EU imports, the first decisions for long lead-time coated products will be made in mid-2025. This will drive importers to focus more on carbon emissions to reduce the impact of CBAM. More focus will be put on emissions of individual assets, which are available in [CRU's Steel Emission Analysis Tool](#). The surprise we expect here is for high emission imports to continue being ordered in mid-2025 as traders exploit loopholes in legislation.

This is a high risk game as we also expect some loopholes to be closed by the European Commission. Follow developments closely using our Global Steel Trade Service.

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The *rising trend* of Chinese steel exports will end

Stein's Law postulates that “if something cannot go on forever, it will stop.” This simple, yet profound view applies to many things, such as the trend of excessively low interest rates after the Covid-19 pandemic had run its course; or the unsustainably low steel sheet prices in late 2015 and early 2016 as noted in this Insight [here](#).

When our analysts view the Chinese steel market, we see a test case to apply Stein's Law, particularly based on trends seen in 2024. During this year, consumption of hot rolled steel products in China fell 3.6% y/y and was down for three of the last four years. Consumption is now down 9.6% or nearly 100 Mt since 2021 and is forecast to fall through the medium term. This recent decline comes alongside the dramatic slowdown of construction activity. However, falling consumption has not yet led to a widespread restructuring of capacity in China. Instead, mills have gotten by with substandard margins by increasing exports.

Our demand forecast in 2025 calls for hot rolled steel products in China to fall by another 10 Mt. Due to this continued decline alongside further changes to steel trade, the recent excess of Chinese steel exports must reach a peak and start to reverse course. We expect these exports are at, or near, their peak and an industry restructure will come about to eliminate some of this excess capacity in China in the second half of 2025 or early 2026.



Decarbonisation: Green steel investment delays will *open the door* for mass balanced solutions

The big question surrounding future investment in steel is if interest in steel decarbonisation has peaked or just paused. Will the so called 'green steel' investments announced in recent years happen or will 'cancel culture' come to steel?

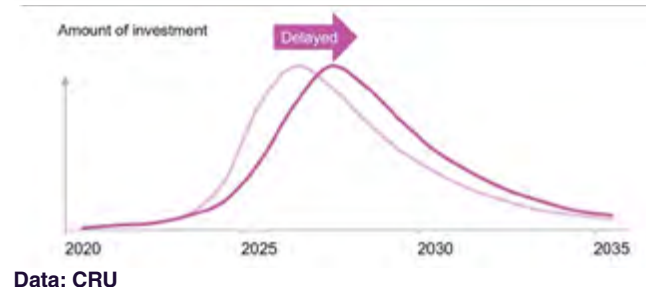
Most investment announcements so far have been focused on Europe. The steel industry there has embarked on a once in a lifetime technology shift in order to decarbonise an industry that accounts for 5–10% of global CO₂ emissions.

Significant investment is still needed and will come about but some investments have been paused. This is partly due to the policy environment, but also a function of the steel market today – the European steel industry needs to invest \$50–100 bn over the next 20 years but current cashflow is weak and steel users' willingness to pay a 'green premium' is low.

We expect some European investments to be delayed or paused for one to three years to wait for a more supportive policy environment and/or for increased government support to be agreed. In particular, steelmakers will be looking for progress in the rollout of hydrogen networks and for country-by-country investments in renewable energy generation and transmission. Without this, we could see some EU ironmaking investments move to other regions such as the Middle East where natural gas and energy supplies are in excess and cheap. This could be a big surprise for 2025.

The delay in green steel projects opens the door for those already approved and being built, for example Stegra. Although it needs to overcome challenges associated with new technologies, the project is in a region where renewable energy supply is more plentiful and cheaper than other European countries. The delay in investments opens the door for mass balancing to take over as a temporary solution until domestic green steel supply arrives in bulk. Although relatively new to steel, other industries – such as energy, chemicals and paper – already use mass balancing successfully. In 2025, a surprise could be the expansion of mass balanced steel products offered by non-EU sources – including China – ahead of CBAM arriving in 2026.

European investment is currently paused but not cancelled



In summary, 2025 will bring rising demand, disrupted trade and delays to *emission investments*

The four topics covered here – rising demand, changing trade flows, lower Chinese exports as capacity there is restructured, and delays to the emissions-related investments in Europe all have the potential to disrupt the steel markets.

If the recovery of steel-intensive economic activities is slower than anticipated, global demand gains may not materialise, particularly considering our expectation of a continued decline in Chinese steel demand. Restricted steel trade is perhaps the most obvious expectation in 2025 with President-elect Trump coming back into office and seemingly ready to use tariffs aggressively.

As for steel trade, the USA has threatened to apply blanket tariffs to some countries which would inevitably have a second order effect on steel consumption if those tariffs are put in place. We may also see Trump revisit the S232 tariffs on steel as well as alter the various exemptions and quotas surrounding these tariffs. It appears necessary for a restructuring of capacity to take place due to the decline in domestic demand in China and the heightened trade restrictions. However, the process may take longer than initially anticipated.

These are all complex topics with variables that seemingly change from one quarter to the next. As variables and expectations change, CRU will continue to update our forecasts and engage with clients. We will announce a client webinar in late January to discuss these topics in more depth – if you're interested, feel free to join us.

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