

SMM Base Metal Briefing

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Base metals price forecast (Jan 29-Feb 2)

	LME 3~M (\$/mt)	Change	SHFE 3~M (yuan/mt)	Change	Spot premiums/discounts (yuan/mt)	Change
Copper	8,250-8,400	→	67,200-68,300	→	(-50) -150	↓
Aluminum	2,100-2,280	↓	18,470-19,350	↓	0-90	↓
Zinc	2,400-2,600	→	20,500-21,500	→	70~150	↓
Lead	2,040-2,120	→	16,100-16,450	→	(-20) -20	→
Tin	24,000-26,000	→	195,000-220,000	→	195,000-215,000(spot price)	→
Nickel			120,000-130,000	↓	120,000-130,000(spot price)	↓

Source: SMM, LME, SHFE

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Copper: Copper prices returned to highs on unexpected positive domestic macroeconomic news

Figure 1: LME copper prices and premiums



Source: LME, SMM

Price review and forecast

Copper prices opened higher after a slow recovery in the week ending January 26. The US dollar briefly exceeded 103 as expectations of a recent interest rate cut by the Federal Reserve weakened, weighing on copper prices. Chinese A-shares hit record lows in the first half of the week, which depressed domestic macroeconomic sentiment. The People's Bank of China (PBOC) unexpectedly announced a reserve requirement ratio cut in advance to restore market confidence. Copper prices rebounded sharply, with LME copper prices approaching \$8,600/mt and SHFE copper prices returning to the 69,000 yuan/mt mark.

The January PMI data released by the United States during the week was still strong and higher than expected. The market thus re-evaluate the timing and extent of the Federal Reserve's interest rate cut this year. The shipping crisis has been difficult to resolve. The US dollar remained strong, which suppressed copper prices in the first half of the week. The European Central Bank kept interest rates unchanged. However, the lingering geopolitical conflicts may continue to affect European inflation data. In addition, Europe is still expected to have an economic recession. The European Central Bank has become particularly cautious in cutting interest rates, and the market has gradually expected that interest rate cuts will occur in the second half of the year.

The Bank of Japan announced that it would maintain the current monetary policy unchanged and continue to focus on the 2% inflation target.

As the PBOC announced "requirement reserve reduction + targeted interest rate cut", foreign investors quickly entered, and A-shares returned to above 2,900. The improved market sentiment bolstered copper prices. However, with the rise in copper prices, the already weak pre-CNY stocking sentiment in the downstream was further suppressed. The oversupply resulted in large contango structure of contracts. Copper concentrate TCs continued to fall, and the price of sulphuric acid were also falling, narrowing profits of smelters. However, according to SMM survey, the vast majority of smelters will not reduce production or even stop production in a month. The import window remaining open will drive inflows of imported cargoes. As such, stock accumulation will be as significant as year-ago levels.

According to SMM survey, some downstream companies will close for CNY holidays in early February and are expected to restock in the week of January 29. In view of counter offers from downstream buyers, spot copper is unlikely to trade with premiums. The Federal Reserve is expected to keep interest rate unchanged. The US dollar is expected to be strong, which will suppress copper prices. LME copper is expected to trade between \$8,300-8,650/mt in the week of January 29 and the most active SHFE copper contract prices will fluctuate between 67,500-69,500 yuan/mt. Spot copper will trade with discounts of 150 yuan/mt to premiums of 50 yuan/mt amid an oversupply.

Figure 2: SHFE and China copper spot prices



Source: SHFE, SMM

Copper concentrate

As of January 26, the SMM Imported Copper Concentrate Index (Weekly) stood at \$27.94/mt, \$41.45/mt lower than a week earlier. The price coefficient of Cu 20% domestic ore stood at 89.5-91.5%, up 1%.

Spot trades in the spot market have been quite brisk recently, but the TCs continued to fall. In terms of imported ore, smelters in central China purchased 2,000 mt of container cargo with high impurity content at a TC of \$40/mt. A trader sold 20,000 mt of clean ore to a smelter at TCs in the mid-to-high \$20s,

scheduled for loading in March. A smelter purchased 10,000 mt of clean ore from traders for March loading at \$25/mt. BHP started bid solicitation again on Wednesday January 24, pending bidding results. One trader plans to offer Las Bambas copper concentrate with TCs in the mid-to-low \$20s. Affected by the continued declines in spot TCs for imported ore, the factory pricing coefficient of domestic copper concentrate has also continued to increase. SMM understood that the pricing coefficient of domestic concentrate under newly-signed contracts in 2024 was raised by 1-1.5%, delivery-to-factory.

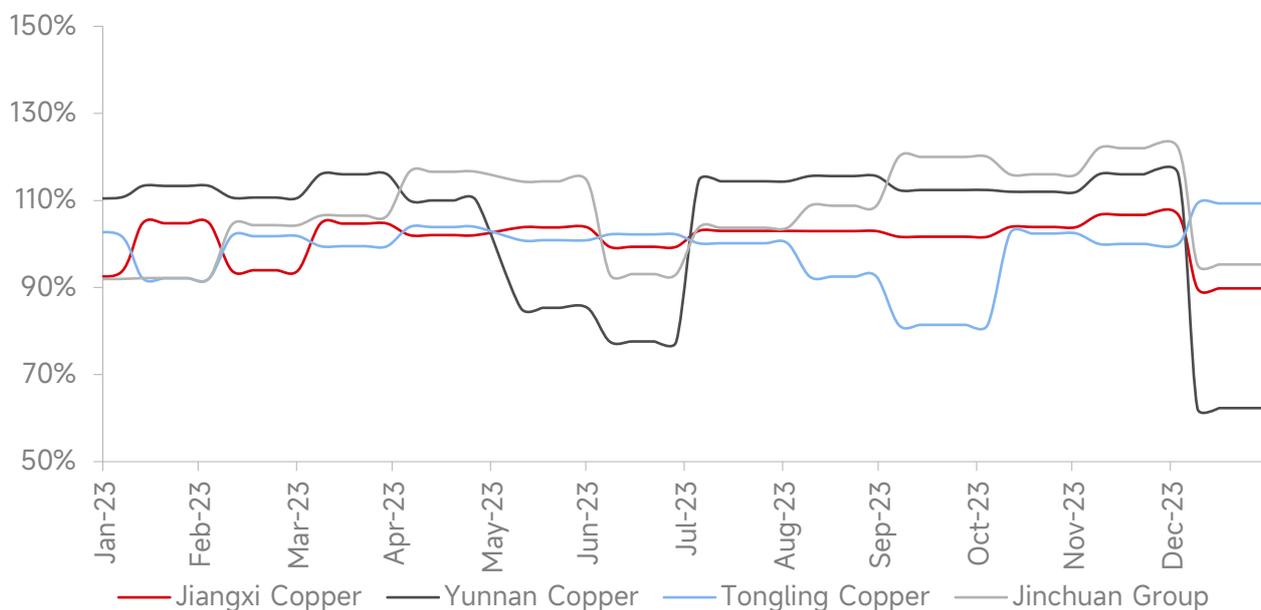
The downward pressure on copper concentrate TCs not only puts pressure on the purchasing of smelters, but also poses a huge challenge to the business of traders in the copper concentrate market. The cliff-like drop in spot TCs for copper concentrate further lowered bid solicitation TCs offered by mines for traders, and the additional terms of the bidding were also extremely unfavourable to traders.

According to SMM, due to the continued sharp decline in spot copper concentrate TCs in the past quarter, the CSPT held an online meeting on the morning of January 26, 2024. During the meeting, members of the CSPT called for joint production cuts in a bid to slow the decline in spot TCs.

According to SMM statistics, the inventory of copper concentrate at seven Chinese ports was 809,000 mt as of January 19, a decline of 116,000 mt from a week earlier. Qingdao port accounted for most of the reduction with a weekly drop of 70,000 mt.

Refined copper supply

Figure 3: Capacity utilisation of China major copper smelters



Source: SMM

Table 1: Copper smelter maintenance schedules

Company	Capacity	Refining capacity	Start date	End date	Maintenance part	Note	Estimated affected output of copper cathode
Huludao Hongyue Group's Northern Copper Industrial Co., Ltd.	100	150	Mid Feb 2024	End Feb 2024	Smelting capacity	10-15 days	
Guangxi Nanguo Copper Co., Ltd. (Phase I)	300	300	01-Nov-23	Indeterminate	Smelting capacity		
Tongling Nonferrous Metals Group Co., Ltd. Jinguan Copper Branch (flash smelting, flash blowing plant)	480	400	May-24	May-24	Smelting capacity	25-30 days	
Yangxin Hongsheng Copper Co., Ltd.	400	400	Early Apr 2024	Early May 2024	Smelting capacity	30 days	
Zhongyuan Gold Smelter	350	400	20-Mar-24	25-Apr-24	Smelting capacity	35-40 days	15.00
Shandong Zhongjin Lingnan Copper Co., Ltd. (No. 3 factory)	250	400	01-Apr-24	01-May-24	Smelting capacity	30days	
Shandong Humon Smelting Co. Ltd.	100	150	01-Apr-24	01-May-24	Smelting capacity	30days	
Yanggu Jianfa Copper Industry Co., Ltd.	400	500	01-May-24	01-Jun-24	Smelting capacity	30 days	
Minmetals Copper (Hunan) Co., Ltd.	100	100	25-May-24	25-Jun-24	Smelting capacity	30 days	
Zhejiang Heding Copper Co., Ltd.	150(new production line)	200(new production line)	Late May 2024	01-Jul-24	Smelting capacity	55 days	
Baotou Huading Cuprum Industry Development Co., Ltd.	100	30	1-Jun-24	1-Jun-24	Smelting capacity	25 days	
Chifeng Yuntong Nonferrous Metals Co., Ltd.	400	400	Aug-24	Sep-24	Smelting capacity	in shifts	
Feishang Copper	100	0	Sep-24	Sep-24	Smelting capacity	5-10 days	
Zhejiang Heding Copper Co., Ltd.	150(old production line)	150(old production line)	End Oct 2024	Nov-24	Smelting capacity	30 days	
Chifeng Jintong Copper Industry	300	250	Sep-24	Sep-24	Smelting capacity	20-25 days	
Zhongtiaoshan Non-ferrous Metals Group Co., Ltd.(Yuanqu)	130	130	Oct-23	Nov-23	Smelting capacity	30 days	
Zijin Copper Co., Ltd.	250	400	Nov-24	Nov-24	Smelting capacity	15 days	

Shandong Humon Smelting Co. Ltd.	100	100	Oct-24	Nov-24	Smelting capacity	30 days
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Source: SMM

Table 2: Copper capacity expansion in 2023 (10,000 mt/year)

Company	New smelting capacity	Total smelting capacity	Type	Commissioning date
Yantai Guorun Copper Industry	8	18	Copper concentrate	2023Q2
Zhongtiaoshan Non-ferrous Metals Group Co., Ltd	18	30	Copper concentrate	2023Q4
Baiyin Nonferrous (restart)	20	40	Copper concentrate/copper anode	2023Q2
Total	46	88		
Guangxi Nanguo Copper	20	50	Copper concentrate	2024
Jinchuan Group (headquarters)	40	60	Copper concentrate	Dec 2024
Shandong Humon Smelting	15	35	Copper concentrate	2025
Guangxi Jinchuan	30	75	Copper concentrate	2025
Shuikoushan Nonferrous Metals Co., Ltd.	20	30	Copper concentrate	Unknown
Kunming Jinshui Copper Smelting Co.	10	20	Copper concentrate	Unknown
Total	135	270		

Source: SMM

Copper scrap

The average weekly spot price of copper rose by 290 yuan/mt in the week ending January 26. The coefficient quoted by overseas sellers was 98.5-99%, unchanged from a week earlier. The average purchase price of bare bright copper in Guangdong was 62,950 yuan/mt, up 175 yuan/mt from the previous week. Although copper prices rebounded, sellers of copper scraps did not raise the price. According to traders of copper scraps in Ningbo, Zhejiang, there was negotiation room for prices as sellers stepped up selling to generate cash before CNY. The current copper scrap inventories are sufficient to over 3 days of production at copper rod plants using copper scrap as raw material.

For copper scrap, cif quotes for #1 copper scrap were COMEX May copper contract prices less \$0.08-0.09/lb, and offers for birch/cliff were COMEX May copper prices less \$0.17-0.18/lb. The coefficient for

US brass against LME copper was 70-70.5%, with the fixed prices of \$5,980-6,050/mt. The coefficient for copper granules (Cu 98.5%) against LME copper stood at 96-96.25% on a cif basis, and the coefficient for bare bright copper against LME copper at 98.75-99%, on a cif basis.

According to SMM survey, most copper rod plants using copper scrap as raw material have completed the stockpiling of copper scraps. Copper rod plants using copper scrap as raw material will gradually suspend purchases in the week of January 29. Copper scrap sellers are expected to ramp up price cuts in order to control inventory.

Refined copper imports

Yangshan copper premiums with a quotation period in February stood at \$55-65/mt under bill of lading during January 22-25, with the weekly average down \$3.62/mt from a week earlier. Those stood between \$52-65/mt under warrants with a quotation period in February, with the weekly average down \$4/mt. Import premiums for EQ copper with a quotation period in February stood at \$5-9/mt, cif, with the weekly average down \$2.75/mt. As of 15:00 CST January 25, the SHFE/LME copper price ratio stood at 8.05, and import losses stood at around 422.3 yuan/mt.

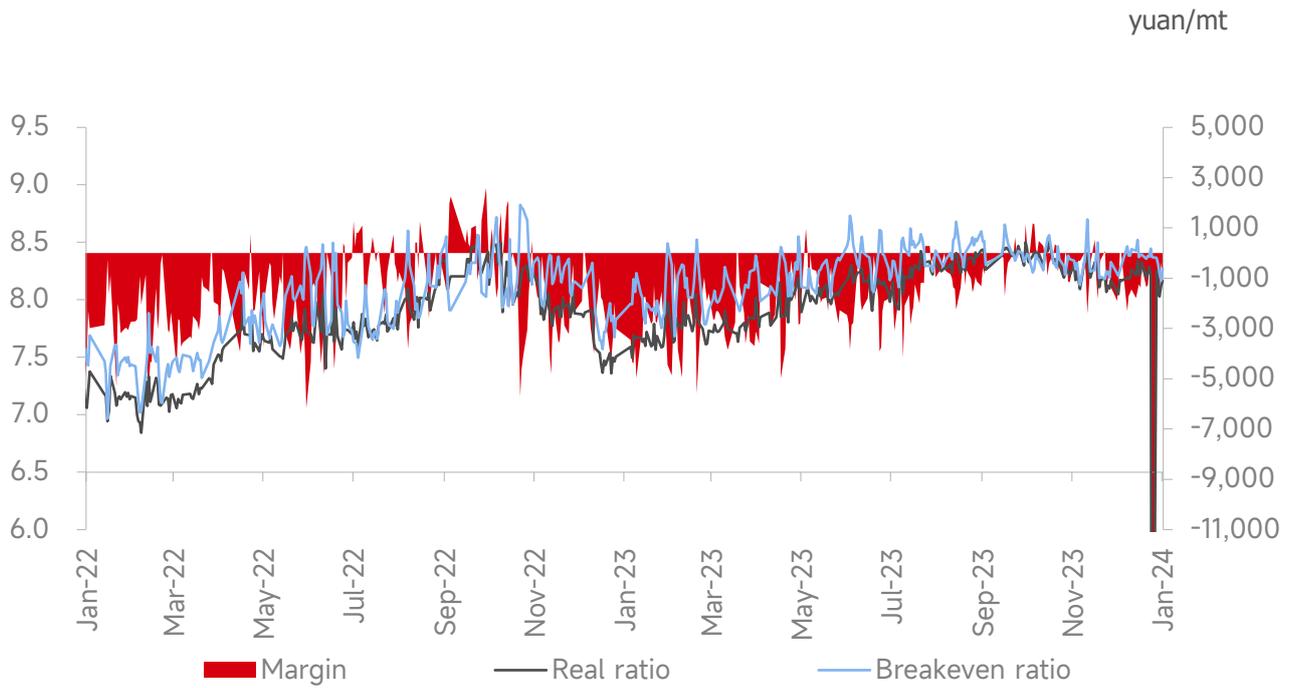
After LME copper prices rose to around \$8,550/mt in the middle of the week, the SHFE/LME copper price ratio fell sharply. The Yangshan copper premiums came under pressure. In terms of bill of lading, the supply of cargoes arriving after the CNY holiday was in demand. Cargoes under long-term contracts scheduled for February had not yet arrived, and the offers were scarce, keeping import premiums firm. As for the supply of cargoes arriving soon, import premiums were lowered due to the approaching CNY. But due to expensive costs for buyers during the CNY holidays, the trades were poor. In terms of warehouse warrants, both supply and demand were weak, and most of the cargoes available were scheduled for shipments after CNY holidays. Trades were subdued.

Import premiums for high-quality pyro-copper stood at around \$65/mt under warehouse warrants as of Thursday, and \$58/mt for mainstream pyro-copper. Those for hydro-copper stood at \$50/mt. On the B/L front, premiums stood at \$64/mt for high-quality copper, \$59/mt for mainstream pyro-copper, and \$53/mt for hydro-copper. Import premiums for EQ copper stood at \$4-8/mt, cif, and averaged \$6/mt.

As several bulk carriers berthed at the end of the week, arriving shipments of imported copper increased significantly from the prior week, which will gradually enter the spot market, thereby having an impact on the spot premiums. Yangshan copper premiums are expected to fall amid the poor SHFE/LME copper price ratio.

As of Friday January 26, copper inventories in the domestic bonded zones dipped 100 mt from January 19 and stood at 10,000 mt, according to the latest SMM survey. Copper inventories in the Shanghai bonded zone added 100 mt to 8,600 mt, and inventories in the Guangdong bonded zone dipped 200 mt to 1,400 mt. The import window was closed at the end of the week, and that reduced shipments from bonded zone inventories. Some cargoes slated to arrive at the end of this month and early February will be entering the warehouses soon. However, facing the expensive costs during the CNY holidays, it is unlikely to see a significant increase in stock accumulation compared to the same period last year.

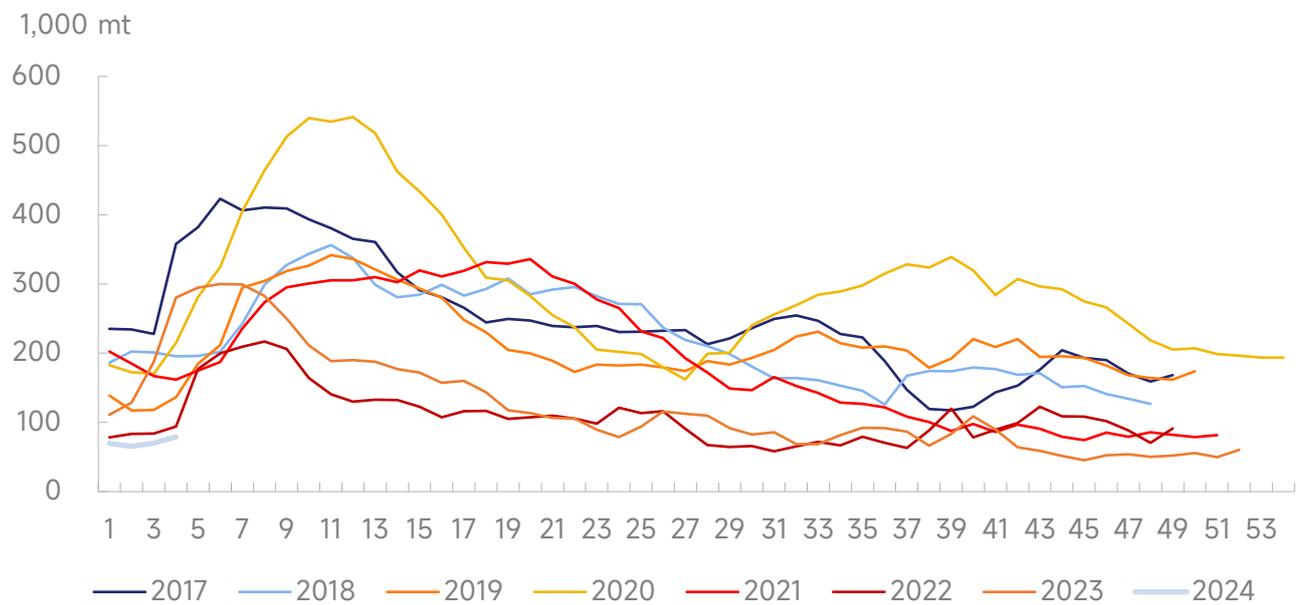
Figure 4: China copper import arbitrage ratio



Source: SMM, LME

Inventory

Figure 5: Domestic Copper inventories (Shanghai, Guangdong, Jiangsu)



Source: SMM

Aluminium: Amid no obvious imbalance between supply and demand, aluminium prices to move rangebound due to macroeconomic factors

Price review and forecast

The macro front was bullish last week. The governor of the People's Bank of China said that the PBOC will lower the deposit reserve ratio by 0.5 percentage points on February 5 to provide liquidity support of one trillion yuan. The State Council meeting emphasized the need to enhance the consistency of macro policy, strengthen innovation and coordination of policy tools, consolidate and enhance the economic recovery, and promote the stable and healthy development of the capital market. Overseas, the market has been concerned about the pace of the Federal Reserve's interest rate cuts. Goldman Sachs said that they expected Fed Reserve to cut interest rates four times this year, with the first interest rate cut in March. Europe and the United Kingdom will follow suit.

Fundamentals: Domestic aluminium production enterprises maintained steady operations, and there were little changes in production capacity. During the week, the Qinghai Bureau of Industry and Information Technology announced the Chinalco Qinghai 600KA electrolytic cell capacity replacement plan. 100,000 mt of unconstructed capacity of Yunnan aluminium will be transferred to Chinalco Qinghai, while other 400,000 mt of production capacity coming from Chinalco Qinghai. The announcement shows that the new production capacity is planned to be put into operation in June 2025. SMM estimates that the domestic aluminium output in January will be 3.56 million mt, flat MoM and up 4.2% YoY. In terms of cost, alumina spot market prices rose slightly, driving up the immediate cost of domestic aluminium. As of Jan 25, the immediate cost of domestic aluminium were around 16,876 yuan/mt, up by 21 yuan/mt WoW. Overseas: In January 23, 2024, Russian aluminium products became one of the key commodities in the EU's next sanctions. European Union began discussions on a new round of sanctions against Russia, which will be adopted on February 24. This news caused market concern about overseas aluminium supply. However, since the Ukraine-Russia war, the circulation of Russian aluminium metal in the EU market dropped significantly, and the global primary aluminium trade has undergone major changes. If sanctions are confirmed, SMM believes that it may tighten the aluminium supply in European market, but may only affect the direction of aluminium trade from a global perspective. Demand: The overall performance of domestic downstream processing enterprises was weak in the week. Environmental protection control in Henan Province became stricter, and small plate/sheet and strip factories suspended or halted production. The operating rate of aluminium extruders weakened, and some small and medium-sized aluminium extruders in north China cut production and stockpiling as they are about to close for upcoming CNY holiday. In the past two weeks, driven by intensive stocking by PV module factories, the operating rate of some PV extrusion companies rebounded. However, some companies reported that order volumes began to weaken, and they will close for CNY holidays. In the short term, downstream operating rate will remain low. Low operating rate and low enthusiasm for stocking somehow suppressed spot premiums in east and central China.

From a technical perspective, the model predicts that the price range of the closing price of most-traded SHFE aluminium contract will be [18,575, 19,225], the price center will be 18,880, the unit is yuan/mt, the extreme price range will be [18,250, 19,540], the normal price range will be [18,470, 19,330], and the conservative price range will be [18,680, 19,120]. The price is expected to bottom out or rise. The support range will be [18,470, 18,680], and the resistance range will be [19,120, 19,330]. The model predicts that the range of the average price of SMM A00 aluminium will be [18,685, 19,145], with the price center of 18,920, and the unit is yuan/mt. The extreme price range will be [18,400, 19,420], the normal price range will be [18,590, 19,240], and the conservative price range will be [18,780, 19,050]. The price trend is expected to move sideways or go down. The support range will be [18,590, 18,780], and the resistance range will be [19,050, 19,240].

On the macro front, the US market PMI data for January exceeded expectations. The data demonstrated the resilience of the US economy, and expectations for interest rate cuts once again cooled significantly. In China, the macroeconomic environment was positive. The People's Bank of China announced RRR cuts and will continue to keep a close eye on development of real estate, boosting domestic market sentiment. In terms of fundamentals, as CNY is drawing near, downstream consumption slowed down, but industry inventories remained at low levels driven by a high aluminium liquid ratio and downstream stockpiling before the CNY holiday. SMM predicts that the total domestic inventory accumulation during the 2024 CNY holidays may be lower than levels for the same period of previous years. In the short term, amid low inventory and no obvious imbalance between supply and demand, aluminium prices may fluctuate along with macro sentiment before CNY holidays. The most-traded SHFE aluminium contract and LME aluminium are likely to move between 18,470-19,330 yuan/mt and \$2,150-2,320/mt respectively this week. We will continue to pay attention to macroeconomic data such as GDP and durable goods orders in the United States in the fourth quarter, as well as domestic inventory.

Figure 6: LME aluminium prices and premium



Source: LME, SMM

Figure 7: SHFE and China aluminium spot prices



Source: SHFE, SMM

Alumina

Table 3: Alumina prices

	Jan 19	Jan 26	+/-
Western Australia (fob, \$/mt)	373	373	0
At port (self pickup, yuan/mt)	3275-3000	3280-3300	153
Domestic goods (yuan/mt)	3210-3420	3250-3420	153

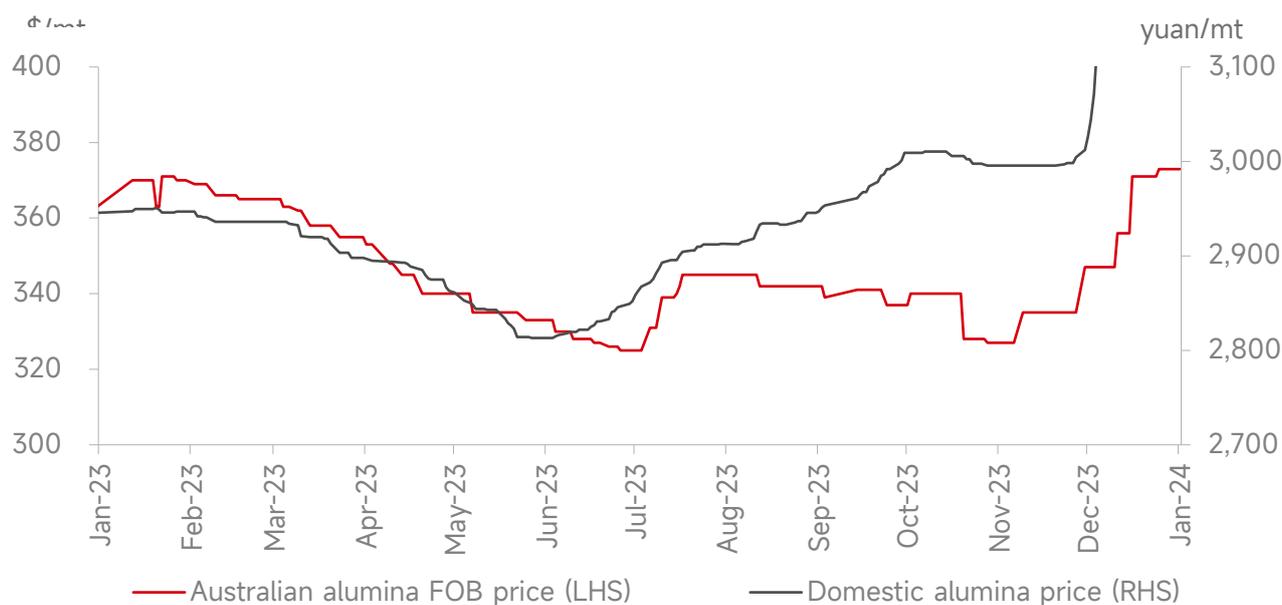
Source: SMM

Overseas market: As of last Thursday, alumina prices were \$373/mt FOB Western Australia, up by \$2 WoW. With the USD/RMB exchange rate around 7.14, the FOB price was equivalent to 3,263 yuan/mt CIF major ports in China after counting in ocean freight of \$21.65/mt, which was 83 yuan/mt lower than the domestic spot prices. The import window remained open. Overseas alumina spot transactions: (1) On January 24, 25,000 mt of alumina was sold at \$379/mt FOB Vitnam, for shipment in late February; (2) On January 18, 30,000 mt of alumina was sold at \$373/mt FOB Western Australia, for shipment in February;

Domestic market: Last week, the alumina refinery operating rate rose 0.65% to 80.28%. Operating rate in Shanxi rose 4.2% mainly because one refinery resumed annual production of 1.3 million mt capacity after ore supply crunch somehow alleviated; operating rate in Shandong rose 0.67% mainly contributed by one refinery who restarted approximately 3,400 mt of capacity after being affected by power supply issue. Operating rate in Henan fell 0.84% because heavy pollution weather forced one refinery to curtail 100,000 mt of capacity. Insufficient ore supply curtailed the annual output of a large alumina refinery in Guangxi by 500,000 mt, and the curtailment may last 7-15 days according to ore supply. As the CNY holiday is drawing near, pre-holiday stockings by aluminium smelters are coming to an end amid stronger downstream wait-and-see sentiment. There were sporadic transactions in the domestic spot market last week, with premium transactions mainly occurred in Shandong and Southwest. Spot ex-factory prices in Shandong stood at 3,290-3,300 yuan/mt, with the price center up by 40 yuan/mt WoW; the spot transaction in Shanxi were sluggish, with spot quotations unchanged; a spot transaction was done in Guizhou, and the spot ex-factory price was 3,370 yuan/mt, with the price center up by 20 yuan/mt WoW; 10,000 mt in Guangxi at 3,530 yuan/mt (including freight and other expenses) to aluminium smelters in Guizhou, with spot transaction prices flat WoW.

Overall: Last week, tight ore supply, energy supply issues and heavy pollution weather warnings continued to affect the operating rate of alumina companies. Some alumina refineries in the southwest planned to suspend production before the CNY holiday. Despite the ore short supply in alumina refineries in Shanxi were alleviated and the operating capacity increased, SMM predicts that tight spot supply may persist, supporting the domestic spot prices before CNY holidays. We need to continue to pay attention to resumption of alumina refineries and arrivals of imported alumina. From a technical perspective, the SMM alumina index-average price range will be [3,320, 3,355], and the price is expected to move rangebound.

Figure 8: Prices of domestic and imported alumina

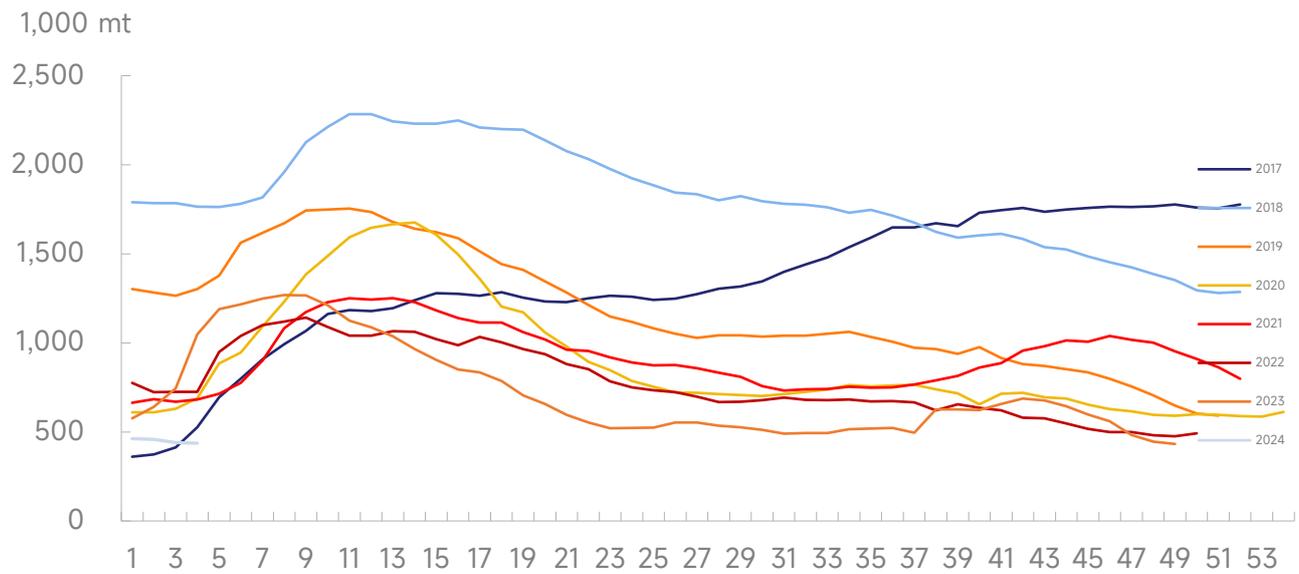


Source: SMM

Aluminium supply

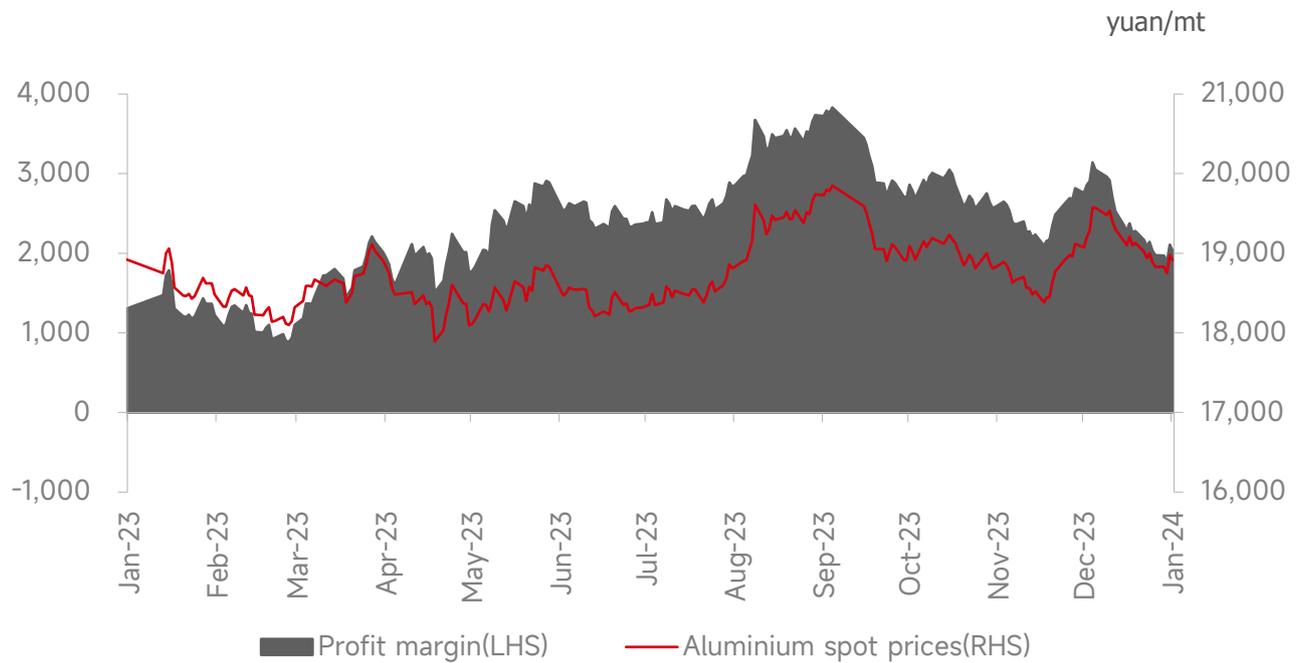
On January 25, 2024, SMM data showed that the social inventory of aluminium ingots in China's eight major markets was 437,000 mt, and the amount for sale stood at 311,000 mt, down by 4,000 mt WoW, and down by 307,000 mt YoY, which was a 7-year low. As the shipment of aluminium ingots were somehow affected by earthquake and lack of transportation capacity in Xinjiang, the arrival did not rise significantly. The destocking of domestic aluminium ingots has continued for nearly two weeks. Goingyi saw obvious inventory accumulation in the week, while inventories kept falling in east and south China. The supply in the spot market continued to tighten, and the inventory accumulation will be mild. The destocking accelerated at the end of 2023. Domestic aluminium ingot inventory has hit new lows for two consecutive weeks before New Year's Day. As CNY holidays is drawing near, the amount of aluminium ingot casting during the holidays will increase slightly in the northwest and southwest China. According to preliminary estimates by SMM, the current domestic aluminium ingot production is 35,000 mt/day, which may reach 40,000 mt/day during holidays. In the context of the year-on-year decrease in ingot output and tightening railway shipping capacity in Xinjiang, the total inventory may be difficult to exceed level in the same period of 2023. SMM sees aluminium ingot social inventories at around 450,000-500,000 mt at the end of January. We need to pay attention to inflows of imported ingots, shipment from Xinjiang and downstream holidays before CNY.

Figure 9: Domestic aluminium inventories



Source: SMM

Figure 10: Aluminium smelters' profit margins in China



Source: SMM

Zinc: Dovish tone of Fed official and continued declines in LME zinc inventories bolstered SHFE and LME zinc prices

LME zinc prices: At the beginning of the week, the US 1-year inflation rate was expected to be lower than forecast. That, combined with the Fed official's hawkish speech, lowered LME zinc prices. The former Fed official's tone turned dovish. LME zinc inventories fell to a new low in two months. The flash US Markit manufacturing index was higher than expected and recorded 50.3. Eased inflation has further weakened the market's expectations for the Federal Reserve to cut interest rates. The bullish macro sentiment bolstered LME zinc prices, breaking through the \$2,580/mt mark; however, LME zinc prices then sank slightly. As of 15:00 CST Thursday, SHFE zinc prices closed at 2,575.5 yuan/mt, up 102.5 yuan/mt or 4.14%.

SHFE zinc prices: At the beginning of the week, customs data showed that zinc concentrate imports recorded 441,900 mt, an increase of 40.55% month-on-month. However, the domestic zinc concentrate TCs fell again, indicating that the tight domestic ore situation continued. SHFE zinc prices consolidated rangebound. Bolstered by the external market and positive domestic macro sentiment, nonferrous metals prices advanced. Meanwhile, the zinc ingot import window continued to be closed during the week, and the supply-side shortage gave SHFE zinc prices strong support. But as downstream demand gradually weakens due to the nearing CNY holidays, the upside room for prices is expected to be limited. As of 15:00 CST Thursday, SHFE zinc prices closed at 21,370 yuan/mt, a weekly increase of 695 yuan/mt or 3.36%.

Figure 11: LME zinc prices and premium



Source: LME, SMM

Forecast

After the market priced in weaker expectations of the Federal Reserve interest rate cut, the People's Bank of China's (PBOC) fiscal policy bolstered market confidence, sending zinc prices rising rapidly to around 21,500 yuan/mt last week.

From a fundamental point of view, LME zinc inventories have dropped to around 193,000 mt. At the same time, the domestic ore supply continues to be tight. Some mines have also undertaken maintenance ahead of Chinese New Year holidays. Domestic ore supply has decreased. In addition, zinc concentrate inventories at ports have declined, keeping TCs weak. This grew the pressure on raw material purchases at smelters. It is expected that refined zinc output will continue to decline in January and February, and some downstream companies have already prepared for closures. The operating rates of galvanising, die-casting, and zinc oxide companies have continued to decline. It is also understood that most of the Chinese small enterprises will shut down at the end of January. Social inventories have increased slightly. As supply and demand are both weak, zinc prices are expected to fluctuate in a wide range.

LME zinc is expected to trade between \$2,470-2,640/mt this week.

SHFE 2403 zinc contract prices: 21,000-21,800 yuan/mt;

Spot copper in China's major markets is expected to trade with discounts of 50 yuan/mt and premiums of 50 yuan/mt.

Figure 12: SHFE and China Zinc Spot Prices

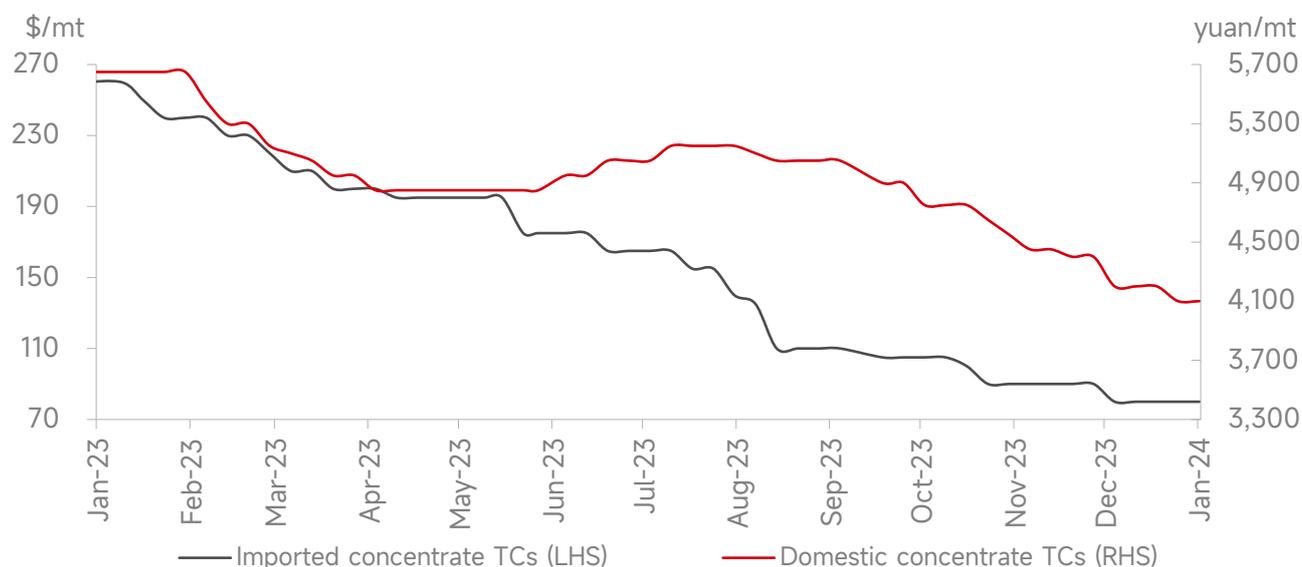


Source: SHFE, SMM

Treatment charges

Negotiations on TCs in February began, and the overall decline in TCs is expected to be limited. Mines and smelters will start negotiations this week. Given the current low TCs of seaborne cargoes at ports and low inventory at smelters, TCs of domestic zinc concentrate stood at a low level. But given the current TC of 4,100 yuan/mt with metal content, the profit at smelters is poor, depressing production enthusiasm of smelters. Any drop in TCs should be insignificant.

Figure 13: Zinc concentrate TCs



Source: SMM

Table 4: Zinc concentrate TCs Nov-Dec 2023

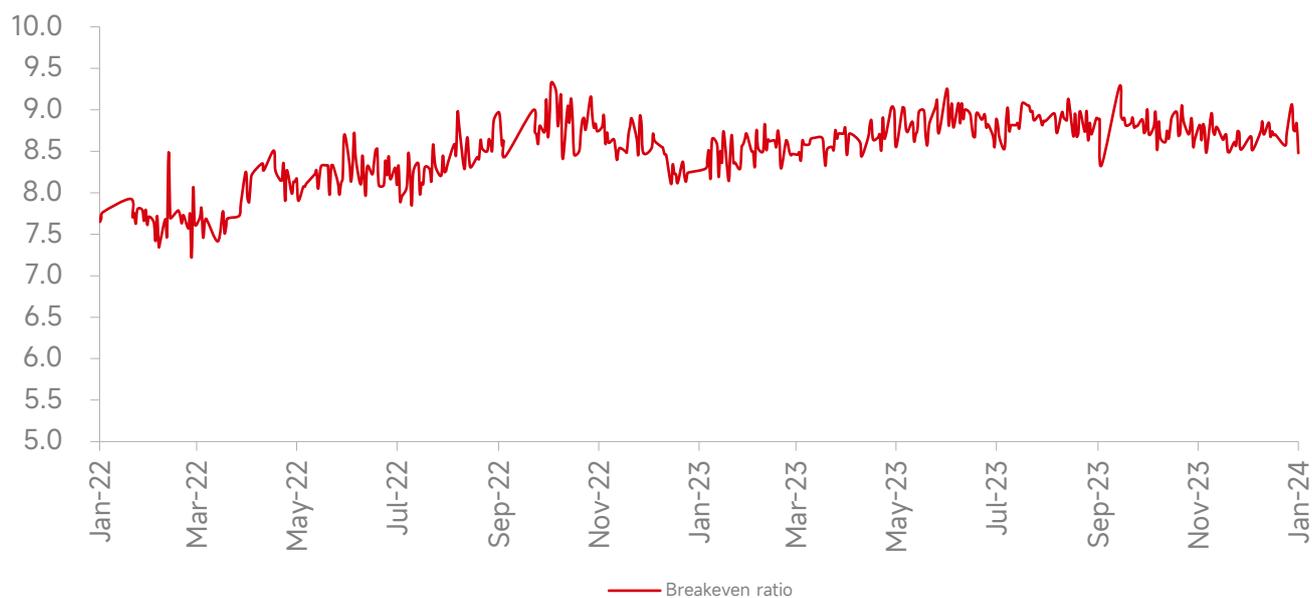
	Dec 2023	Nov 2023	Monthly change
Imported (\$/dmt)	80-100	80-120	-12
Domestic (yuan/mt in Zn content)	4,300-4,700	4,600-5,000	-300

Source: SMM

Note: 50-55% zinc content in both the imported and the domestic concentrate.

Refined zinc imports

The SHFE/LME zinc price ratio fell to around 8.3 in the week ending January 26 and the import losses widened. The dovish speak by Fed officials and the continued decline in LME zinc inventory buoyed the trend of LME zinc prices. However, the gains in SHFE zinc prices were less than LME zinc. The downstream demand has weakened due to closures before the CNY holiday, and domestic social inventories have begun to accumulate in the week ending January 26. It is expected that the upward space for SHFE zinc prices will be limited, thus the recovery of the SHFE/LME zinc price ratio will be limited.

Figure 14: China zinc import arbitrage ratio

Source: LME, SMM

Refined zinc supply

SMM data shows that social inventories of zinc ingots across seven major markets in China totalled 78,600 mt as of Thursday January 25, up 7,700 mt from January 19 and 4,500 mt from January 22. The inventory in Shanghai increased significantly, mainly due to more arrivals of cargoes during the week and traders active in shipping cargoes. As zinc prices rose, downstream purchases decreased; in Guangdong, due to the increase in the proportion of direct shipments to smelters, cargoes arriving in warehouses were scarce. This, combined with normal downstream delivery-taking, reduced inventory in Guangdong. Some cargoes arrived in Tianjin during the week, and the downstream delivery-taking was normal, growing inventory slightly. Inventories in Shanghai, Guangdong and Tianjin rose 3,300 mt.

Figure 15: SMM refined zinc social inventory (Shanghai, Guangdong and Tianjin)

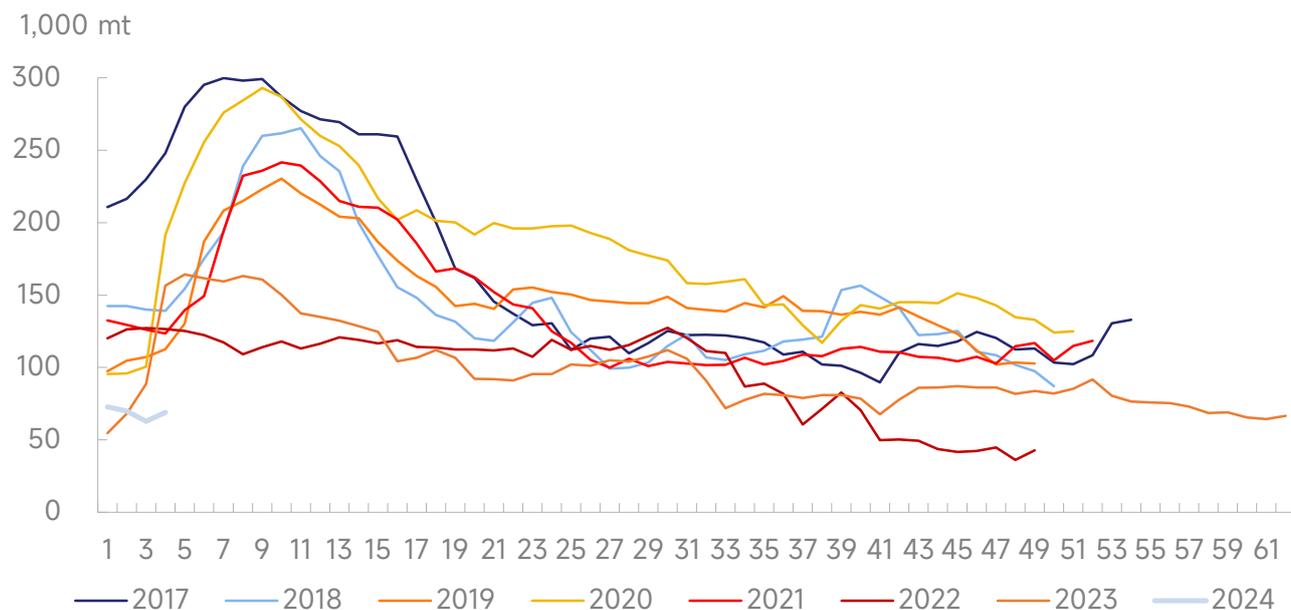


Table 5: Major zinc smelters ex-works quotes for #0 zinc yuan/mt

Region	Company Names	2024/1/19	2024/1/26	Up/Down	Remark	Status quo
North-east	22,300	22,500	200	22,300	ex-works #0 zinc price	normal operation
North-west	21,085	21,605	520	21,085	#0 zinc traded price in Shanghai	normal operation
South China	21,640	22,180	540	21,640	#0 zinc traded price in Guangdong	normal operation
South-west	21,405	21,985	580	21,405	#0 zinc traded price in Shanghai	normal operation
Central China	21,105	21,605	500	21,105	#0 zinc traded price in Shanghai	normal operation
South-west	20,905	21,440	535	20,905	#0 zinc traded price in Shanghai	normal operation
North-west	20,973	21,550	578	20,973	#0 zinc traded price in Guangdong	normal operation
North China	-	-	-	-	#0 zinc traded price in Shanghai	normal operation
North China	20,820	21,440	620	20,820	#0 zinc traded price in Tianjin	normal operation

Source: SMM

Table 6: Operating rates at major domestic zinc smelters

Company	Nov	Dec(E)	Monthly change
Zhuzhou Smelter Group Co., Ltd.	108.00%	110.00%	-4.00%
Yunnan Chihong Zinc & Germanium Co., Ltd.	134.46%	134.46%	-7.00%
Huludao Zinc Industry Co., Ltd.	70.77%	70.77%	-1.00%
Hanzhong Zinc Industry Co., Ltd.	66.00%	66.00%	0.00%
Guangxi Hechi Nanfang Non-ferrous Metals Group	132.00%	156.00%	0.00%
Henan Yuguang Zinc Industry Co., Ltd.	112.04%	108.00%	-4.00%
Shaanxi Dongling Industry and Trade Group Co., Ltd.	90.38%	85.38%	0.00%
Chifeng Nfc Zinc Co., Ltd.	100.66%	100.00%	-8.00%
Shenzhen Zhongjin Lingnan Nonfermet (Smelting) Group Co., Ltd.	110.40%	114.00%	-14.00%
Zijin Mining Bayannur Co., Ltd.	119.47%	120.00%	2.00%
Sichuan Hongda Group	31.20%	33.00%	-1.00%
Shaanxi Zinc Industrial Co., Ltd.	102.00%	102.00%	-6.00%
Baiyin Nonferrous Metals (Group) Co., Ltd.	106.35%	104.28%	1.00%
Yunnan Xiangyun Feilong Nonferrous Metals Co. Ltd./Yunnan Xiangyun Feilong Regeneration Technology Co., Ltd.	38.67%	38.00%	-3.00%
Western Mining Co., Ltd.	124.80%	120.00%	5.00%
Yunnan Jinding Zinc Industry Co., Ltd.	58.29%	60.00%	-7.00%
Yunnan Yuntong Zinc Industry Co., Ltd.	99.60%	96.00%	-8.00%
Inner Mongolia Xing'an Copper & Zinc Smelting Co., Ltd.	115.20%	115.20%	2.00%
Yunnan Luoping Zinc & Electricity Co., Ltd.	63.00%	65.00%	5.00%
Sihuan Zinc & Germanium Technology Co., Ltd.	120.00%	120.00%	30.00%

Source: SMM, E: estimate

Table 7: Domestic #0 zinc prices

yuan/mt

Region	2024/1/19	2024/1/26	Up/Down	Inventory (1,000 mt)
Shanghai	20860-21130	21410-21630	525	36.0
Nanchu	20925-21020	21535-21565	577	17.6
Tianjin	20760-20900	21400-21490	615	71.0

Source: SMM

Table 8: New production capacity at refined zinc smelters in 2019-2024E (10,000 mt/year)

Name of company	Raw materials	Existing capacity	New capacity	Commissioning date
Qinghai Xibu Indium Industry	Secondary zinc	0	4	Jan 2022
Guiyang Haoyu	Secondary zinc	0	6	Aug 2022
Jiangxi Siyuan	Secondary zinc	0	2.5	Oct 2022
Henan Jinli Gold Lead Group	Zinc produced with zinc concentrate	0	10	Dec 2022
Hunan Jinshi Mining	Secondary zinc	5	5	Mar 2023
Nandan County Jilang Indium Industry	Zinc produced with zinc concentrate	8	2	Mar 2023
Sichuan Junlei Zinc Industry	Zinc produced with zinc concentrate	0	7	Apr 2023
Hechi Nanfang	Zinc produced with zinc concentrate	35	30	Jul 2023
Henan Wanji	Zinc produced with zinc concentrate	0	15	Dec 2023
Jincheng Zinc Industry	Secondary zinc	0	10	Dec 2023
Guangxi Yusheng	Zinc produced with zinc concentrate	5	5	2023
Guangxi Yongxin	Secondary zinc	5	5.8	2023

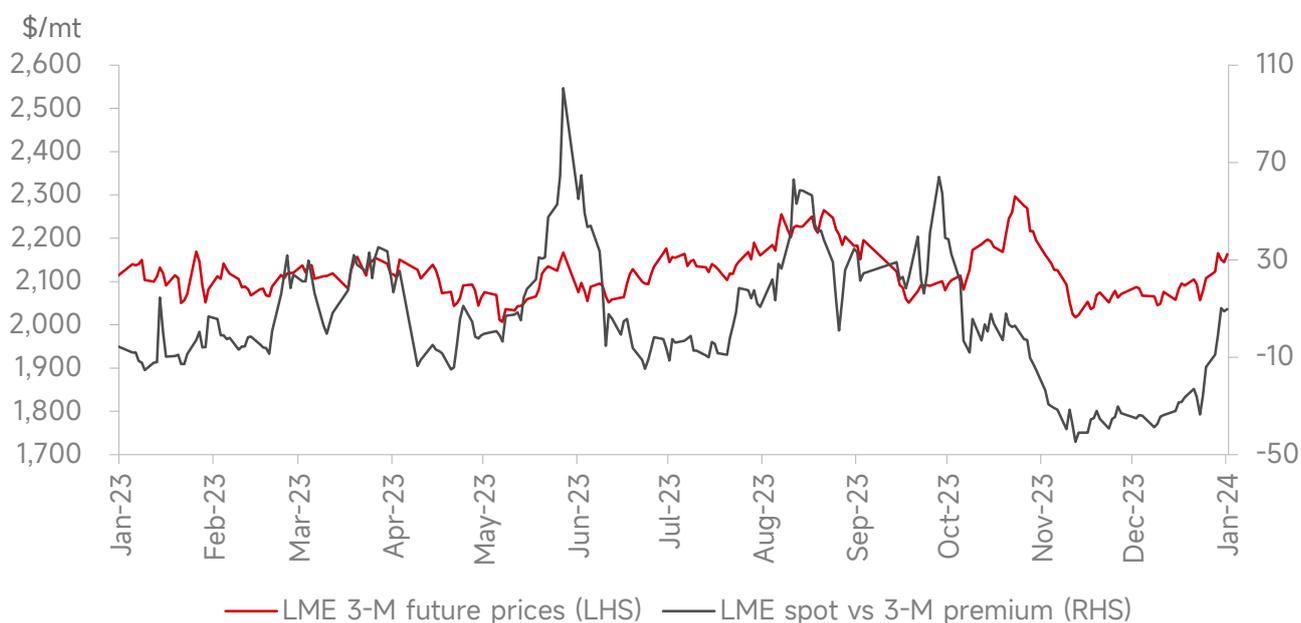
Source: SMM

Zinc oxide

According to SMM survey, the average operating rate of zinc oxide enterprises was 55.7% last week, down 0.8 percentage point from a week earlier. Raw materials grew. As more galvanising manufacturers closed during the week, some zinc oxide companies increased the proportion of zinc ingots purchased. In the first half of the week, zinc ingots were purchased at lower prices and the overall inventory of raw materials increased slightly. In terms of orders, last week, orders of rubber grade zinc oxide were stable, supported by the operating rate of semi-steel tyres; orders of ceramic-grade zinc oxide were shrinking; orders of feed-grade zinc oxide remained poor; orders of electronic-grade zinc oxide changed little; orders of chemical-grade zinc oxide declined slightly due to downstream demand. Zinc oxide companies suspended production for the Chinese New Year holidays last week, affecting output. This, together with the decline in orders, lowered the average operating rate. An increasing number of zinc oxide companies will shutter this week, and operating rates are expected to continue to decline.

Lead: Both supply and demand dropped, eyes on cost support

Figure 16: LME lead prices and premiums



Source: LME, SMM

Price forecast

This week, key macroeconomic data due include the flash annualised fourth-quarter GDP of the eurozone, the US ADP employment in January, the final US Markit manufacturing PMI in January, the US unemployment rate in January and the seasonally adjusted non-farm employment in January. The Federal Reserve will announce its interest rate decision, which is expected to remain unchanged.

In terms of LME lead, LME lead stocks have continued to decline since the New Year's Day holiday, reaching as low as 108,500 mt. However, after LME lead surged to \$2,188/mt last week, lead stocks rebounded. The contango of LME cash to the three-month lead contract turned into backwardation and stood at \$8.84/mt as of January 25. As the declines in lead ingot inventories were priced in, lead prices rolled back some of their gains. It is expected that LME lead prices will run at \$2,090-2,165/mt this week.

In terms of domestic SHFE lead prices, the pace of lead ingot destocking has slowed down. Meanwhile, there should be concentrated closures across upstream and downstream companies in the lead industry chain ahead of the Chinese New Year holidays this week, including battery companies. As such, lead prices are expected to fluctuate weakly due to lack of consumption. Lead smelters are still in the process of stockpiling raw materials. If the price of battery scrap remains high, it may provide cost support for lead prices. The most active SHFE lead contract prices are expected to stand between 16,050-16,400 yuan/mt this week.

Spot prices are expected to move between 16,000-16,250 yuan/mt. In terms of primary lead, there will be both increase and decrease in production at smelters this week. As downstream consumption weakens,

the available spot supply is expected to increase slightly, reducing quotations with high premiums; in terms of secondary lead, as smelters shut down, the supply of lead ingots will decrease, reducing market quotations. This, combined with raw material stockpiling by smelters and high cost of battery scrap, will prevent secondary lead from trading with discounts. In terms of lead consumption, most lead battery companies will close this week, and lead consumption is expected to fall off a cliff. The spot trades will turn sluggish again.

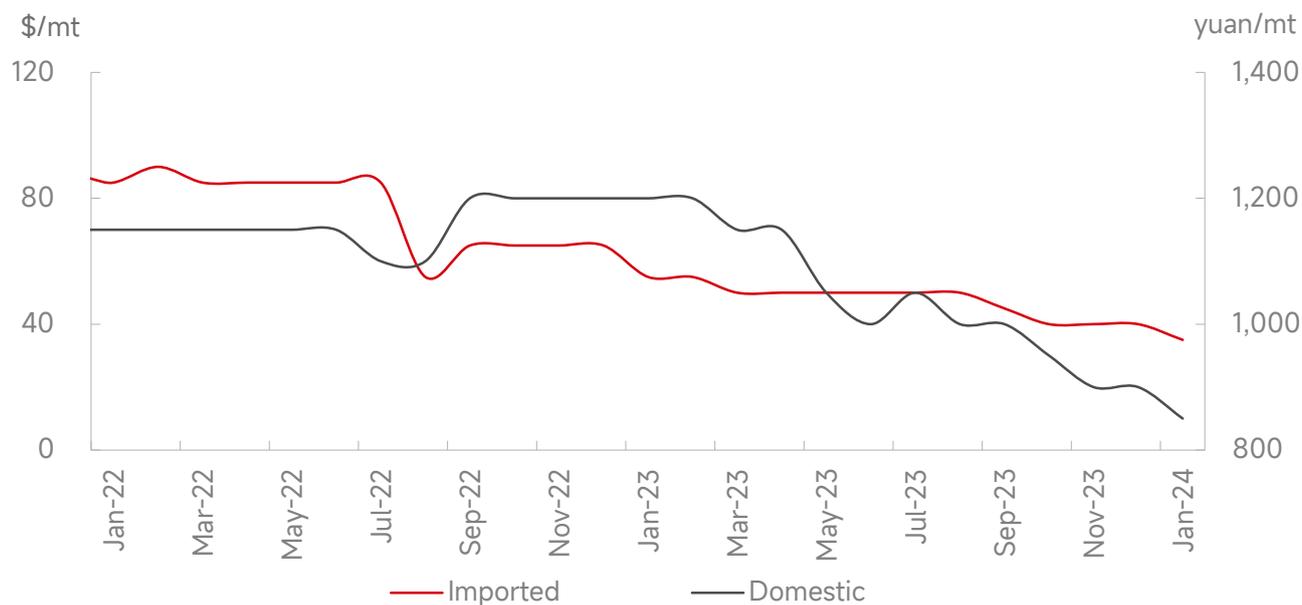
Figure 17: China lead spot prices



Source: SMM

Lead concentrate

In terms of imported ore, imported ore port inventories remained low. Lead and zinc mines cut production in the fourth quarter and smelters conducted maintenance. Many smelters in Hunan and Yunnan cut output for maintenance, and TCs of lead concentrate stabilised. At the end of the month, many smelters said that lead concentrate trading volume would decline in February and offers would decrease. Trading weakened amid tight lead concentrate supply. According to SMM survey, most of the shipments arrivals of imported lead ore were purchased by smelters under long-term contracts. Due to the difficulty in raising the TCs for imported ore and the closing of the import window, there has been an absence of offers for spot lead ore at ports. Traders generally see no profit for lead ore import in the foreseeable future, hence no trades for cargoes slated to arrive in the near future.

Figure 18: Imported Lead Concentrate TC

Source: SMM

Table 9: Lead concentrate TCs in Nov-Dec 2023

	Dec 2023	Nov 2023	MoM Change
Imported (\$/dmt)	30-50	30-50	0
Domestic (yuan/mt in Pb content)	800-1,000	800-1,000	0

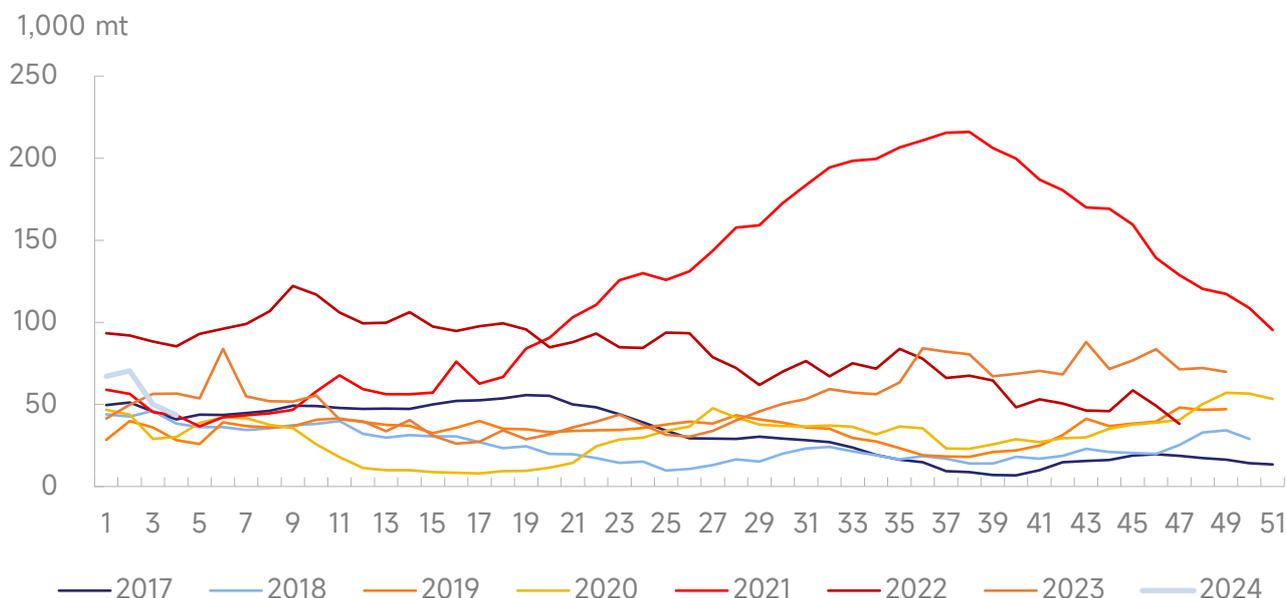
Source: SMM

Note: 60% lead content in the imported concentrate, and 50% lead content in the domestic concentrate.

Supply of refined lead

According to SMM survey, the average operating rate of primary lead smelters stood at 51.73% last week (January 20-26), down 0.06 percentage point from a week earlier.

Last week, several smelters in Henan received notices of production restrictions, and output declined slightly. Smelters that had previously been shut down for maintenance have not yet resumed production, and the operating rates in Henan declined slightly. Last week, a small-scale smelter in Hunan increased production slightly after resuming production two weeks ago. A refined lead smelter that had previously planned to resume at the end of the month delayed resumption until early February. The operating rates of refined lead last week increased by 0.48 percentage point last week. Smelters of delivery brands in Yunnan that conducted maintenance will resume production this week, while the remaining smelters maintained stable production. Production at refined lead smelters in Guangdong, Guangxi and Jiangxi that had previously been overhauled stabilised last week. The output of refined lead last week increased slightly.

Figure 19: Domestic lead inventories (Shanghai, Guangdong, Zhejiang, Jiangsu and Tianjin)

Source: SMM

Inventory

According to SMM survey, social lead ingot inventory across five major regions in China totalled 43,500 mt as of January 25, down 6,500 mt from Friday January 19 and 2,500 mt from Monday January 22, the lowest in six months.

As migrant workers returned home, some downstream companies will begin to reduce production or directly stop production for CNY holidays. Therefore, last week was the final week of concentrated stockpiling by downstream companies ahead of CNY. That, combined with soaring lead prices, dampened the purchasing enthusiasm of downstream companies. With low stocks at primary lead and secondary lead smelters, some companies that needed spot cargoes continued to purchase lead ingot stocks in social warehouses. Therefore, social stocks continued to decline, but the decline narrowed. This week, downstream companies will shut down. With the CNY approaching, long-distance logistics vehicles will be reduced, and downstream pre-holiday stockpiling is coming to an end. Meanwhile, some secondary lead smelters will also close. Both the supply and demand of lead ingots will fall, and the subsequent decline in lead ingot inventories will further slow down.

Downstream demand

Last week, there was little difference in end-user consumption in the lead-acid battery market. Electric bicycle and car battery dealers have basically completed their pre-holiday stockpiling. New orders from

manufacturing companies have gradually decreased, and finished product inventories have gradually increased. Due to the recent strong lead prices, price increases in the wholesale market of electric bicycle batteries were reported. However, given sluggish end-user consumption, battery sales prices lacked ability to rise, remaining stable last week. In addition, some lead-acid battery manufacturers shut down for CNY, and downstream companies' pre-holiday stockpiling are coming to an end. The trading in the spot market has weakened. , which will be even quieter this week due to more closures.

Nickel: SHFE nickel prices rose last week with mixed market sentiments

Figure 20: SHFE-LME price trend



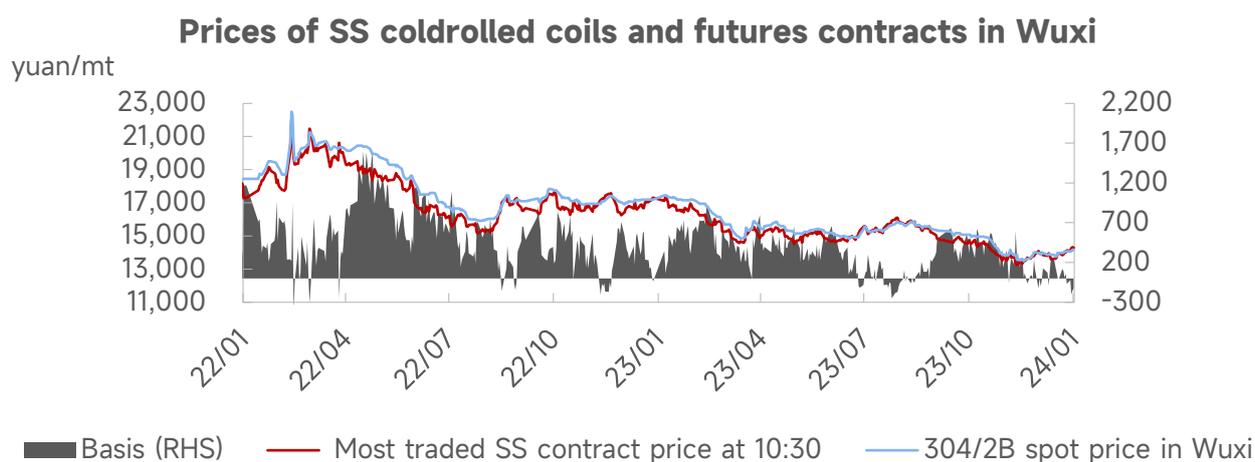
Source: SMM

Source: SMM

The SHFE nickel market showed strong resilience at a low level and surpassed the 130,000 yuan/mt mark last Friday. Market sentiment received a boost from a series of favorable macro news, significantly lifting SHFE nickel prices. Foreign media first reported the closure of the Kambalda mine in Western Australia due to the prolonged slump in nickel prices, and according to SMM research, the mine is one of BHP's nickel raw material suppliers. At the same time, Canadian miner First Quantum has temporarily halted mining operations at its Ravensthorpe nickel mine in Western Australia. This could impact the company's raw material supply in the second quarter of this year. Additionally, the delayed Reserve Base Metal Quotas (RKAB) has provided support to nickel prices. On the macro front, the market focused on the US December core PCE price index last week, with GDP reports indicating a slight decrease in US inflation. The data reveals robust economic growth in the United States, with a year-on-year increase of 3.3% in the fourth quarter of 2023 compared to the previous year. Meanwhile, the week ending January 19 saw an increase in US initial jobless claims, reaching 214,000, indicating signs of weakness in the current employment market. Although market expectations for a potential interest rate cut by the Federal Reserve in March remain cautious, given the faster-than-expected economic growth and some alleviation of inflationary pressures, there is a widespread belief that the Fed might start cutting rates in the first half of this year. In terms of fundamentals, nickel inventories showed an accumulating trend last week. The inventory build-up was mainly contributed by nickel briquettes. This is mainly due to a large influx of nickel briquettes arrivals, and the high nickel prices are suppressing downstream stocking sentiments. In terms of output, with the rise in nickel prices boosting profits, some refined nickel producers that may

have previously reduced production maintained high operating rates last week. Coupled with the ramp-up of some new production capacity, it is expected that the supply of pure nickel will be relatively ample. On the demand side, as the Spring Festival holiday approaches, downstream enterprises are gradually entering holiday mode. Purchasing pace is slowing down, leading to a decrease in overall activity in the spot market. In summary, because mining output has decreased and there's anticipation of interest rate cuts, short-term nickel prices could rise, but the upside space will be capped by oversupply. The current SHFE nickel market reflects a mix of bullish and bearish sentiments, displaying some resilience prior to the holiday.

Figure 21: Prices of SS cold-rolled coils and futures contracts in Wuxi



Source: SMM

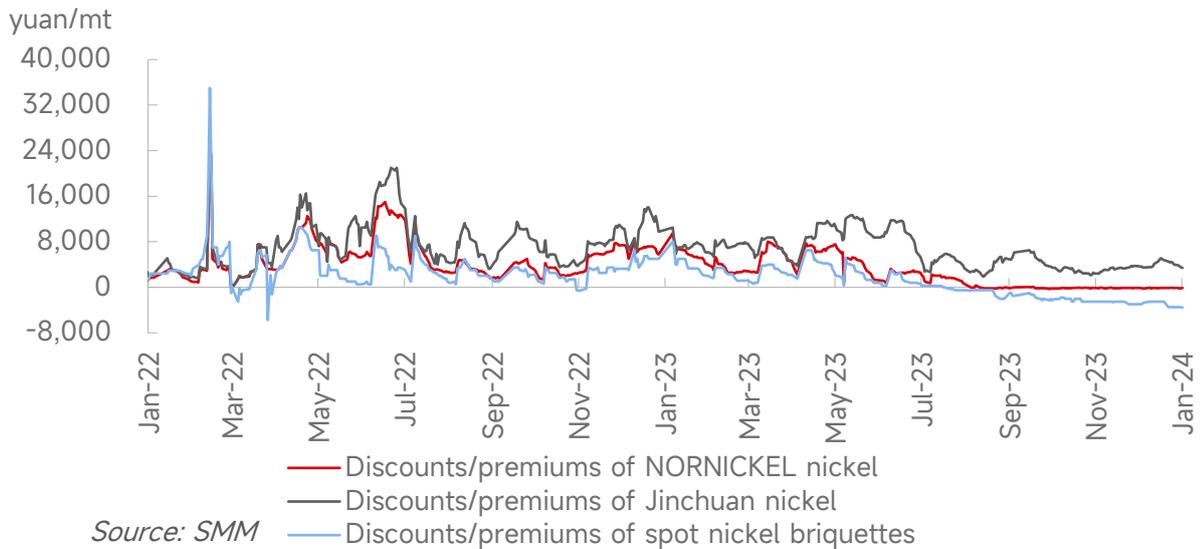
Stainless steel futures contract rose last week, and may move wildly this week

The stainless steel futures contract showed a relatively strong performance last week. As of the closing price on January 25, it reached 14,295 yuan/mt, marking an increase of about 165 yuan/mt compared to the previous week. On the macro level, China's central bank will cut the reserve requirement ratio for financial institutions by 0.5 percentage points from Feb. 5, said Pan Gongsheng, governor of the People's Bank of China, on January 24. Additionally, on January 25, the central bank will reduce re-lending and re-discount interest rates for the rural sector and small businesses by 0.25 percentage points from 2% to 1.75%, amid efforts to promote a moderate decrease in comprehensive financing costs. China's central bank conducted 466 billion yuan of seven-day reverse repos at an interest rate of 1.8 percent on January 25, unchanged from the previous rate. As 100 billion yuan of reverse repos matured on the same day, the operation led to a net injection of 366 billion yuan into the market. Macro factors continued to support a strong market trend, with prices reaching a peak of 14,395 yuan/mt on last Thursday. However, the stainless steel market weakened before the Spring Festival holiday. The bullish side had an advantage with increased positions, but both bullish and bearish parties reduced their trading activities, showing a tendency to adopt a wait-and-see approach. In Indonesia, the approval process for nickel ore quotas slowed down due to policy factors, causing concerns about future nickel ore supply in the market. However, the production of high-grade NPI and the inflows of NPI from Indonesia didn't decrease. As a result, the market is adopting a wait-and-see approach for the time being. Fundamentally, the stainless steel spot market saw a cooling in transactions last week, yet steel mills continued to reduce their

distribution compared to previous week. Overall, social inventories remained relatively stable with a slight accumulation. Cold-rolled coil accumulated significantly, while hot-rolled coil remained scarce and in high demand. Public warehouse deliveries in Wuxi saw a significant increase in inventory. Currently, spot prices are trending slightly stronger. SMM predicts that stainless steel contracts will maintain a wide-ranging consolidation.

Pure Nickel

Figure 22: Premiums/discounts of domestic refined nickel



Source: SMM

Figure 23: LME nickel briquette inventory

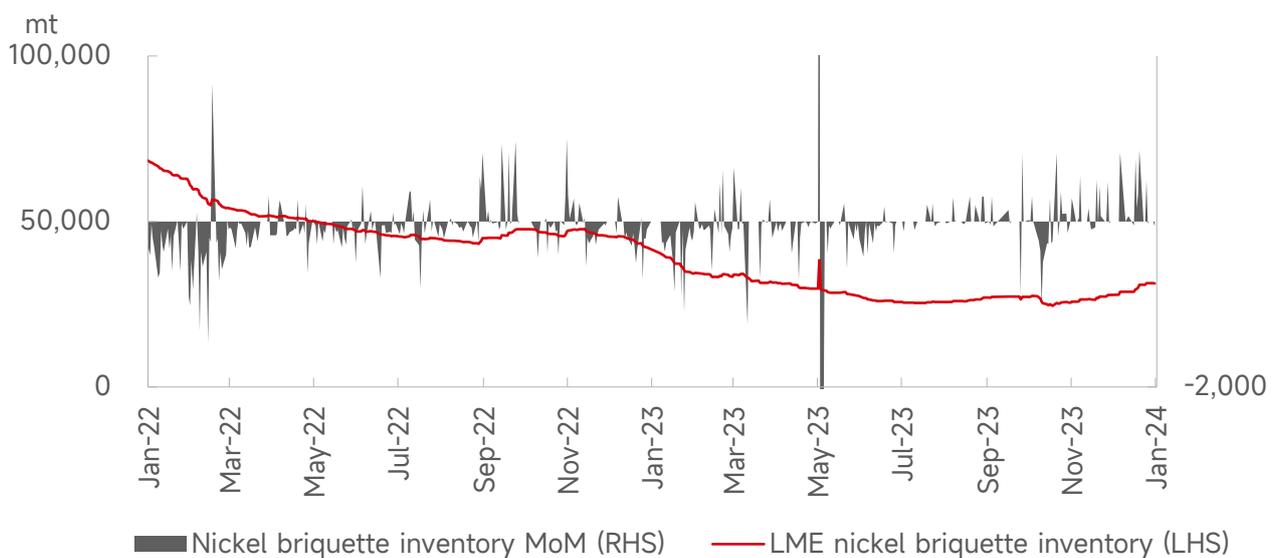
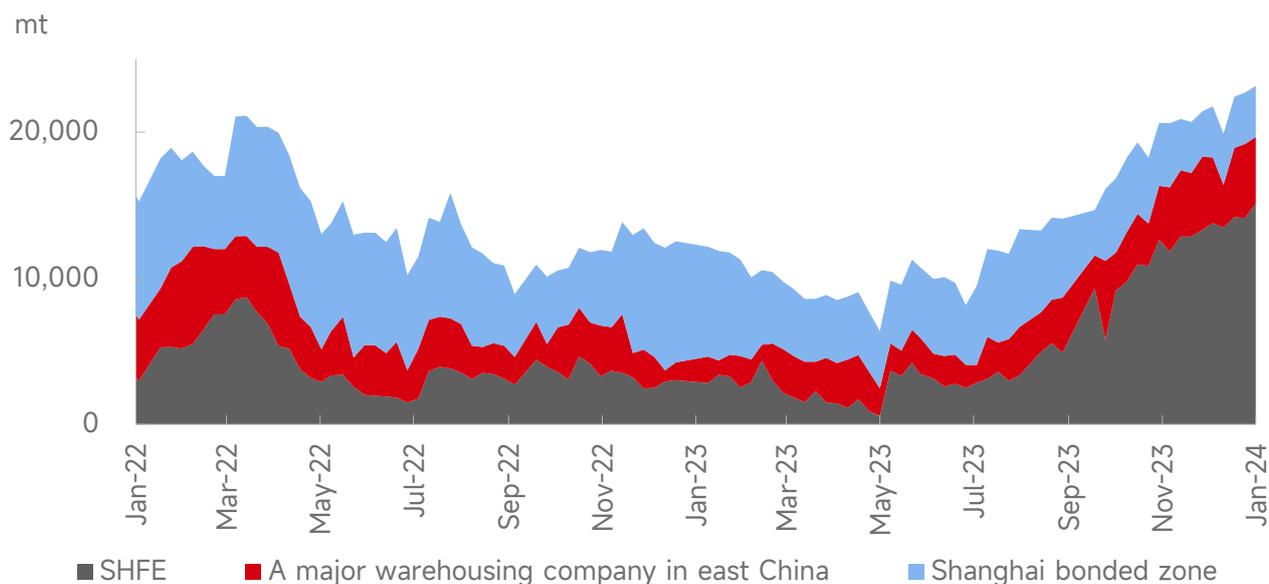


Figure 24: Domestic inventory

Source: SMM

Nickel inventories in Shanghai bonded zone remained unchanged, but nickel briquette stocks declined

SMM data shows nickel stocks in Shanghai bonded zone remained unchanged WoW last week, standing at 3,500 mt, including 1,700 mt of nickel briquette and 1,800 mt of nickel plate. However, nickel briquette inventory decreased, while nickel plate inventory slightly increased. The main reason for the decline in nickel briquette inventory is the lower prices in the bonded area, coupled with a significant rise in domestic nickel prices last week. Consequently, some traders opted to import a small amount of nickel briquette into the domestic market.

Pure nickel social inventory continued to grow

According to SMM research, pure nickel inventory in six regions across China stood at 19,660 mt, up 462 mt from January 19. Due to the competitive advantage of nickel briquette over nickel plate in terms of prices last week, some traders imported a small amount of nickel briquettes from the bonded area into the domestic spot market. As a result, the majority of accumulated stocks consist of nickel briquettes. With the rise in market prices, nickel prices reached a recent high, impacting the downstream purchasing sentiment. As a result, the atmosphere for spot transactions weakened, leading to a slight increase in inventory last week.

NPI/Stainless Steel

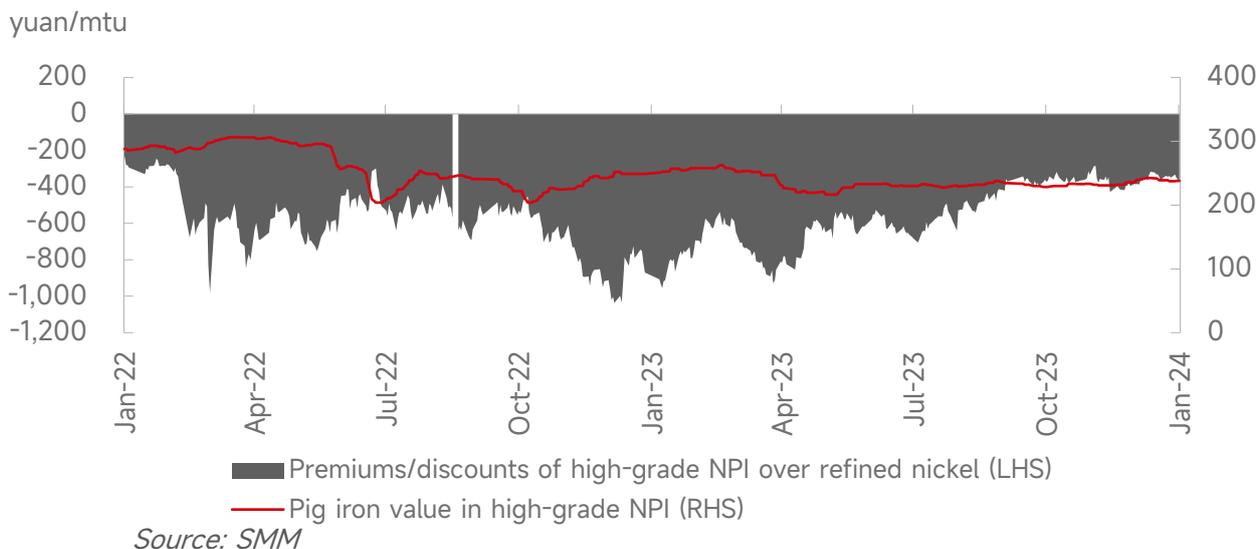
Figure 25: NPI prices



Source: SMM

NPI prices dropped last week due to a decrease in spot transactions

As of last Friday, the average price of 8-12% high-grade NPI was 930 yuan/mtu (ex-factory, including tax), down 0.5 yuan/mtu from January 19. From a fundamental perspective, the Indonesian nickel ore quota issue sparked market discussions. According to SMM research, Indonesian large high-grade NPI smelting plants currently possess a raw material inventory sufficient for approximately two months. It is expected that these smelters will maintain normal production levels, leading to a continued high output of Indonesian high-grade NPI in January. From the demand perspective, most steel mills have already completed pre-holiday stockpiling. Due to the impact of the Spring Festival, the operating rates of steel mills are expected to decline in February. In summary, the demand and supply for high-grade NPI was weak, leading to a slight decline in NPI prices. It is anticipated that the increase in steel mill production in the future will be limited, and the loose supply of NPI is unlikely to change, limiting the potential for a rebound in NPI prices.

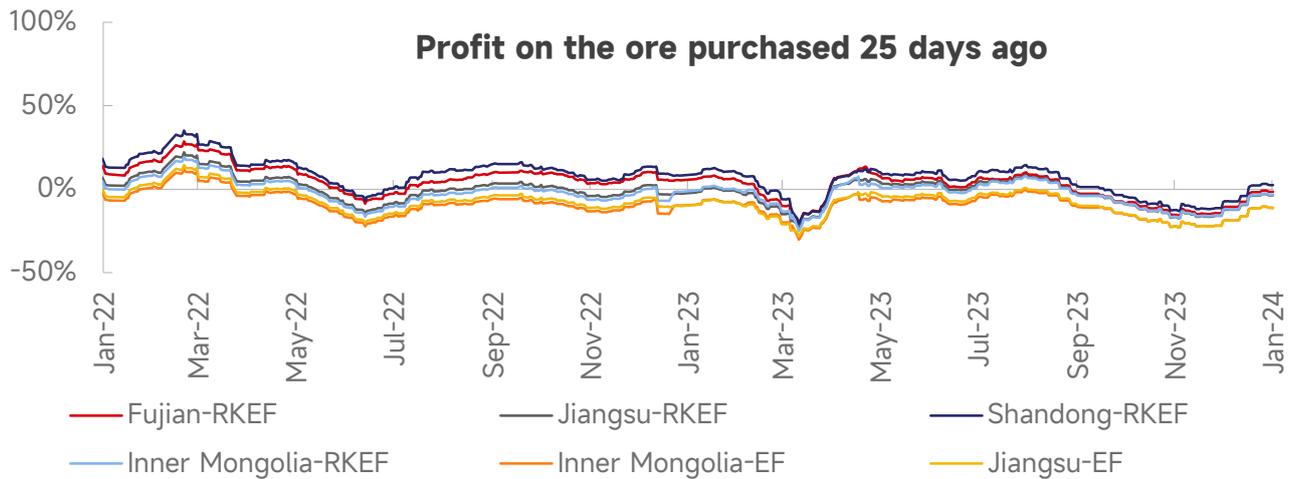
Figure 26: Premiums and discounts of high-grade NPI against refined nickel

Source: SMM

Weekly average discount of high-grade NPI stood at 351.4 yuan/mtu against refined nickel

Weekly average discount of high-grade NPI stood at 351.4 yuan/mtu against refined nickel, 8 yuan/mtu wider than two weeks ago. NPI prices dipped last week, but due to market news, pure nickel prices saw an increase, leading to a widening price gap between the two. In pure nickel, there was a slight price uptick in response to recent events such as restrictions on LME delivery and nickel ore quotas. However, according to SMM, refined nickel is primarily exported to foreign smelting plants rather than being used for delivery. As a result, the impact of restricted delivery on the fundamentals is relatively minor. The expansion of electro-deposited nickel capacity continues to accumulate, but January demand is expected to weaken, leading to an anticipated soft trend in pure nickel prices. Looking at NPI, recent high-priced transactions are mainly concentrated in special steel plants with requirements for P and S elements, and transaction volumes are generally small. Steel mill is nearly finished NPI procurement; however, there remains an oversupply of NPI, leading to expectations of sustained low prices. In summary, considering both prices are expected to be bearish, it is anticipated that the price difference between the two will fluctuate.

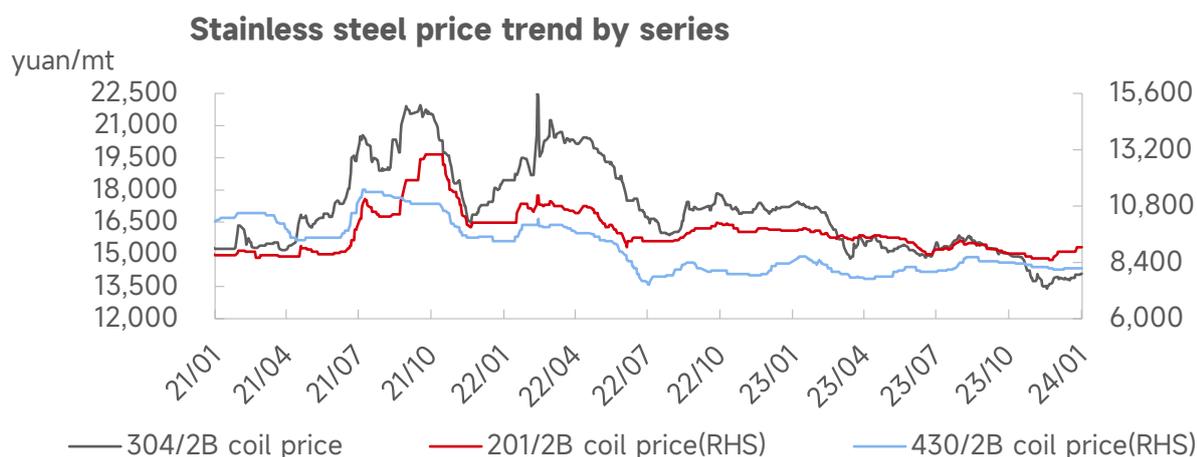
Figure 27: Profit on the ore purchased 25 days ago



Source: SMM

Losses of high-grade NPI plants narrowed last week due to falling ore price

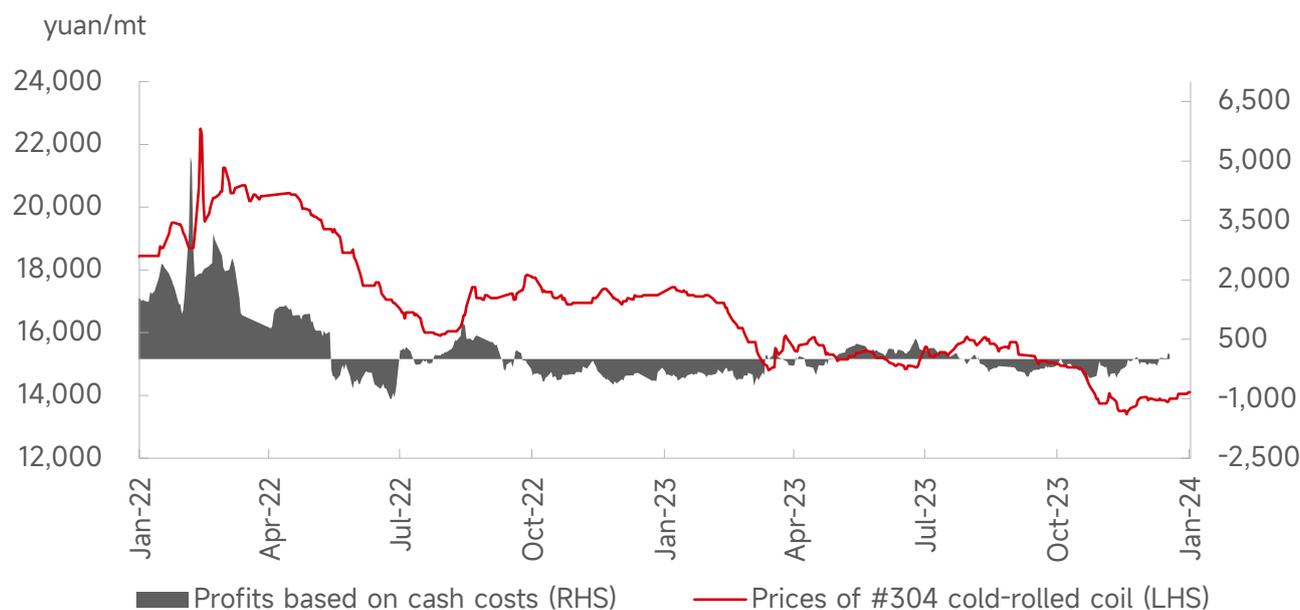
NPI plants suffered narrower losses based on the prices of nickel ore purchased 25 days earlier. At the raw material end, the coking coal and coke prices slightly decreased but remain generally stable, thus having a minimal impact on the production cost of high-grade NPI. Some enterprises became profitable primarily due to the stabilization of NPI prices after a rebound, coupled with a decline in nickel ore prices. Additionally, they benefited from the advantage of self-generated power. NPI plants in provinces such as Fujian, Jiangsu, Inner Mongolia, and Liaoning experienced losses ranging from 1.57% to 11.25%. Given the expected decline in nickel ore prices ahead, there's an anticipation of narrowing losses.



Source: SMM

Stainless steel spot prices continued to rise last week

Stainless steel spot prices remained stable with a slight increase last week. On January 25, the price of 304 bur edge cold-rolled stainless steel was at 14,000-14,200 yuan/mt, showing an average increase of 50 yuan/mt compared to last Tuesday. The stainless steel futures contract reached 14,400 yuan/mt. The rise in futures prices propelled spot stainless steel prices up. The mainstream price of private 304 cold-rolled coil steel mills increased from 13,600 to 13,700 yuan/mt. The rise is driven by falling supply as many traders have taken an early break for the upcoming CNY holiday. Stainless steel social inventories increased by 0.49% compared to the previous week and 1.97% compared to the previous month. The main factors include a decline in arrivals across various regions such as Wuxi and Foshan, coupled with downstream procurement needs being met in early January, resulting in a slowdown in purchasing demand and a slight accumulation of inventory. According to customs data on January 22, stainless steel imports in December were around 288,600 mt, while exports were approximately 353,900 mt. The total stainless steel imports for January to December were 2.367 million mt, marking a year-on-year decrease of about 30.88%. Exports for the same period totaled around 4.58 million mt, showing a year-on-year decline of about 15.66%. Overall, the stainless steel industry is experiencing a weak demand both domestically and internationally in 2023. The stainless steel spot market saw a decline in trading sentiment. Traders and some downstream players have entered the Chinese New Year holiday mode, leading to a temporary slowdown in demand. It is anticipated that stainless steel spot prices will remain in a narrow fluctuation in the short term.

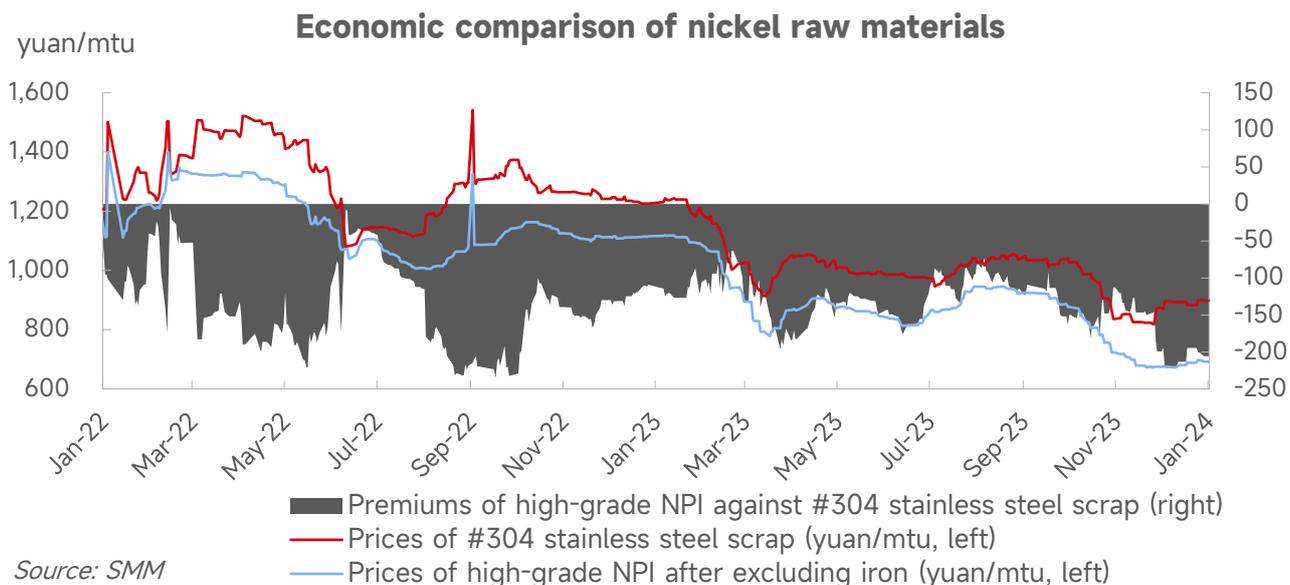
Figure 29: 304 stainless steel CRC profit

Source: SMM

Stainless steel profitability recovered further last week

Stainless steel spot prices experienced a slight increase. The profit margin for raw materials inventory increased. The profit margin for current raw material further improved. High-grade NPI prices stabilized and experienced a slight decrease. Some steel mills were slowing down their NPI purchasing. They focused on buying NPI in early January for February, so now there are fewer inquiries and transactions. The finished product price increased slightly by 50 yuan/mt last week, expanding the profit margin based on raw material inventory. Meanwhile, the current raw material prices dropped slightly, decreasing the cost slightly, leading to a recovery in profit margin based on current raw material. The cost of the RKEF process was around 13,927.62 yuan/mt, and that of the non-RKEF process was around 14,017.67 yuan/mt. Steel mills slowed down in both procurement, inquiries and transactions for raw materials, leading to a slight decrease in high-grade NPI prices. High-carbon ferrochrome prices remained relatively stable in the short term due to a combination of upward price sentiment from steel mills and weak downstream demand, making it difficult for prices to rise or fall. In summary, the short-term stainless steel spot prices slightly increased, raw material prices are stable. Spot goods transactions were relatively slow, with some traders on holiday. It is expected that prices will fluctuate within a narrow range, leading to expanded profit margin for raw materials inventory, while the profit margin for current raw material will be maintained.

Figure 30: Economic comparison of nickel-based raw materials

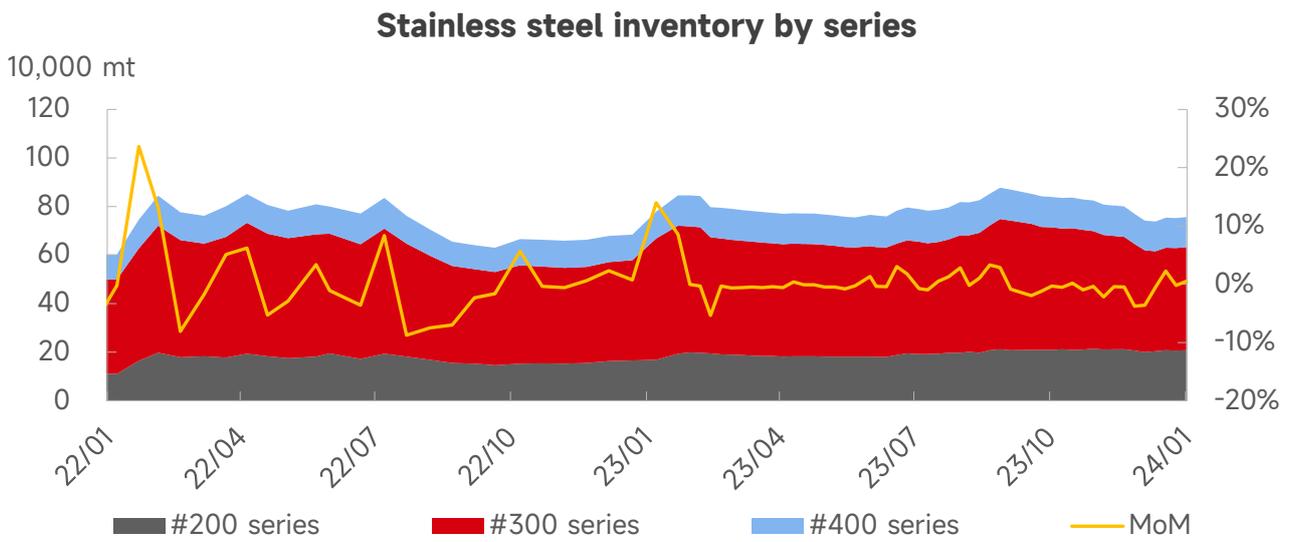


Source: SMM

The cost efficiency of high-grade NPI was maintained last week

Currently, the cost of producing stainless steel from stainless steel scrap is around 13,778.37 yuan/mt, while producing it from high-grade NPI costs about 13,511.84 yuan/mt. Due to reduced stainless steel production in February, the trading prices of high-grade NPI slightly decreased compared to the previous week. Due to a recent decrease in the recycling volume and tightened supply of stainless steel scrap, stainless steel scrap price slightly increased. In January, there was a significant increase in shipments of high-grade NPI from Indonesia. However, in February, stainless steel plants have limited production and procurement demands, hindering the price increase of high-grade NPI. The approval of nickel ore quotas is slowing down due to Indonesian policies, causing some concerns in the market about future nickel ore supply. Currently, high-grade NPI prices are expected to remain stable as it faces challenges in both rising and falling. In February, stainless steel production is expected to decrease, while stainless steel scrap prices may rise. SMM predicts an overall increase in the production cost of stainless steel in the future. High-grade NPI maintains its cost efficiency due to sustained high social inventory.

Figure 31: Stainless steel inventory by series



Source: SMM

New Energy - Cobalt

Nickel and cobalt price review and forecast

Table 10: Nickel and cobalt price review and forecast

Product	Unit	Prices as of Jan 25	Weekly change	Price forecast for Jan 29-Feb 2	Change
Refined cobalt	10,000 yuan/mt	20.5-23.5	-	20.0-23.5	↓ 1.1%
Cobalt powder	10,000 yuan/mt	20.0-20.7	↓ 1.0%	20.0-20.5	↓ 0.5%
Cobalt intermediate products	\$/lb	7.00-7.1	-	7.00-7.1	-
Cobalt sulphate	10,000 yuan/mt	3.15-3.20	-	3.15-3.2	-
Cobalt chloride	10,000 yuan/mt	3.90-4.00	-	3.90-4.00	-
Tricobalt tetraoxide (Co ₃ O ₄)	10,000 yuan/mt	13.0-13.3	-	13.0-13.3	-
Battery-grade nickel sulphate	10,000 yuan/mt	2.63-2.69	↑ 0.9%	2.63-2.69	-

Source: SMM

Refined cobalt

Refined cobalt prices stayed stable for the week ending January 25, with steady production and completed pre-holiday restocking. Downstream demand is weak, leading to a quiet market and spot price stalemate as the holiday nears.

Cobalt intermediate products

Cobalt intermediate product prices were stable in the week ending January 25. Port arrivals kept supply steady, with few low-priced spots. Some smelters' rigid restocking needs kept market demand modest. Inquiries have slowed from last week, but with concentrated spot goods, holders are firm on prices and reluctant to sell, leading to a standoff. As year-end nears, the trading atmosphere and price fluctuations may be minimal.

Cobalt salt (cobalt sulphate and cobalt chloride)

Cobalt salt prices were stable for the week ending January 25. Supply dipped slightly as smelters cut production amid the Spring Festival and weaker demand. On the demand side, with earlier restocking done, inquiries and transactions were sparse. The market, with weak supply and demand, saw subdued transactions due to the holiday season, remaining stable over the week. The trade atmosphere may weaken further, with spot prices expected to stay stable.

Cobalt salt (Co₃O₄)

Co3O4 prices held steady for the week ending January 25. From the supply side, smelters kept high operating rates following earlier substantial orders. On the demand side, with prior low restocking by LCO firms, new Co3O4 orders were fewer during the week. Given market conditions and stable cobalt salt prices, Co3O4 producers are unlikely to change prices amid a weaker trading environment, keeping spot prices steady. With the Spring Festival approaching, market fluctuations should be minimal, likely sustaining price stability.

Nickel sulphate

Nickel sulphate prices edged up in the week ending January 25, due to tight supply and demand. Transaction price coefficients were mostly at 98%-100% against the low-end SMM price, up from the previous week's 95-97%. Transactions were quieter than the prior week, as spot supplies of nickel sulphate are scarce and some ternary cathode precursor companies still need to purchase it. Cost side, First Quantum's production cuts have strained the market, keeping supply tight. MHP price coefficients are up, now at 75-77% of LME nickel prices. With this support, nickel sulphate prices are expected to stay high in the week of January-February 2.

New Energy- Lithium

Lithium price review and forecast

Table 11: Lithium price review and forecast

Product	Unit	Prices as of Jan 25	Weekly change	Price forecast for Jan 29-Feb 2	Change
Spodumene	\$/mt	975	↓ 2.9%	950	↓ 2.6%
Industrial-grade lithium carbonate	10,000 yuan/mt	8.70-9.0	↑ 0.2%	8.70-9.0	-
Battery-grade lithium carbonate	10,000 yuan/mt	9.30-10.00	-	9.30-10.00	-
Lithium hydroxide (industrial grade)	10,000 yuan/mt	7.50-7.91	-	7.50-7.91	-
Lithium hydroxide (battery grade)	10,000 yuan/mt	8.10-8.85	-	8.10-8.85	-
Lithium hydroxide (battery-grade fine powder)	10,000 yuan/mt	8.70-9.65	↓ 1.6%	8.70-9.65	-

Source: SMM

Lithium ore

Lepidolite prices remained stable for the week ending January 25, continuing their steady trend. Lepidolite trade is light; Jiangxi smelters cut output, except a few at normal levels for trade and arbitrage gains. The majority of manufacturers requiring external purchases of lepidolite ore are progressively entering a phase of reduced or suspended production, reducing demand and scheduled production. Supply side activity has also dropped, with suppliers mainly honoring long-term contracts due to falling demand. As lithium carbonate prices stabilize at 90,000 to 100,000 yuan/mt, some miners consider holding or raising prices, facing pushback from downstream, causing a split in price expectations. Weak market dynamics lead to a temporary price stability.

Spodumene concentrate CIF prices stayed stable as of week ending January 25, with lithium salt producers showing tepid interest in long-term orders, leading to muted transactions. Additionally, domestic ports and private warehouses have high spodumene inventories, ensuring a plentiful spot supply within the country. As a result, some domestic lithium salt producers stopped renewing long-term contracts with Australian mines, and Brazilian mines saw low client interest in Q1 pickups. Overseas mines' Q4 2023 financial reports highlight cost reduction as a key focus for future competition. Consequently, if lithium salt prices drop post- Spring Festival amid weaker-than-expected demand, imported spodumene prices may also fall.

Lithium carbonate

Lithium carbonate prices were relatively stable for the week ending January 25. Supply side, in December 2023, China's lithium carbonate imports hit an unexpected 20,000 mt, with domestic output at 44,000 mt, with supply totaling 64,000 mt—the most in nearly three years, showing a significant supply for the month." With the Spring Festival and maintenance season near, more lithium salt firms will halt for

maintenance. Hence, there's no rush to ship goods, and a tendency to delay sales persists. Demand side, businesses like cathode material manufacturers are buying as needed without restocking much, showing little interest in high-priced lithium carbonate. In summary, downstream lithium battery firms are de-stocking, with little chance of short-term demand rising. If Australian mine prices keep falling, lithium carbonate spot prices may not improve.

Lithium hydroxide

Lithium hydroxide prices stayed stable for the week ending January 25. The lithium hydroxide market is stable in supply and demand. Some suppliers with low stock and higher smelting costs hold firm on prices, some quoting 88,000 yuan/mt or more. However, overall, downstream high-nickel cathode producers are finishing Spring Festival stockpiling and expect moderate post-holiday demand recovery, leading to low acceptance of high-priced lithium salts. Market transactions are mainly long-term contracts, with stable supply and demand, keeping prices steady for now.

New Energy-Precursor and cathode active material

PCAM and CAM price review and forecast

Table 12: PCAM and CAM price review and forecast

Product	Unit	Prices as of Jan 25	Weekly change	Price forecast for Jan 29-Feb 2	Change
NMC 532 precursor (single crystal)	10,000 yuan/mt	6.97-7.12	-	6.97-7.12	-
NMC 622 precursor (consumer battery)	10,000 yuan/mt	7.54-7.94	-	7.54-7.94	-
NMC 811 precursor (power battery)	10,000 yuan/mt	8.20-8.39	-	8.20-8.39	-
NMC 532 materials	10,000 yuan/mt	10.4-11.5	-	10.4-11.5	-
NMC 622 materials	10,000 yuan/mt	11.6-13.6	-	11.6-13.6	-
NMC 811 materials	10,000 yuan/mt	13.5-14.7	-	13.5-14.7	-
LFP (power battery)	10,000 yuan/mt	4.20-4.45	-	4.20-4.40	↓ 0.6%
LCO (4.4V domestic)	10,000 yuan/mt	17.2-17.8	-	17.2-17.8	-

Source: SMM

Ternary cathode precursor

Prices for ternary cathode precursors were stable in the week ending January 25. On the cost side, cobalt prices were weakly stable and nickel prices firm, prompting some precursor firms to slightly raise quotes. Yet, due to excess capacity, prices in general failed to rise. Demand side, January's cathode scheduled production has been stable, with some firms expecting better uptake. From the supply perspective, precursor production varied; some are boosting February production for stockpiling after end-project gains, while others cut back following a year-end volume push. Expect ternary cathode precursor prices to stay relatively steady with current stable nickel and cobalt prices.

Ternary material prices

Ternary material prices were stable for the week ending January 25. On the cost side, steady lithium prices kept cathode production costs even. Intense price competition in digital and power battery markets drove some processing fees down. Pre-holiday stockpiling and solid electric tools market performance were reported. In the EV market, ternary cathode producers increased January production for Spring Festival stockpiling. Demand for high-nickel content rose among top battery makers, while low-nickel demand fell, but some second-tier firms saw more demand for mid- to low-nickel products. Ternary material prices are expected to stay stable going forward.

LFP

LFP prices stayed stable for the week ending January 25. Consistent prices of lithium carbonate and iron phosphate kept LFP production costs steady. LFP makers are producing to order, with some seeing more orders and planning to produce over the holiday. Demand side, demand for LFP is below expectations, slightly better in EV than energy storage. High finished battery cell inventories mean companies are slowly reducing stock, keeping LFP demand limited. Prices are expected to remain weakly stable.

LCO

LCO prices were stable in the week ending January 25, with steady Co₃O₄ and lithium carbonate costs maintaining stable LCO production costs. Pre-holiday market activity has quieted, leading to weaker transactions. On the demand side, demand from top-tier buyers is steady, but it's weakened among smaller battery makers, some of whom may start holidays early. On the supply side, leading enterprises maintain production, while small and medium-sized enterprises see a decline in scheduled production. The high-rate battery market faces intense price competition, likely to continue with new capacities. LCO prices are expected to show weak stability.

Appendix 1:

SMM Monthly Balance Sheet of Base Metal

		Nov-23E	Dec-23E	Jan-24E
Copper	Output	960.8	999.4	953.6
	Imports	378.8	350.0	310.0
	Exports	16.8	14.0	13.0
	Apparent consumption	1,322.8	1,335.4	1,250.6
	Inventory change	-24.7	7.0	25.0
	Actual consumption	1,347.5	1,328.4	1,225.6
	Growth in actual consumption	7.9%	11.9%	43.9%
Aluminium	Output	3,488.0	3,562.0	3,570.0
	Imports	172.0	150.0	100.0
	Exports			
	Apparent consumption	3,660.0	3,712.0	3,670.0
	Inventory change	-55.0	-148.0	150.0
	Actual consumption	3,715.0	3,860.0	3,520.0
	Growth in actual consumption	4.5%	8.1%	17.5%
Zinc	Output	579.0	590.9	572.4
	Imports	51.7	50.0	35.0
	Exports	0.4	1.0	0.2
	Apparent consumption	630.3	639.9	607.2
	Inventory change	-4.1	-17.1	27.2
	Actual consumption	634.4	657.0	580.0
	Growth in actual consumption	133.0%	232.7%	418.8%
Lead	Output	301.2	308.5	286.0
	Imports	5.1	4.5	4.0
	Exports	17.3	10.0	5.0
	Apparent consumption	680.8	599.9	581.2
	Inventory change	10.5	-14.1	-26.9
	Actual consumption	670.3	614.0	608.1
	Growth in actual consumption	3.5%	-5.1%	28.6%
Nickel	Output	23.1	24.5	24.0
	Imports	6.2	7.2	8.7
	Exports	5.8	7.7	7.0
	Apparent consumption	23.4	23.9	25.7
	Inventory change	1.3	1.4	1.5
	Actual consumption	22.1	22.5	24.3
	Growth in actual consumption	-21.1%	-22.0%	2.3%

Source: SMM

SMM also provides

SMM Regular Reports (weekly & monthly)

SMM Base Metal Briefing (weekly)

SMM Copper Weekly

SMM Aluminium Weekly

SMM Zinc Weekly

SMM Lead Weekly

SMM Nickel Weekly

SMM Cobalt & Lithium Weekly

SMM Steel Briefing

SMM Rare Earth Weekly

SMM Iron Ore Weekly Monitor

SMM Copper Monthly

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SMM Steel Scrap & EAF Monthly

SMM Nickel Downstream Sectors PMI Monthly

SMM Copper Raw Materials Monthly

SMM Annual Reports & Database

China Copper Industry Chain Annual Report 2022-2026 (Research Report + Database)

China Aluminium Industry Chain Annual Report 2022-2026 (Research Report + Database)

China Lead Industry Chain Annual Report 2022-2026 (Research Report + Database)

China Zinc Industry Chain Annual Report 2022-2026 (Research Report + Database)

China Nickel Industry Chain Annual Report 2022-2026 (Research Report + Database)

China Tin Industry Chain Database 2012-2026

China Silicon Industry Chain Annual Report 2022-2026 (Research Report + Database)

China Manganese Industry Chain Annual Report 2022-2026 (Research Report + Database)

China Stainless Steel Industry Chain Annual Report 2022-2026 (Research Report + Database)

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