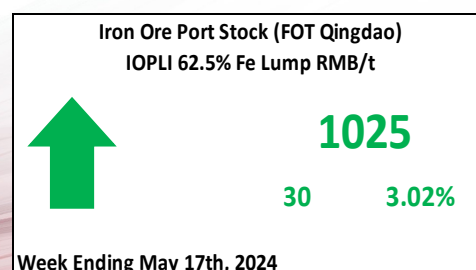
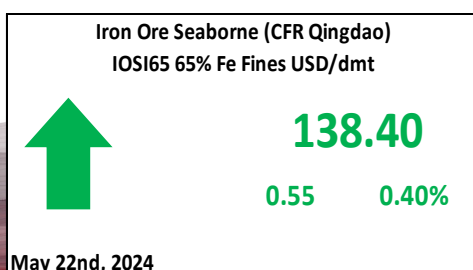
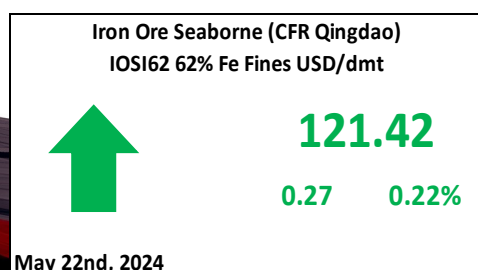
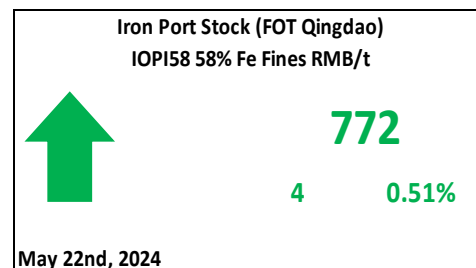
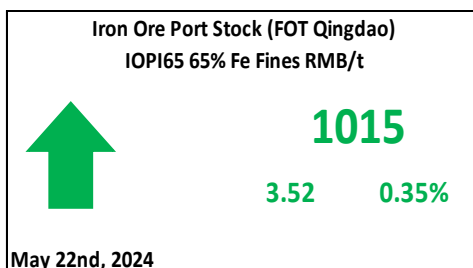
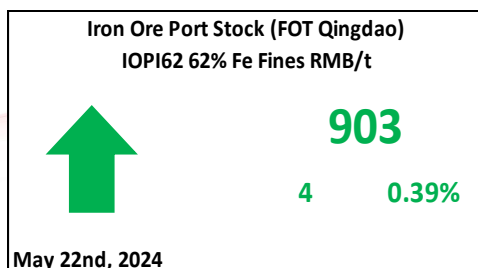


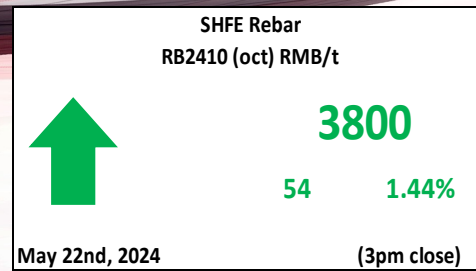
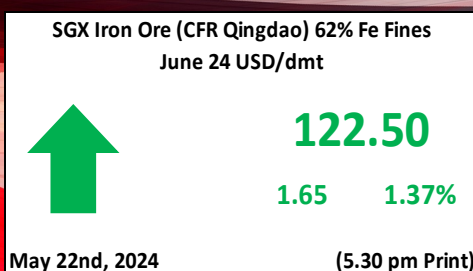
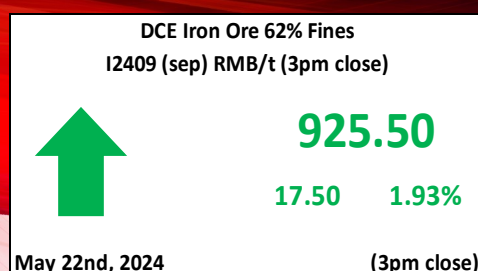


## MMi Dashboard

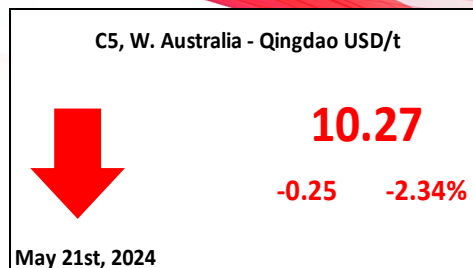
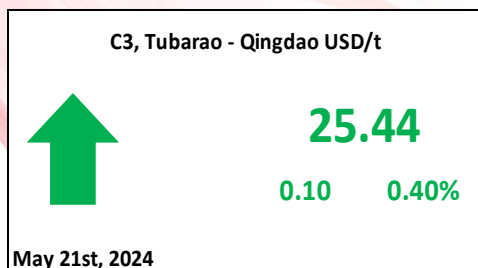
## Iron Ore Price Indices



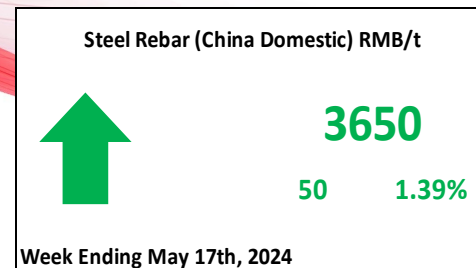
## Exchange Traded Contracts



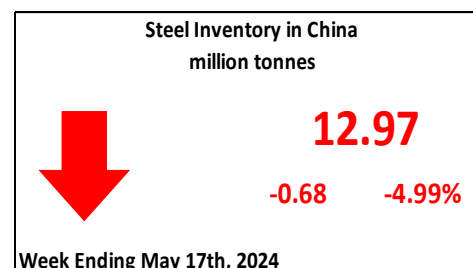
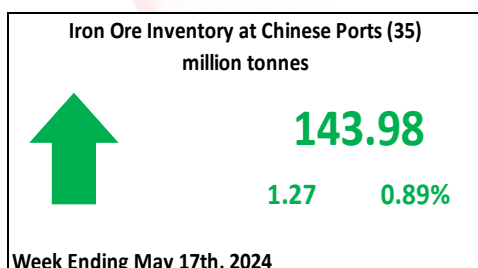
## Freight Rates



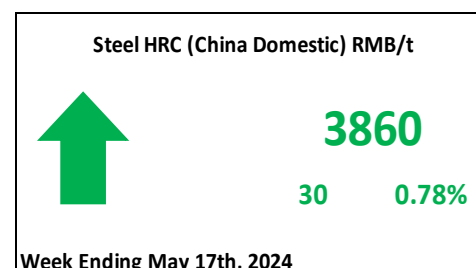
## Steel Price



## Inventory Levels



## Steel Price



## IRON ORE PORT STOCK INDEX (IOPI)

May 22nd, 2024		FOT Qingdao (inc. 13% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 13% VAT), USD/dry tonne <sup>1</sup>						
Index	Fe Content	Price	Change	Change %	MTD	YTD	Low <sup>2</sup>	High <sup>2</sup>	Price	Change	Change %	MTD	YTD	Low <sup>2</sup>	High <sup>2</sup>
IOPI62	62% Fe Fines	903	3.5	0.39%	880	895	770	1063	118.46	0.46	0.4%	116.38	121.03	101.00	140.00
IOPI58	58% Fe Fines	772	3.9	0.51%	785	781	665	963	101.74	0.52	0.5%	104.50	106.10	86.00	128.00
IOPI65	65% Fe Fines	1015	3.5	0.35%	996	1026	881	1175	133.57	0.46	0.3%	132.21	139.47	116.00	155.00

## IRON ORE SEABORNE INDEX (IOSI)

May 22nd, 2024		CFR Qingdao, USD/dry tonne							MARKET COMMENTARY							
Index	Fe Content	Price	Change	Change %	MTD	YTD	Low <sup>2</sup>	High <sup>2</sup>	DCE iron ore futures market rising sharply trends, The main contract I2409 closed at 921, an increase of 2.73% throughout the day, some traders were active to sell; Some steel mills tended to be weak-and-see, and purchased on demand. Today the overall market transaction atmosphere is acceptable. PBF at Shandong port dealt 900-905 yuan/mt; increased 10-20 yuan/mt over yesterday. PBF at Tangshan port dealt 920-925 yuan/mt; increased 10-15 yuan/mt over yesterday. According to SMM research, on May 22nd, the operating rate of blast furnaces according to SMM statistics was 93.17%, an increase of 0.19% compared to the previous month. The utilization rate of blast furnace production capacity was 94.87%, an increase of 0.25% compared to the previous period. The daily average iron production of the sample steel plant was 2.2688 million tons, an increase of 5600 tons compared to the previous period. This week, the resumption of blast furnace production fell short of expectations, and the increment of molten iron has significantly narrowed. It is also estimated that there will be a slight decrease next week, and the production of molten iron has peaked, which has a weak impact on the driving force of mineral prices. However, policies on the real estate side have boosted market sentiment, with optimistic expectations for the future, stimulating a significant increase in the market. However, high iron ore port inventories may suppress the increase in spot prices, which may drag down the futures market. It is expected that the short-term upward space for ore prices will be limited, and they will mainly operate in high volatility.							
IOSI62	62% Fe Fines	121.42	0.27	0.22%	116.42	116.42	99.20	146.75								
IOSI65	65% Fe Fines	138.40	0.55	0.40%	130.60	130.60	115.45	171.65								

## IRON ORE PORT LUMP INDEX (IOPLI)

Week Ending May 17th, 2024		FOT Qingdao (inc. 13% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 13% VAT), USD/dry tonne <sup>3</sup>						
Index	Fe Content	Price	W-o-W	Change %	MTD	YTD	Low <sup>2</sup>	High <sup>2</sup>	Price	W-o-W	Change %	MTD	YTD	Low <sup>2</sup>	High <sup>2</sup>
IOPLI62	62.5% Fe Lump	1025	30	3.0%	994	1041	900	1210	129.37	3.84	3.06%	126.95	136.27	113.28	153.57

## IRON ORE DOMESTIC CONCENTRATE SPOT PRICE ASSESSMENTS AND COMPOSITE INDEX

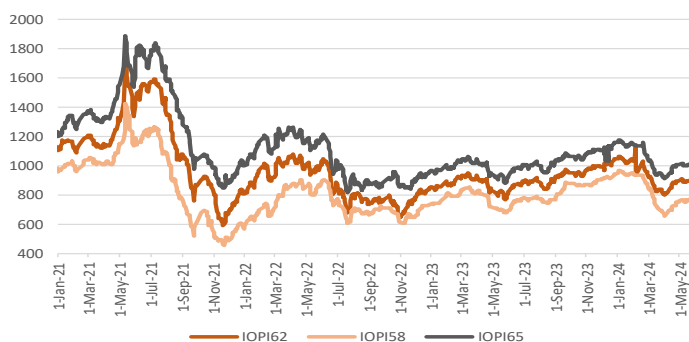
Week Ending May 17th, 2024		RMB/tonne (excluding tax) <sup>3</sup>						USD/tonne (excluding tax) <sup>3</sup>			
Province	Region	Product	Basis	This week	Change %	Low <sup>2</sup>	High <sup>2</sup>	This week	Change %	Low <sup>2</sup>	High <sup>2</sup>
Hebei	Hanxing	66% Fe Concentrate	Dry	1048	0.2%	779	1645	147.52	0.15%	110.31	255.69
Hebei	Qian'an	65% Fe Concentrate	Dry	1065	0.5%	780	1630	149.92	0.43%	110.51	251.57
Liaoning	Anshan	65% Fe Concentrate	Wet	840	1.2%	620	1310	118.24	1.16%	87.40	202.32
Shandong	Zibo	65% Fe Concentrate	Dry	1092	0.3%	800	1752	153.72	0.23%	0.00	272.32

Week Ending May 17th, 2024

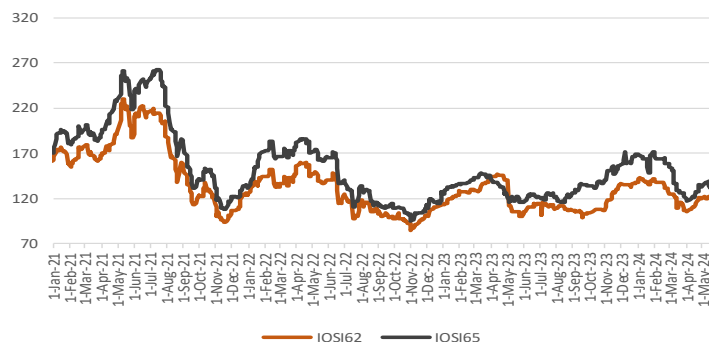
	This week	Change %	Low <sup>2</sup>	High <sup>2</sup>
China Mines Concentrate Composite Index RMB/WT	966.05	0.51%	706.36	1511.22

<sup>1</sup> Exchange rate applied: RMB/USD = 6.7522    <sup>2</sup> Last 12 months  
<sup>3</sup> Weekly exchange rate applied: RMB/USD = 6.87528

## IRON ORE PORT INDEX, FOT QINGDAO (RMB/WT)



## IRON ORE SEABORNE INDEX, CFR QINGDAO (USD/DMT)



## IRON ORE PORT STOCK INDEX MONTHLY, QUARTERLY AND YEAR-TO-DATE AVERAGES

May 22nd, 2024		FOT Qingdao (inc. 13% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 13% VAT), USD/dry tonne						
Index	Fe Content	January	February	March	April	MTD	QTD	YTD	January	February	March	April	MTD	QTD	YTD
IOPI62	62% Fe Fines	119	992	860	857	880	874	895	137.08	130.57	112.79	112.32	115.32	115.83	120.56
IOPI58	58% Fe Fines	101	908	752	711	785	779	781	126.09	120.39	99.14	93.48	103.33	103.96	105.35
IOPI65	65% Fe Fines	134	1108	972	969	996	992	1026	152.20	146.16	127.92	127.43	131.20	131.91	139.19

## IRON ORE SEABORNE INDEX MONTHLY, QUARTERLY AND YEAR-TO-DATE AVERAGES

May 22nd, 2024		CFR Qingdao, USD/dry tonne							FREIGHT RATES						
Index	Fe Content	January	February	March	April	MTD	QTD	YTD	FREIGHT RATES - DRY BULK US\$/wet tonne						
Index	Fe Content	January	February	March	April	MTD	QTD	YTD	Route	Designation	Change	Change %	Low <sup>2</sup>	High <sup>2</sup>	
IOSI62	62% Fe Fines	139.58	134.03	116.50	112.78	112.14	115.18	116.42	W. Australia - Qingdao	C5	10.27	-0.25	-2.34%	3.57	16.77
IOSI65	65% Fe Fines	164.44	162.36	135.22	124.98	122.86	129.04	130.60	Tubarao - Qingdao	C3	25.44	0.10	0.40%	6.70	36.40

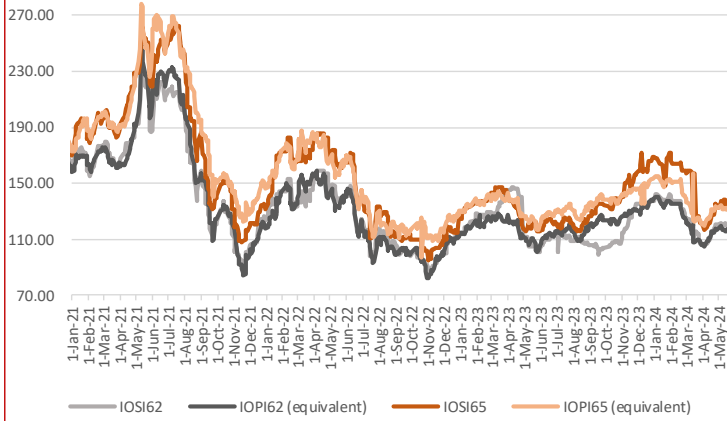
## IRON ORE PORT LUMP INDEX MONTHLY, QUARTERLY AND YEAR-TO-DATE AVERAGES

Week Ending May 17th, 2024		FOT Qingdao (inc. 13% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 13% VAT), USD/dry tonne <sup>1</sup>						
Index	Fe Content	January	February	March	April	MTD	QTD	YTD	January	February	March	April	MTD	QTD	YTD
IOPLI62	62.5% Fe Lump	1170	1093	982	997	933	989	1017	148.20	138.12	123.87	125.79	119.96	126.47	134.98

## IRON ORE INDEX PREMIUMS/DISCOUNTS

May 22nd, 2024		PORT STOCK INDEX (RMB/WT)				May 22nd, 2024		SEABORNE INDEX (USD/DMT)			
Index	Fe Content	Spread to IOPI62		% Spread to IOPI62		Index	Fe Content	Spread to IOSI62		% Spread to IOSI62	
IOPI58	58% Fe Fines	-132		-14.58%		IOSI65	65% Fe Fines	16.98		13.98%	
IOPI65	65% Fe Fines	112		12.37%							

## IRON ORE INDEX COMPARISONS (USD/DMT)



## CHINA DOMESTIC COMPOSITE MINES INDEX (RMB/Wet Tonne, including VAT)



## IRON ORE BRAND SPOT PRICE ASSESSMENTS

May 22nd, 2024				May 22nd, 2024			
PORT STOCK INDEX (RMB/WT)				SEABORNE INDEX (USD/DMT)			
	Price	Change	Diff to IOPI62		Price	Change	Diff to IOSI62
Roy Hill	846	3	-57	Roy Hill	116.90	0.25	-4.52
SIMEC Fines	776	3	-127	SIMEC Fines	113.40	0.25	-8.02
PB Fines	871	3	-32	PB Fines	117.65	0.25	-3.77
Newman Fines	872	3	-31	Newman Fines	120.55	0.30	-0.87
MAC Fines	853	3	-50	MAC Fines	117.65	0.25	-3.77
Jimblebar Blended Fines	768	3	-135	Jimblebar Blended Fines	110.05	0.30	-11.37
Carajas Fines	1084	3	181	Carajas Fines	150.95	0.25	29.53
Brazilian SSF	868	3	-35	Brazilian SSF	125.15	0.25	3.73
Brazilian Blend Fines	884	3	-19	Brazilian Blend Fines	126.75	0.20	5.33
RTX Fines	786	3	-117	RTX Fines	111.25	0.20	-10.17
West Pilbara Fines	814	3	-89	West Pilbara Fines	115.65	0.25	-5.77

May 22nd, 2024			
PORT STOCK INDEX (RMB/WT)			
	Price	Change	Diff to IOPI58
SSF	771	-2	-1
FMG Blended Fines	781	-2	9
Robe River	781	-2	9
Western Fines	784	-2	12
Atlas Fines	778	-2	6
Yandi	764	-2	-8

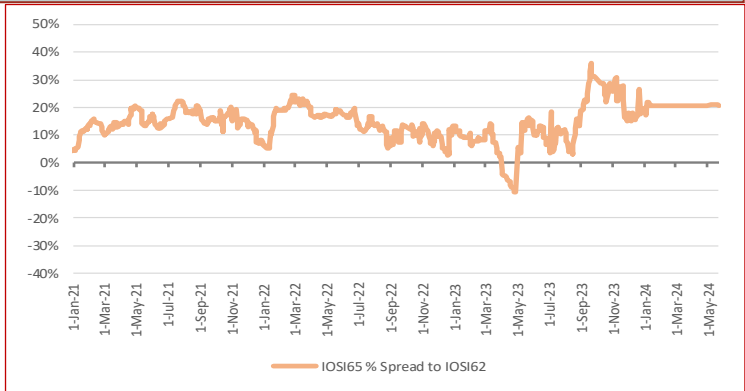
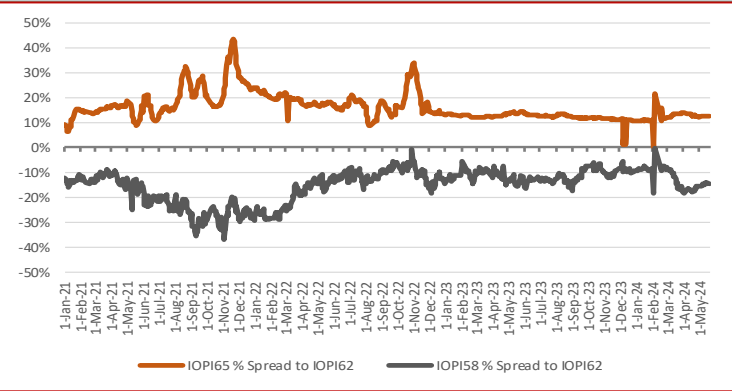
## IRON ORE INDEX NORMALISATION DIFFERENTIALS

Port Stock Index Product Differentials (RMB/wet tonne)				Seaborne Index Product Differentials (USD/dry tonne)			
	Applicable range	Value	Change		Applicable range	Value	Change
1% Fe	High Grade Fe 60 - 63%	14.00	0.00	1% Fe	High Grade Fe 60 - 63%	3.00	0.50
	High Grade Fe 63 - 64%	61.00	1.00		High Grade Fe 63 - 64%	2.75	-0.50
	High Grade Fe 64 - 65%	61.00	1.00		High Grade Fe 64 - 65%	2.75	-0.50
	High Grade Fe 65 - 65.5%	61.00	1.00		High Grade Fe 65 - 65.5%	2.75	-0.50
1% Alumina	Low Grade Fe	26.00	-4.00	1% Alumina	High Fe Grade Al <2.25%	2.00	0.00
	High Fe Grade Al <2.25%	15.00	0.00		High Fe Grade Al 2.25-4%	2.50	0.00
	High Fe Grade Al 2.25-4%	5.00	0.00				
	Low Fe Grade Al <2.25%	130.00	-5.00				
1% Silica	Low Fe Grade Al 2.25-4%	33.00	7.00	1% Silica	High Fe Grade Si <4%	2.25	-0.75
	High Fe Grade Si <4%	35.00	-3.00		High Fe Grade Si 4 - 6.5%	2.25	-0.75
0.01% Phosphorus	High Fe Grade Si 4-6.5%	10.00	-7.00	0.01% Phosphorus	High Fe Grade 0.09%<P<0.115%	0.50	0.00
	Low Fe Grade	10.00	5.00		High Fe Grade 0.115%<P<0.15%	1.25	0.00
	High Fe Grade 0.09%<P<0.115%	5.00	0.00		Low Fe Grade 0.09%<P<0.1%	5.00	0.00
	High Fe Grade 0.115%<P<0.15%	5.00	0.00				
	Low Fe Grade 0.09%<P<0.1%	5.00	0.00				

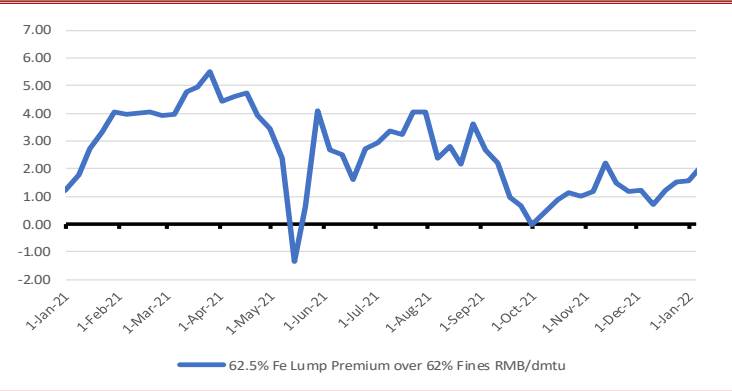
## Port Stock Price Differentials to Qingdao Port for PB Fines (RMB/wet tonne)

Port	Value	Change	Port	Value	Change	Port	Value	Change	Port	Value	Change
Bayuquan	-50.00	0.00	Fangcheng	-25.00	0.00	Lanshan	0.00	0.00	Rizhao	0.00	0.00
Beilun	0.00	0.00	Jiangyin	-30.00	0.00	Lianyungang	0.00	0.00	Shekou	0.00	0.00
Caofeidian	-20.00	0.00	Jingtang	-20.00	0.00	Majishan	0.00	0.00	Taichang	-30.00	0.00
Dalian	0.00	0.00	Lanqiao	0.00	0.00	Qingdao	0.00	0.00	Tianjin	-10.00	0.00

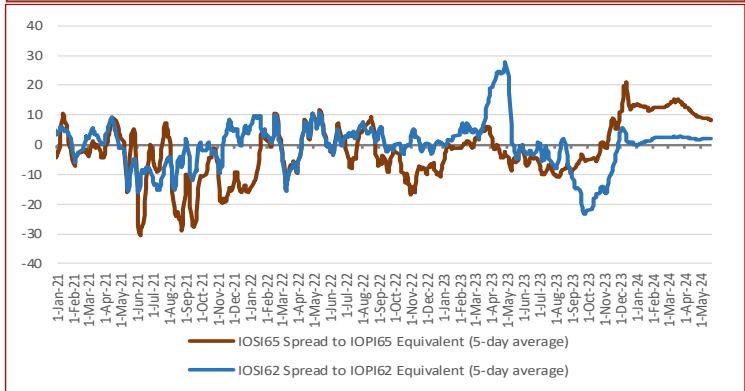
IRON ORE INDEX PREMIUMS/DISCOUNTS



WEEKLY IRON ORE PORT STOCK LUMP PREMIUM (RMB/DMTU)



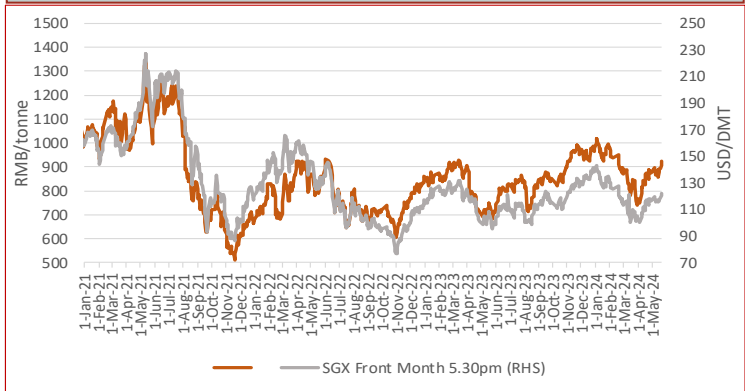
IRON ORE SEABORNE TO PORT STOCK PRICE SPREADS (USD/DMT)



TOTAL IRON ORE INVENTORIES AT CHINA PORTS (MILLION TONNES)



FUTURE TRADING—FRONT MONTH CLOSING PRICE



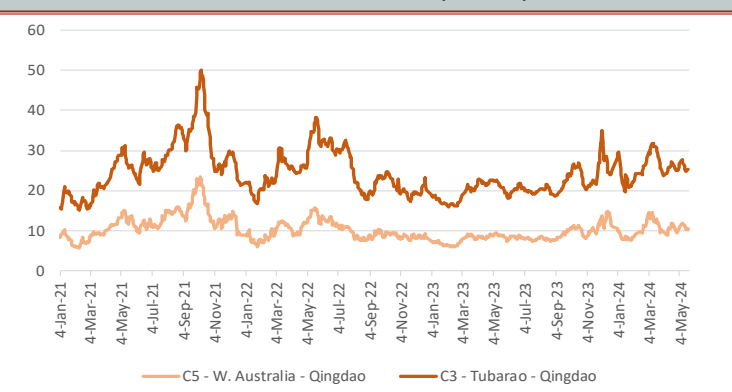
IRON ORE PORT INVENTORIES (MILLION TONNES)

Week Ending May 17th, 2024				
Province	This week	Change %	Low <sup>2</sup>	High <sup>2</sup>
Jingtang	16.04	3.55%	8.41	19.20
Qingdao	22.69	0.84%	9.41	26.24
Caofeidian	16.06	0.50%	7.56	16.29
Tianjin	10.97	-5.19%	6.49	12.97
Rizhao	18.41	4.07%	9.44	19.26
<b>Total (35 Ports)</b>	<b>143.98</b>	<b>0.89%</b>	<b>98.80</b>	<b>155.39</b>

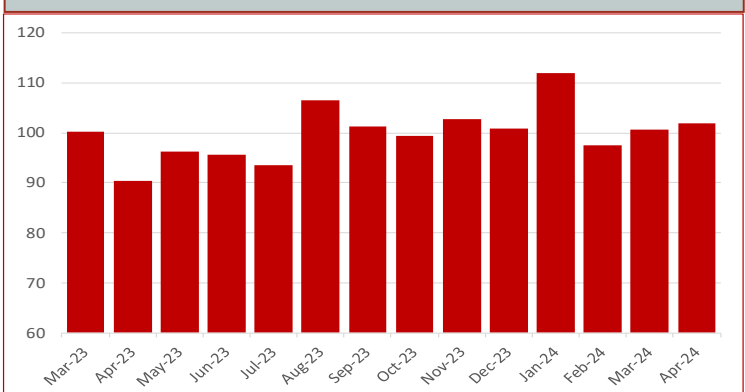
IRON ORE FUTURES CONTRACTS

Closing Date	DCE (RMB/WMT)			SGX (USD/DMT)		
	May 22nd, 3pm close			May 22nd, 5:30pm		
Contract	12409	Change	Change %	June. 24	Change	Change %
Closing Price	925.50	17.50	1.93%	122.50	1.65	1.37%
Vol traded ('000 lots)	32.05	-1.04	-3.14%	8.58	-2.24	-20.69%
Open positions ('000 lots)	43.01	-0.10	-0.24%	31.24	-0.61	-1.93%
Day Low	908.0	23.00	2.60%	120.90	2.90	2.46%
Day High	925.5	16.00	1.76%	122.90	1.95	1.61%

DRY BULK FREIGHT RATES (USD/MT)



TOTAL CHINA IRON ORE IMPORT VOLUMES (MILLION TONNES)



STEEL SPOT MARKET PRICES—CHINA

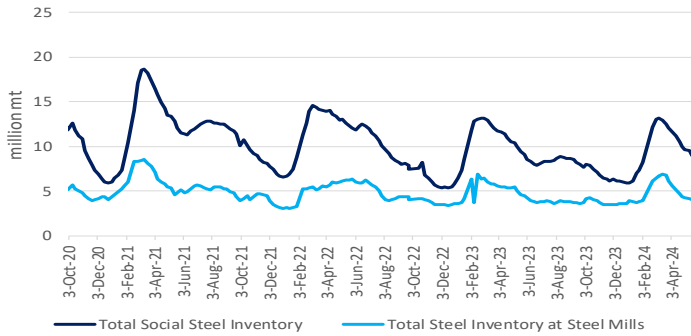
Steel Spot Market RMB/tonne			
Product	2024/5/17	Change	Change %
ReBar HRB400 φ18mm	3,650	50	1.39%
Wirerod Q300 φ6.5mm	3,910	50	1.30%
HRC Q235/SS400 5.5mm*1500*C	3,860	30	0.78%
CRC SPCC/ST12 1.0mm*1250*2500	4,290	-20	-0.46%
Medium & Heavy Plate Q235B 20mm	3,840	-10	-0.26%
GI ST02Z 1.0mm*1000*C	4,810	0	0.00%
Colour Coated Plate	6,550	50	0.77%

CHINESE STEEL MILL PROFITABILITY

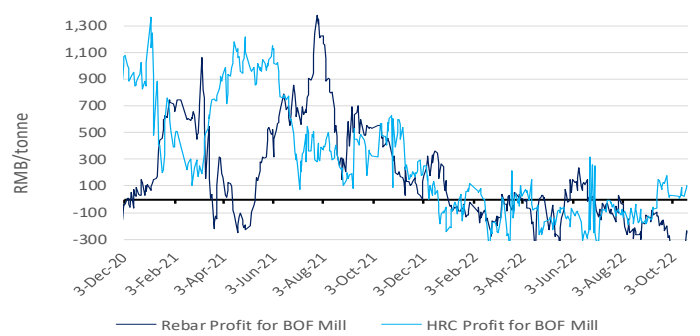
SMM Tracking of Steel Mill P&L - Rebar and Hot-rolled Coil (RMB/tonne)			
Category	Price	Change (WoW)	Note
MMi (Fe 62%), USD/mt excluding tax	120.93	0	Mmi CFR Equivalent index for 1st Feb
Coke	2,340	0	2nd grade met coke, Tangshan, incl. tax
Steel Scrap	2,800	-30	steel scrap (6mm) in Zhangjiagang, excl. tax
Billet Cost	3,085	-5	Q234, incl. tax
Rebar cost - Blast furnace	3,712	-5	calculated based on theoretical weight, incl. tax
Rebar profit - Blast furnace	-132	55	based on Shanghai prices, incl. tax
Hot-rolled coil cost - Blast furnace	3,735	-0	based on actual weight, incl. tax
Hot-rolled coil profit - Blast furnace	125	30	based on Shanghai prices, incl. tax

Note: 1. Costs in the table are calculated based on today's market prices and factored our management, sales, financial and depreciations fees.  
2. The cost refers to average cost in the industry based on SMM's survey of small, medium and large mills in China

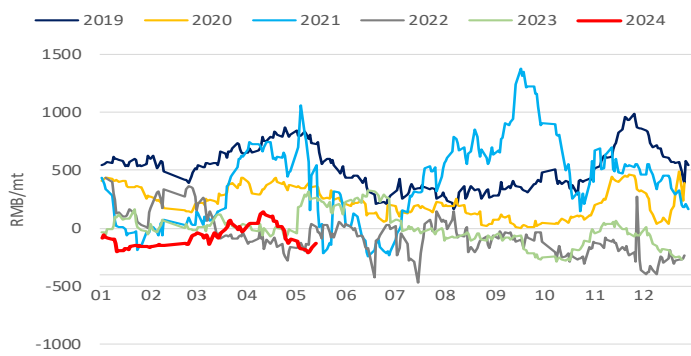
CHINESE STEEL INVENTORIES



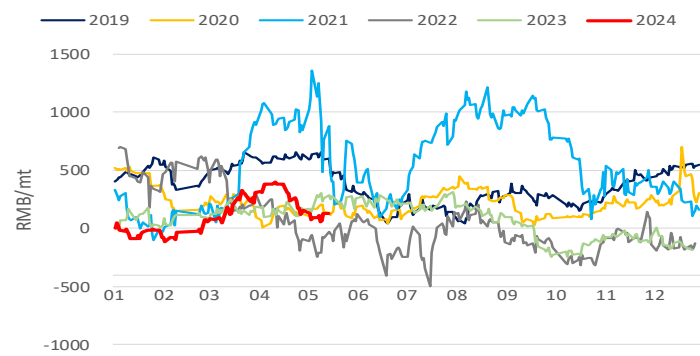
CHINESE STEEL MILL PROFITABILITY



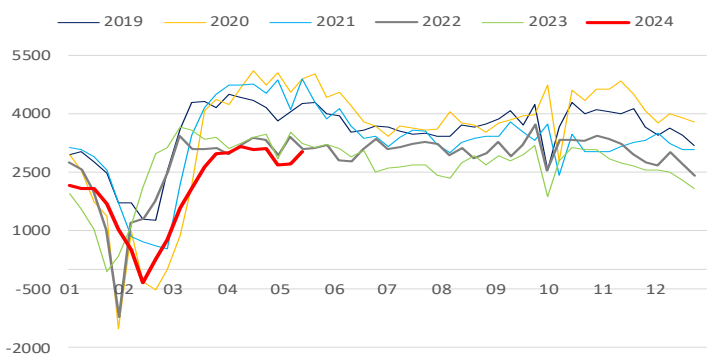
CHINESE STEEL MILL PROFITABILITY—Rebar



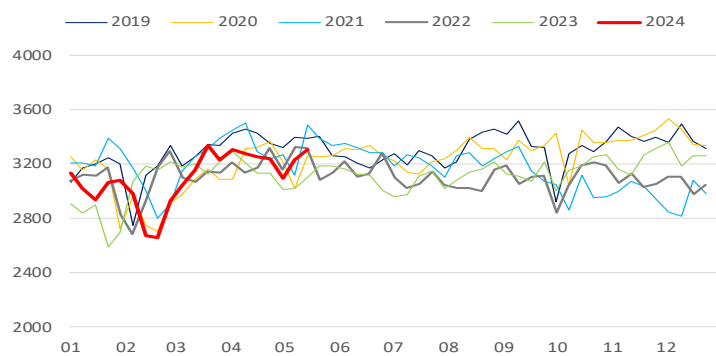
CHINESE STEEL MILL PROFITABILITY—Hot-rolled Coil



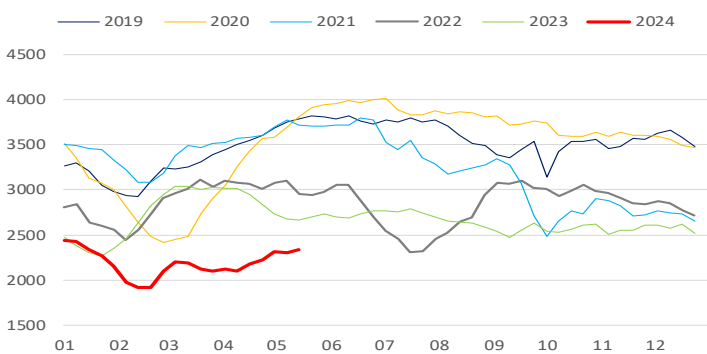
CHINESE STEEL CONSUMPTION—Rebar



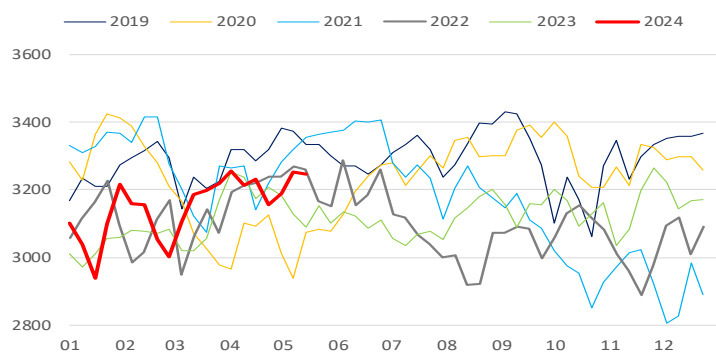
CHINESE STEEL CONSUMPTION—Hot-rolled Coil



CHINESE STEEL PRODUCTION—Rebar



CHINESE STEEL PRODUCTION—Hot-rolled Coil



## IRON ORE INDEX SPECIFICATIONS, COMPILATION RATIONALE AND DATA EXCLUSIONS

Iron Ore Index Specifications (Port and Seaborne)					Iron Ore Index Compilation Rationale and Data Exclusions
	<b>65% Fe Fines</b>	<b>62% Fe Fines</b>	<b>58% Fe Fines</b>	<b>62.5% Fe Lump</b>	<p>MMi iron ore indices are compiled from data provided by companies that are part of the iron ore supply chain and involved in spot market transactions. The indices are calculated using detailed transaction-level data submitted to MMi by these companies. This data is normalised to the appropriate specifications and screened to remove outliers before volume-weighted average prices are calculated from the remaining core set of data.</p> <p>For more details on MMi's iron ore methodology please download the guide published on our website at: <a href="http://www.mmiprices.com">www.mmiprices.com</a></p>
Fe %	65.00	62.00	58.00	62.50	
Alumina %	1.40	2.25	2.25	1.50	
Silica%	1.50	4.00	5.50	3.50	
Phosphorus %	0.06	0.09	0.05	0.08	
Sulphur %	0.01	0.02	0.02	0.02	
Moisture %	8.00	8.00	9.00	4.00	
Sizing	Granular size below 10mm for at least 90% of cargo; maximum of 40% below 150 micron		Size below 6.3mm max 15% Size above 31.15mm max 25%		
Pricing Point	Qingdao Port (FOT and CFR respectively)		FOT Qingdao Port		
Timing (Seaborne)	Loading within 4 weeks, Delivery within 8 weeks		Delivery within 2 weeks		
Payment Terms	L/C at sight		L/C at sight or CAD		

Data Exclusions*			
Port Index	62%	58%	65%
Seaborne index	0	0	0
Lump Index 62.5	0		

\* Number of price submissions for iron ore indices that were excluded from index calculations today as they were anomalous and could not be verified

## IRON ORE DOMESTIC CONCENTRATE INDEX CALCULATION METHODOLOGY

The compilation method for price index generally refers to the compilation method of CPI price index and other price indices, breakdown the price data and calculate the average value according to a certain method, taking the vertical axis as the regional composite index (average of different grade index) and the horizontal axis as the grade composite index (average of different regional index), a total composite index for domestic ore can be output ultimately. The process system is also adopted in the calculation i.e. each sub-index can be obtained as well.

## AVERAGE IRON ORE SPECIFICATIONS APPLIED FOR BRAND PRICE ASSESSMENTS

PORT STOCK BRANDS						SEABORNE BRANDS					
May 22nd, 2024	Specifications applied for 62% brand assessments					Specifications applied for 62% brand assessments					
	Fe	Alumina	Silica	Phos	Moisture		Fe	Alumina	Silica	Phos	Moisture
Roy Hill	60.88%	2.35%	4.45%	0.055%	9.26%	Roy Hill	60.70%	2.30%	4.90%	0.055%	8.00%
SIMEC Fines	60.00%	2.30%	6.30%	0.060%	6.00%	SIMEC Fines	60.00%	2.30%	6.30%	0.060%	6.00%
PB Fines	61.64%	2.31%	3.87%	0.099%	9.45%	PB Fines 62%	62.00%	2.60%	4.30%	0.090%	9.50%
Newman Fines	62.49%	2.31%	3.98%	0.090%	7.72%	Newman Fines	62.30%	2.40%	4.30%	0.095%	8.00%
MAC Fines	60.43%	2.38%	4.64%	0.078%	7.57%	MAC Fines	60.80%	2.35%	4.40%	0.075%	7.80%
Jimblebar Blended Fines	60.87%	2.95%	4.53%	0.111%	7.32%	Jimblebar Blended Fines	60.50%	3.10%	4.80%	0.120%	7.80%
Carajas Fines	64.90%	1.39%	1.82%	0.080%	7.78%	Carajas Fines	65.10%	1.50%	1.70%	0.080%	8.50%
Brazilian SSF	62.00%	1.00%	6.50%	0.040%	6.00%	Brazilian SSF	62.00%	1.00%	6.50%	0.040%	6.00%
Brazilian Blend Fines	62.56%	1.58%	4.79%	0.091%	8.72%	Brazilian Blend Fines	63.00%	1.50%	5.00%	0.070%	7.00%
RTX Fines	61.00%	3.10%	4.50%	0.135%	7.50%	RTX Fines	61.00%	3.10%	4.50%	0.135%	7.50%
West Pilbara Fines	60.10%	2.30%	4.70%	0.075%	8.50%	West Pilbara Fines	60.10%	2.30%	4.70%	0.075%	8.50%
May 22nd, 2024	Specifications applied for 58% brand assessments										
	Fe	Alumina	Silica	Phos	Moisture						
SSF	56.49%	3.20%	6.19%	0.065%	9.18%						
FMG Blended Fines	58.20%	2.43%	5.54%	0.057%	8.29%						
Robe River	56.44%	3.16%	5.73%	0.042%	8.44%						
Western Fines	57.88%	2.87%	7.50%	0.062%	7.45%						
Atlas Fines	58.00%	1.85%	5.50%	0.090%	9.00%						
Yandi	56.87%	1.58%	6.41%	0.042%	9.53%						

## BLOOMBERG TICKERS

PORT STOCK INDICES				SEABORNE INDICES	
	FOT Qingdao (RMB/wet tonne)		CFR Qingdao Equivalent (USD/dry tonne)		CFR Qingdao (USD/DMT)
IOPI62	IRCNQ001		IRCNQ004		IRCN0034
IOPI58	IRCNQ002		IRCNQ005		IRCN0035
IOPI65	IRCNQ003		IRCNQ006		
IOPLI62	IRCN0036		IRCN0037		

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