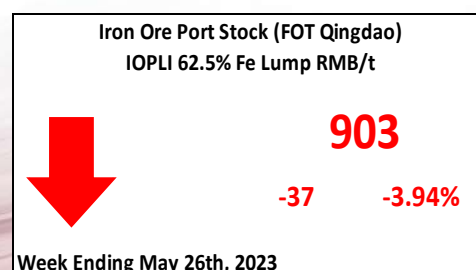
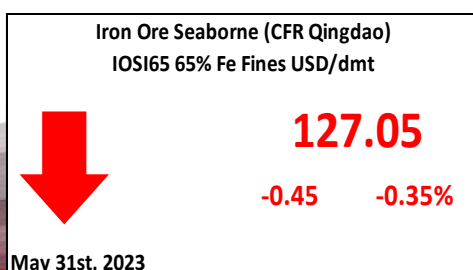
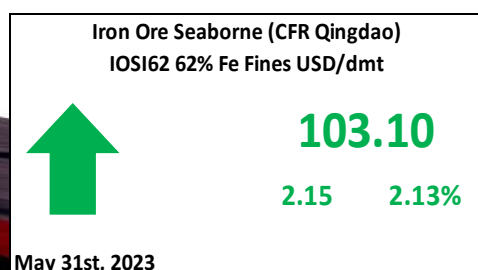
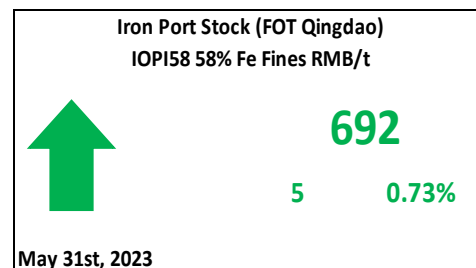
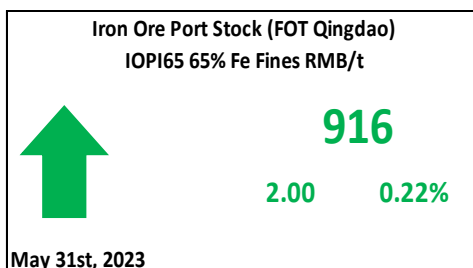
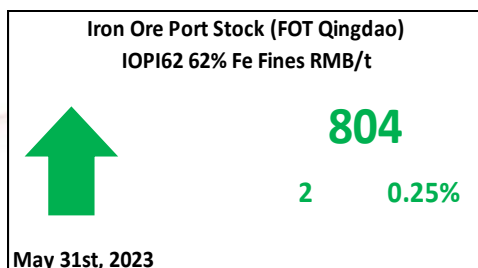


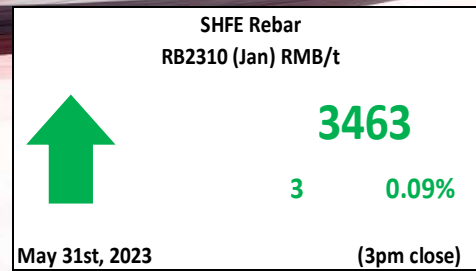
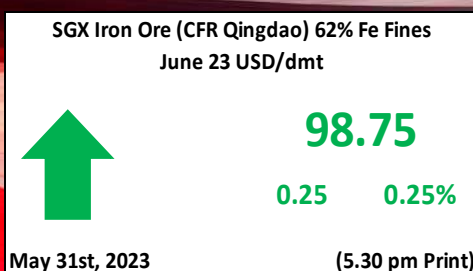
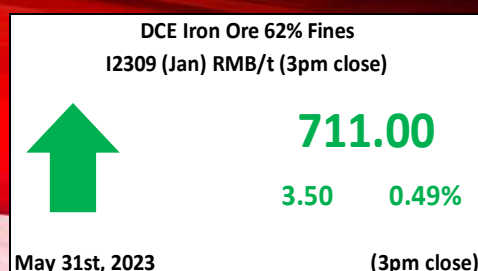


# MMi Dashboard

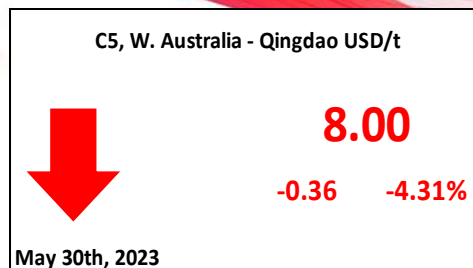
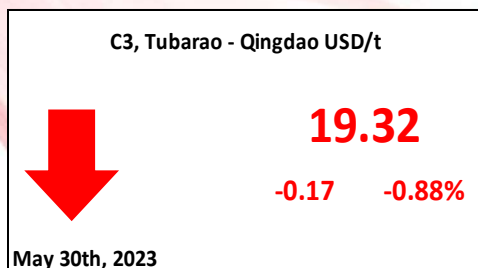
## Iron Ore Price Indices



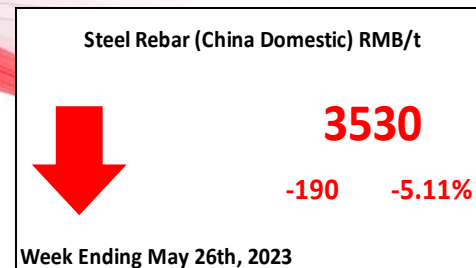
## Exchange Traded Contracts



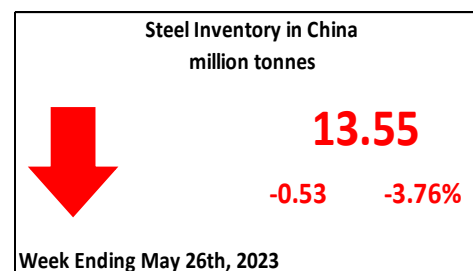
## Freight Rates



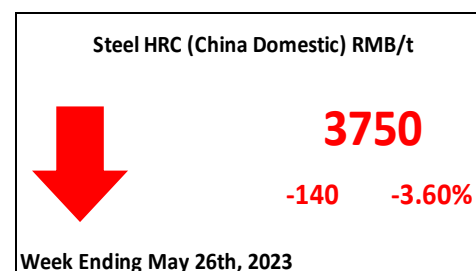
## Steel Price



## Inventory Levels



## Steel Price



## IRON ORE PORT STOCK INDEX (IOPI)

May 31st, 2023		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	804	2	0.2%	869	880	858	892	105.40	0.27	0.3%	120.06	120.58	117.93	122.93
IOPI58	58% Fe Fines	692	5	0.7%	813	798	761	793	91.18	0.68	0.8%	113.29	110.17	105.29	110.04
IOPI65	65% Fe Fines	916	2	0.2%	981	992	970	1003	120.61	0.27	0.2%	136.05	136.43	133.84	138.73

## IRON ORE SEABORNE INDEX (IOSI)

## MARKET COMMENTARY

May 31st, 2023		CFR Qingdao, USD/dry tonne							DCE iron ore futures declined by 0.42% today, the main contract closed at 711. The traders' willingness to ship is general. The steel mills are not active to purchase. The overall trading sentiment of the market is general. PBF at Shandong port deal 766-772 yuan/mt. Today's PMI data release was lower than market expectations, and market sentiment weakened, dragging down the market before noon; As emotions digest, the market starts to rebound in the afternoon. The short-term supply and demand pattern of iron ore has not changed much. Considering the subsequent reduction in crude steel and weakened demand for finished products due to weather conditions, it is difficult for ore prices to be driven upwards. But considering cost support, the downward space is also relatively limited. Overall, ore prices are still dominated by a volatile trend.							
Index	Fe Content	Price	Change	Change %	MTD	YTD	Low <sup>2</sup>	High <sup>2</sup>								
IOSI62	62% Fe Fines	103.10	2.15	2.13%	114.41	123.55	83.90	147.90								
IOSI65	65% Fe Fines	127.05	-0.45	-0.35%	125.04	139.49	94.45	171.85								

## IRON ORE PORT LUMP INDEX (IOPLI)

Week Ending May 26th, 2023		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	903	-37	-3.9%	926	1025	770	1330	114.47	-5.90	-4.90%	119.90	137.44	95.00	180.00

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

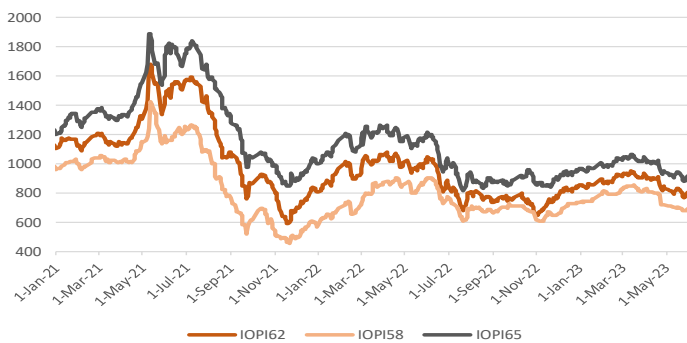
Week Ending May 26th, 2023				RMB/tonne (excluding tax) <sup>3</sup>				USD/tonne (excluding tax) <sup>3</sup>			
Province	Region	Product	Basis	This week	Change %	Low <sup>2</sup>	High <sup>2</sup>	This week	Change %	Low <sup>2</sup>	High <sup>2</sup>
Hebei	Hanxing	66% Fe Concentrate	Dry	957	3.2%	779	1645	135.81	2.33%	110.31	255.69
Hebei	Qian'an	65% Fe Concentrate	Dry	990	-2.0%	780	1630	140.49	-2.84%	110.51	251.57
Liaoning	Anshan	65% Fe Concentrate	Wet	725	1.4%	620	1310	102.89	0.51%	87.40	202.32
Shandong	Zibo	65% Fe Concentrate	Dry	964	3.7%	800	1752	136.80	2.74%	117.19	272.32

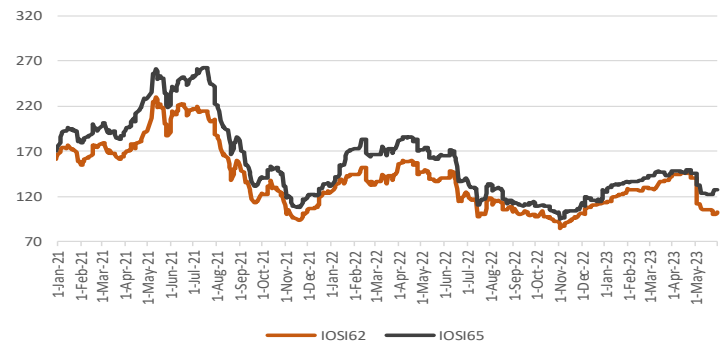
Week Ending May 26th, 2023		This week	Change %	Low <sup>2</sup>	High <sup>2</sup>
China Mines Concentrate Composite Index RMB/WT		868.38	0.67%	706.36	1511.22

<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 31st, 2023		FOT Qingdao (inc. 13% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 13% VAT), USD/dry tonne						
Index	Fe Content	February	March	April	May	MTD	QTD	YTD	February	March	April	May	MTD	QTD	YTD
IOPI62	62% Fe Fines	892	924	879	804	869	881	880	121.64	124.91	118.84	106.85	120.06	120.90	120.58
IOPI58	58% Fe Fines	799	832	782	698	813	792	798	109.79	113.41	106.43	93.21	113.29	109.35	110.17
IOPI65	65% Fe Fines	1003	1036	991	916	981	993	992	137.36	140.49	134.47	122.23	136.05	136.72	136.43

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

## FREIGHT RATES

May 31st, 2023		CFR Qingdao, USD/dry tonne							May 30th, 2023							
Index	Fe Content	February	March	April	May	MTD	QTD	YTD	Route		Designation	Change	Change %	Low <sup>2</sup>	High <sup>2</sup>	
IOSI62	62% Fe Fines	127.73	134.77	144.76	108.53	112.14	114.04	123.55	W. Australia - Qingdao		C5	8.00	-0.36	-4.31%	3.57	16.77
IOSI65	65% Fe Fines	138.06	145.14	147.67	127.20	122.86	125.00	139.49	Tubarao - Qingdao		C3	19.32	-0.17	-0.88%	6.70	36.40

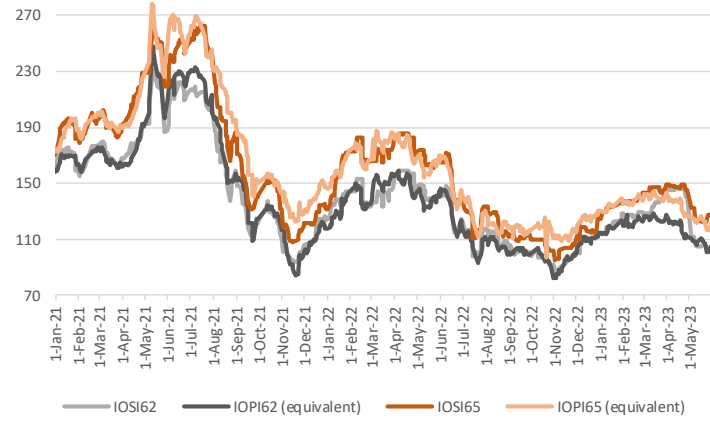
## IRON ORE PORT LUMP INDEX MONTHLY, QUARTERLY AND YEAR-TO-DATE AVERAGES

Week Ending May 26th, 2023		FOT Qingdao (inc. 13% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 13% VAT), USD/dry tonne <sup>1</sup>						
Index	Fe Content	February	March	April	May	MTD	QTD	YTD	February	March	April	May	MTD	QTD	YTD
IOPLI62	62.5% Fe Lump	988	1012	983	919	925	924	1032	129.95	131.15	132.68	117.67	119.39	119.95	137.99

## IRON ORE INDEX PREMIUMS/DISCOUNTS

May 31st, 2023		PORT STOCK INDEX (RMB/WT)				May 31st, 2023		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	-112		-13.93%		IOSI65	65% Fe Fines	23.95		23.23%	
IOPI65	65% Fe Fines	112		13.93%							

## IRON ORE INDEX COMPARISONS (USD/DMT)



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



## IRON ORE BRAND SPOT PRICE ASSESSMENTS

May 31st, 2023				PORT STOCK INDEX (RMB/WT)				May 31st, 2023				SEABORNE INDEX (USD/DMT)			
	Price	Change	Diff to IOPI62		Price	Change	Diff to IOPI62		Price	Change	Diff to IOSI62		Price	Change	Diff to IOSI62
Roy Hill	747	2	-57	Roy Hill	95.60	-0.85	-7.50	Roy Hill	95.60	-0.85	-7.50	Roy Hill	95.60	-0.85	-7.50
SIMEC Fines	675	2	-129	SIMEC Fines	701	6	9	SIMEC Fines	92.10	-0.85	-11.00	SIMEC Fines	92.10	-0.85	-11.00
PB Fines	773	2	-31	Robe River	701	5	9	PB Fines	96.35	-0.85	-6.75	PB Fines	96.35	-0.85	-6.75
Newman Fines	772	2	-32	Western Fines	704	5	12	Newman Fines	99.25	-0.85	-3.85	Newman Fines	99.25	-0.85	-3.85
MAC Fines	754	2	-50	Atlas Fines	698	5	6	MAC Fines	96.35	-0.85	-6.75	MAC Fines	96.35	-0.85	-6.75
Jimblebar Blended Fines	668	2	-136	Yandi	686	5	-6	Jimblebar Blended Fines	88.75	-0.85	-14.35	Jimblebar Blended Fines	88.75	-0.85	-14.35
Carajas Fines	984	2	180					Carajas Fines	129.65	-0.85	26.55	Carajas Fines	129.65	-0.85	26.55
Brazilian SSF	767	2	-37					Brazilian SSF	103.85	-0.85	0.75	Brazilian SSF	103.85	-0.85	0.75
Brazilian Blend Fines	786	2	-18					Brazilian Blend Fines	105.50	-0.85	2.40	Brazilian Blend Fines	105.50	-0.85	2.40
RTX Fines	687	2	-117					RTX Fines	90.00	-0.85	-13.10	RTX Fines	90.00	-0.85	-13.10
West Pilbara Fines	716	2	-88					West Pilbara Fines	94.35	-0.85	-8.75	West Pilbara Fines	94.35	-0.85	-8.75

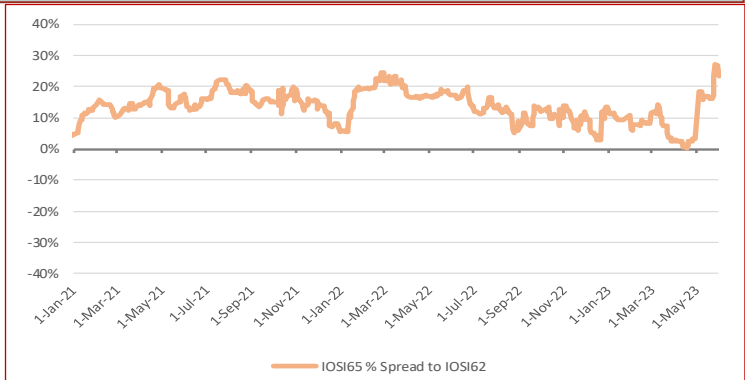
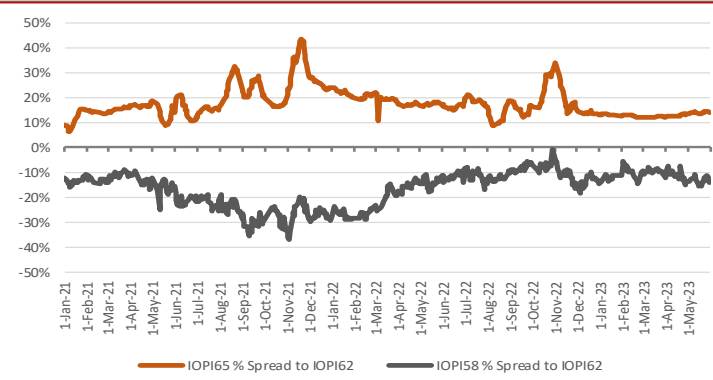
## IRON ORE INDEX NORMALISATION DIFFERENTIALS

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%	8.00	0.00	1% Fe	High Grade Fe 60 - 63%	1.50	0.00
	High Grade Fe 63 - 64%	5.00	0.00		High Grade Fe 63 - 64%	9.00	0.00
	High Grade Fe 64 - 65%	5.00	0.00		High Grade Fe 64 - 65%	9.00	0.00
	High Grade Fe 65 - 65.5%	5.00	0.00		High Grade Fe 65 - 65.5%	9.00	0.00
1% Alumina	Low Grade Fe	34.00	0.00	1% Alumina	High Fe Grade Al <2.25%	1.00	0.00
	High Fe Grade Al <2.25%	15.00	0.00		High Fe Grade Al 2.25-4%	1.25	0.00
	High Fe Grade Al 2.25-4%	5.00	0.00				
	Low Fe Grade Al <2.25%	5.00	0.00				
1% Silica	Low Fe Grade Al 2.25-4%	23.00	1.00	1% Silica	High Fe Grade Si <4%	1.50	-0.25
	High Fe Grade Si <4%	58.00	0.00		High Fe Grade Si 4 - 6.5%	4.25	0.00
0.01% Phosphorus	High Fe Grade Si 4-6.5%	8.00	3.00	0.01% Phosphorus	High Fe Grade 0.09%<P<0.115%	1.50	0.00
	Low Fe Grade	27.00	0.00		High Fe Grade 0.115%<P<0.15%	9.00	0.00
	High Fe Grade 0.09%<P<0.115%	11.00	-8.00		Low Fe Grade 0.09%<P<0.1%	5.00	0.00

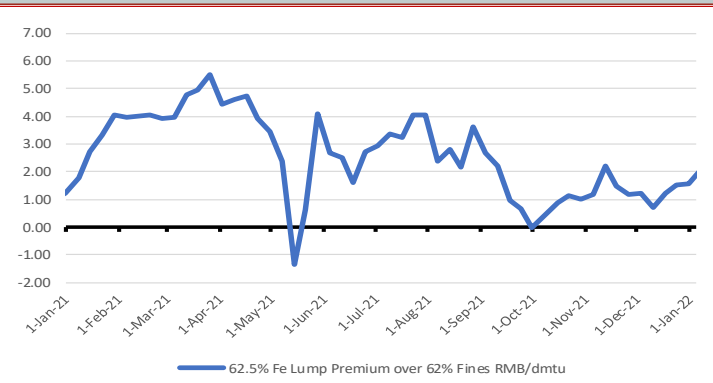
## Port Stock Price Differentials to Qingdao Port for PB Fines (RMB/wet tonne)

Port	Value	Change	Port	Value	Change	Port	Value	Change	Port	Value	Change
Bayuquan	-100.00	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	-30.00	0.00	Jingtang	-30.00	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	-15.00	0.00

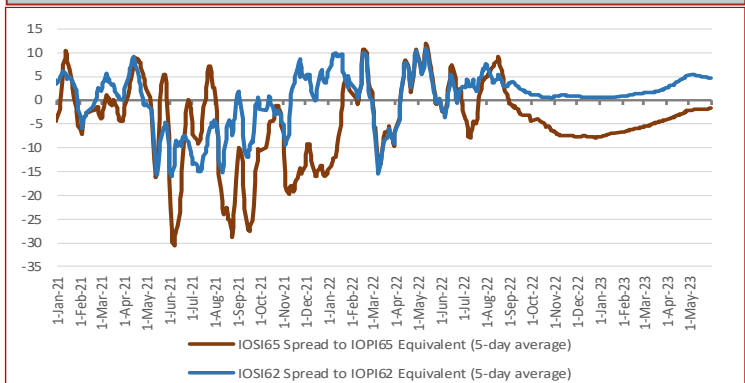
IRON ORE INDEX PREMIUMS/DISCOUNTS



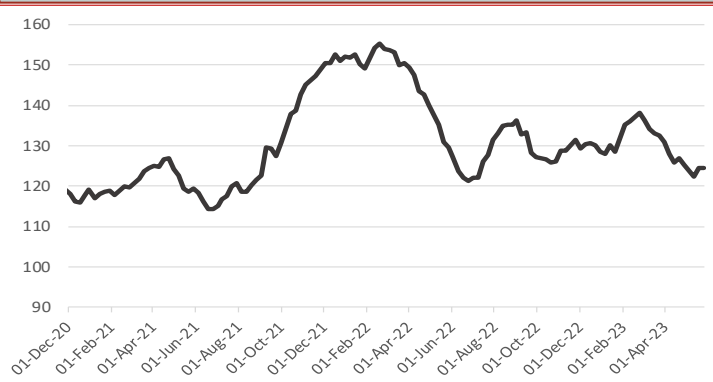
WEEKLY IRON ORE PORT STOCK LUMP PREMIUM (RMB/DMTU)



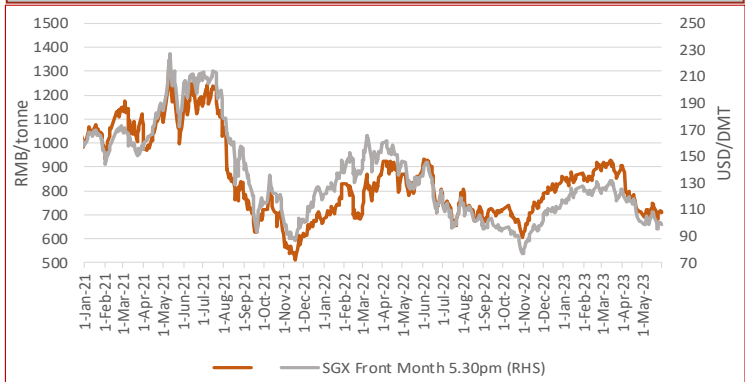
IRON ORE SEABORNE TO PORT STOCK PRICE SPREADS (USD/DMT)



TOTAL IRON ORE INVENTORIES AT CHINA PORTS (MILLION TONNES)



FUTURE TRADING—FRONT MONTH CLOSING PRICE



IRON ORE PORT INVENTORIES (MILLION TONNES)

Week Ending May 26th, 2023				
Province	This week	Change %	Low <sup>2</sup>	High <sup>2</sup>
Jingtang	11.32	-1.05%	9.84	19.20
Qingdao	24.60	-2.19%	9.41	26.24
Caofeidian	11.68	6.47%	9.05	16.29
Tianjin	8.63	1.17%	7.14	12.97
Rizhao	17.58	1.03%	9.44	19.26
<b>Total (35 Ports)</b>	<b>124.39</b>	<b>0.01%</b>	<b>98.80</b>	<b>155.39</b>

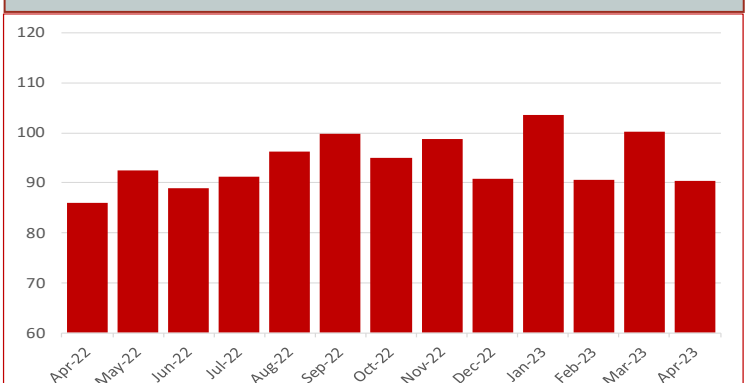
IRON ORE FUTURES CONTRACTS

Closing Date	DCE (RMB/WMT)			SGX (USD/DMT)		
	May 31st, 3pm close			May 31st, 5:30pm		
Contract	12309	Change	Change %	Jun. 23	Change	Change %
Closing Price	711.00	3.50	0.49%	98.75	0.25	0.25%
Vol traded ('000 lots)	89.72	5.27	6.23%	3.90	0.14	3.63%
Open positions ('000 lots)	76.81	0.11	0.14%	26.62	-0.58	-2.12%
Day Low	693.0	-10.00	-1.42%	97.20	-2.65	-2.65%
Day High	713.0	-11.00	-1.52%	102.35	-0.90	-0.87%

DRY BULK FREIGHT RATES (USD/MT)



TOTAL CHINA IRON ORE IMPORT VOLUMES (MILLION TONNES)



STEEL SPOT MARKET PRICES—CHINA

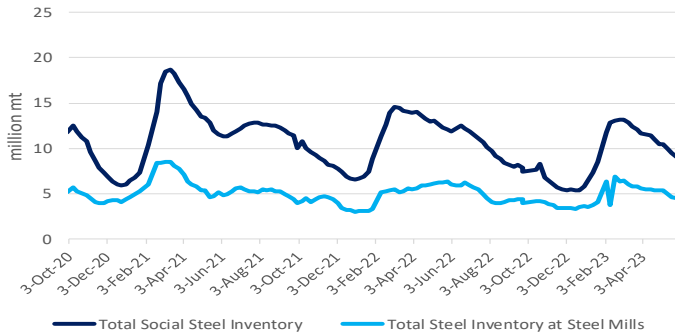
Product	2023/5/26	Change	Change %
ReBar HRB400 φ18mm	3,530	-190	-5.11%
Wirerod Q300 φ6.5mm	3,820	-160	-4.02%
HRC Q235/SS400 5.5mm*1500*C	3,750	-140	-3.60%
CRC SPCC/ST12 1.0mm*1250*2500	4,390	-70	-1.57%
Medium & Heavy Plate Q235B 20mm	3,990	-80	-1.97%
GI ST02Z 1.0mm*1000*C	4,740	-80	-1.66%
Colour Coated Plate	6,950	-100	-1.42%

CHINESE STEEL MILL PROFITABILITY

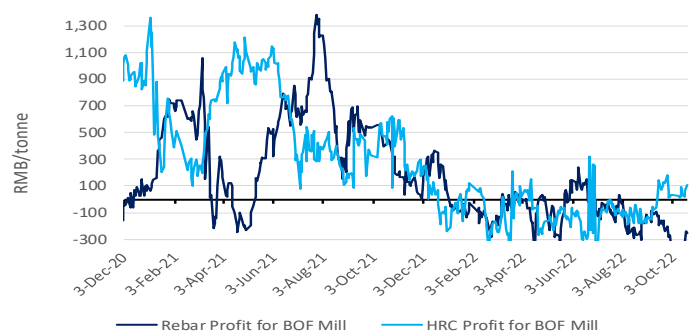
SMM Tracking of Steel Mill P&L - Rebar and Hot-rolled Coil (RMB/tonne)			
Category	Price	Change (WoW)	Note
MMi (Fe 62%), USD/mt excluding tax	100.42	-5	Mmi CFR Equivalent index for 1st Feb
Coke	2,210	-50	2nd grade met coke, Tangshan, incl. tax
Steel Scrap	2,750	-20	steel scrap (6mm) in Zhangjiagang, excl. tax
Billet Cost	3,059	-103	Q234, incl. tax
Rebar cost - Blast furnace	3,490	-117	calculated based on theoretical weight, incl. tax
Rebar profit - Blast furnace	-30	-33	based on Shanghai prices, incl. tax
Hot-rolled coil cost - Blast furnace	3,510	-114	based on actual weight, incl. tax
Hot-rolled coil profit - Blast furnace	270	14	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

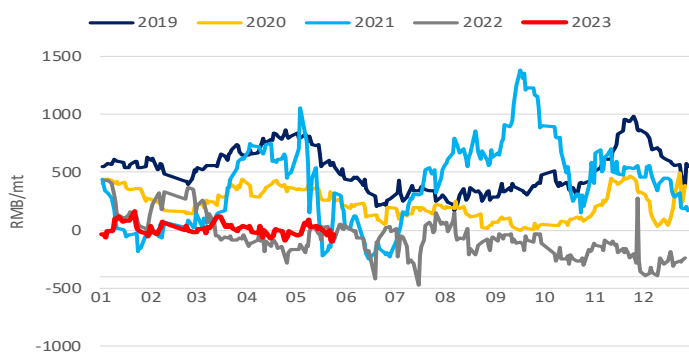
CHINESE STEEL INVENTORIES



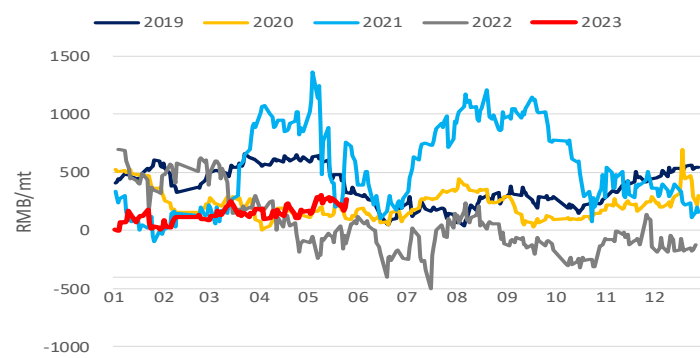
CHINESE STEEL MILL PROFITABILITY



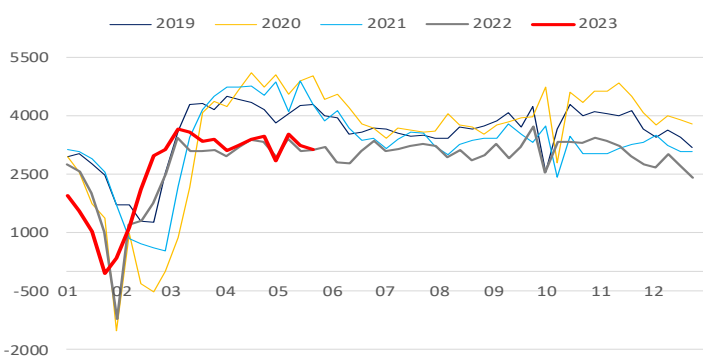
CHINESE STEEL MILL PROFITABILITY—Rebar



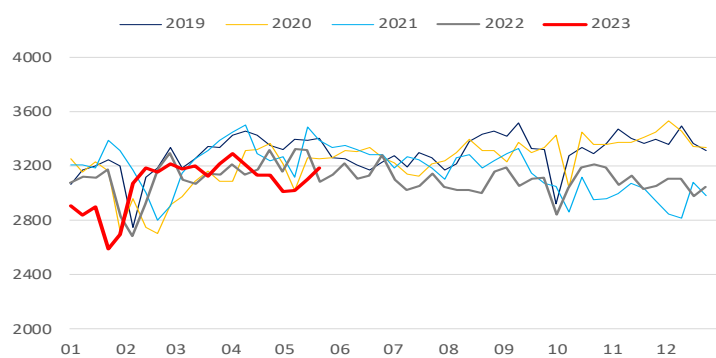
CHINESE STEEL MILL PROFITABILITY—Hot-rolled Coil



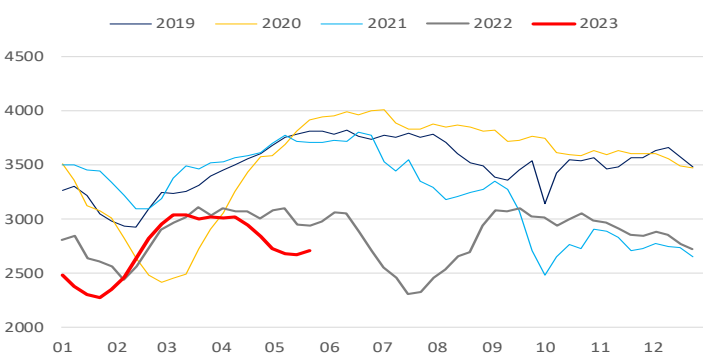
CHINESE STEEL CONSUMPTION—Rebar



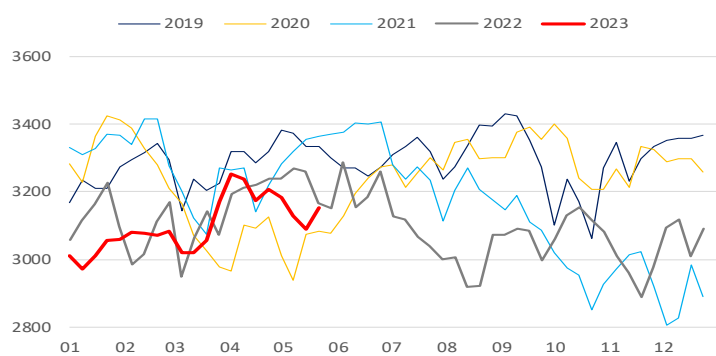
CHINESE STEEL CONSUMPTION—Hot-rolled Coil



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>	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.  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>
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 31st, 2023	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 31st, 2023	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		

## CONTACT US

MMi Singapore Office Details: Level 28, Manulife Tower, 8 Cross Street Singapore. Tel: + 65 6850 7629 E: [prices@mmiprices.com](mailto:prices@mmiprices.com)  
 SMM Singapore Office Details: Level 28, Manulife Tower, 8 Cross Street Singapore. Tel: + 65 6850 7630 E: [service.en@smm.cn](mailto:service.en@smm.cn)  
 SMM Shanghai Office Details: 9th FL, Building 9, Lujiazui Software Park, No.20, Lane 91, Pudong, Shanghai Tel: +86 021 5155 0306 E: [service.en@smm.cn](mailto:service.en@smm.cn)

Visit [www.mmiprices.com](http://www.mmiprices.com) for full index price histories and archive of daily reports

This information has been prepared by Metals Market Index ("MMI"). Use of the information presented here is at your sole risk, and any content, material and/or data presented or otherwise obtained through your use of the information in this document is at your own discretion and risk and you will be solely responsible for any damage to you personally or your company or organisation or business associates whatsoever which in anyway results from the use, reliance or application of such content material and/or information. Certain data has been obtained from various sources and any copyright existing in such data shall remain the property of the source. Except for the foregoing, MMi retains all copyright within this document. The copying or redistribution of any part of this document without the express written authority of MMi is forbidden.