China / Hong Kong Industry Focus

China Basic Materials Sector

Refer to important disclosures at the end of this report

DBS Group Research . Equity

17 Jan 2022

Opportunities from tighter supply in 1Q22

- **China's new infrastructure development and carbon policies to drive better consumption growth for lithium and aluminium materials**
- **Growing demand amid accommodative China monetary policies and persistent tight supply to benefit product price sentiment**
- **Positive on lithium and aluminium but turn cautious on steel**
- **Sector valuation has turned attractive and we prefer industry cost leaders with more resilient earnings outlook - Hongqiao (1378 HK), Ganfeng (1772 HK) and Conch (914 HK)**

Opportunities from new infrastructure drivers to continue. Overall material consumption growth has decelerated after its robust recovery from the pandemic. China's new and clean economy development should drive faster consumption growth for lithium and aluminium materials (16%/3% CAGR) in the next five years. Also, we believe the continued new infrastructure projects will mitigate cement and steel demand slowdown.

Expect price rebound but conservative on steel. Overall market supply has slowed down in reaction to product price correction since 3Q21. We expect market prices would rebound, underpinned by persistent tight supply outlook, with accommodative China monetary policies to mitigate demand slowdown. Despite this, we are conservative on steel price outlook given possible supply rebound upon completion of the industry output curb last year.

Falling input costs amid increase in China's power supply. We expect China's easing power shortage woes and coal price decline to lower production costs. Aluminium smelters and cement producers are the two energy-intensive industries to benefit the most. The dual control on energy consumption policies will persist in restraining supply of finished products and demand for input materials, which could support products GP expansion.

Appealing valuation. The sector is currently trading at only 1.2x FY22F price-to-book (P/B), lower than its historical average of 1.6x. We believe the sector has been oversold as China's market consumption growth is unlikely to collapse next year, and companies' financial positions are generally strengthening. On an expected ROE of 15% versus 9% over the last decade, we see share price to re-rate underpinned by an expected pick-up in margins. Prefer industry leaders with strong cost leadership and reiterate BUY Hongqiao. We also like Conch and Ganfeng. Meanwhile, we downgrade our TP and rating on steel.

HSI: 24,383

ANALYST
Duncan CHAN +852 36684178 duncanchan@dbs.com

Recommendation & valuation

Company Name	Currency	Price Local$	Target Price Local$	Recom	PE 22F x
Anhui Conch Cement 'H' (914 HK)	HKD	40.60	58.00	BUY	5.3
Anhui Conch Cmt. 'A' (600585 CH)	CNY	39.06	55.00	BUY	6.3
China Hongqiao Group (1378 HK)	HKD	8.93	15.00	BUY	3.5
Ganfeng Lithium 'H' (1772 HK)	HKD	117.40	230.00	BUY	28.5
Ganfeng Lithium 'A' (002460 CH)	CNY	128.63	230.00	BUY	38.2

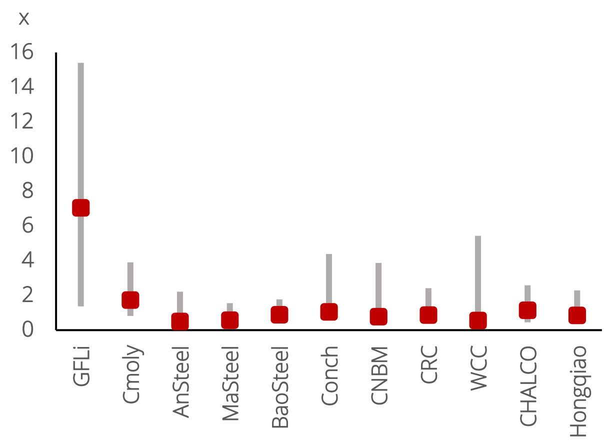
Source: Thomson Reuters, DBS Bank (Hong Kong) Limited ("DBS HK")

When would the cycle turn?

P/B ROE

We believe P/B ROE-based valuation parameters are appropriate in gauging market expectations of when the cycle will turn. The sector has corrected by an average of 31% since late August and early September this year, triggered by the correction in commodity prices. At the current level, almost all of them are trading at an average of 1.2x FY22F price-to-book (P/B), clustering at their corresponding lows in the last decade. While we expect a earnings downgrade on the street estimate due to weak 4Q21 earnings, we do believe the tight supply outlook driven commodities price rebound will drive margins and earnings to be maintained at their relatively high historical bases. As such, the captioned valuation level does provide good opportunities for entry in view that the sector is still offering good ROE returns.

China basic materials' prevailing P/B, 2010-2021

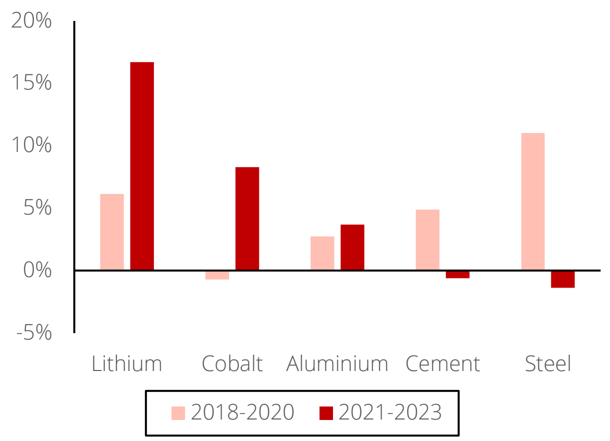


Source: Bloomberg Finance L.P., DBS HK

- **Slowing consumption versus opportunities in electric vehicles and carbon transition**

We expect China's material consumption growth to decelerate in 2022 after making a strong recovery from the pandemic this year. This is also partly due to the negative impact from the slowing China real estate investment over the year. As the government's monetary policies are expected to be accommodative, we believe this could support a gradual market rebound for construction materials. In the meantime, amid China's new infrastructure development, rising electric vehicle market penetration and its 2030 carbon strategy, we expect better consumption growth potential for lithium and aluminium materials, at an estimated >16% CAGR for lithium and c.3% for aluminium from 2021-2023.

China consumption growth, 2021-2023 CAGR

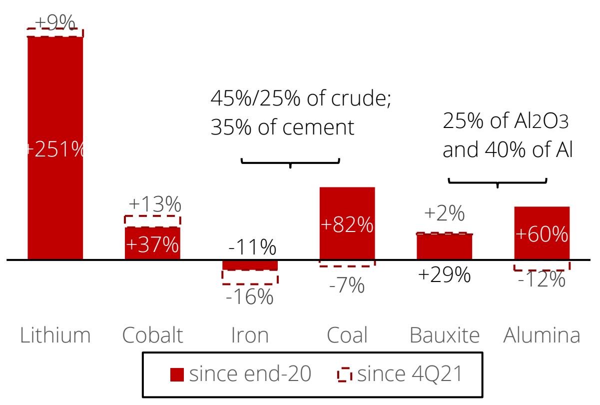


Source: Bloomberg Finance L.P., DBS HK

- **Normalising steel output from power supply shortage**

China's slowing economic growth and production disruptions amid China's power shortage have resulted in a correction in the commodity market since late August and early September. Until mid-December, amid further liquidity injection into the banking system from China PBOC's second cut of the year in required reserve ratio, overall material market prices had started to stabilise. However, we believe the normalising steel production may increase market supply. With signs of production run rate rebounding towards Dec-21, we are conservative on steel GP, which may come under pressure with price rebound in iron ore exceeding that in steel product on speculation and restocking. In all, we are concerned about the incremental steel supply would cap steel price upside.

Power shortage has dampened Chinese steel iron ore prices since 4Q21



Source: Bloomberg Finance L.P., DBS HK

Mixed GP outlook

	FY19	FY20	FY21F	FY22F	FY23F	Trend
Aluminium						
Chalco	6.4%	7.2%	11.5%	13.2%	14.7%	↑
Hongqiao	19.6%	22.5%	28.1%	29.1%	30.6%	↑
Cement						
CNBM	30.2%	26.2%	24.3%	25.5%	26.0%	→
Conch	32.4%	28.5%	27.6%	28.0%	29.1%	→
CRC*	40.2%	39.0%	37.1%	37.3%	37.9%	→
WCC	33.7%	32.8%	35.7%	35.4%	35.7%	→
Steel						
AnSteel	8.3%	9.2%	14.3%	13.9%	14.6%	→
BaoSteel	11.0%	11.1%	17.4%	15.3%	15.9%	→
MaSteel	8.1%	9.1%	16.7%	14.2%	15.0%	↑
Li & Co						
Cmoly	3.3%	6.7%	9.2%	9.3%	9.3%	→
GFLi	23.6%	21.2%	38.4%	42.6%	39.0%	↑

Source: Bloomberg Finance L.P., DBS HK

- **Implication from China's carbon trading development and other regulatory risks**

Except for coal, we think overall policy headwinds from the government's price regulation are diminishing, following the broad correction from their multiple year highs during the last quarter in Q4FY21. Meanwhile, media has reported that the industry is reviewing new capacity projects that are required to adhere to corresponding carbon quota before starting construction amid the dual regulatory control on energy consumption. This supports market outlook on restraining the increase in new supply, combined with existing efforts to limit industry capacity and off-peak production arrangement. We are eagerly watching the development of China's carbon trading market development to see whether cement or steel would be the next to join the fray. This could provide hints on the next industry outperformer in the race to become the first clean producer.

Expecting a new equilibrium

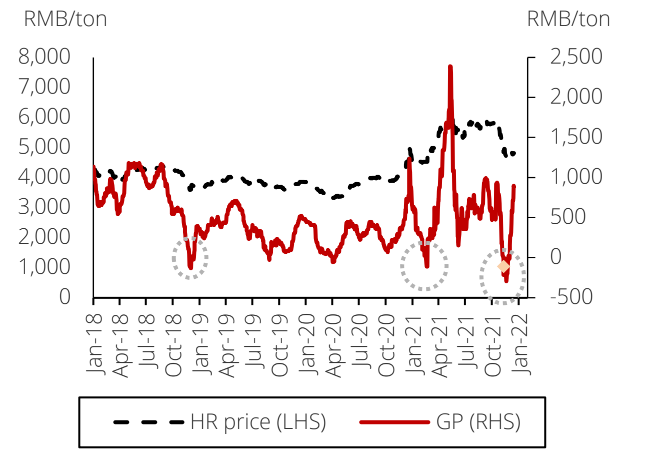
- Steel (Neutral from POSITIVE) – output curb continues to mitigate the shrinking market demand

The output curb is not an ultimate measure. Under the governments' blueprint of carbon peak strategy, we have witnessed a dramatic shift in the Chinese steel industry's production pattern over the second half of the year. That was read as the industry's efforts in controlling emissions at the "peak" while maintaining steady China's crude steel production relative to previous year. Based on Chinese crude steel production run rate during 2H21, we estimate China's crude steel production growth to decline by >2% y-o-y in 2022. The uncertainty in supply arises from China's power supply shortage which is expected to ease gradually although we see supply upside risks.

Less optimistic on domestic consumption. In our observation over the last two months, considering the steel output curb, Chinese social inventory held by middlemen was largely unchanged over the period. Our interpretation is that despite the supply cut, the magnitude of domestic consumption slowdown has equally affected the inventory and market balance level. The anecdotal evidence is that there was a more widespread impact on domestic steel demand from real estate investments during the previous downcycle. Assuming the continuation of a steadier export momentum, we expect China's apparent consumption to drop c.3% in 2022 after 2021's c.2% decline.

Steel products' margin overhang. We are cautious that Chinese steel product margins will remain subdued. And we believe the market outlook would depends on the introduction of new output curbs. In the event that curbs are relaxed next year, iron ore prices could rebound quickly as they have been largely depressed and this disincentivised the miners from responding immediately. Considering the three-week lag between steel prices and inputs costs, we are concerned that a slower rebound in steel prices as compared to iron ore could restrain Chinese steel products' margin performance ahead. Meanwhile, we expect a relatively low likelihood of a significant rebound in Chinese steel prices over 2022.

China steel product price and simulated GP



Source: Bloomberg Finance L.P., DBS HK

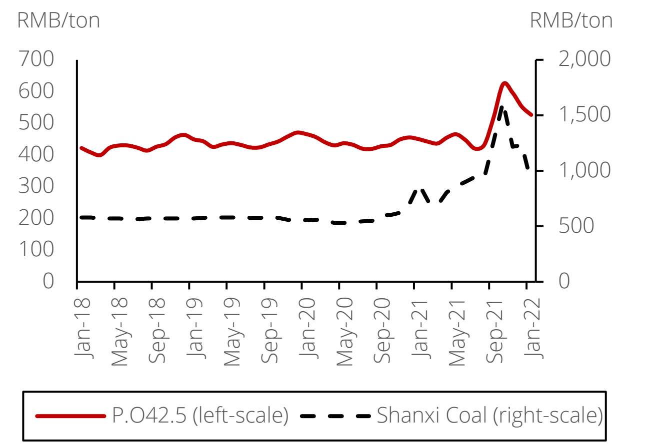
- Cement (NEUTRAL) – opportunities of sales recovery and margin rebound

Off-peak winter production to mitigate silo level increase. China cement output dropped 17% y-o-y in Oct-21 due to a double whammy from dual control on energy consumption and the power rationing constraint, but the overall situation was less severe than previously thought with accumulated consumption rose 2% y-o-y in Jan to Oct-21. The silo level of cement products at plants had exceeded 2018's high which was primarily attributed to subdued cement sales shipment recorded after product prices hit their historical high. We note that provinces have announced their off-peak production plan for winter which could help to slow down the increase in silo level. After all, we remain optimistic that the industry's capacity replacement arrangement of two tons of capacity closure per ton of new capacity (across those pollution prevention key regions) would support a stable capacity utilisation outlook.

Catalyst from construction projects restarting in the near term. We expect overall cement sales to eventually rebound as: (1) new starts of infrastructure projects accelerate, (2) special bond issuances continue, and more importantly (3) gradual improvement in market sentiment after the liquidity injection from PBOC's second cut in RRR, and relaxed mortgage and refinancing requirements supported the real estate sector. We maintain our stance that China's cement consumption per capita is at its peak and the high outstanding local government debt level also constrains additional spending on large-scale projects. However, we expect the near-term catalyst from the restart of construction projects to drive better market outlook in the quarters ahead. Meanwhile, we forecast China's cement consumption to contract by 1% each in 2021 and 2022.

Prime beneficiary of coal price decline. China P.O42.5 grade cement price is slowly coming off its historical high amid weakening downstream consumption. We believe cement producers could still benefit in product margin rebound from the normalising coal market supply, resulting in a faster decline in their coal input cost. Coal benchmark price decline has benefitted not only in terms of lower production costs but has also enable them to utilise power generated from residual heat. We foresee a clearer pathway when the right to participate in the carbon trading market is granted. In the longer run, producers have also opted to shift towards clean energy or pursue green power purchases advocated in western countries which is overall complementing China's development strategy of Industry 4.0.

China P.O42.5 grade cement price



Source: Bloomberg Finance L.P., DBS HK

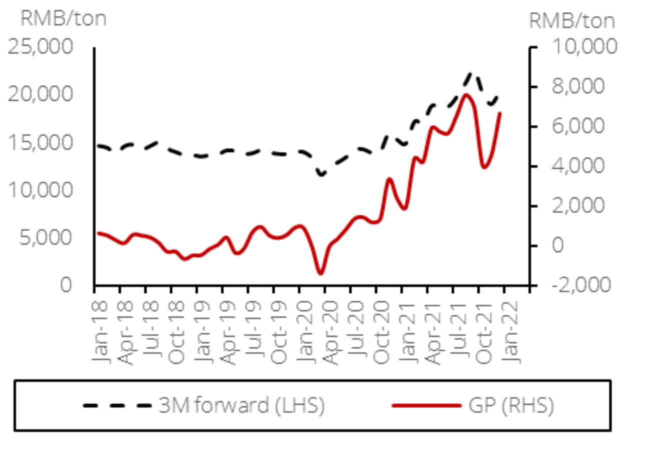
- Aluminium (POSITIVE) – resilient demand; tight supply outlook support price momentum

The "dual control" on energy consumption swings China's supply market landscape. In 2021, China dual control and power shortage has disrupted local market supply, exceeding 2m tons cut as per Antaike estimate, representing 5% of total aluminium supply in 2021. Over the next 12 months, we believe the aluminium supply increase will decelerate, limited by the industry capacity ceiling which is likely to be kept unchanged at 45m tons. Even considering the easing bottleneck in upstream supply chain, such as a return in oversupply in alumina market and diminishing geopolitical risk in bauxite supply from Guinea, we believe there will still be undersupply in Chinese aluminium due to production constraints. Also, we believe project delays following the implementation of ladder-type pricing for electricity would also add to the downside risk for supply growth.

Constructive consumption outlook. We foresee several factors supporting consumption to return to pre-pandemic levels. Firstly, the anticipation of expected fiscal and monetary stimulus has driven a rebound in infrastructure and property investments, resulting in greater demand for construction activities, including aluminium usage in electrical equipment and machinery sectors. Secondly, we expect a continued need for lightweight materials as replacement for aluminium car-body parts as lighter materials result in lower energy consumption. Thirdly, amid China's carbon strategy, we expect support from China's rising electric vehicle penetration amid the energy transition development. We note that China's electric vehicle output grew 164% y-o-y in the first 10 months of 2021, well above that of fuel-car market growth. Overall, we stay optimistic on China's consumption growth momentum over the next few years.

Undersupply supports SHFE aluminium price uptrend. In 2022, imports will still be needed to fill China's market supply gap. Meanwhile, we estimate China's primary aluminium supply growth to be slower at 5.1%, down from 5.4% in 2021, whereas estimated demand growth remains fast at c.5%. Considering the relatively low social stock available, the domestic aluminium market price uptrend should be maintained next year. Based on our regional commodity price forecast, we have revised up our latest aluminium price forecast to RMB19,000 and RMB20,000 for 2022 and 2023 respectively. There is a major overhang from whether the state reserve bureau's metal disposal programme will be continued next year despite its overall impact over the last six months when it sold an equivalent of c.1% of our estimated supply in 2021.

China 3M aluminium price and simulated GP



Source: Bloomberg Finance L.P., DBS HK

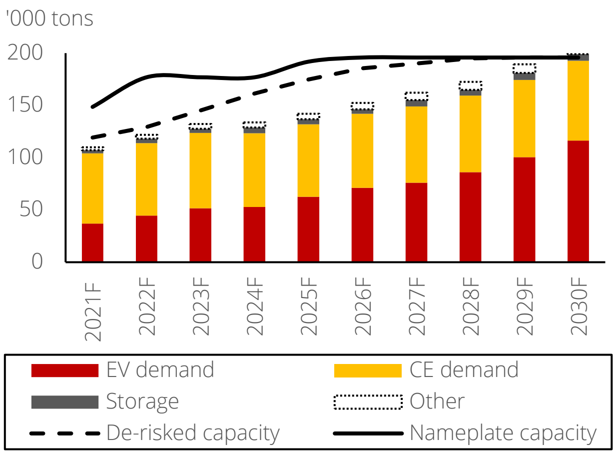
- Cobalt (NEUTRAL from POSITIVE) – solid demand; risk arising from quicker supply resumption

Incremental supply from Glencore's resumption and new production in Congo. Glencore's Mutanda in the Democratic Republic of Congo accounted for 20% of global total cobalt production in 2018. It was suspended since 2019 due to the slump in cobalt prices along with surging costs and taxes. The mine is scheduled to restart after the current market prices have made production economically feasible and would be the main source of new market supply in 2022 and 2023. Meanwhile, over 81% of global cobalt mined supply comes from the Democratic Republic of the Congo. Considering that the mines operated by individual Chinese investors are also ramping up capacity, we believe this could provide incremental new supply pressure over the next two years.

Solid consumption near term despite upcoming cobalt-free technology. Even though concerns about advanced technology would reduce cobalt usage in battery production as a few major manufacturers are developing their cobalt-free cathode material production. Global annual cobalt demand from lithium-ion batteries is expected to grow at a CAGR of 5.7% during 2021-2025, as per Bloomberg data, led by rising trend of China's electric vehicle market penetration growth. Despite this, we highlight the risk that if energy density improvement continues, currently at a perceived threshold of 250Wh/kg or above, the market could shift out from NCM categories hence posing potential downside in cobalt consumption per pack of battery and are constraining the industry's consumption growth outlook.

Cobalt price appreciation might moderate in the medium term. After its 72% run-up in 2021 which has returned to a high level since 2019, we expect Chinese cobalt prices to remain at its 4Q21 level but upside would turn moderate from 2022 afterwards. Over our forecast period till end-2025, battery consumption is projected to reach 70% of total cobalt consumption, expanding from 63% in 2020. However, the continuous technology advancement in reducing cobalt usage will eventually neutralise the benefit from the rising trend of China's electric vehicle market penetration growth. Due to the industry's efforts to lower overall battery pack prices, we believe the cobalt price upside will be ultimately capped.

Cobalt supply expansion underway



Source: Bloomberg Finance L.P., DBS HK

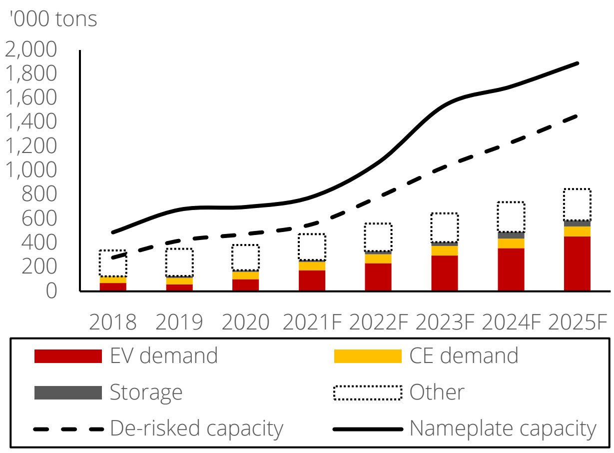
- Lithium (POSITIVE) – new supply lag; riding on rising trend of China electric vehicle market penetration growth

Lithium supply expansion lags the market. Taking advantage of rising lithium and equity market prices in 2021, those upstream companies in the supply-chain have opted to maximise conventional large-scale production and to diversify geographically into more marginal, unconventional resources. For example, Mt Holland and Kemerton plants in Australia, and Nemaska in North America are being developed, resulting in capacity expansion at an estimated CAGR of 27% during 2021-2025 which are mostly scheduled to commence towards the end of the period mentioned. Despite expecting so, spodumene concentrate prices continued to hit all-time highs, reflecting the strong buying interest as existing market supply is insufficient to meet the rapid demand from the consumption market.

Keen market consumption from battery production. According to GGII a local research firm specialising in power battery research, China power battery installation for electric vehicles increased 164% y-o-y during Jan – Nov 2021. Among the installed battery categories, lithium-iron-phosphate has exceeded ternary cathode material although both categories delivered robust growth over the period. We believe the phenomenon indicates that overall market consumption growth will remain solid in view of the rising trend of China electric vehicle market penetration growth. The optimistic outlook remains that China's new electric vehicle sales will reach 5.1m units in 2022, significantly rising from 2021's 3.4m units, versus 2.7m units in Jan-Oct 2021, as forecasted by China Association of Automotive Manufacturers. This will provide sustained demand for lithium.

Optimistic lithium product price outlook. We remain optimistic on lithium product prices in the near term. After climbing up by 319% from 2020, we expect China lithium carbonate prices to remain at their 4Q21 level in 2022. They are then expected to consolidate in view of the new supply projects in 2023. For China's lithium hydroxide, we expect prices to trade closely with lithium carbonate products in response to periodic market flows between LFP and NCM batteries, depending on the model to be launched by auto makers and battery manufacturers. We generally see the uptrend in products prices spilling over to the next year.

China lithium – robust demand growth outlook



Source: Bloomberg Finance L.P., DBS HK

Slower sales revenue and mixed margin outlook

Amid our slowing China GDP forecast for 2022, the outlook for our 11 covered companies are as follows: (1) revenue – slower sales revenue growth, combined with lower sales volume and market price rebound amid stringent supply regulations; and (2) margin – gradual margin pick-up on lower input costs. We have revised our price and cost assumptions accordingly. Overall, we hold our pecking order in terms of earnings: lithium, aluminium then cobalt, cement and lastly steel.

Earnings revisions. We cut our earnings for steel names such as AnSteel and BaoSteel by 4-27% for FY21F-FY23F, to reflect a lower steel price assumption. However, we raise our earnings forecasts for MaSteel by 32-95% on its shift of product mix towards higher-margin sales. Also, we revised down our estimate for alumium and cement companies' after revising down our sales volume assumptions. Following the revisions, our new forecast implies net earnings growth at an average of 3% CAGR during 2021-

2023, higher than their -3% CAGR during 2018-2020. That is primarily attributed to the expected margin increase as factored into our earnings models.

Revised earnings forecasts

Unit: RMB m/ *HK$m	FY21F	% rev.	FY22F	% rev.	FY23F	% rev.
Aluminium						
Chalco	6,145	35.1	6,767	23.7	7,307	12.4
Hongqiao	17,870	(5.1)	19,121	(10.9)	21,269	-
Cement						
CNBM	15,268	-	17,181	0.5	18,545	(4.8)
Conch	32,145	-	33,110	(8.9)	34,513	(15.5)
CRC*	8,021	(3.4)	8,084	(8.2)	8,265	(8.2)
WCC	1,885	(6.1)	2,043	(8.9)	2,265	(8.5)
Steel						
AnSteel	6,878	3.5	5,963	(12.2)	6,664	-
BaoSteel	27,644	(4.1)	22,319	(27.0)	23,975	(25.4)
MaSteel	7,214	95.2	5,171	32.8	5,663	-
Li & Co						
Cmoly	4,748	(0.4)	5,099	(4.7)	5,297	-
GFLi	2,544	-	4,839	-	5,246	-

Source: DBS HK

Stable cashflow and gearing outlook

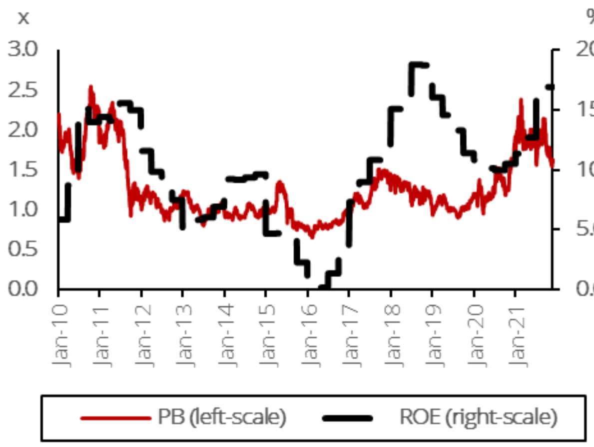
	FY21F		FY22F		FY23F	
	ND/E (%)	(RMB/sh)	ND/E (%)	(RMB/sh)	ND/E (%)	FCF (RMB/sh)
Aluminium						
Chalco	86	0.7	59	0.8	37	0.9
Hongqiao	30	0.8	18	2.0	9	2.2
Cement						
CNBM	78	0.1	66	1.5	54	2.1
Conch	CASH	2.7	CASH	2.9	CASH	3.4
CRC*	CASH	0.6	CASH	1.1	CASH	1.2
WCC	17	0.2	12	0.2	6	0.3
Steel						
AnSteel	11	0.5	4	0.7	CASH	0.7
BaoSteel	6	0.9	1	1.0	CASH	1.1
MaSteel	22	(0.4)	11	0.8	3	0.8
Li & Co						
Cmoly	46	(0.1)	46	(0.0)	39	0.2
GFLi	19	(2.4)	32	(1.1)	29	1.2

Source: DBS HK

Attractive sector valuation

The sector is currently trading at only 1.2x FY22F price-book (P/B) relative to its historical average of 1.6x. We believe the market is oversold as China's market consumption growth is unlikely to collapse next year, and overall companies' financial position is strengthening. On the expected ROE of 15% versus 9% over the last decade, we see share price upside underpinned by the expected pick-up in margins. We are cautious on steel names, downgraded BaoSteel and AnSteel and prefer companies with visible expansion growth pipeline and strong cost leadership, top picks Hongqiao, Ganfeng and Conch.

China basic materials simple average P/B



*stocks mentioned include aluminium, cement, steel, lithium and cobalt

Source: Bloomberg Finance L.P., DBS HK

Revised rating and TP

	Rating		TP (LC)		Valuation basis
	New	Prior	New	Prior	
Aluminium					
Chalco	BUY	BUY	7.0	6.5	+1SD FY22F PB
Hongqiao	BUY	BUY	15.0	18.0	+1SD FY22F PB
Cement					
CNBM	BUY	BUY	16.0	16.0	10-yr avg. FY22F PB
Conch	BUY	BUY	58.0	60.0	-1SD FY22F PB
CRC	HOLD	HOLD	8.0	9.0	10-yr avg. FY22F PB
WCC	BUY	BUY	1.60	1.65	Avg. dis. to Conch
Steel					
AnSteel	HOLD	BUY	4.5	7.2	-0.5SD FY22F PB
BaoSteel	HOLD	BUY	8.5	12.0	-0.5SD FY22F PB
MaSteel	BUY	BUY	4.5	4.7	+0.5SD FY22F PB
Li & Co					
Cmoly	BUY	BUY	7.5	7.5	+2SD FY22F PB
GFLi	BUY	BUY	230.0	230.0	+2.5SD FY22F PB

Source: DBS HK

Anhui Conch (914 HK, BUY, TP: HK$58) – A deep-value play

There are several reasons we like Conch: (1) sales momentum should eventually improve next year with margin expected to benefit from declining coal prices, (2) ample inorganic expansion growth opportunities arising from its mid-term budgeted M&A plan of total RMB100bn, nearly doubling from the total capex amount during 2016-2020. Indeed, Conch's recent acquisition of a new energy asset from its parent will support the company's future energy cost of production, and (3) attractive valuation as the stock offers deep value and a decent dividend yield. We expect the improved industry supply dynamics to support Conch's above-peer unit cement GP. Our unit cement GP estimate is RMB167 per ton for 2022, widening from RMB156 per ton in 2021. The strong net cash position should enable Conch to accelerate its new market share absorption. Our TP of HK$58 is based on 1.3x FY22F P/BV, pegged to its historical average during 2016-2020, against an ROE which is expected to stabilise at 17% over 2022-2023. The stock also offers an attractive net dividend yield of >7%.

Ganfeng Lithium (1772 HK, BUY, TP: HK$230) – Giant to lead the charging market

We believe GFLi's market share expansion and earnings growth prospects remain solid. Its sales volume growth is estimated to remain fast during 2021-2023, underpinned by the renewal of its supplier contract with Tesla. Also, the accelerating upstream expansion development should lift its margin outlook. According to the company's development plan, it will boost raw material self-sufficiency to above 70% in 2024, from 30% in 2020. And we expect upside to our GPM assumption of >42% in FY22F from 21% in FY20. We believe the market has mispriced GFLi on concerns over consumption slowdown amid car chip shortage. On the contrary, we project new supply growth to be insufficient to meet demand amid the electric vehicle market's rapid growth. This will continue to support lithium price uptrend which will be the key driver for GFLi's earnings growth of 43% CAGR during 2021-2023. Our TP of HK$230 is based on a 14x FY22F P/BV, supported by ROE improvement to >24% by 2023 from <11% in 2020.

China Hongqiao (1378 HK, BUY, TP: HK$13.0) – Buy on weakness

We believe the current share price reflects the negative impact relating to the government's abolishment of power tariff discount for newly built capacity in Yunnan. Yet such a move could have limited impact on the company's earnings. And its capacity expansion plan in Yunnan will increase exposure in hydro power resources. In turn, it will benefit from being less reliant on coal power for future production (the company's captive power contribution has fallen to below industry average at 65%). In view of normalising coal market supply, we are optimistic that CHG's GPM can remain well above its peers', underpinned by lower future coal prices expected and its superior production efficiency. The plan of expanding into direct supply for auto makers and higher-margin recycling business, as well as the growth potential from further optimising its capital structure could drive earnings. Our TP of HK$15.0 is based on a 1.3x FY22F P/BV, which is +1SD of its five-year historical mean, against ROE improving to 23% in 2022-2023 (exceeding its 2013 peak). The net dividend yield in FY22F is attractive at >12%.

Peer comparison

Company Name	Code	Price Local$	Target Price Local$	Recom	Mkt Cap US$m	Fiscal Yr	PE 21F x	PE 22F x	Yield 21F %	Yield 22F %	P/Bk 21F x	P/Bk 22F x	EV/EBITDA 21F x	EV/EBITDA 22F x	ROE 21F %	ROE 22F %
China Resources Cement	1313 HK	6.56	8.00	HOLD	5,875	Dec	5.7	5.7	8.4	8.5	0.9	0.8	2.9	2.6	15.5	14.5
Anhui Conch Cement 'H'	914 HK	40.6	58.00	BUY	6,767	Dec	5.5	5.3	7.3	7.5	1.0	0.9	2.5	2.4	18.8	17.3
Anhui Conch Cmt. 'A'	600585 CH	39.06	55.00	BUY	24,547	Dec	6.4	6.3	6.2	6.4	1.1	1.0	3.1	2.9	18.8	17.3
CNBM 'H'	3323 HK	10.34	16.00	BUY	11,952	Dec	4.7	4.1	6.8	7.6	0.7	0.6	5.4	5.0	16.0	16.1
West China Cement	2233 HK	1.39	1.60	BUY	970	Dec	3.3	3.0	12.8	13.8	0.5	0.5	2.1	1.9	17.3	17.0
Baoshan Iron & Stl.'A'	600019 CH	7.26	8.50	HOLD	25,402	Dec	5.8	7.2	8.8	7.1	0.8	0.8	3.0	3.3	14.5	11.0
Angang Steel 'H'	347 HK	3.85	4.50	HOLD	697	Dec	4.3	5.0	9.1	7.9	0.5	0.5	2.8	2.8	12.4	10.1
Angang Steel 'A'	000898 CH	3.86	4.50	HOLD	4,848	Dec	5.3	6.1	7.4	6.4	0.6	0.6	3.3	3.3	12.4	10.1
Maanshan Iron & Stl.'H'	323 HK	3.19	4.50	BUY	709	Dec	2.8	3.9	18.2	13.0	0.6	0.6	2.1	2.5	23.9	15.6
Maanshan Iron & Stl. 'A'	600808 CH	4	5.50	BUY	3,751	Dec	4.3	6.0	11.8	8.5	1.0	0.9	2.7	3.3	23.9	15.6
China Hongqiao Group	1378 HK	8.93	15.00	BUY	10,446	Dec	3.7	3.5	12.9	13.8	0.8	0.8	2.8	2.4	23.7	22.8
CHALCO 'H'	2600 HK	4.57	7.00	BUY	2,312	Dec	10.3	9.4	0.0	0.0	1.1	0.9	5.8	5.1	10.7	10.6
CHALCO 'A'	601600 CH	5.93	8.00	BUY	12,186	Dec	16.4	14.9	0.0	0.0	1.7	1.5	7.2	6.4	10.7	10.6
Ganfeng Lithium 'H'	1772 HK	117.4	230.00	BUY	4,340	Dec	54.2	28.5	0.7	1.4	8.2	7.0	36.4	20.8	18.4	26.4
Ganfeng Lithium 'A'	002460 CH	128.63	230.00	BUY	23,226	Dec	72.7	38.2	0.5	1.0	11.0	9.3	48.3	27.4	18.4	26.4
China Molybdenum 'H'	3993 HK	4.28	7.50	BUY	2,159	Dec	15.9	14.8	1.9	2.1	1.7	1.5	9.1	8.5	11.5	11.0
China Moly.Luoyang 'A'	603993 CH	5.62	8.00	BUY	15,599	Dec	25.6	23.8	1.2	1.3	2.8	2.5	13.0	12.2	11.5	11.0
Sector average							**14.7**	**10.8**	**7.6**	**7.1**	**2.1**	**1.9**	**9.3**	**6.8**	**17.1**	**16.1**

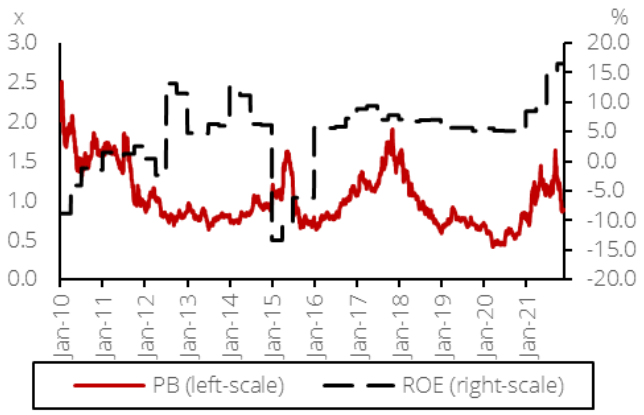
Source: Thomson Reuters, DBS HK

China commodities' market prices

	Last px 13-Dec	Variation (%) w/w	m/m	y/y	5-y avg.	Pulse
Unit: RMB ton						
Alum spot – SHFE	21,670	4.4	8.0	10.9	14,724	↑
Alum spot – LME (US$)	2,971	2.1	6.5	17.5	1,948	→
China alumina	2,780	-	-12.0	0.6	2,623	↓
China bauxite (US$)	56	-2.6	0.9	15.3	49	↓
China hot rolled steel	4,960	0.6	2.5	-7.6	3,927	→
China steel rebar	4,750	-0.6	0.2	-5.3	3,843	→
China iron ore	1,060	2.9	20.0	-18.3	834	↑
China metcoke	3,110	6.9	-	-1.3	2,049	↑
China P.O42.5 grade cement	526	-2.6	-9.0	16.5	462	↓
Qinhuangdao coal 5500kcal	841	6.7	-8.0	-4.8	628	↑
Copper spot – SHFE	70,740	0.9	-0.9	2.5	50,620	→
Concentrate treatment cost	62	-	-0.8	30.0	59	→
Changjiang cobalt	498,000	-	8.8	31.7	348,327	→
China Li2CO3	316,000	6.8	35.1	147.6	97,038	↑
China LiOH	258,500	9.3	17.7	112.7	110,686	↑

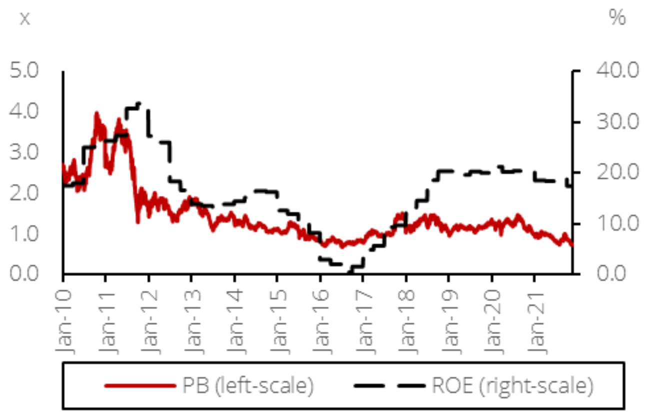
*closing date as of 13 Dec, 2021
Source: Bloomberg Finance L.P., DBS HK

China aluminium P/B ROE



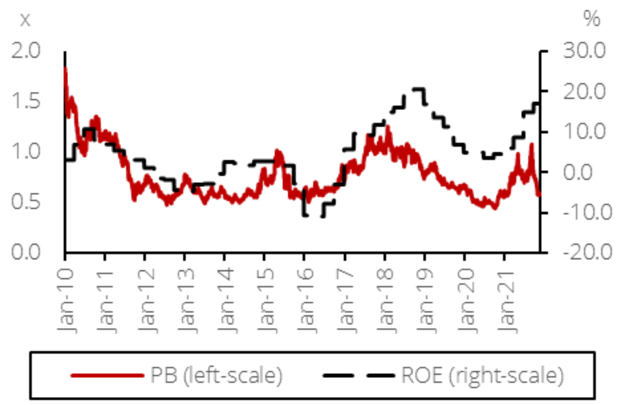
Source: Bloomberg Finance L.P., DBS HK

China cement P/B ROE



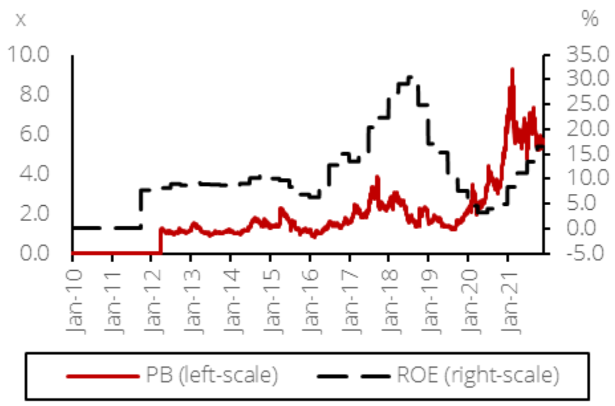
Source: Bloomberg Finance L.P., DBS HK

China steel P/B ROE



Source: Bloomberg Finance L.P., DBS HK

China minor metals P/B ROE



Source: Bloomberg Finance L.P., DBS HK

China Steel Overview

Unit: m tons, RMB/t	2018	2019	2020	2021F	2022F	2023F
Crude steel capacity	1,175	1,210	1,257	1,284	1,269	1,254
Crude production	928	996	1,053	1,050	1,020	1,020
% Y-o-Y	11.6	7.3	5.7	-0.3	-2.9	0.0
Implied utilisation (%)	79.0	82.3	83.7	81.8	80.4	81.3
Finished steel output	1,105	1,205	1,325	1,322	1,290	1,290
Net export/ (import)	56.2	52	33.4	52	55	55
Apparent consumption	1,048	1,152	1,292	1,270	1,235	1,235
% Y-o-Y	6.4	9.9	12.1	-1.7	-2.8	0.0
China hot rolled price	4,214	3,815	3,822	5,200	4,900	5,000
China rebar price	4,352	4,109	3,850	4,800	4,700	4,800
China IO price	702	837	911	1,200	900	800
China met coal price	2,234	1,987	1,952	3,200	2,800	2,700

Source: DBS HK

China Aluminium Overview

Unit: m tons, RMB/t	2018	2019	2020	2021F	2022F	2023F
Primary aluminium capacity	40	41	42	45	45	45
Production	36	35	37	39	41	42
% Y-o-Y	10.9	-2.2	5.1	5.4	5.1	2.4
Implied utilisation (%)	89.8	85.4	87.3	86.7	91.1	93.3
Net export/ (import)	0	0	-1	-1	-1	-1
Apparent consumption	36	35	38	40	42	43
% Y-o-Y	10.8	-2.4	8.0	5.3	5.0	2.4
SHFE Al spot	14254	13913	14123	19000	20000	21000
Changjiang spot	14204	13956	14216	19050	20050	21050
LME spot	2,108	1,794	1,706	2,450	2,550	2,650
China alumina price (RMB/t)	2,971	2,707	2,337	2,600	2,650	2,650
China bauxite price (US$/t)	56	53	46	56	58	59

Source: DBS HK

China Cement Overview

Unit: m tons, RMB/t	2018	2019	2020	2021F	2022F	2023F
Clinker capacity	1,870	1,879	1,926	1,990	1,980	1,950
Cement eq capacity	3,366	3,382	3,274	3,184	3,168	3,120
Cement production	2,177	2,330	2,359	2,335	2,312	2,312
% Y-o-Y	-6.0	7.0	1.3	-1.0	-1.0	0.0
Implied utilisation (%)	64.7	68.9	72.1	73.3	73.0	74.1
Net export/ (import)	3	-16	-33	-20	-15	-15
Calculated consumption	2,174	2,346	2,392	2,355	2,327	2,327
% Y-o-Y	-5.6	8.0	2.0	-1.5	-1.2	0.0
Driver1: Infra (m tons)	1,031	1,118	1,007	1,037	1,047	1,048
Driver2: Property (m tons)	643	707	732	702	692	693
P.O42.5 grade price	427	438	438	470	530	550
China coal price	648	587	569	950	850	750

Source: DBS HK

China Coal Overview

Unit: m tons, RMB/t	2018	2019	2020	2021F	2022F	2023F
Mining capacity	5,212	5,450	5,500	5,500	5,400	5,300
Raw Coal	3,680	3,850	3,840	4,011	4,051	3,929
Implied utilisation (%)	70.6	70.6	69.8	72.9	75.0	74.1
Thermal Coal	3,103	3,219	3,336	3,484	3,518	3,412
% Y-o-Y	2.4	3.7	3.6	4.4	1.0	-3.0
Net export/ (import)	-118	-132	-100	-100	-100	-100
Apparent consumption	3,221	3,351	3,436	3,584	3,618	3,512
% Y-o-Y	2.5	4.0	2.5	4.3	0.9	-2.9
Driver1: Power (m tons)	1,970	2,050	2,085	2,174	2,194	2,129
Driver2: Metallurgy (m tons)	154	159	171	178	180	174
ZCE Spot	617	580	569	852	900	700
CCTD Steam (Q5500) – Term end-Dec (RMB/ton)	555	546	558	754	700	700

Source: DBS HK

China Lithium Overview

Unit: '000 tons, RMB/t	2018	2019	2020	2021F	2022F	2023F	2024F	2025F
Mine supply (lithium carbonate equivalent)	237	358	393	476	655	883	1,069	1,269
Refined capacity	488	676	698	782	1,066	1,540	1,696	1,889
Production	287	428	479	524	687	945	1,154	1,358
Implied utilisation (%)	58.8	63.3	68.6	67.0	64.4	61.4	68.0	71.9
EV passenger	58	52	89	153	201	251	295	374
EV commercial	11	7	12	22	32	46	61	81
Consumer electronic	54	52	62	69	74	79	80	82
Storage	4	17	14	16	25	31	54	51
Other	213	225	206	215	228	240	249	260
Total	340	353	383	475	560	647	739	848
China Li2CO3 price	116,813	68,971	44,026	106,000	200,000	190,000	195,000	195,000
China LiOH price	137,676	82,472	51,817	105,000	195,000	185,000	190,000	190,000

Source: DBS HK

China Cobalt Overview

Unit: '000 tons, USD/lb, RMB/t	2018	2019	2020	2021F	2022F	2023F	2024F	2025F
Mine supply (contained metal)	147	173	139	162	175	190	192	203
Refined capacity	147	180	210	228	240	248	263	285
Production	145	163	151	162	177	199	210	228
Implied utilisation (%)	98.6	90.6	71.9	71	73.7	80.2	80	80
EV passenger	16	13	20	33	39	44	45	54
EV commercial	1	1	2	3	4	6	7	8
Consumer electronic	57	55	61	67	69	72	70	69
Storage	3	5	2	2	4	4	5	4
Other (E-bus, two-wheeler)	64	63	54	57	59	64	65	68
Total	141	137	139	162	175	190	192	203
MB Co Price	33.3	15.1	14.2	22	30	29	28	28
Changjiang Co	536,494	277,548	267,652	370,000	480,000	450,000	430,000	430,000

Source: DBS HK

DBS HK recommendations are based on an Absolute Total Return* Rating system, defined as follows:
STRONG BUY (>20% total return over the next 3 months, with identifiable share price catalysts within this time frame)
BUY (>15% total return over the next 12 months for small caps, >10% for large caps)
HOLD (-10% to +15% total return over the next 12 months for small caps, -10% to +10% for large caps)
FULLY VALUED (negative total return, i.e., > -10% over the next 12 months)
SELL (negative total return of > -20% over the next 3 months, with identifiable share price catalysts within this time frame)

Share price appreciation + dividends

Completed Date: 17 Jan 2022 16:29:38 (HKT)
Dissemination Date: 17 Jan 2022 18:40:54 (HKT)

Sources for all charts and tables are DBS HK unless otherwise specified.

GENERAL DISCLOSURE/DISCLAIMER

This report is prepared by DBS Bank (Hong Kong) Limited ("DBS HK"). This report is solely intended for the clients of DBS Bank Ltd., DBS HK, DBS Vickers (Hong Kong) Limited ("DBSV HK"), and DBS Vickers Securities (Singapore) Pte Ltd. ("DBSVS"), its respective connected and associated corporations and affiliates only and no part of this document may be (i) copied, photocopied or duplicated in any form or by any means or (ii) redistributed without the prior written consent of DBS HK.

The research set out in this report is based on information obtained from sources believed to be reliable, but we (which collectively refers to DBS Bank Ltd., DBS HK, DBSV HK, DBSVS, its respective connected and associated corporations, affiliates and their respective directors, officers, employees and agents (collectively, the "DBS Group") have not conducted due diligence on any of the companies, verified any information or sources or taken into account any other factors which we may consider to be relevant or appropriate in preparing the research. Accordingly, we do not make any representation or warranty as to the accuracy, completeness or correctness of the research set out in this report. Opinions expressed are subject to change without notice. This research is prepared for general circulation. Any recommendation contained in this document does not have regard to the specific investment objectives, financial situation and the particular needs of any specific addressee. This document is for the information of addressees only and is not to be taken in substitution for the exercise of judgement by addressees, who should obtain separate independent legal or financial advice. The DBS Group accepts no liability whatsoever for any direct, indirect and/or consequential loss (including any claims for loss of profit) arising from any use of and/or reliance upon this document and/or further communication given in relation to this document. This document is not to be construed as an offer or a solicitation of an offer to buy or sell any securities. The DBS Group, along with its affiliates and/or persons associated with any of them may from time to time have interests in the securities mentioned in this document. The DBS Group, may have positions in, and may effect transactions in securities mentioned herein and may also perform or seek to perform broking, investment banking and other banking services for these companies.

Any valuations, opinions, estimates, forecasts, ratings or risk assessments herein constitutes a judgment as of the date of this report, and there can be no assurance that future results or events will be consistent with any such valuations, opinions, estimates, forecasts, ratings or risk assessments. The information in this document is subject to change without notice, its accuracy is not guaranteed, it may be incomplete or condensed, it may not contain all material information concerning the company (or companies) referred to in this report and the DBS Group is under no obligation to update the information in this report.

This publication has not been reviewed or authorized by any regulatory authority in Singapore, Hong Kong or elsewhere. There is no planned schedule or frequency for updating research publication relating to any issuer.

The valuations, opinions, estimates, forecasts, ratings or risk assessments described in this report were based upon a number of estimates and assumptions and are inherently subject to significant uncertainties and contingencies. It can be expected that one or more of the estimates on which the valuations, opinions, estimates, forecasts, ratings or risk assessments were based will not materialize or will vary significantly from actual results. Therefore, the inclusion of the valuations, opinions, estimates, forecasts, ratings or risk assessments described herein IS NOT TO BE RELIED UPON as a representation and/or warranty by the DBS Group (and/or any persons associated with the aforesaid entities), that:

(a) such valuations, opinions, estimates, forecasts, ratings or risk assessments or their underlying assumptions will be achieved, and
(b) there is any assurance that future results or events will be consistent with any such valuations, opinions, estimates, forecasts, ratings or risk assessments stated therein.

Please contact the primary analyst for valuation methodologies and assumptions associated with the covered companies or price targets. Any assumptions made in this report that refers to commodities, are for the purposes of making forecasts for the company (or companies) mentioned herein. They are not to be construed as recommendations to trade in the physical commodity or in the futures contract relating to the commodity referred to in this report.

DBS Vickers Securities (USA) Inc ("DBSVUSA"), a US-registered broker-dealer, does not have its own investment banking or research department, has not participated in any public offering of securities as a manager or co-manager or in any other investment banking transaction in the past twelve months and does not engage in market-making.

Neither DBS Bank Ltd nor DBS HK market makes in equity securities of the issuer(s) or company(ies) mentioned in this Research Report.

ANALYST CERTIFICATION

The research analyst(s) primarily responsible for the content of this research report, in part or in whole, certifies that the views about the companies and their securities expressed in this report accurately reflect his/her personal views. The analyst(s) also certifies that no part of his/her compensation was, is, or will be, directly or indirectly, related to specific recommendations or views expressed in the report. The research analyst (s) primarily responsible for the content of this research report, in part or in whole, certifies that he or his associate[1] does not serve as an officer of the issuer or the new listing applicant (which includes in the case of a real estate investment trust, an officer of the management company of the real estate investment trust; and in the case of any other entity, an officer or its equivalent counterparty of the entity who is responsible for the management of the issuer or the new listing applicant) and the research analyst(s) primarily responsible for the content of this research report or his associate does not have financial interests[2] in relation to an issuer or a new listing applicant that the analyst reviews. DBS Group has procedures in place to eliminate, avoid and manage any potential conflicts of interests that may arise in connection with the production of research reports. The research analyst(s) responsible for this report operates as part of a separate and independent team to the investment banking function of the DBS Group and procedures are in place to ensure that confidential information held by either the research or investment banking function is handled appropriately. There is no direct link of DBS Group's compensation to any specific investment banking function of the DBS Group.

COMPANY-SPECIFIC / REGULATORY DISCLOSURES

1. DBS Bank Ltd, DBS HK, DBSVS or their subsidiaries and/or other affiliates have proprietary positions in China Resources Cement Holdings Ltd (1313 HK), Anhui Conch Cement Co Ltd (914 HK), China National Building Material Co Ltd (3323 HK), Angang Steel Co Ltd (347 HK), Maanshan Iron & Steel Co Ltd (323 HK), China Hongqiao Group Ltd (1378 HK), Jiangxi Ganfeng Lithium Co Ltd (1772 HK) and Aluminum Corp of China Ltd (2600 HK) recommended in this report as of 12 Jan 2022.

2. Compensation for investment banking services:
   DBS Bank Ltd, DBS HK, DBSVS, their subsidiaries and/or other affiliates of DBSVUSA have received compensation, within the past 12 months for investment banking services from China Hongqiao Group Ltd (1378 HK) as of 31 Dec 2021.

3. DBS Bank Ltd, DBS HK, DBSVS, their subsidiaries and/or other affiliates of DBSVUSA have managed or co-managed a public offering of securities for China Hongqiao Group Ltd (1378 HK) and Aluminum Corp of China Ltd (2600 HK) in the past 12 months, as of 31 Dec 2021.

   DBSVUSA does not have its own investment banking or research department, nor has it participated in any public offering of securities as a manager or co-manager or in any other investment banking transaction in the past twelve months. Any US persons wishing to obtain further information, including any clarification on disclosures in this disclaimer, or to effect a transaction in any security discussed in this document should contact DBSVUSA exclusively.

4. Disclosure of previous investment recommendation produced:
   DBS Bank Ltd, DBSVS, DBS HK, their subsidiaries and/or other affiliates of DBSVUSA may have published other investment recommendations in respect of the same securities / instruments recommended in this research report during the preceding 12 months. Please contact the primary analyst listed on page 1 of this report to view previous investment recommendations published by DBS Bank Ltd, DBS HK, DBSVS, their subsidiaries and/or other affiliates of DBSVUSA in the preceding 12 months.

[1] An associate is defined as (i) the spouse, or any minor child (natural or adopted) or minor step-child, of the analyst; (ii) the trustee of a trust of which the analyst, his spouse, minor child (natural or adopted) or minor step-child, is a beneficiary or discretionary object; or (iii) another person accustomed or obliged to act in accordance with the directions or instructions of the analyst.

[2] Financial interest is defined as interests that are commonly known financial interest, such as investment in the securities in respect of an issuer or a new listing applicant, or financial accommodation arrangement between the issuer or the new listing applicant and the firm or analysis. This term does not include commercial lending conducted at arm's length, or investments in any collective investment scheme other than an issuer or new listing applicant notwithstanding the fact that the scheme has investments in securities in respect of an issuer or a new listing applicant.

RESTRICTIONS ON DISTRIBUTION

General	This report is not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation.
Australia	This report is being distributed in Australia by DBS Bank Ltd, DBSVS or DBSV HK. DBS Bank Ltd holds Australian Financial Services Licence no. 475946. DBS Bank Ltd, DBSVS and DBSV HK are exempted from the requirement to hold an Australian Financial Services Licence under the Corporation Act 2001 ("CA") in respect of financial services provided to the recipients. Both DBS Bank Ltd and DBSVS are regulated by the Monetary Authority of Singapore under the laws of Singapore, and DBSV HK is regulated by the Hong Kong Securities and Futures Commission under the laws of Hong Kong, which differ from Australian laws. Distribution of this report is intended only for "wholesale investors" within the meaning of the CA.
Hong Kong	This report is being distributed in Hong Kong by DBS Bank Ltd, DBS Bank (Hong Kong) Limited and DBS Vickers (Hong Kong) Limited, all of which are registered with or licensed by the Hong Kong Securities and Futures Commission to carry out the regulated activity of advising on securities. DBS Bank Ltd., Hong Kong Branch is a limited liability company incorporated in Singapore.
Indonesia	This report is being distributed in Indonesia by PT DBS Vickers Sekuritas Indonesia.
Malaysia	This report is distributed in Malaysia by AllianceDBS Research Sdn Bhd ("ADBSR"). Recipients of this report, received from ADBSR are to contact the undersigned at 603-2604 3333 in respect of any matters arising from or in connection with this report. In addition to the General Disclosure/Disclaimer found at the preceding page, recipients of this report are advised that ADBSR (the preparer of this report), its holding company Alliance Investment Bank Berhad, their respective connected and associated corporations, affiliates, their directors, officers, employees, agents and parties related or associated with any of them may have positions in, and may effect transactions in the securities mentioned herein and may also perform or seek to perform broking, investment banking/corporate advisory and other services for the subject companies. They may also have received compensation and/or seek to obtain compensation for broking, investment banking/corporate advisory and other services from the subject companies. Wong Ming Tek, Executive Director, ADBSR
Singapore	This report is distributed in Singapore by DBS Bank Ltd (Company Regn. No. 196800306E) or DBSVS (Company Regn No. 198600294G), both of which are Exempt Financial Advisers as defined in the Financial Advisers Act and regulated by the Monetary Authority of Singapore. DBS Bank Ltd and/or DBSVS, may distribute reports produced by its respective foreign entities, affiliates or other foreign research houses pursuant to an arrangement under Regulation 32C of the Financial Advisers Regulations. Where the report is distributed in Singapore to a person who is not an Accredited Investor, Expert Investor or an Institutional Investor, DBS Bank Ltd accepts legal responsibility for the contents of the report to such persons only to the extent required by law. Singapore recipients should contact DBS Bank Ltd at 6327 2288 for matters arising from, or in connection with the report.
Thailand	This report is being distributed in Thailand by DBS Vickers Securities (Thailand) Co Ltd.
United Kingdom	This report is produced by DBS HK which is regulated by the Hong Kong Monetary Authority This report is disseminated in the United Kingdom by DBS Vickers Securities (UK) Ltd ("DBSVUK"). DBSVUK is authorised and regulated by the Financial Conduct Authority in the United Kingdom. In respect of the United Kingdom, this report is solely intended for the clients of DBSVUK, its respective connected and associated corporations and affiliates only and no part of this document may be (i) copied, photocopied or duplicated in any form or by any means or (ii) redistributed without the prior written consent of DBSVUK. This communication is directed at persons having professional experience in matters relating to investments. Any investment activity following from this communication will only be engaged in with such persons. Persons who do not have professional experience in matters relating to investments should not rely on this communication.
Dubai International Financial Centre	This research report is being distributed by DBS Bank Ltd., (DIFC Branch) having its office at units 608-610, 6th Floor, Gate Precinct Building 5, PO Box 506538, DIFC, Dubai, United Arab Emirates. DBS Bank Ltd., (DIFC Branch) is regulated by The Dubai Financial Services Authority. This research report is intended only for professional clients (as defined in the DFSA rulebook) and no other person may act upon it.

United Arab Emirates	This report is provided by DBS Bank Ltd (Company Regn. No. 196800306E) which is an Exempt Financial Adviser as defined in the Financial Advisers Act and regulated by the Monetary Authority of Singapore. This report is for information purposes only and should not be relied upon or acted on by the recipient or considered as a solicitation or inducement to buy or sell any financial product. It does not constitute a personal recommendation or take into account the particular investment objectives, financial situation, or needs of individual clients. You should contact your relationship manager or investment adviser if you need advice on the merits of buying, selling or holding a particular investment. You should note that the information in this report may be out of date and it is not represented or warranted to be accurate, timely or complete. This report or any portion thereof may not be reprinted, sold or redistributed without our written consent.
United States	This report was prepared by DBS HK. DBSVUSA did not participate in its preparation. The research analyst(s) named on this report are not registered as research analysts with FINRA and are not associated persons of DBSVUSA. The research analyst(s) are not subject to FINRA Rule 2241 restrictions on analyst compensation, communications with a subject company, public appearances and trading securities held by a research analyst. This report is being distributed in the United States by DBSVUSA, which accepts responsibility for its contents. This report may only be distributed to Major U.S. Institutional Investors (as defined in SEC Rule 15a-6) and to such other institutional investors and qualified persons as DBSVUSA may authorize. Any U.S. person receiving this report who wishes to effect transactions in any securities referred to herein should contact DBSVUSA directly and not its affiliate.
Other jurisdictions	In any other jurisdictions, except if otherwise restricted by laws or regulations, this report is intended only for qualified, professional, institutional or sophisticated investors as defined in the laws and regulations of such jurisdictions.

DBS Bank (Hong Kong) Limited

13th Floor One Island East, 18 Westlands Road, Quarry Bay, Hong Kong

Tel: (852) 3668-4181, Fax: (852) 2521-1812

DBS Regional Research Offices

HONG KONG
DBS Bank (Hong Kong) Ltd
Contact: Carol Wu
13th Floor One Island East,
18 Westlands Road, Quarry Bay, Hong Kong
Tel: 852 3668 4181
Fax: 852 2521 1812
e-mail: dbsvhk@dbs.com

MALAYSIA
AllianceDBS Research Sdn Bhd
Contact: Wong Ming Tek (128540 U)
19th Floor, Menara Multi-Purpose, Capital Square,
8 Jalan Munshi Abdullah 50100, Kuala Lumpur, Malaysia.
Tel.: 603 2604 3333
Fax: 603 2604 3921
e-mail: general@alliancedbs.com
Co. Regn No. 198401015984 (128540-U)

SINGAPORE
DBS Bank Ltd
Contact: Janice Chua
12 Marina Boulevard,
Marina Bay Financial Centre Tower 3
Singapore 018982
Tel: 65 6878 8888
e-mail: groupresearch@dbs.com
Company Regn. No. 196800306E

INDONESIA
PT DBS Vickers Sekuritas (Indonesia)
Contact: Maynard Priajaya Arif
DBS Bank Tower
Ciputra World 1, 32/F
Jl. Prof. Dr. Satrio Kav. 3-5
Jakarta 12940, Indonesia
Tel: 62 21 3003 4900
Fax: 6221 3003 4943
e-mail: indonesiaresearch@dbs.com

THAILAND
DBS Vickers Securities (Thailand) Co Ltd
Contact: Chanpen Sirithanarattanakul
989 Siam Piwat Tower Building,
9th, 14th-15th Floor
Rama 1 Road, Pathumwan,
Bangkok Thailand 10330
Tel. 66 2 857 7831
Fax: 66 2 658 1269
e-mail: research@th.dbs.com
Company Regn. No 0105539127012
Securities and Exchange Commission, Thailand