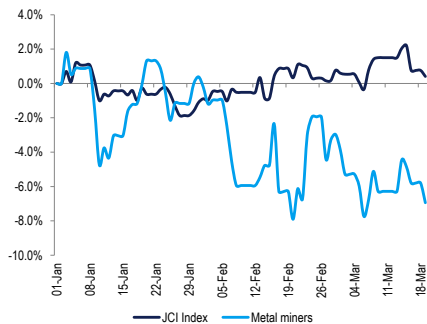


Sector Index Performance

	3M	6M	12M
Absolute	0.3%	-20.4%	3.3%
Relative to JCI	-1.7%	-25.4%	-6.2%



Summary Valuation Metrics

P/E (x)	2023F	2024F	2025F
ADMR IJ	9.2	9.0	9.2
ANTM IJ	11.5	12.1	10.8
HRUM IJ	8.3	9.3	8.1
INCO IJ	9.9	33.1	124.9
MBMA IJ	269.3	22.5	11.8
MDKA IJ	N/A	86.3	47.6
NCKL IJ	9.8	8.3	6.8

EV/EBITDA (x)	2023F	2024F	2025F
ADMR IJ	7.9	8.1	7.4
ANTM IJ	7.3	6.7	6.0
HRUM IJ	3.0	6.8	5.8
INCO IJ	4.1	9.8	12.7
MBMA IJ	31.7	10.5	7.3
MDKA IJ	16.8	11.2	9.9
NCKL IJ	7.0	5.5	4.2

Div. Yield	2023F	2024F	2025F
ADMR IJ	N/A	N/A	N/A
ANTM IJ	4.8%	4.4%	4.1%
HRUM IJ	N/A	N/A	N/A
INCO IJ	2.2%	N/A	N/A
MBMA IJ	N/A	N/A	N/A
MDKA IJ	N/A	N/A	N/A
NCKL IJ	N/A	3.1%	3.6%

Ryan Winipta

PT Indo Premier Sekuritas
ryan.winipta@ipc.co.id
+62 21 5088 7168 ext.718

Reggie Parengkuan

PT Indo Premier Sekuritas
reggie.parengkuan@ipc.co.id
+62 21 5088 7168 ext.714

Nickel: minimal downside risks with possible demand relief from EU

- LME nickel price has rallied by +8% YTD, mainly driven by the short-covering rally post-Biden's sanctions plan on Russia & RKAB issues.
- NPI was flattish YTD, but with both LME & NPI prices are still below cash-costs curve, downside is relatively limited, in our view.
- We like names with strong bottom-up story, we recommend **ANTM** (higher volume) and **HRUM** (coal to nickel transition) as our top pick.

Nickel prices have rallied: what are the drivers & could it sustain?

LME nickel prices rallied by +8% YTD, which we think is mainly driven by traders' action to cover their short-position, as reflected in reduction commitment of traders (COT)'s net-short position (Fig. 1). While it would be difficult to fully-gauge to what magnitude these traders are willing to continue covering their short-position, at this price level, we argue that 1) continuous supply-responses from nickel players (Fig. 5) in addition to 2) favorable macro backdrop, leading to other base metal prices recent rally (i.e. copper, aluminum) may translate into a lesser possibility on these traders further piling-up back their short-position. This may lead to nickel price staying range-bound at ~US\$17k/t level, in our view. Following supply-responses, we lower our S-D balance to only 77kt surplus in FY24F vs. ~340kt surplus in FY23.

Cash-costs curve provide an equilibrium price level over the long-run

Despite short-term volatility, over the long-run, commodity prices would eventually recovered back to its sustainable cash-cost level (i.e. 90th percentile cash costs). Thus, with prices currently stood well below the cost-curve (Fig. 6), we think a downside risk is already minimal for LME nickel prices. NPI prices, on the other hand, has remained soft YTD (flat), despite low inventory in China's steel-mills, but we think upside to NPI prices is limited, especially with Chinese RKEF cash margin stood only slightly above current price level (Fig. 20), already close to 90th percentile cash costs in addition to weaker-than-expected post-CNY restocking activity.

Europe is the biggest tail-risks, but may also provide demand relief

European stainless-steel market has been dragging down the surprisingly robust stainless-steel demand in China (+8% yoy in FY23). Recent strike in Finland, affecting Outokumpu – one of the biggest SS players in Europe, has also led to two-weeks production halt, further adding woes to an already weak European SS market. One of the biggest tail-risks that we foresee is also ECB's tight monetary policy which would have a relatively huge impact to nickel demand in particular, as lower EU's industrial activity (despite strong U.S economy and vice versa) have historically led to lackluster commodity-demand & prices (Fig. 14). Nonetheless, labor strike resolution and industrial production recovery may provide demand relief to SS & NPI market, which are positive to SS and NPI demand & prices.

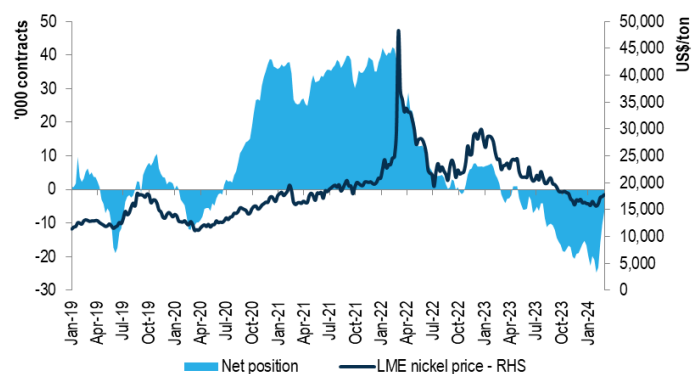
Maintain our sector Neutral rating with ANTM & HRUM as our top pick

With relatively soft demand outlook, we prefer names with an attractive bottom-up story such as **ANTM** (Buy, [report](#)) on its higher Ni ore & gold sales volume and **HRUM** (Buy, [report](#)) on its potential multiples re-rating due to higher nickel contribution. We maintain our sector Neutral rating on potential demand risks from Europe. Downside risks include: slower demand recovery, unfavourable macro backdrop, and higher coal price.

Drivers and sustainability of recent LME nickel price rally

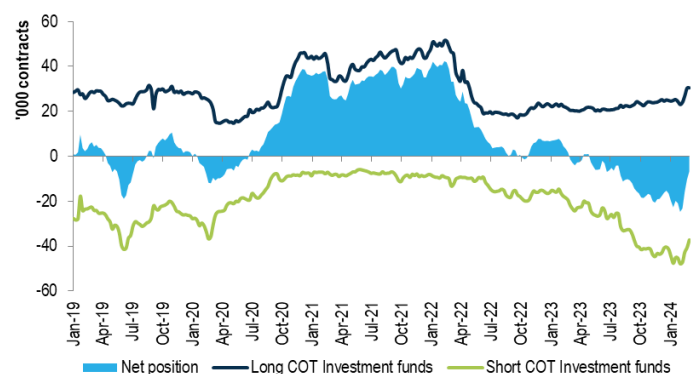
LME nickel prices have rallied by +8% YTD, which we think is mainly driven by traders' action to cover their short-position, as reflected in commitment of traders (COT) long and short position (Fig. 1 & 2). Although Bloomberg and Shanghai Metal Market (SMM) mentioned that the price-rally was mainly caused by the RKAB issues in Indonesia (i.e. late-approval on stricter requirements), we believe this was counter-intuitive, given the lack of price rally in NPI/FeNi prices (flat YTD, Fig. 4), which contributed around c.90% of nickel-products in Indonesia, meaning any disruption in ore production should also led to supply-issues in NPI/FeNi, eventually positive to prices. Note that the previous RKAB-extension issues in Aug/Sep-23 has caused NPI price to rally from US\$12k/t level to US\$14.5k/t at the peak.

Fig. 1: LME nickel price and COT position



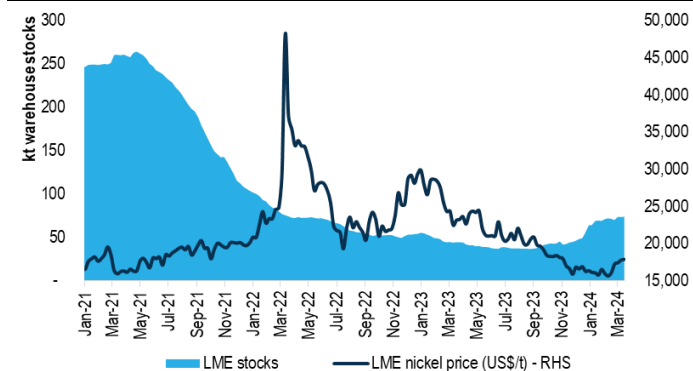
Source: Bloomberg, LME, Indo Premier

Fig. 2: COT traders' long and short position



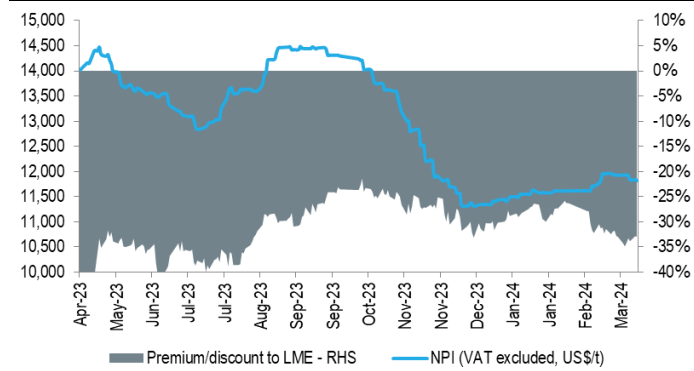
Source: Bloomberg, LME, Indo Premier

Fig. 3: LME nickel price and inventory



Source: Bloomberg, Indo Premier

Fig. 4: NPI price and discount to LME prices



Source: Bloomberg, Indo Premier

As such, we think there are several key factors that could influence prices over short to medium-term, including **further ex-Indo supply-responses**, similar to what we have already seen in the past 4-5 months (Fig. 5), particularly coming from Australia and New Caledonia, in addition to potential **demand-recovery from US and Europe**, albeit we believe it would be dependent on Fed's and ECB's monetary-policy.

China, in our view, would remain an important factor in commodity's demand as they are the biggest consumer of commodities, but thinks a stimulus could be disbursed to prevent the economy from spiraling down ([see report](#)) but **India** is another country that could drive commodities demand in the long-run, following their plan to boost infrastructure development within the country.

Recently, concerns on RKAB has gradually ease as our channel-check with listed and non-listed miners have indicated that more licenses are being approved and thus would eventually ease the tight nickel ore supply situation.

On LME short-covering activities, we think it would be difficult to fully-gauge to what magnitude these traders are willing to do at this point. However, we argue that with continuous supply-responses from nickel players (Fig. 5) in addition to favorable macro backdrop, leading to other base metal prices to rally (i.e. copper, aluminum), we saw lesser possibility on these traders further piling-up their short-position.

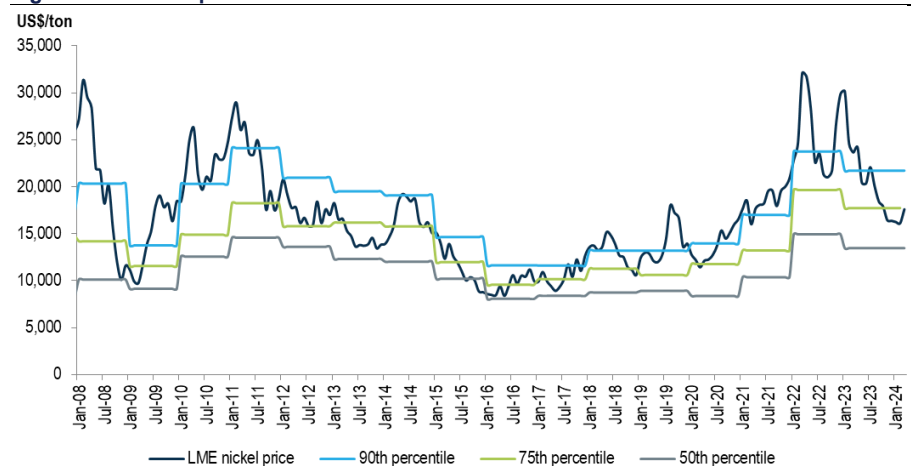
In spite of short-term volatility, over the long-run, we believe that commodity prices would eventually recovered back to its sustainable cash-cost level (i.e. 90th percentile cash costs). Thus, with prices currently stood well below the cost-curve (Fig. 6), we think downside is already relatively minimal, albeit the floor would be at US\$13.5k/t, at 50th percentile cash-costs, a level which was never breached over the past 20-years.

Fig. 5: Nickel supply-responses

Supply response	Date	Assets	Impacted supply (ton)	As % of supply	Location
Bishi (Jingan)	Dec-23	FeNi/NPI	10,000	0.3%	China
Savannah Nickel (Panoramic Resources)	9-Jan, 2024	Ni concentrate	10,000	0.3%	Kimberley, Western Australia
First Quantum Minerals (FQM), POSCO	15-Jan, 2024	HPAL	16,000	0.4%	Ravensthorpe, Western Australia
Wyloo Metals & BHP	21-Jan, 2024	Nickel Mine & Refining	16,000	0.4%	Kambalda, Western Australia
Cosmos (IGO)	31-Jan, 2024	Ni concentrate	14,000	0.4%	Leinster, Western Australia
Koniambo (Glencore)	12-Feb, 2024	FeNi	27,200	0.7%	New Caledonia
Onca Puma (Vale Brazil)	23-Feb, 2024	FeNi	17,000	0.4%	Para, Brazil
Total			110,200	2.9%	

Source: Company data, Shanghai Metal Market, Bloomberg, Indo Premier

Fig. 6: LME nickel price and cash-costs curve

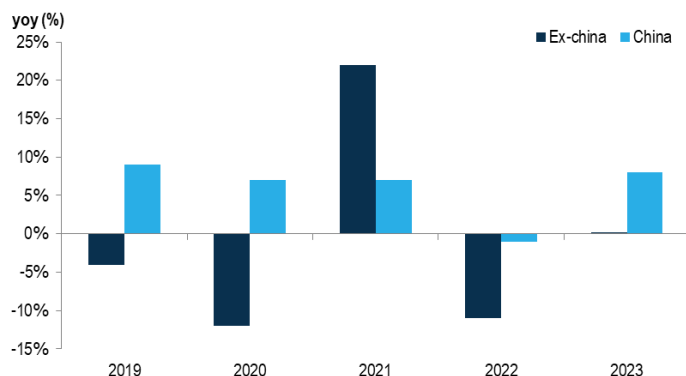


Source: Bloomberg, Company data, Indo Premier estimates

We think there is a potential demand surprise from U.S and Europe, particularly for stainless-steel market (i.e. NPI end-use) – which

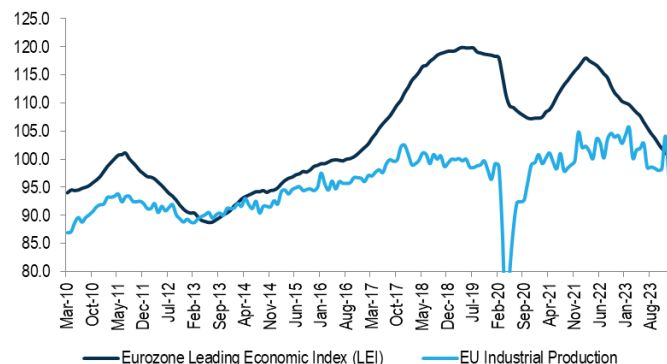
experienced a downturn in ex-China market in FY23 (Fig. 7) while China market grew by +8% yoy in FY23. Industrial production activities in the U.S have been picking-up, reflected in the increase in PMI survey. However, leading indicators in Europe has yet to show any signs of recovery, with leading indicators such as Eurozone leading economic index (LEI) and EU's industrial production activity remained below 100 (Fig. 8).

Fig. 7: Stainless-steel demand growth (%)



Source: MySteel, Indo Premier

Fig. 8: Leading indicators' in EU has remained soft

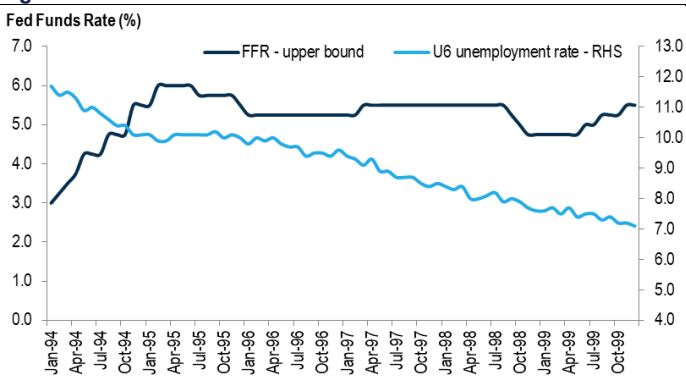


Source: Bloomberg, Indo Premier

Nevertheless, one of the interesting observations from the top-down or macro perspective is the monetary policy of both The Fed's and European Central Bank (ECB). Interest-rate cuts didn't historically always correlated with better demand and/or higher production activity, as it would depend on the magnitude of the rate-cuts and the underlying economic situation during the rate-cuts. In the past, fast-paced rate-cuts such as after post-dot-com bubble and 2008's GFC have led to commodity price sharp decline. On the contrary, slower rate-cuts and then rate-pause in 1995, had fared better for the economy and commodity prices in general (Fig. 9).

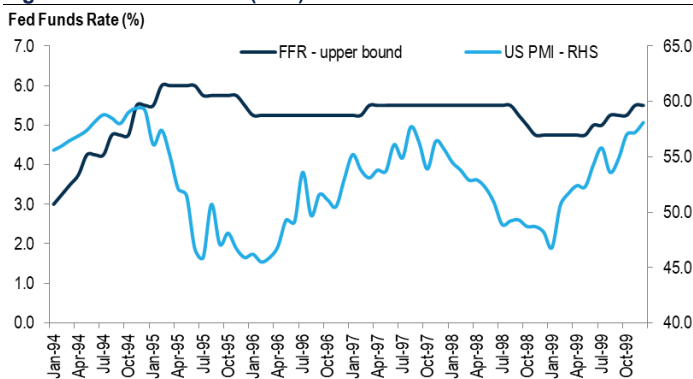
Thus, in spite of the narrative and its constant shift, we think it's better to look at the underlying economic data such as labor demand-supply, unemployment rate, as well as industrial activities. We think 1995's Fed rate-cuts of around 75 bps and then long-pause resulted in soft landing, as underlying economic data such as US unemployment data (i.e. including part-time workers) kept declining, indicating a strong labor demand and economy in general. During this time, commodity prices in general have also performed relatively well post-75bps rate-cuts and rate-pause up until 1997, thanks to uptick in industrial activity/PMI (Fig. 10).

Fig. 9: 1995's Fed-rate cuts



Source: Bloomberg, Indo Premier

Fig. 10: Fed Funds Rate (FFR) & US PMI



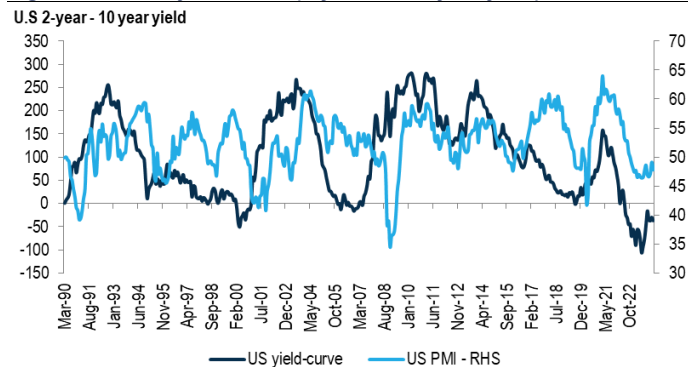
Source: Bloomberg, Indo Premier

However, there are also period of higher-for-longer such as in 2006 where The Fed is considered behind the curve, despite the declining industrial activity (i.e. PMI) and rising sub-prime mortgage default rate (%), which eventually trigger the housing crisis in the U.S as well as commodity prices.

Another data-point that is also often being used to detect potential recession and economic turnaround is also the inversion of yield-curve and the steepening of the curve, but each steepening of the yield curve (i.e. 2-year yield vs 10-year yield, Fig. 11) – similar to rate-cuts, doesn't always translate into recession nor indicating bullish signal, but would much rather contingent on the economic situation. Yield-curve has been inverted over the past two-years, which has indicated a tight credit supply for the private sector. Historically, sudden steepening post-inversion has yet to end well for commodity prices during the past 40 years (Fig. 12) with the exception of 2019 & Covid-19 pandemic.

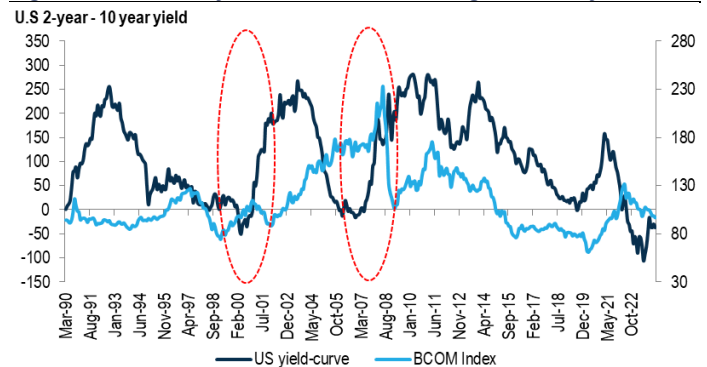
Thus, the biggest tail-risks from macro-perspective are: 1) U.S Fed are late in cutting-rates especially if the underlying economic-data is not as resilient as it currently stands – unemployment data have started to inch-up in recent months, but further data is needed to take further conclusion (Fig. 13), 2) European Central Bank (ECB) being too restrictive on its interest-rate policy as a result of being behind the curve vs. U.S, adding another uncertainty to Eurozone's already lackluster economy (Fig. 8). The latter scenario is of a higher likelihood, as things currently stands, and have a relatively huge impact to general commodity and nickel demand in particular as lower EU's industrial activity (despite strong U.S economy and vice versa) have historically led to lackluster commodity-demand & prices (Fig. 14).

Fig. 11: Inverted yield curve (2-year vs. 10-year yield)



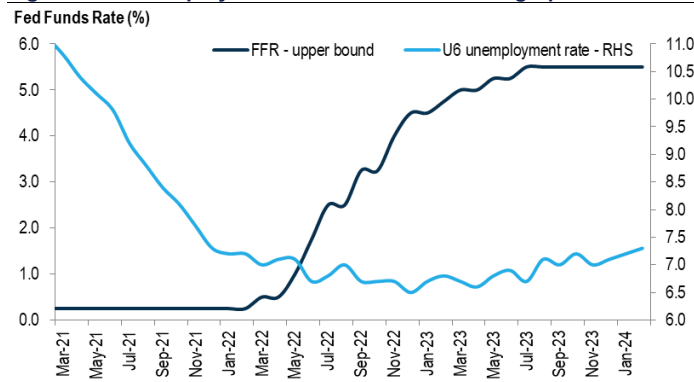
Source: Bloomberg, Indo Premier

Fig. 12: Inversion in yield curve vs. Bloomberg commodity index



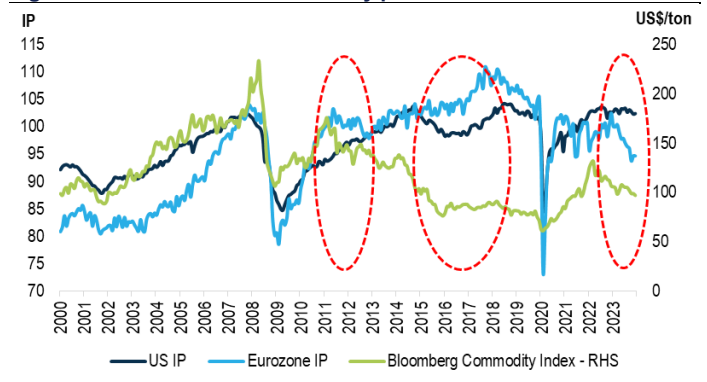
Source: Bloomberg, Indo Premier

Fig. 13: U.S unemployment rate has started inching-up



Source: Bloomberg, Indo Premier

Fig. 14: US & EU PMI vs. commodity prices



Source: Bloomberg, Indo Premier

Impact to nickel supply and demand and outlook to 1Q24F

As we remain skeptical on demand recovery in EU in addition to potential tail-risks from macro-economy perspective, we assume NPI demand to only grow by +4% yoy in FY24F, as we expect slight recovery in the U.S stainless-steel market and resilient growth in China. In spite of it, we lower our NPI supply-demand (S-D) balance to only slight surplus (+12kt) for FY24F to take into account recent RKAB issues, which according to our channel-check has led to slightly lower NPI grade (i.e. reduction in NPI volume in Ni content basis) especially in 1Q24F. We also take into account recent supply responses (Fig. 5) from Australia and New Caledonia on Class-1 nickel and reduction in Chinese NPI production for Class-2 nickel (Fig. 15). We also lower our NiSO₄ supply assumptions as both Ravensthorpe and Goro are facing financial difficulties and lower production, leading to recent rally in battery-grade nickel prices (i.e. NiSO₄ & MHP, Fig. 16 & 17) and higher MHP payability.

Our key price assumption changes:

NPI – We lower our NPI price assumptions in FY24F to US\$12.5k/t (from US\$13k/t) on lower-than-expected post-CNY restocking activity in addition to recent recovery in Chinese RKEF's cash margins (Fig. 18), albeit still in negative territory, its cash margin is already nearing break-even, limiting potential upside in NPI price rally.

Fig. 15: Nickel supply-demand (S-D) balance & price assumptions

Supply-demand balance (kt)	2019	2020	2021	2022	2023	2024F	2025F
LME Nickel							
Refined production	2,529	2,533	2,717	3,101	3,516	3,662	3,952
Supply growth yoy (%)		0.1%	7.3%	14.1%	13.4%	4.2%	7.9%
Refined consumption	2,451	2,445	2,804	2,938	3,162	3,585	3,880
Demand growth yoy (%)		-0.2%	14.7%	4.8%	7.6%	13.4%	8.2%
Market balance	78	88	(87)	163	354	77	72
Nickel sulphate							
Refined production				479	548	676	777
Supply growth yoy (%)					14.5%	23.3%	15.0%
Refined consumption				494	531	630	778
Demand growth yoy (%)					7.5%	18.8%	23.4%
Market balance				(15)	17	46	(1)
Class-2 nickel (NPI/FeNi)							
Refined production	1,446	1,493	1,681	1,884	1,928	1,925	2,034
Supply growth yoy (%)		3.3%	12.5%	12.1%	2.3%	-0.2%	5.7%
Refined consumption	1,615	1,714	1,894	1,877	1,839	1,913	2,009
Demand growth yoy (%)		6.1%	10.5%	-0.9%	-2.0%	4.0%	5.0%
Market balance	(169)	(221)	(213)	7	89	12	26
Price forecast							
LME nickel (US\$/t)	13,917	13,804	18,459	25,720	21,505	17,000	17,000
Nickel pig iron 8-12% (US\$/t)	13,256	13,020	17,293	18,761	14,226	12,500	13,250
Battery-grade nickel sulphate (US\$/t)					19,308	16,500	17,000
Mixed hydroxide precipitate (US\$/t)					15,287	13,200	13,600

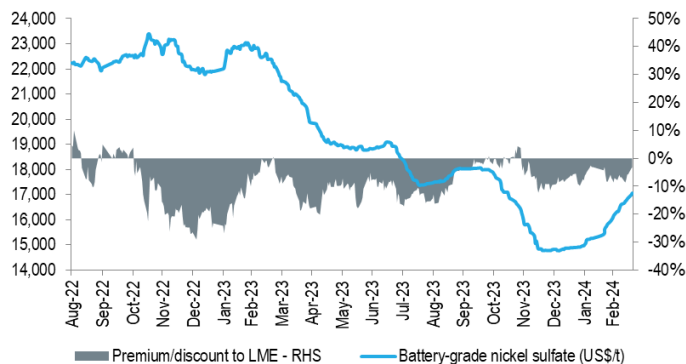
Source: Company data, Shanghai Metal Market, Bloomberg, Indo Premier

NiSO₄ & MHP – We raised our nickel sulphate (NiSO₄) and MHP price assumptions in FY24F to US\$16.5k/t (previously US\$15k/t) and US\$13.2k/t (previously at ~US\$12k/t) owing to recent price recovery in other battery

materials (i.e. lithium hydroxide & carbonate) and tight MHP supply, thanks to lower than expected production of PT Huafei,

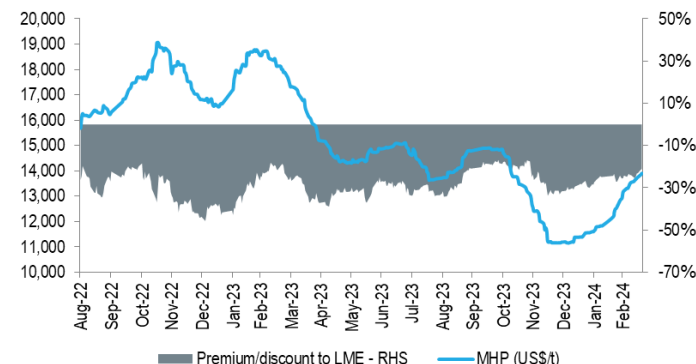
LME Nickel – We maintained our FY24F LME price assumptions to average at US\$17k/t, but raised our FY25F price assumptions to US\$17k/t (from US\$16.5k/t) as we expect lower supply addition following the soft price environment.

Fig. 16: NiSO4 prices



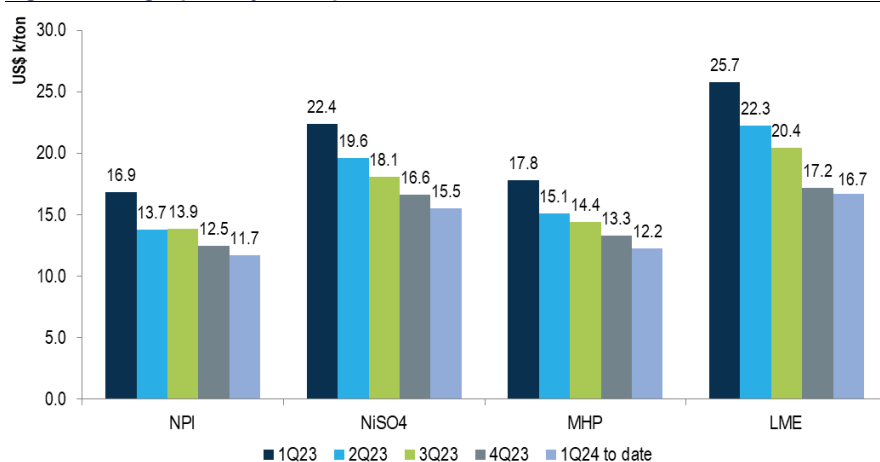
Source: Bloomberg, Shanghai Metal Market, Indo Premier

Fig. 17: MHP prices



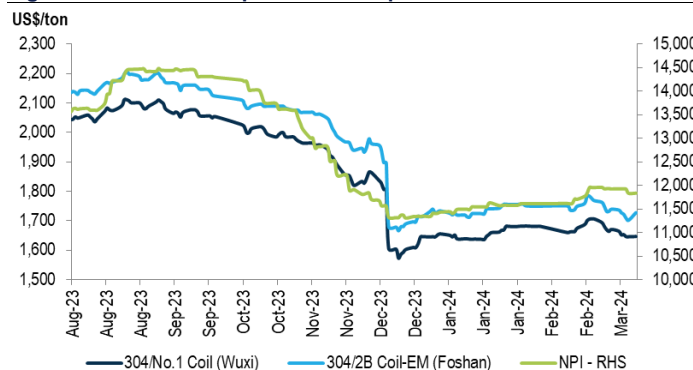
Source: Bloomberg, Shanghai Metal Market, Indo Premier

Fig. 18: Average quarterly nickel price



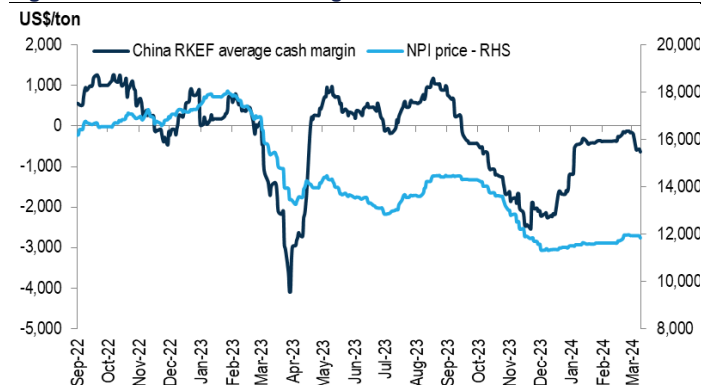
Source: Company data, Bloomberg, Shanghai Metal Market, Indo Premier

Fig. 19: Stainless steel prices vs. NPI prices



Source: Bloomberg, Company data, Indo Premier

Fig. 20: China's RKEF cash margin



Source: Bloomberg, SMM, Indo Premier

Fig. 21: Peers comparison

Ticker	Company	Rating	Target price (Rp/share)	P/E			EV/EBITDA			Dividend yield (%)		
				23F	24F	25F	23F	24F	25F	23F	24F	25F
ADMR IJ	Adaro Minerals Indonesia	Buy	1,650	9.2	9.0	9.2	7.9	8.1	7.4	N/A	N/A	N/A
ANTM IJ	Aneka Tambang	Buy	1,800	11.5	12.1	10.8	7.3	6.7	6.0	4.8%	4.4%	4.1%
HRUM IJ	Harum Energy	Buy	1,800	8.3	9.3	8.1	3.0	6.8	5.8	N/A	N/A	N/A
INCO IJ*	Vale Indonesia	Hold	4,250	9.9	33.1	124.9	4.1	9.8	12.7	2.2%	N/A	N/A
MBMA IJ	Merdeka Battery Materials	Buy	750	269.3	22.5	11.8	31.7	10.5	7.3	N/A	N/A	N/A
MDKA IJ	Merdeka Copper Gold	Buy	3,200	N/A	86.3	47.6	16.8	11.2	9.9	N/A	N/A	N/A
NCKL IJ	Trimegah Bangun Persada	Buy	1,100	9.8	8.3	6.8	7.0	5.5	4.2	N/A	3.1%	3.6%

Source: Company data, Bloomberg, Indo Premier estimates

SECTOR RATINGS

- OVERWEIGHT : An Overweight rating means stocks in the sector have, on a market cap-weighted basis, a positive absolute recommendation
- NEUTRAL : A Neutral rating means stocks in the sector have, on a market cap-weighted basis, a neutral absolute recommendation
- UNDERWEIGHT : An Underweight rating means stocks in the sector have, on a market cap-weighted basis, a negative absolute recommendation

COMPANY RATINGS

- BUY : Expected total return of 10% or more within a 12-month period
- HOLD : Expected total return between -10% and 10% within a 12-month period
- SELL : Expected total return of -10% or worse within a 12-month period

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