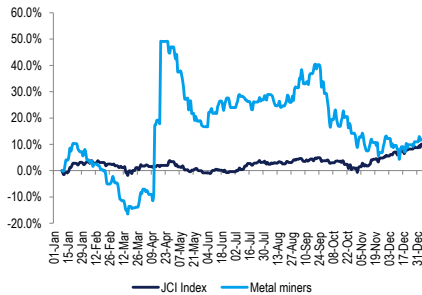


Sector Update | 9 January 2024

Sector Index Performance

| | 3M | 6M | 12M |
|-----------------|--------|--------|-------|
| Absolute | -12.9% | -17.3% | 5.7% |
| Relative to JCI | -17.4% | -24.3% | -1.9% |



Summary Valuation Metrics

| P/E (x) | 2023F | 2024F | 2025F |
|---------------|-------|-------|-------|
| ADMR IJ | 9.9 | 8.6 | 8.8 |
| ANTM IJ | 11.2 | 10.0 | 8.7 |
| HRUM IJ | 9.4 | 10.7 | 9.9 |
| INCO IJ | 11.2 | 20.6 | 36.8 |
| MBMA IJ | 185.7 | 19.8 | 12.0 |
| MDKA IJ | N/A | 30.4 | 29.3 |
| NCKL IJ | 9.8 | 7.0 | 6.3 |
| EV/EBITDA (x) | 2023F | 2024F | 2025F |
| ADMR IJ | 7.6 | 7.8 | 7.1 |
| ANTM IJ | 6.9 | 6.3 | 5.4 |
| HRUM IJ | 3.6 | 5.4 | 7.0 |
| INCO IJ | 4.2 | 8.0 | 9.9 |
| MBMA IJ | 34.1 | 8.6 | 6.3 |
| MDKA IJ | 17.3 | 8.0 | 7.5 |
| NCKL IJ | 7.0 | 4.5 | 3.6 |
| Div. Yield | 2023F | 2024F | 2025F |
| ADMR IJ | N/A | N/A | N/A |
| ANTM IJ | 4.8% | 4.5% | 5.0% |
| HRUM IJ | N/A | N/A | N/A |
| INCO IJ | N/A | 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% | 4.3% |

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

Adverse impact from IRA FEOC interpretation

- In Dec-23, U.S Department of Energy (DOE) released interpretation of FEOC (foreign entity of concern; China, Russia, North Korea, & Iran).
- Note that companies that have more than 25% ownership/control by a FEOC won't be eligible for US\$7.5k EV-tax credit under the U.S IRA.
- We think U.S IRA would be an overhang to Indonesian nickel miners. Maintain sector Neutral rating with MDKA and ADMR as top pick.

More clarity on foreign entity of concern (FEOC) interpretation

U.S Department of Energy (DOE) and Treasury have released proposed guidance of interpretation on FEOC that would determine whether particular battery component or critical mineral is eligible for US\$7.5k/unit electric-vehicle (EV) tax credit (Fig. 3). U.S has defined FEOC as any foreign entity that is "owned by, controlled by, or subject to the jurisdiction or direction of a government of a covered nation"; note that countries that fall into these covered nations are China, Russia, North Korea, and Iran. It is also stated that starting FY24F, any battery-component companies (FY25F for critical minerals, Fig. 1) that have 25% or more ownership/control (directly or indirectly) by FEOC entities will not be eligible for the tax credit under the U.S IRA. We think the impact of such interpretation goes beyond nickel, as battery metals such as lithium, graphite (for anode) mainly involved China (c.60% of global refined lithium supply). In addition, in a typical NMC811 battery, the value of cathode (which mostly controlled by Chinese companies) has exceeded the eligibility threshold for EV-tax credit (Fig. 2), ruling out the tax-credit eligibility for majority of Indonesian nickel miners.

Impact to Indonesian nickel miners; would there be any exemption?

We assess the ownership stake in each of NPI-matte smelter and HPAL in Indonesia and observed that only battery-materials from Eramet-BASF HPAL – which is yet to be completed nor built – would be eligible for U.S tax credit (Fig. 4 & 5). However, we argue that without Indonesia and China, IRA-eligible supply won't be able to keep-up with the demand growth in both nickel and lithium (Fig. 6 & 7), potentially leading to cost-inflation of EV and may set back EV-penetration among U.S mass-market population.

Limited FTA partnership is an upside risk, but has yet to materialize

Nonetheless, to gain EV tax-credit eligibility, Indonesia government initially proposed to the U.S government to sign a limited FTA (free-trade agreement) on critical minerals with U.S government, similar to Japan. Note that U.S FTA partners are eligible to obtain half of the tax credit through critical minerals and full amount of the tax credit, if the manufacturing of the battery component is conducted in North America region (Fig. 3). While securing the deal with the U.S government is pivotal, the deal has yet to materialize as U.S government are concerned with the involvement of China in Indonesia, an FEOC, based on our checks. U.S senators have also cited pushbacks against Chinese involvement in Indonesia.

Maintain our sector Neutral rating, prefer non-nickel names

We maintain our sector Neutral rating and our preference on non-nickel-related names: MDKA (Buy) and ADMR (Buy) given soft nickel price outlook, overhang on U.S IRA, and qoq NP decline in 4Q23F amid soft prices. Upside risks include better than expected demand recovery, driven by seasonality after Chinese New Year and improving economic outlook.

Impact on regional peers

So far, Chinese-based EV equities share price such as CATL have declined by c.10% since FEOC guidance was released by U.S Department of Energy (DOE) as U.S continue to limit Chinese components on EV by making it ineligible for U.S tax credit. Meanwhile, on the other hand, Korean EV-battery component makers (i.e. SK Tech, Ecopro) rose by 10-22% since the news was out, as Korea is currently U.S FTA partner.

We think Chinese-involvement within the projects in Indonesia nickel would add further hurdle for critical minerals coming out of Indonesia to be accepted by Western countries. Furthermore, recent safety incident happening in IMIP (Indonesia Morowali Industrial Park) on Dec-23 could provide additional reasons for the U.S to not grant a limited FTA partnership with Indonesia, in our view, citing safety concerns.

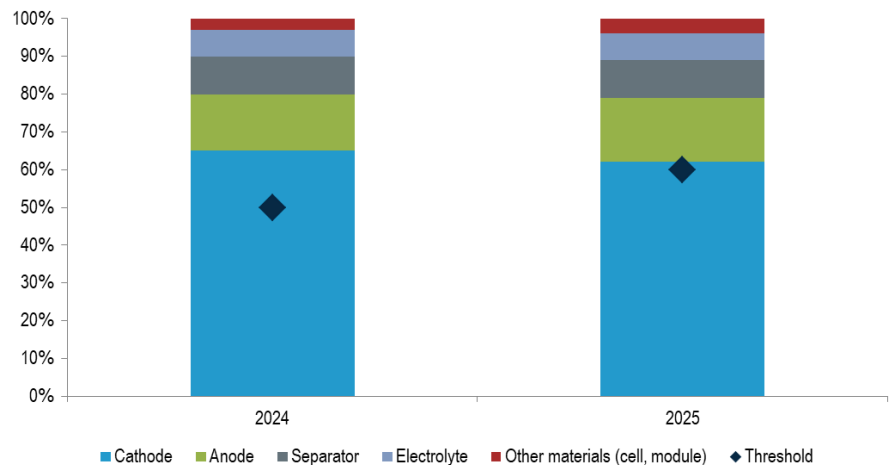
However, on the positive side, we think the U.S would eventually realize that Indonesia and China would play a pivotal role in battery-metals, not only in nickel, but also in lithium, graphite, and others, and limiting the nickel from Indonesia would lead to EV costs-inflation and setting back green energy-transition, countering the original purpose of inflation reduction act (IRA).

Fig. 1: U.S EV tax credit timeline

| Clean vehicle credit requirement | 2024 | 2025 |
|---|------|------|
| Foreign entity of concern (battery component) | Yes | Yes |
| Foreign entity of concern (critical minerals) | No | Yes |
| Battery component % | 60% | 60% |
| Critical minerals % | 50% | 60% |

Source: U.S Department of Energy (DOE), Indo Premier

Fig. 2: Percentage of critical minerals estimation within a typical nickel-based batteries



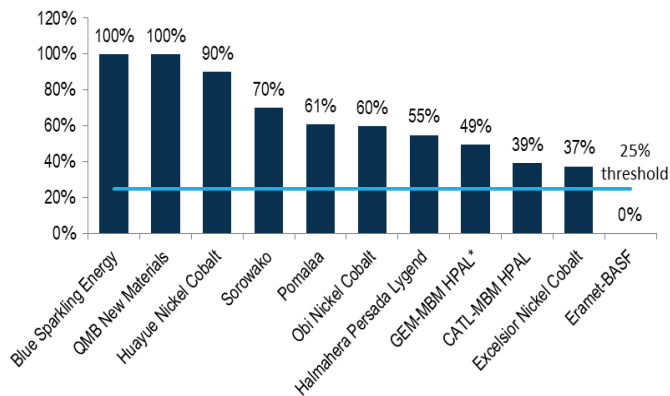
Source: Bloomberg Intelligence, Indo Premier

Fig. 3: Summary on U.S IRA

| | Critical Minerals | Battery Manufacturing |
|---|--|---|
| Tax credit | US\$3,750 | US\$3,750 |
| Mechanism | Extraction or 'value-addition' (More than 50% of the increase in value through either extraction or processing occurs within the specified region) | |
| Region | US-FTA partners (including Japan) or recycled in North America | North America |
| Minimum value % | - 2023: 40% - 2024: 50% - 2025: 60% - 2026: 70% - 2027: 80% | - 2023: 50% - 2024: 60% - 2025: 70% - 2026: 80% - 2027: 90% - 2028: 100% |
| Foreign entity of concern exclusion year | 2025 | 2026 |

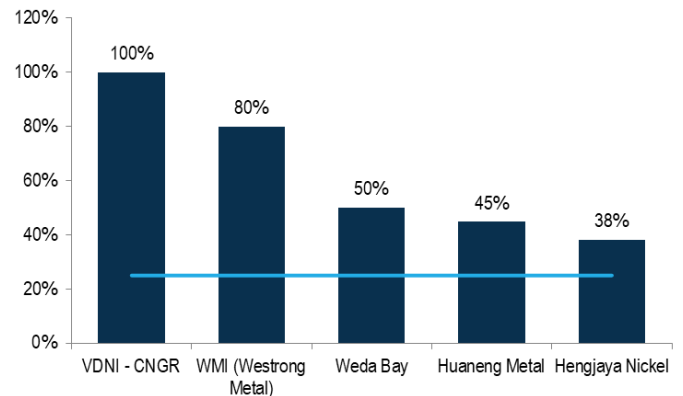
Source: The White House, Indo Premier

Fig. 4: FEOC's effective ownership in Indonesian HPAL project (existing & upcoming)



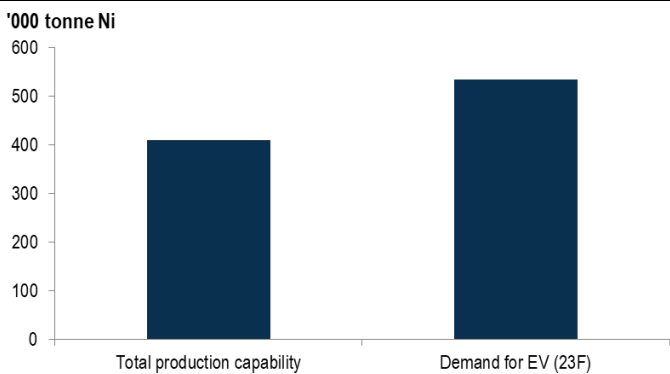
Source: Bloomberg, Company data, Indo Premier estimates

Fig. 5: FEOC's effective ownership in Indonesian NPI-to-matte project (existing & upcoming)



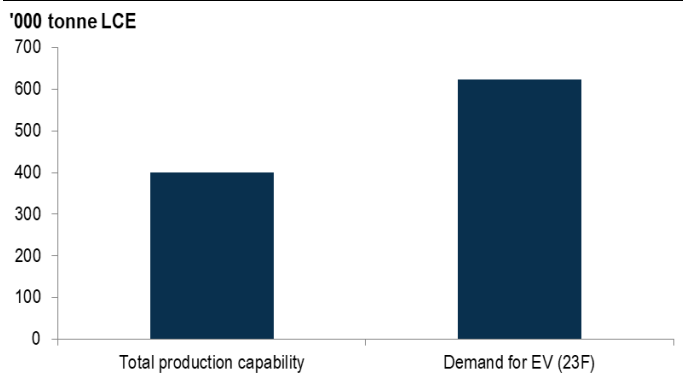
Source: Bloomberg, Company data, SMM, Indo Premier estimates

Fig. 6: 2023's refined nickel production capacity in US FTA partners vs consumption



Source: Bloomberg, Indo Premier

Fig. 7: 2023's refined lithium production capacity in US FTA partners vs consumption



Source: Bloomberg, Indo Premier

Fig. 8: Peers comparison table

| 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 | 9.9 | 8.6 | 8.8 | 7.6 | 7.8 | 7.1 | N/A | N/A | N/A |
| ANTM IJ | Aneka Tambang | Buy | 2,100 | 11.2 | 10.0 | 8.7 | 6.9 | 6.3 | 5.4 | 4.8% | 4.5% | 5.0% |
| HRUM IJ | Harum Energy | Buy | 1,750 | 9.4 | 10.7 | 9.9 | 3.6 | 5.4 | 7.0 | N/A | N/A | N/A |
| INCO IJ | Vale Indonesia | Hold | 5,560 | 11.2 | 20.6 | 36.8 | 4.2 | 8.0 | 9.9 | N/A | N/A | N/A |
| MBMA IJ | Merdeka Battery Materials | Buy | 940 | 185.7 | 19.8 | 12.0 | 34.1 | 8.6 | 6.3 | N/A | N/A | N/A |
| MDKA IJ | Merdeka Copper Gold | Buy | 3,500 | N/A | 30.4 | 29.3 | 17.3 | 8.0 | 7.5 | N/A | N/A | N/A |
| NCKL IJ | Trimegah Bangun Persada | Buy | 1,250 | 9.8 | 7.0 | 6.3 | 7.0 | 4.5 | 3.6 | N/A | 3.1% | 4.3% |

Source: Bloomberg, Indo Premier

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

ANALYSTS CERTIFICATION

The views expressed in this research report accurately reflect the analyst's personal views about any and all of the subject securities or issuers; and no part of the research analyst's compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed in the report.

DISCLAIMERS

This research is based on information obtained from sources believed to be reliable, but we do not make any representation or warranty nor accept any responsibility or liability as to its accuracy, completeness or correctness. Opinions expressed are subject to change without notice. This document is prepared for general circulation. Any recommendations contained in this document do not have any regard to the specific investment objectives, financial situation and the particular needs of any specific addressee. This document is not and should not be construed as an offer or a solicitation of an offer to purchase or subscribe or sell any securities. PT Indo Premier Sekuritas or its affiliates may seek or will seek investment banking or other business relationships with the companies in this report.