

8 December 2020

Basic Materials | Mining

Nickel Mining

Overweight

Powering Vehicles Of The Future; Initiate O/W

- Initiating coverage; OVERWEIGHT.** Despite being cautiously optimistic on near-term nickel prices after a 49% rally from March's bottom, we are upbeat on long-term demand – given stable demand from the stainless steel industry and additional growth avenue from electric vehicle (EV) battery production. 2021 should be an interesting period to monitor Indonesia's nickel mining industry. This is after the nickel ore ban in 2020, development of rotary kiln electric furnace (RKEF) and high pressure acid leach (HPAL) smelters, and potential battery factory investments.
- Recovering from COVID-19 slump.** Nickel prices have recovered to as high as USD16,400/tonne, climbing since bottoming in March. The price recovery was driven by the lack of ore supply, given Indonesia's ore exports ban. Hence, upon the reopening of China's stainless steel industry and the rebound in nickel-importing countries' Purchasing Managers' Indices (PMIs), ore supply remains tight. As the major nickel consumer is China's stainless steel industry, production recovery largely impacted the nickel price rebound. China's stainless steel industry commands 79% of global production. Although the whole industry is poised to see a c.9-10% decline this year, 2Q20's numbers indicate that China's production grew 29% QoQ. With nickel pig iron (NPI) smelters in China facing higher processing prices due to the new ore supplies – the bulk from the Philippines – nickel prices are likely to remain high, as smelters are unlikely to lower their prices to cover costs. Additionally, with the transition from President Donald Trump to President Elect Joe Biden in 2021, the expectation of the US-China trade war de-escalating should bring positive sentiment to the industry.
- Potential growth driver: EV batteries.** As cobalt is the most expensive component in EV battery production – contributing c.40% of EV production costs – Tesla (TSLA US, NR) has announced its intent to lower cobalt use while increasing nickel content in its batteries. With this, it claims it can sell a USD25,000 vehicle – ie USD10,000 cheaper than its cheapest model, the Model 3. EV battery demand is poised to accelerate towards 2027 at a CAGR of 22% towards c.800GWh (>3x 2019's amount), with nickel as the largest component in its production process.
- Preparing to meet the new demand.** Indonesia is currently focusing on the construction of RKEF and HPAL smelters, which – in our view – will ultimately spread into the development of and investments in more intermediate products, eg stainless steel and lithium-ion (li-ion) batteries. There are currently three HPAL smelters under construction – they are designed to extract low-grade nickel (<1.5%), which is the raw material for EV batteries. Another three are undergoing feasibility studies, one of which is owned by Vale Indonesia (INCO). Preparations and investments in li-ion batteries and raw materials production started this year. The two notable large projects are the formation of the state-owned enterprise (SOE) battery holding company that comprises Aneka Tambang (ANTM), Mining Industry Indonesia (MIND ID), Pertamina, and Perusahaan Listrik Negara (PLN). Another potential investor is Tesla, which has reportedly shown interest in building a nickel cobalt aluminium (NCA) li-ion battery factory here.
- Cautiously optimistic for the near term with long-term price upsides.** We expect nickel prices to average at the USD15,000/tonne level in FY21, a 15% upside from FY20's average, with upsides towards the USD18,000/tonne mark going into 2025-2027, given the expected acceleration in EV battery demand. While FY21F earnings upside remains, nickel's price point may be prone to corrections from the current level.

Stocks Covered 2
 Rating (Buy/Neutral/Sell): 2/0/0
 Last 12m Earnings Revision Trend: Positive

Top Picks

Aneka Tambang (ANTM IJ) – BUY
 Vale Indonesia (INCO IJ) – BUY

Target Price

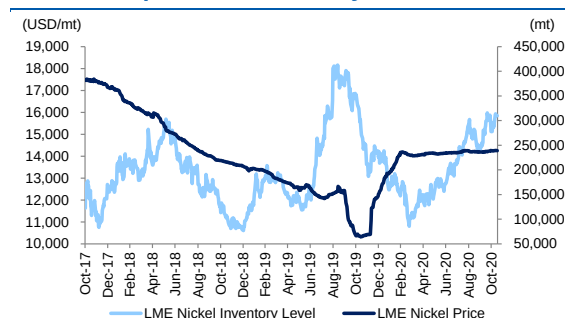
IDR1,600
 IDR5,900

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LME nickel price and inventory movement



Source: Company data, RHB

Company Name	Rating	Price	Target	% Upside	P/E (x)	P/B (x)	Yield (%)
				(Downside)	Dec-20F	Dec-20F	Dec-20F
Aneka Tambang	BUY	IDR 1,280	1,600	25.0	35.1	1.7	N/A
Vale Indonesia	BUY	IDR 5,100	5,900	15.7	520.9	24.9	N/A

Source: Company data, RHB

Investment Thesis

Cautious on near-term price surge, optimistic for the long-term growth potential

After the nickel price surge in 2019 – triggered by Indonesia's nickel ore export ban – prices for of commodity have subsequently corrected, driven by demand concerns and the COVID-19 pandemic – the latter has worsened demand expectations. Nevertheless, prices have recovered back to USD16,100 per tonne, climbing since its bottom in March.

This price recovery was driven by the reopening of China's stainless steel industry and rebound in nickel-importing countries' PMIs. With nickel prices at this level, we are adopting a cautious view, given that the price of this commodity is prone to some correction.

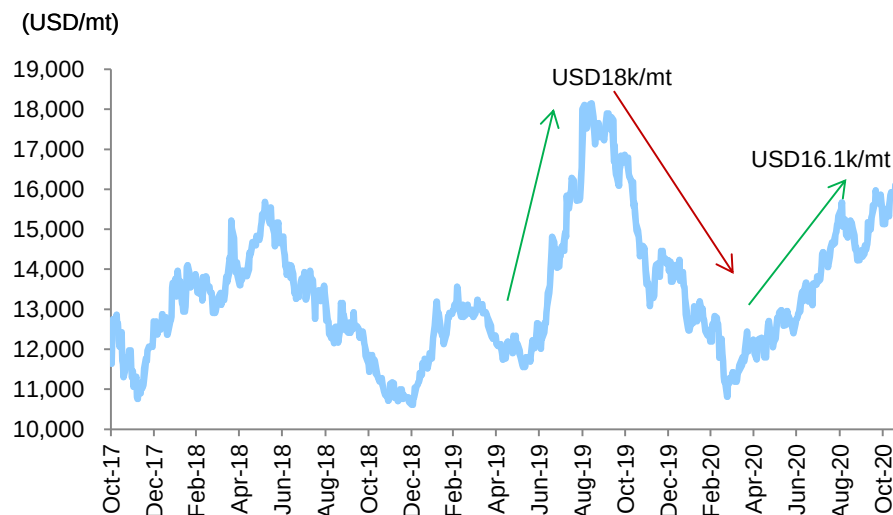
However, we are optimistic on nickel's long-term outlook, given the stainless steel industry's stable growth and additional demand from EV battery production. We expect nickel prices to average at USD15,000 per tonne in FY21F, which represents a 15% upside from FY20's average. Going into 2025-2027, upsides are towards the USD18,000 per tonne level, given the expected acceleration in EV battery demand.

2019 was an eventful year for nickel

Triggered by the Government's decision to accelerate the nickel ore export ban to Jan 2020 from 2022, nickel prices surged – reaching the USD18,000 per tonne peak in Sep 2019. Indonesia currently sits on the world's largest reserves of nickel (21m tonnes), which represents 23.7% of total reserves. It also made up 29.6% of 2019's total production.

Consequently, the nickel ore export ban largely impacted global nickel prices. However, by October, prices started to correct, brought about by cuts in China's economic growth forecasts by the International Monetary Fund and World Bank due to the impact from the trade war with the US. Until end 2019, London Metal Exchange's (LME) nickel prices have corrected by a sharp 23% from their peak. The correction was then worsened by COVID-19, which brought nickel prices to as low as USD10,800 per tonne by late March.

Figure 1: LME nickel price movement



Source: Bloomberg

- ◆ Nickel prices surged in mid-2019 when the Government accelerated the nickel ore export ban to Jan 2020 from 2022 (announced in Aug 2019)
- ◆ After prices reached their USD18,000/tonne peak, they corrected on concerns over demand, as China's GDP forecast was slashed. This was subsequently followed by the pandemic, which lowered prices further
- ◆ By March/April, China had successfully contained COVID-19, which led to a recovery in stainless steel production

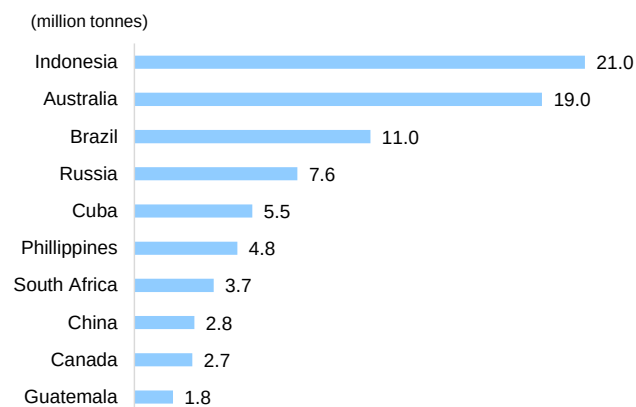
Nickel supply: Indonesia plays a huge part

Indonesia currently sits on the world's largest reserves of nickel at 21m tonnes, or 23.4% of the global total – followed by Australia and Brazil. In terms of producing mines, the country makes up c.29.6% of total global production, with c.800,000 tonnes per year. This is followed by the Philippines; its production numbers are similar to Indonesia and it largely exports its output to China.

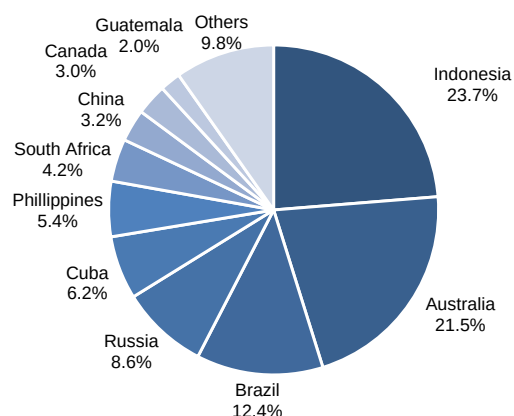
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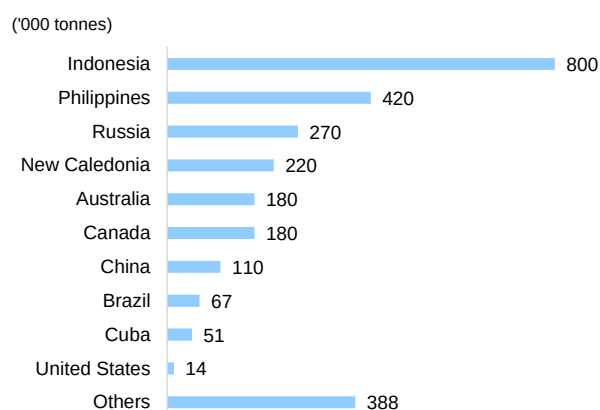
This was why – when the Government announced the nickel ore export ban in 2019 – the impact to nickel prices was substantial. Until that period, Indonesia still largely exported nickel ore (c.30% from ANTM). The Government's ore ban was aimed at increasing production in more intermediate products after various smelter projects are completed – a large sum of such projects are slated for completion by 2022-2025.

Figure 2: Global nickel reserves by country (in m tonnes)

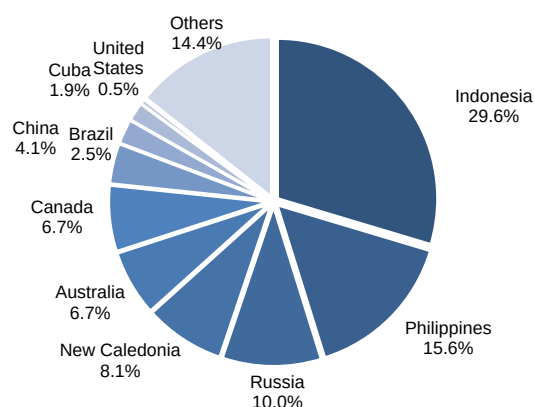
Source: US Geological Survey

Figure 3: Global nickel reserves by country (percentage of the world's total)

Source: US Geological Survey

Figure 4: Global nickel production by country (2019 – in '000 tonnes)

Source: US Geological Survey

Figure 5: Global nickel production by country (2019 – in percentage of the world's total)

Source: US Geological Survey

Nickel demand: China leads in nickel imports

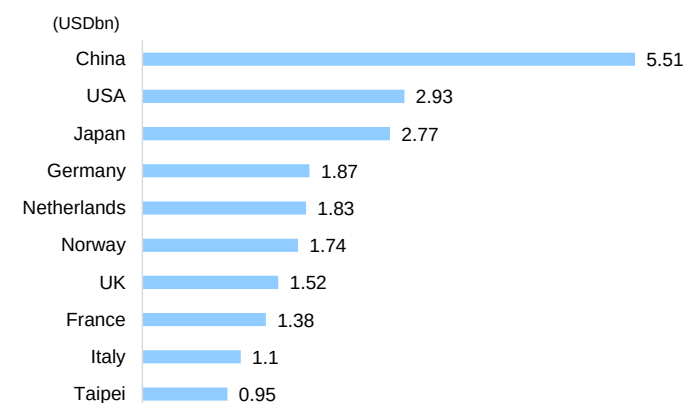
China, as at 2019, is the largest nickel-importing country, with USD5.5bn of global nickel imports, or 21% of the total. This is followed by the US, Japan, and Germany. The bulk of imports into the East Asian nation are earmarked for the country's stainless steel industry.

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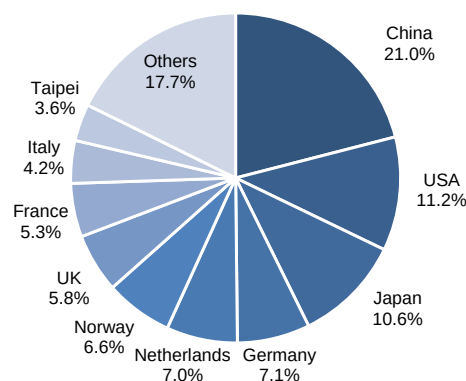
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Figure 6: Global nickel imports by country (2019 – in USDbn)

Figure 7: Global nickel imports by country (2019 – in percentage of the world's total)



Source: Statista



Source: Statista

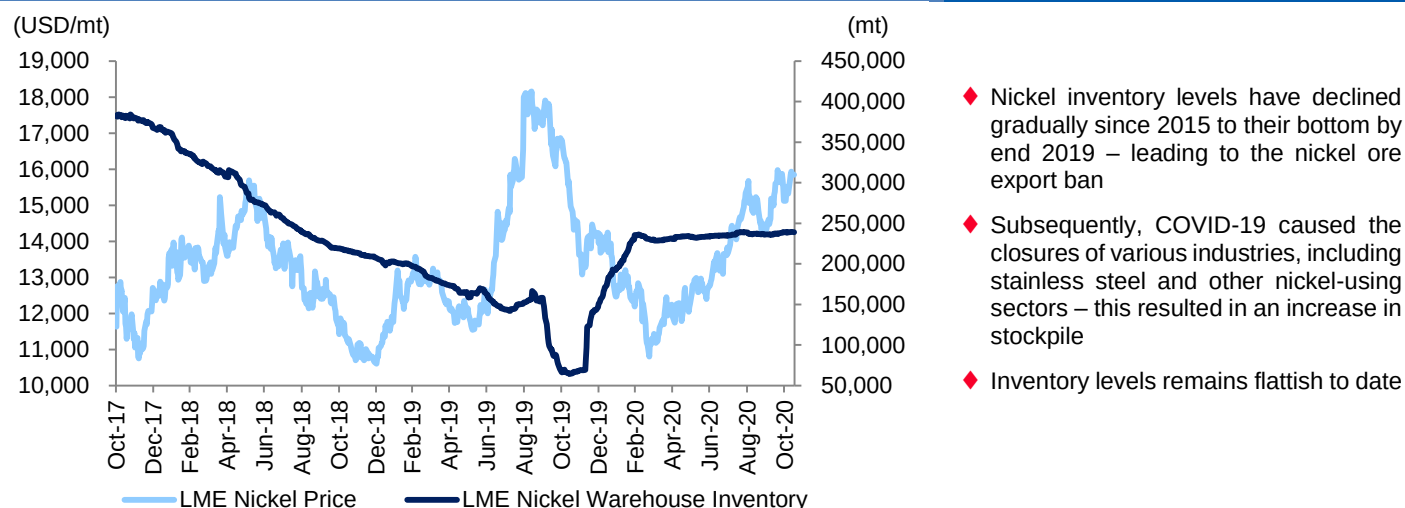
Resurgence in prices on expectations of an economic recovery with tight ore supply

Even during the ongoing pandemic, the global PMI has shown a V-shaped recovery, bouncing back from the bottom in mid-March. The trend goes in line with the largest of the nickel importing countries: China, the US, Japan, and Germany, which control c.50% of global nickel imports.

All four of these countries have seen their respective PMIs recovering to pre-COVID-19 levels, which implies that industries using nickel as a raw material have reopened after some downtime during the early parts of the pandemic. Expectations of production normalisation going into 2021 have resulted in nickel prices rebounding 49% in eight months (USD16,115 per tonne) from its bottom in March (USD10,806 per tonne). This was also largely driven by the reopening of China's stainless steel industry in 2Q20.

With the imposition of Indonesia's nickel ore export ban, Chinese smelters face higher costs in procuring ore from other countries, which is why they are unlikely to lower smelted nickel products – eg NPI and ferronickel – to cover their costs.

Figure 8: LME nickel price and inventory level movement



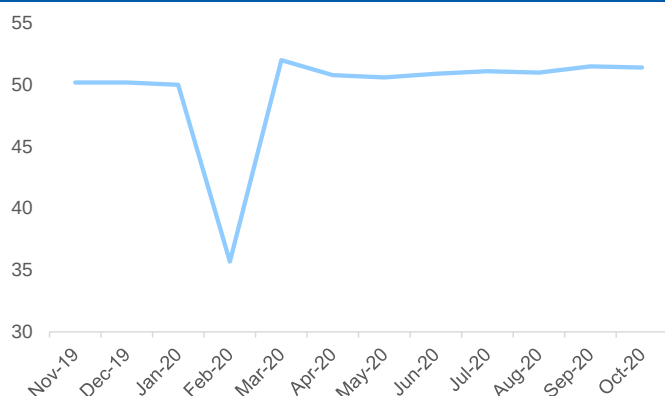
Source: Bloomberg

Despite prices already recovering to the current USD16,000 per tonne level – on expectations of a post-pandemic economic recovery – inventory remains at relatively the same levels since the early days of COVID-19. Once demand completely recovers and inventory starts to decline, we may then see further upsides for nickel prices.

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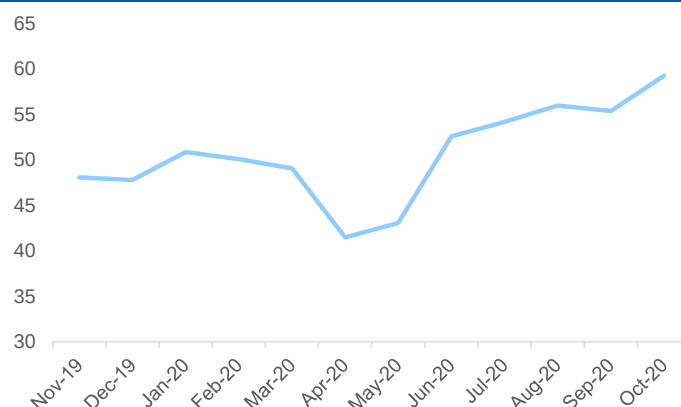
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Figure 9: China's PMI



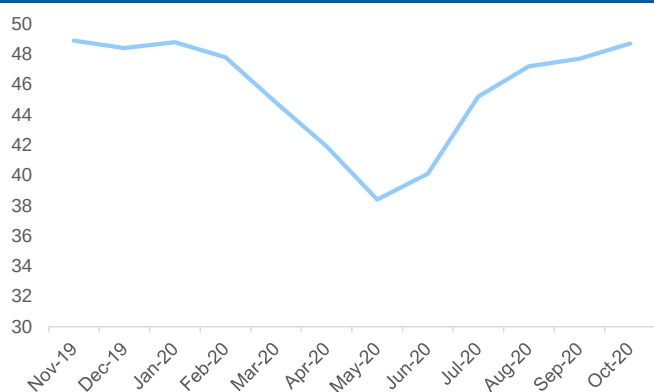
Source: Bloomberg

Figure 10: The US' PMI



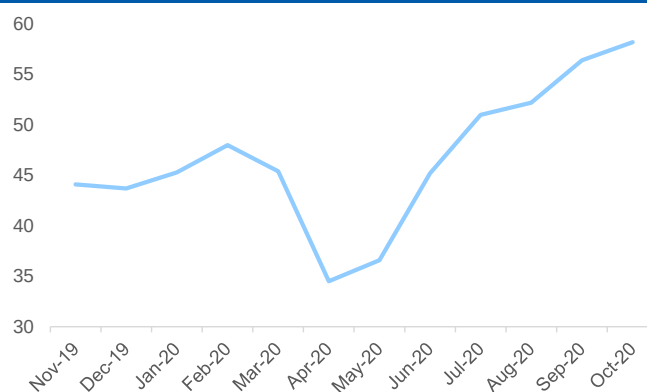
Source: Bloomberg

Figure 11: Japan's PMI



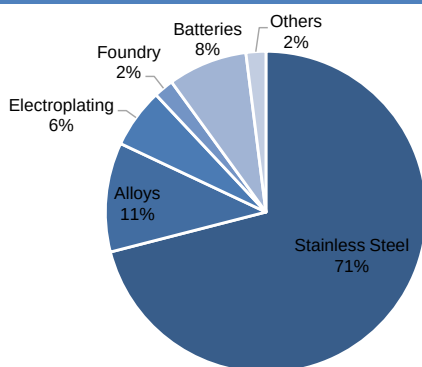
Source: Bloomberg

Figure 12: Germany's PMI



Source: Bloomberg

Figure 13: Nickel usage by products



◆ Nickel usage is still dominated by the stainless steel industry (68% of total nickel production), with less than 10% used for batteries – mainly EVs. With the rise in EV production, demand for nickel should see a steady increase

Source: Bloomberg

China's stainless steel industry has recovered since 2Q20

As China's stainless steel industry is a major consumer of nickel, the production recovery has largely impacted the nickel price rebound. Note that this industry in the East Asian nation commands 79% of the world's stainless steel production.

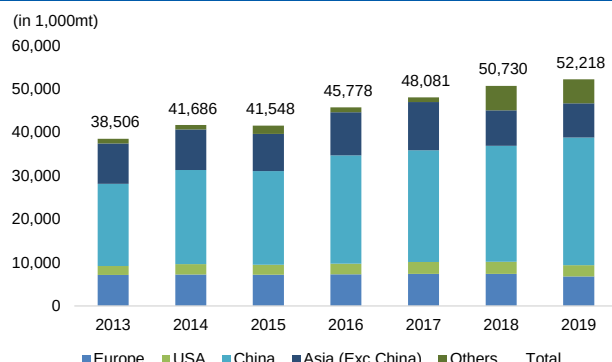
While the whole stainless steel industry is poised to see a decline this year by c.9-10%, looking at 2Q20 numbers we can see that China's production levels actually grew 29% QoQ – this brought positive sentiment for nickel prices. Additionally, with zero option to buy Indonesian ore, the cost of procuring nickel ore elsewhere has pushed smelting cash costs higher – consequently, smelters are unlikely to lower their prices to maintain profitability.

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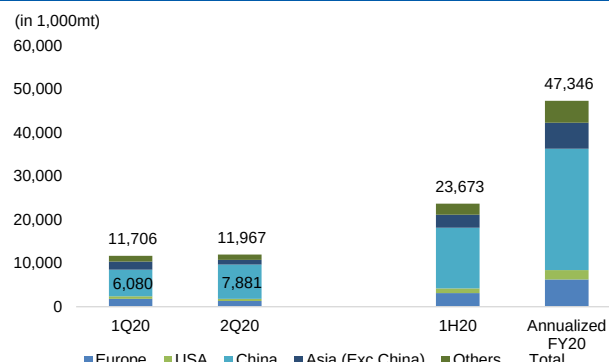
Note that the global production of stainless steel has grown at a 6-year CAGR of 5% – this has been the driver of the steady demand for nickel. Additionally, with the transition from President Trump to President Elect Biden in the US in 2021, expectations of a US-China trade war de-escalation should bring positive sentiment to the industry.

Figure 14: Global stainless steel production (2013-2019)



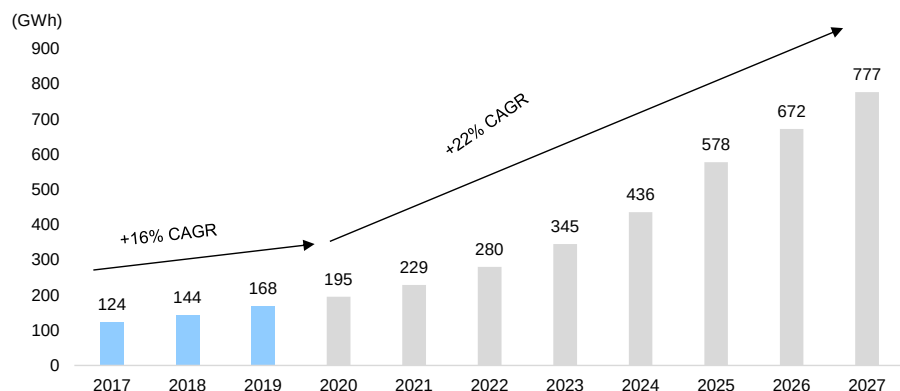
Source: ISSF

Figure 15: Global stainless steel production (1H20)



Source: Bloomberg

Figure 16: EV battery demand forecasts



Source: MIND ID

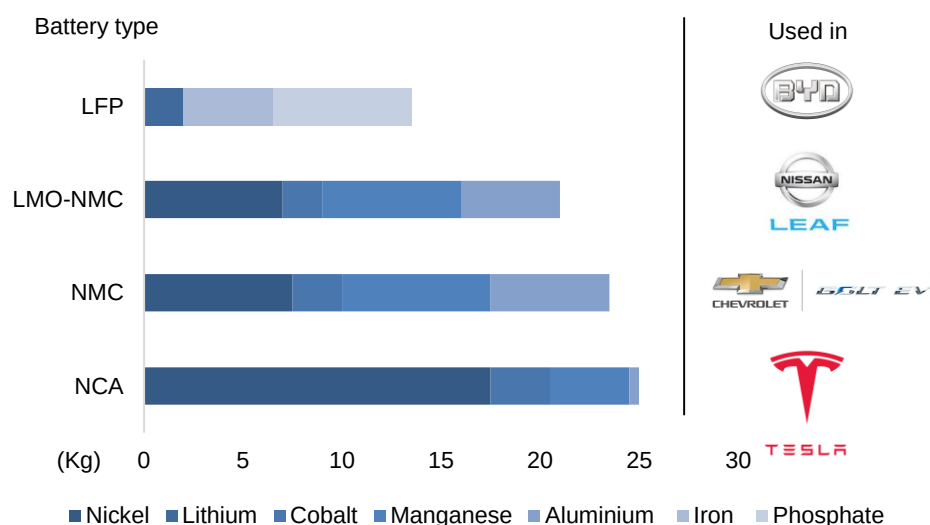
- ◆ The increasing demand for EVs has resulted in a growth in li-ion battery demand – by a CAGR of 16% – over the last three years to 168GWh in 2019
- ◆ This trend is expected to accelerate towards 2027 at a CAGR of 22%, as charging infrastructure is put in place and prices gradually lower

Additional demand from EV batteries

The growing forecasted production of EVs is another potential growth avenue for nickel demand, which – in our view – will support the long-term price for nickel. The increasing demand for EVs has led to a growth in li-ion battery demand by a CAGR of 16% over the last three years to 168GWh in 2019. This trend is expected to accelerate towards 2027 at a CAGR of 22% towards c.800GWh, as charging infrastructure is put in place and prices gradually lower.

The lower price may also be attributable to the decrease in battery production costs, given the increase in nickel content vis-à-vis cobalt. As cobalt is the most expensive component in EV battery production – c.40% of total production costs – Tesla has declared its intent to lower cobalt content. At the same time, it wants to increase the nickel content in its batteries. By lowering cobalt content, the company claims it can sell a vehicle at the USD25,000 price point, or USD10,000 cheaper than most affordable model currently – the standard-range Model 3.

Figure 17: Nickel content in battery types



◆ Nickel content in batteries are currently the highest in Tesla's EVs at c.17kg, or c.70% of its NCA batteries. The company is still looking to increase its nickel content while lowering the use of cobalt

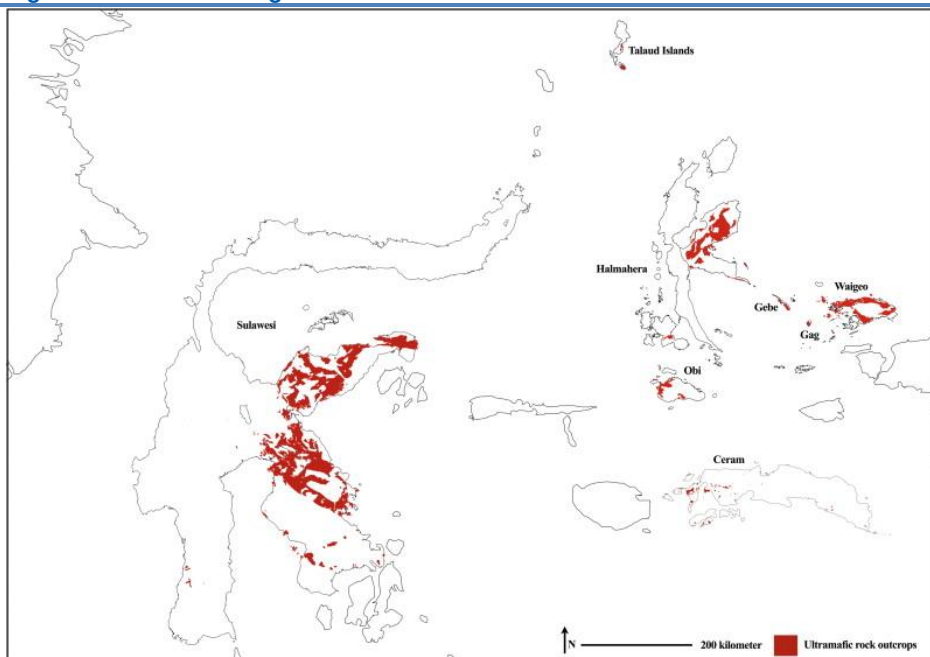
Source: CSA Global

Indonesia's nickel mining landscape

Indonesia's nickel industry is concentrated in the country's eastern portion – mainly in Sulawesi, as well as some parts of Maluku and Papua. There are currently 293 operating companies with mining licenses or IUPs, with three more under exploration – this results in a total mining area of more than 600,000ha. There are also only 19 smelters in operation with 12 under construction and three still undergoing feasibility studies.

The industry is still highly concentrated in the upstream business (ore sales). Hence, the nickel ore export ban was imposed to spur miners to produce more value-added products after smelting the ore – eg ferronickel, NPI, nickel in matte, mix hydroxide precipitate, and mix sulphide precipitate – or into more intermediate products such as stainless steel.

Figure 18: Nickel mining areas in Indonesia



◆ Nickel reserves in Indonesia are concentrated in the eastern part of the archipelago – mainly in Sulawesi, although some reserves are located in parts of Maluku and Papua

Source: Science Direct

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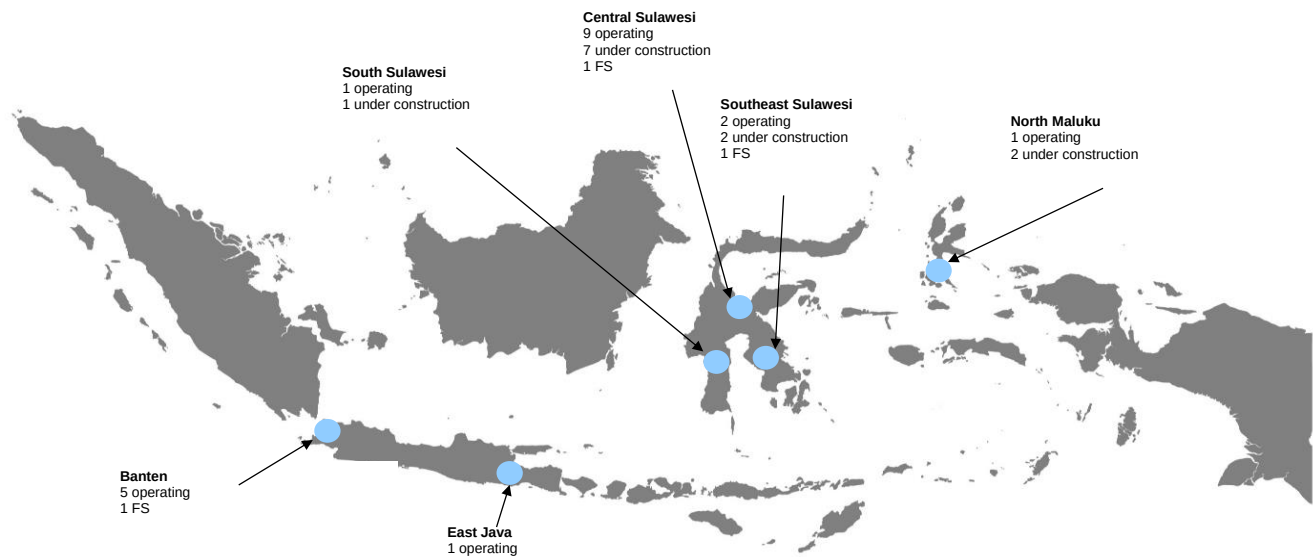
Figure 19: Nickel IUP holders in Indonesia

Province	Exploration	Operating	Total
Maluku		2	2
North Maluku		45	45
Papua		2	2
West Papua		4	4
South Sulawesi	2	1	3
Central Sulawesi		85	85
Southeast Sulawesi	1	154	155
	3	293	296

♦ There are currently 293 operating companies with IUPs with three more under exploration – this takes the total mining area to more than 600,000ha

Source: Science Direct

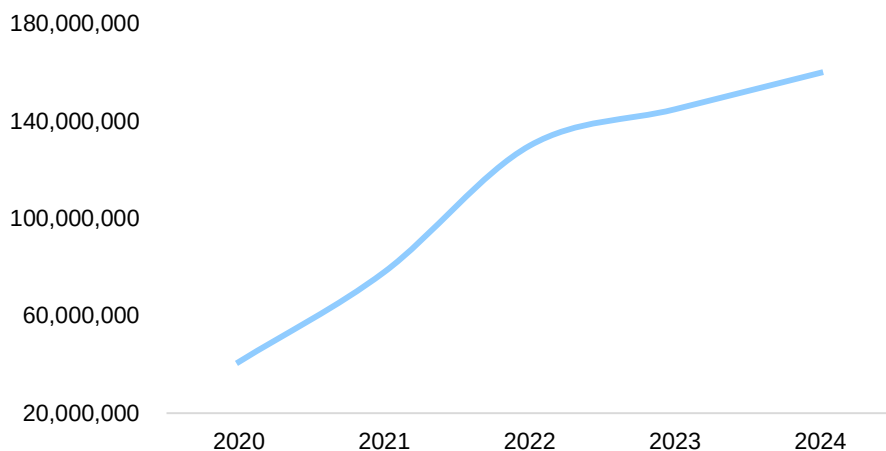
Figure 20: Nickel smelters in Indonesia



Source: Energy and Mineral Resources Ministry

Figure 21: Domestic nickel ore (>1.8% grade) demand forecast

(metric ton)



♦ Domestic nickel demand is expected to quadruple over a 4-year time period – in line with the project completions of the nickel smelters

Source: Indonesia Nickel Miners Association (APNI)

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Indonesia currently has 19 smelters in operation, with 12 under construction and three still undergoing feasibility studies. With the smelter projects slated for completion within 2021-2024, domestic nickel demand from these smelters are also expected grow. After the imposition of the nickel ore export ban, these smelters are expected to absorb all domestic nickel ore sales.

Figure 22: RKEF nickel production cash costs in Indonesia – the lowest in the world

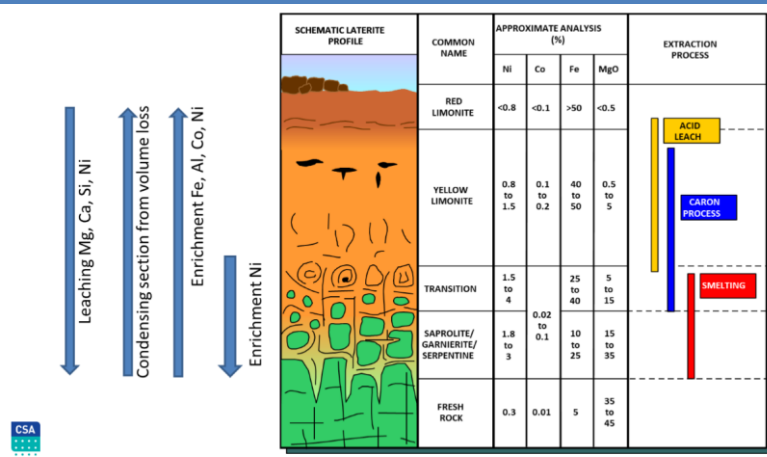


Source: Energy & Mineral Resources Ministry

One of Indonesia's competitive advantage is the low cash costs in nickel smelting when using RKEF smelters. The cash costs stand at USD8,502 per tonne, or 35% lower than in China – this is on close to zero freight costs (due to the proximity of mines to processing facilities), as well as lower ore purchasing and smelting costs.

Hence it is attractive for companies to invest in processing facilities of nickel products in Indonesia rather than continuing to import the raw material. As nickel ore purchases account for 44% of total cash costs, the tight ore supply – post Indonesia's ore export ban – has significantly pushed prices higher due to the rise in ore purchasing costs for smelters that need to look for other sources of raw materials.

Figure 23: Nickel grades and processing



◆ Nickel with high grades are found in the saprolite layer, which can be extracted using RKEF smelters

◆ Meanwhile, low grade nickel (below 1.5% grade) can only be extracted with acid leaching using the HPAL technique

Source: CSA Global

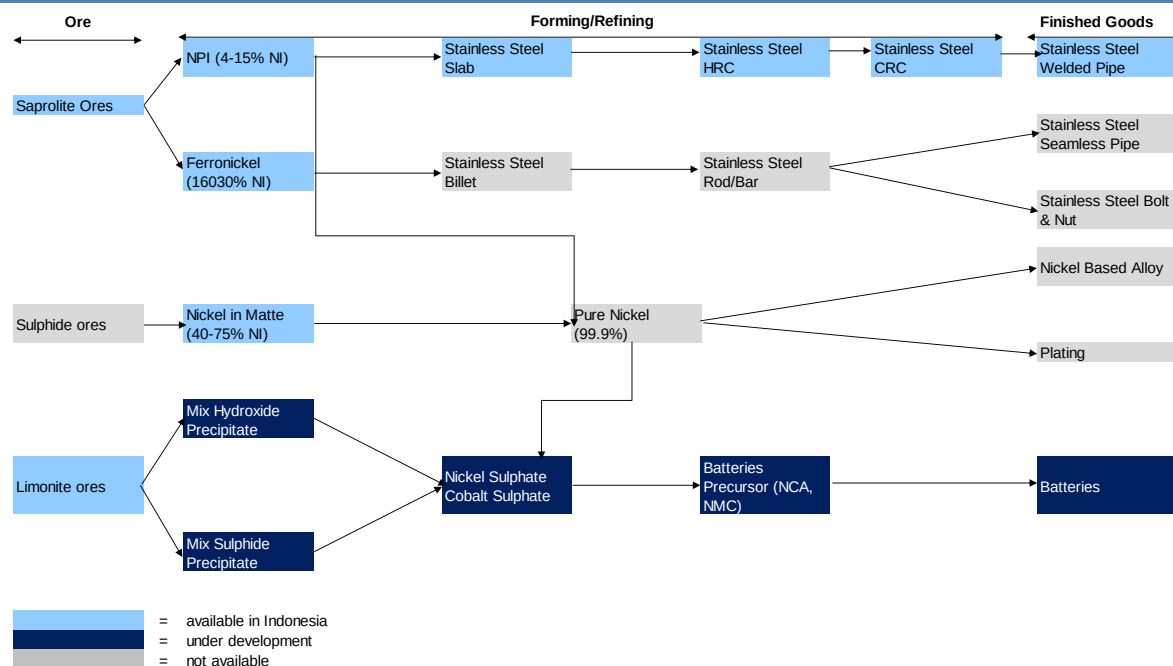
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The majority of smelters here still use RKEF, which is used for smelting ores with high nickel grades (>1.8%) in the saprolite layer. Low-grade nickel (<1.5%), which is used for li-ion batteries, can only be extracted through HPAL.

There are currently three HPAL smelters under construction and another there undergoing feasibility studies, one of which is owned by INCO. Indonesia saprolite nickel ore reserves (high-grade) currently amounts to c.25% of the country's total nickel reserves. This means there is an abundance of untapped limonite ores that can be monetised in the future.

Figure 24: Nickel product tree and availability in Indonesia



Source: Energy & Mineral Resources Ministry

Indonesia is currently focused in both RKEF and HPAL smelter construction, which will – in our view – ultimately spread into the development and investment in more intermediate products, such as stainless steel and li-ion batteries.

The HPAL smelter technique is particularly new and has large potential for Indonesia, especially in monetising low-grade nickel ore. If successful, nickel ore processed through HPAL can be used as the raw material in EV batteries. However, HPAL nickel smelters remain a relatively new technology with rather low success rates globally and higher capex usage.

Figure 25: Past HPAL projects summary

Projects	Country	Operator	Capex (USDm)	Unit capex (USD/kt Ni)
Successes in both capex and opex				
Coral Bay	Philippines	Sumitomo Metal Mining (SMM)	500	21
Moa Bay	Cuba	Sherritt International (Sherritt)	451	12
Failure in capex, success in opex				
Ramu	Papua New Guinea	China Metallurgical Construction Group Corp (MCC)	2,100	64
Taganito	Philippines	SMM	1,300	36
Ambatovy	Madagascar	Sherritt	5,500	92
Failure both in capex and opex				
Goro	New Caledonia	Vale	6,200	103
Ravensthorpe	Australia	First Quantum Minerals	2,480	69
Murrin Murrin	Australia	Glencore	1,485	29
Shutdown & overhaul				
Gordes	Turkey	Meta Nikel Kobalt	360	36
Bulong	Australia	Wingstar	160	16
Cawse	Australia	Wingstar	234	26
Average				46

Source: Energy & Mineral Resources Ministry

◆ There are already 11 HPAL projects globally, with only two that have attained full successful production capabilities

◆ HPAL smelting requires higher capex and experience

Figure 26: HPAL projects in Indonesia

No.	Business	Capacity Input (tonnes)	Capacity output (tonnes)	Capex (USDm)	Unit capex
1	Halmahera Persada Lygend	5,213,847	35,574	684	18.0
2	Adhikara Cipta Mulia	2,401,920	30,600	36	1.2
3	Smelter Nikel Indonesia	2,401,920	30,600	36	1.2
4	Vale Indonesia	n/a	40,000	2,100	53.0
5	Huayue	11,000,000	60,000	1,280	21.0
6	QMB	5,000,000	50,000	998	20.0
Average					19.1

Source: Energy & Mineral Resources Ministry

Development of the EV battery industry in Indonesia

The Government has set a production target of 400,000 EVs by 2025, which implies a demand of 11,000, 3,000, and 31,000 tonnes of nickel, cobalt, and copper. The number is expected to triple by 2035. Note that EV battery costs make up of c.40% of EV COGS. Hence, the preparation and investments in li-ion battery technology and infrastructure, as well as raw material production, started this year.

The two notable large projects; the formation of the SOE battery holding involving ANTM, MIND ID, Pertamina, and PLN. Another potential investor is Tesla, which has reportedly shown interest in building a NCA li-ion battery factory here. Details on these projects as follows:

- i. **SOE battery holding company** – this project involves SOE mining holding firm MIND ID through ANTM, Pertamina, and PLN. It has been reported in the media that this entity is in talks with two large EV battery producers: China's Contemporary Amperex Technology and South Korea's LG Chem. Under this project, ANTM would produce the raw materials, Pertamina develops the battery precursors, and PLN takes charge of the downstream element. While no details on the shareholding structure has been disclosed yet, total investment is estimated at USD12bn (IDR180trn) – this is expected to be finalised by end 2020;
- ii. **Tesla battery factory plan** – in an effort to lower the prices of its EVs, Tesla CEO Elon Musk announced his plans to increase nickel content in its batteries by reducing the cobalt content. To this extent, Musk's company is now in talks with the Indonesian Government on potential investments in a battery factory here.

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Risks

What's the upside?

Upsides to FY21F earnings are still there, considering that nickel ASPs may have a 15% upside towards the USD15,000 per tonne level from c.USD13,000 per tonne estimated for FY20. We are also optimistic on nickel's long-term price, with support from stable demand from the stainless steel industry and an additional growth avenue in EV battery production.

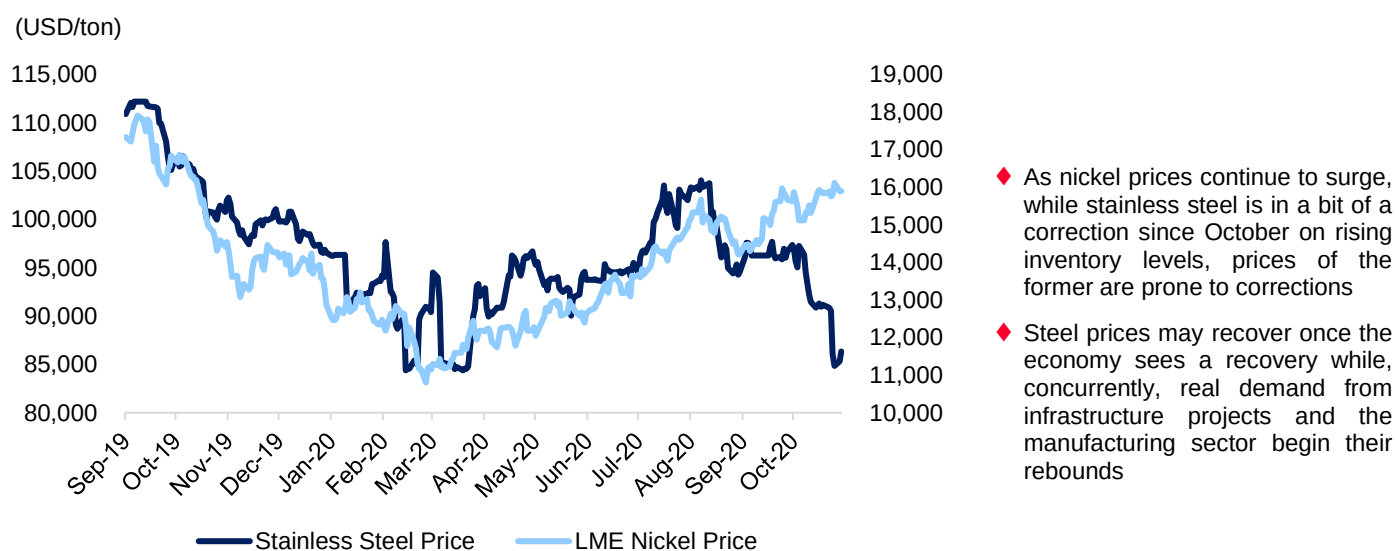
Upside risks to our call include increased demand in stainless steel and EVs, supply disruption in other countries, and lower fuel costs.

What could go wrong?

Downside risks to our call include:

- i. Slumping demand due to disruptions in global trade – especially in the event of a re-escalation in the US-China trade war;
- ii. Risk on the widening spread of stainless steel and nickel prices since October, which have seen widening;

Figure 27: Nickel and stainless steel price comparisons



Source: Bloomberg

- iii. Rising oil price risk from the lower prices this year – resulting in cost increases in fuel prices;
- iv. USD depreciation, as nickel miners are – for the most part – USD earners;
- v. Regulatory risks regarding mining laws, which include permits as well as tax and royalties;
- vi. Weather risks and other natural disasters, which may result in mine closures.

Stock Picks And Pecking Order

We are initiating coverage in the nickel sector with two company coverages: i) ANTM, and ii) INCO – the two largest players in the sector. At the moment, we have set ANTM as our sector Top Pick, as it is a more balanced metal play with assets in nickel (ore mining and ferronickel processing), gold (mining, refinery, and trade), as well as bauxite and alumina (ore mining and refinery). We are also optimistic over its inclusion in the SOE battery holding company, which we believe could be a share price catalyst.

However, we also like INCO as a pure nickel play. Given the surge in nickel prices, we believe nickel ASPs in 2021 should see a 10-15% upside – this should provide earnings upside. Hence, our pecking order for the sector is ANTM>INCO.

Figure 28: Nickel mining companies operational summaries

	ANTM	INCO (USD'000)	Pelat Timah Nusantara (NIKL) (USD'000)	Central Omega Resources (DKFT)
Description	ANTM is a vertically integrated, export-oriented, diversified mining and metals company. It undertakes all activities – from exploration, excavation, and processing, through to the marketing of nickel ore, ferronickel, gold, silver, bauxite and coal. With locations all over Indonesia, the company has long-term loyal customers in Europe and Asia. It owns several subsidiaries.	INCO has mined laterite nickel ore and processed it into nickel in matte for over 50 years in Sulawesi. The average volume of nickel production has reached 75,000 tonnes. INCO uses pyrometallurgical technology in melting the laterite nickel ore – the nickel product produced is exported entirely to Japan's SMM under a long-term special contract	NIKL was the first company in Indonesia to produce a high quality tin plate. It was established in 1982 by a Japan-led consortium comprising Nippon Steel Corp, Mitsui, Nippon Steel Trading Corp, and Metal One Corp.	DKFT was founded in 1995. Since 2008, the company engaged in the mining of nickel ore and, in 2011, began exporting nickel ore overseas. In a short time, DKFT has produced as much as 3m tonnes of nickel ore per year. The company's nickel mines are located in Sulawesi, which has one of the largest laterite nickel reserves in the world, specifically at Morowali (Central Sulawesi) and North Konawe (South-East Sulawesi).
Market cap (USDbn)	28,957	45,707	2,573	1,116
Average daily turnover (IDRbn/USDm)	549	90	9	20
Reserve				
Nickel saprolite (m wet metric tonne (wmt))	207			
Nickel limonite (m wmt)	90			
Total reserves	297	108		
FY19 - Financial results (IDRbn)				
Cash	3,636	249,035	28,393	238
Debt	8,549	1,120	101,196	54
Equity	18,133	1,941,693	45,640	975
Net gearing	47%	0%	222%	6%
Revenue	32,719	782,012	163,085	548
Gross profit	4,447	116,454	10,537	232
EBITDA	2,075	234,908	3,897	101
Net profit	194	57,400	2,681	40
Gross margin	14%	15%	6%	42%
EBITDA margin	6%	30%	2%	-18%
Net margin	1%	7%	2%	-7%
Cash flow from operations	1,634	137,994	10,178	52
AR days	16	50	126	4,076
ROAE	1.02%	3%	6%	-10%

Source: Energy & Mineral Resources Ministry

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Basic Materials | Mining

Aneka Tambang (ANTM IJ)

Buy

Indonesia's Complete Metal Package; BUY

Target Price (Return): IDR1,600 (+25%)
 Price: IDR1,280
 Market Cap: USD2,181m
 Avg Daily Turnover (IDR/USD) 326,899m/22.6m

Analyst

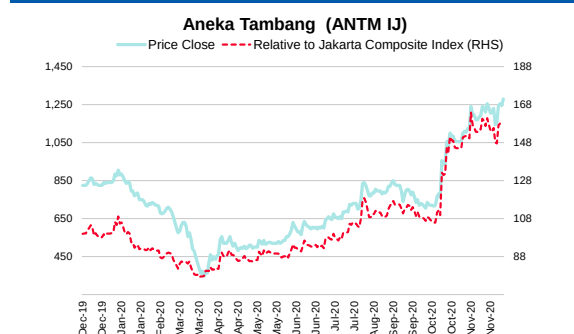
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- **Initiate coverage on our sector Top Pick with a BUY and TP of IDR1,600, 25% upside**, on the back of Aneka Tambang shifting from nickel ore exports to the domestic market that rebounded in 3Q20; potential running in of the Halmahera ferronickel project with electricity availability expected by 2021F; good contribution from gold mining; as well as inclusion in Indonesia's battery holding development, which serves as next catalyst.
- **Shifting to domestic nickel ore sales.** After the nickel ore ban was implemented beginning 2020, ANTM's nickel ore revenue dropped from a sales volume of 6m and 7m wet metric tonnes (wmt) in 2018 and 2019. Ore sales dropped to zero in 3Q20 after the implementation. However, after the large-scale social restriction (PSBB) easing and reopening in several nickel processing facilities, mostly in Morowali, nickel ore sales jumped 5x in 3Q20 to 1m wmt. The company is optimistic that this year it will achieve c.2-2.2m wmt nickel ore sales, up from its previous estimate of 1.2-1.5 wmt. With production acceleration of smelters post-nickel ore export ban, domestic nickel processing should offset nickel ore export revenue.
- **Halmahera ferronickel plant to commence trials by 2021F.** Despite its completion since 2019, the Halmahera ferronickel smelting plant has yet to be operational. The biggest setback was the availability of electricity from Perusahaan Listrik Negara (PLN). The plant needs a minimum of 75MWh of electricity and a conservative 100MWh. Currently, the company is in talks of acquiring permits from PLN to move the electricity surplus in Sulawesi to North Maluku (Halmahera). The power plant is expected to be operational in 2021F and will begin a trial run by 3Q21F.
- **Gold should still see steady contribution.** After a stellar performance in 2020, we believe ANTM's gold sales will still perform in 2021F driven by its retail majority market. The company has been increasing domestic gold sales since 2018, which resulted in a surge in gold sales. Its gold sales peaked in 2019 at 1m oz and management expects 2020F gold sales to top this number. Gold sales to domestic market was previously only around 1-3 tonnes (32,000-96,000oz) – the company expects domestic gold sales for the year at 18ton (576,000oz).
- **Battery holding: The next big thing for Indonesia.** Under the formed Indonesia battery holding, ANTM will be in charge of the upstream industry, ie ore mining and smelting. Although details of the overall project are still scarce – equity contribution, production capabilities, as well as the whole investment pipeline – we see any announcement of details in the project may potentially be an upside catalyst for it as the only investible proxy between three included in the holdings (the other two being Pertamina and PLN).
- **Valuation** We derive our 12M TP of IDR1,600 using a target of 10x FY21F EV/EBITDA, set at its 5-year mean.

Share Performance (%)

	YTD	1m	3m	6m	12m
Absolute	52.4	13.8	55.2	116.9	58.0
Relative	60.2	4.9	44.1	99.5	64.1
52-wk Price low/high (IDR)				348 – 1,280	



Source: Bloomberg

Forecasts and Valuation	Dec-18	Dec-19	Dec-20F	Dec-21F	Dec-22F
Total turnover (IDRb)	25,275	32,719	25,543	29,111	29,953
Recurring net profit (IDRb)	(466)	213	876	1,017	1,036
Recurring net profit growth (%)	558.8	-	311.4	16.1	1.9
Recurring P/E (x)	na	144.47	35.12	30.24	29.69
P/B (x)	1.8	1.8	1.7	1.7	1.6
P/CF (x)	16.41	18.83	12.45	16.91	15.08
Dividend Yield (%)	na	na	na	na	na
EV/EBITDA (x)	12.50	14.95	9.81	8.65	9.22
Return on average equity (%)	9.2	1.1	4.8	5.3	5.2
Net debt to equity (%)	net cash	net cash	net cash	net cash	net cash

Source: Company data, RHB

Note:

Small cap stocks are defined as companies with a market capitalisation of less than USD1bn.

Financial Exhibits

Asia Indonesia Basic Materials Aneka Tambang ANTM IJ Buy	Financial summary (IDR)					
		Dec-18	Dec-19	Dec-20F	Dec-21F	Dec-22F
	Recurring EPS	-	19.39	8.86	36.45	42.33
	BVPS	716.93	707.12	739.38	771.86	804.98
	Valuation metrics					
		Dec-18	Dec-19	Dec-20F	Dec-21F	Dec-22F
	Recurring P/E (x)	na	144.47	35.12	30.24	29.69
	P/B (x)	1.8	1.8	1.7	1.7	1.6
Valuation basis	FCF Yield (%)	(0.9)	1.3	4.6	2.4	3.2
	EV/EBITDA (x)	12.50	14.95	9.81	8.65	9.22
	EV/EBIT (x)	18.55	31.27	14.93	12.99	14.03
Key drivers	Income statement (IDRb)					
		Dec-18	Dec-19	Dec-20F	Dec-21F	Dec-22F
	Total turnover	25,275	32,719	25,543	29,111	29,953
	Gross profit	4,662	4,447	4,037	4,525	4,626
Key risks	EBITDA	2,310	1,999	2,912	3,139	3,203
	Depreciation and amortisation	(754)	(1,044)	(999)	(1,049)	(1,099)
	Operating profit	1,556	956	1,913	2,090	2,104
	Net interest	(870)	(113)	(573)	(549)	(536)
Company Profile	Pre-tax profit	2,013	687	1,184	1,385	1,412
	Taxation	(377)	(493)	(355)	(416)	(424)
	Reported net profit	1,636	194	829	970	989
	Recurring net profit	(466)	213	876	1,017	1,036
	Cash flow (IDRb)					
		Dec-18	Dec-19	Dec-20F	Dec-21F	Dec-22F
	Change in working capital	1,681	(1,211)	2,310	(1,352)	(2,145)
	Cash flow from operations	1,875	1,634	2,471	1,820	2,040
Key risks	Capex	(2,138)	(1,236)	(1,070)	(1,070)	(1,070)
	Cash flow from investing activities	(2,594)	(885)	(1,070)	(1,070)	(1,070)
	Cash flow from financing activities	(620)	(1,363)	(1,482)	(1,443)	(1,245)
	Cash at beginning of period	5,551	4,299	3,636	3,556	2,863
Company Profile	Net change in cash	(1,339)	(615)	(80)	(693)	(275)
	Ending balance cash	4,299	3,636	3,556	2,863	2,588
	Balance sheet (IDRb)					
		Dec-18	Dec-19	Dec-20F	Dec-21F	Dec-22F
	Total cash and equivalents	4,299	3,636	3,556	2,863	2,588
	Tangible fixed assets	20,200	19,619	19,692	20,686	21,679
Key risks	Total investments	1,145	745	745	745	745
	Total assets	32,195	30,195	29,738	30,398	31,225
	Short-term debt	1,452	1,408	0	0	0
	Total long-term debt	2,098	2,099	2,098	0	2,098
Company Profile	Total liabilities	13,747	12,061	10,830	10,709	10,740
	Total equity	18,448	18,133	18,909	19,689	20,485
	Total liabilities & equity	32,195	30,195	29,738	30,398	31,225
Key metrics	Key metrics					
		Dec-18	Dec-19	Dec-20F	Dec-21F	Dec-22F
	Revenue growth (%)	99.7	29.4	(21.9)	14.0	2.9
	Recurrent EPS growth (%)	558.8	0.0	311.4	16.1	1.9
Company Profile	Gross margin (%)	18.4	13.6	15.8	15.5	15.4
	Operating EBITDA margin (%)	9.1	6.1	11.4	10.8	10.7
	Net profit margin (%)	6.5	0.6	3.2	3.3	3.3
	Capex/sales (%)	8.5	3.8	4.2	3.7	3.6
Company Profile	Interest cover (x)	1.38	4.10	2.67	3.03	3.05

Source: Company data, RHB

Investment Thesis

Indonesia's complete metal package

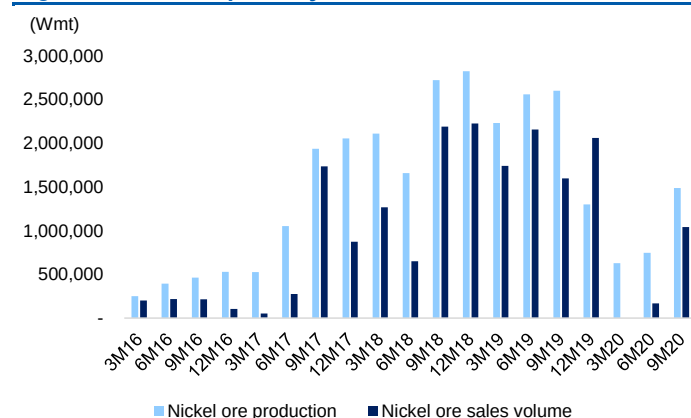
Initiate coverage on ANTM with a BUY call and 12-month TP of IDR1,600, implying 25% upside. Our bullish stance is premised on:

- Improving domestic nickel ore sales, with regulated nickel benchmark price;
- Promising progress from Halmahera ferronickel project with electricity availability expected by 2021F;
- Good contribution from gold mining;
- Battery holding development as next catalyst.

As such, we believe ANTM is fairly valued at 10x (+1SD from its 5-year mean) FY21F EV/EBITDA, implying a TP of IDR1,600.

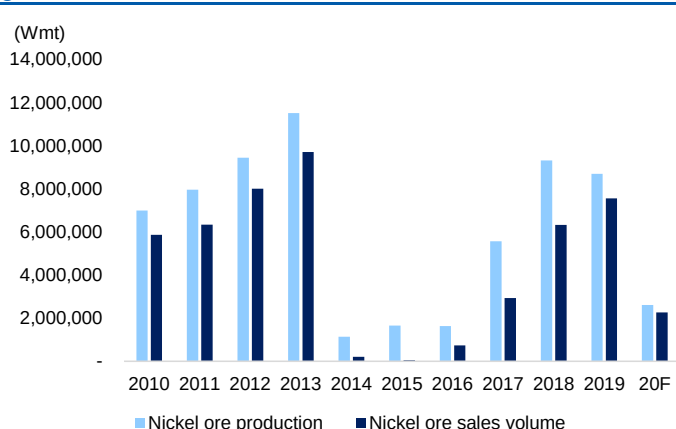
Shifting to domestic ore sales post export ban. After the nickel ore ban was implemented beginning 2020, ANTM's nickel ore revenue dropped from a sales volume of 6m and 7m wmt in 2018 and 2019. Ore sales dropped to zero in 3Q20 after the implementation. However, after the PSBB easing and reopening in several nickel processing facilities, mostly in Morowali, nickel ore sales jumped 5x in 3Q20 to 1m wmt. The company is optimistic that this year it will achieve c.2-2.2m wmt nickel ore sales, up from its previous estimate of 1.2-1.5 wmt. With production acceleration of smelters post-nickel ore export ban, domestic nickel processing should offset nickel ore export revenue.

Figure 1: ANTM's quarterly ore sales



Source: Company data, RHB

Figure 2: ANTM's historical ore sales



Source: Company data, RHB

The Indonesian Government, through the energy and mineral resources Ministry plans to narrow the gap between global and domestic nickel ore prices. The adjustment in Ministerial Regulation No 7/2017 was then revised to the Ministerial Regulation No 11/2020 to include the enforcement of nickel ore prices to follow the benchmark metal price (HPM). The calculation of which includes grading, global nickel reference price (LME, Asian Metal, Indonesia Commodity and Derivatives Exchanges, Jakarta Future Exchange, as well as London Bullion Market Association) with a one- to two-month lag according to the company. Note that ANTM's high grade nickel ore sales (>1.8% grade) YTD has an ASP of USD33.00-34.00 per tonne with a cash cost of USD15.00-17.00 per wmt.

Figure 3: Indonesia nickel ore benchmark price (HPM Nikel) – Nov 2020

Nickel Grade	Correction Factor	Moisture Content 30% (FOB) (USD/Dmt)	Moisture Content 35% (FOB) (USD/Dmt)
1.7%	18%	31.56	29.30
2%	19%	35.27	32.75
2%	20%	39.19	36.39
2%	21%	43.31	40.22

Source: APNI

♦ The benchmark price (HPM) is calculated by incorporating grade, benchmark nickel global price, corrective factor, treatment and refining costs

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Electricity available by 2021 for Halmahera ferronickel plant. Despite its completion since 2019, ANTM's Halmahera ferronickel smelting plant is yet to be operational. The biggest setback was the availability of electricity from PLN. The plant needs a minimum of 75MWh of electricity and a conservative 100MWh, mostly to operate its rotating kiln electric furnace (RKEF). Currently, the company is in talks of acquiring permits from PLN to move the electricity surplus in Sulawesi to North Maluku (Halmahera). The power plant is expected to be operational in 2021F and will begin a trial run by 3Q21F.

Targeted to be fully operational by 2022F, the plant is expected to have a full capacity of 13,500 tonnes, adding about half of ANTM's current built ferronickel in Pomalaa. The plant will also absorb c.1m tonnes of ANTM's nickel ore. Based on its past experience with the Pomalaa plant, it will take 3-4 years until the company reaches full capacity.

Figure 4: ANTM's Halmahera ferronickel plant



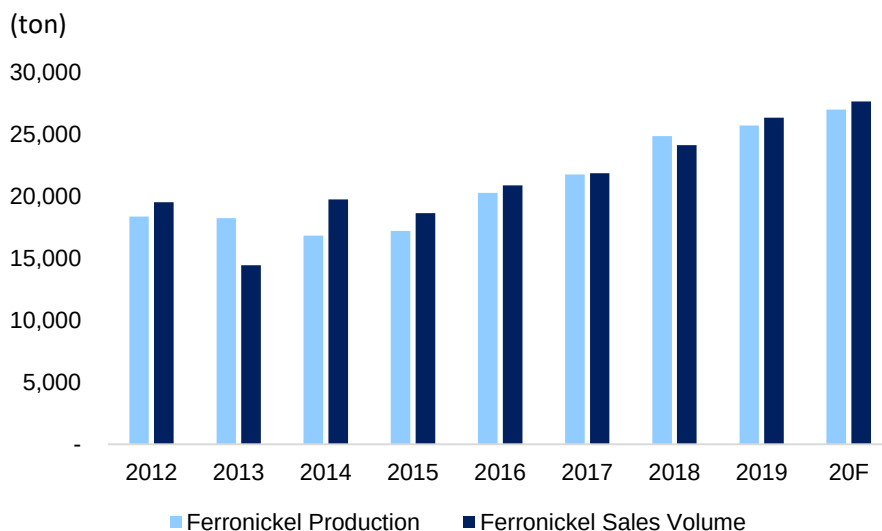
Source: Company

Figure 5: ANTM's Pomalaa ferronickel plant



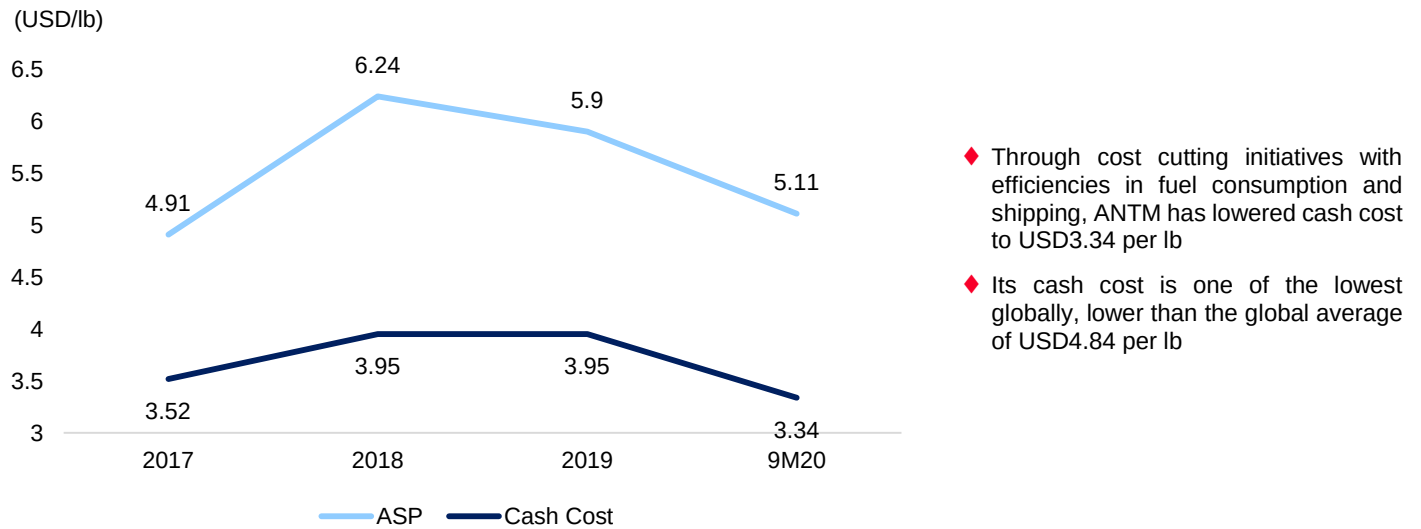
Source: Company

Figure 6: ANTM's current ferronickel production



- ◆ ANTM's current ferronickel plant located in Pomalaa already reached its full capacity at 27,000 tonnes
- ◆ Based on its past experience, the company estimates it will take 3-4 years for its Halmahera plant to reach full capacity

Source: Company data, RHB

Figure 7: ANTM's ferronickel ASP and cash cost

Source: Company data, RHB

The company sells its ferronickel 100% to the export market with YTD ASP at USD7.5-7.8 per lb (equivalent to USD16,500-17,200 per tonne), with a cash cost of c.USD3.34 per lb. Through savings in production cost (efficiency in fuel usage, reducing professional services) as well as transport cost (from cost in freight (CIF), to freight on board (FOB)), the company has cut down in cash cost by 33% YoY. Its ferronickel cash cost is also one of the lowest in the world (Top 3 lowest), below the average global cash cost of USD4.84 per lb.

Gold sales should still perform in 2021F. After a stellar performance in 2020, we believe ANTM's gold sales may still perform in 2021F driven by its retail majority market. The company has been increasing domestic gold sales since 2018, which resulted in a surge in gold sales of 111% YoY. Gold sales peaked in 2019 at 1m oz and management expects 2020F gold sales to top this number. Gold sales to the domestic market were previously only around 1-3 tonnes (32,000-96,000 oz), which reached an all-time high of 16 tonnes (512,000oz) in 2019 (47% of total gold sales) – the company expects domestic gold sales for the year at 18 tonnes (576,000 oz).

The company sells its gold through wholesale (70%) and also its retail boutique, website, and partnership with e-commerce platforms (30%). With a higher reliance on retail and the domestic market, we believe gold sales will persist despite a potential correction in gold prices upon an economic recovery in 2021F.

Figure 8: ANTM's gold sales and production

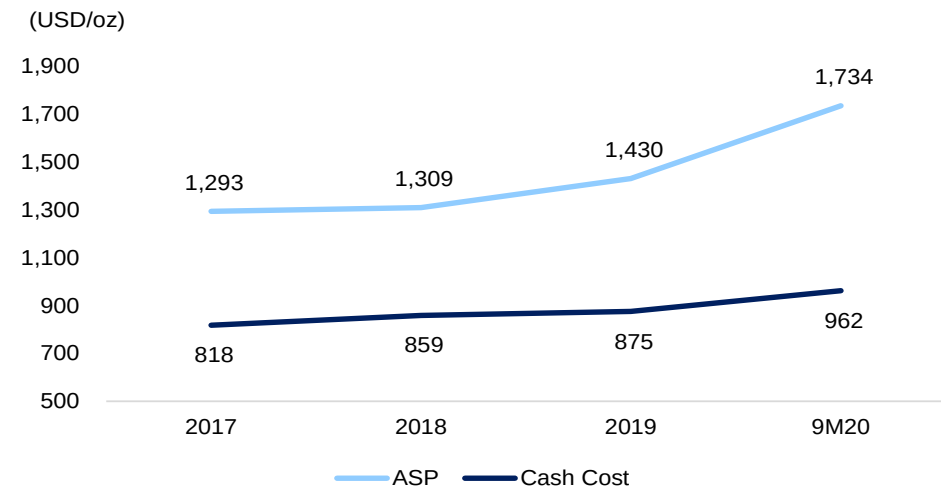
Source: Company data, RHB

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Although gold sales amounted up to 1m oz, the company only produced 63,111oz in 2019 from its Pongkor Gold Mine, and bought the rest from other miners. Although margins from its own mined gold are better in FY20 due to the surge in gold prices, the remaining c.900,000oz of gold trading sales only amount to c.5%. Hence it is more volume driven.

Figure 9: ANTM's gold ASP and cash cost



♦ Margins for its mined gold are better, especially with the ASP in 9M20

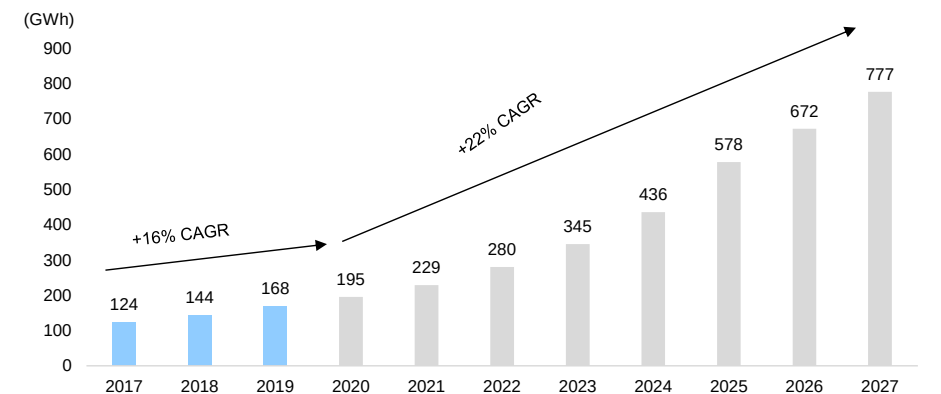
Source: Company data, RHB

Battery holding as next catalyst. The Ministry of State-Owned Enterprises has approved the formation of Indonesia's battery holding to make an end-to-end battery production company starting with the ore mining, smelting, battery precursor and li-ion battery production all the way to battery recycling. The formation of the holding is commanded by the President Commissioner of Indonesia Asahan Aluminium (MIND ID – Indonesia's mining holding), which was formed by the SOE Ministry since February 2020. The holding will include three companies –ANTM, Pertamina, and PLN. The holdings is also in talks to partner up with South Korea's LG Chem after also signing a partnership agreement China's Contemporary Amperex Technology (CATL) as a strategic partner in the battery production plant.

ANTM will be in charge of the upstream industry, ie ore mining and smelting, including the potential development of high-pressure acid leaching (HPAL) smelter for low grade (limonite) nickel extraction. Note that the company still has a proven probable reserve of 90m wmt of low-grade nickel on top of its c.200m wmt high-grade nickel ore reserve. Pertamina will be in charge of the overall battery production, while PLN will be in charge of the electricity and charging infrastructure preparation.

Although details about the overall project are still scarce – equity contribution, production capabilities, as well as the whole investment pipeline – we see any announcement of details on the project may potentially be an upside catalyst for ANTM as the only investible proxy between the three in the holdings.

Figure 10: EV battery demand forecast



♦ Seeing that the MIND ID expects a sharp demand increase in EVs and therefore EV Batteries between 2020-2027, the battery holding should be able to get a significant chunk in the EV Battery production in Indonesia, especially with its subsidiaries ANTM and Vale Indonesia (INCO) controlling 30% of Indonesia's nickel ore reserve

Source: MIND ID

Financial Performance

9M20 has already exceeding Street earnings estimates

Figure 11: ANTM's 9M20 results review

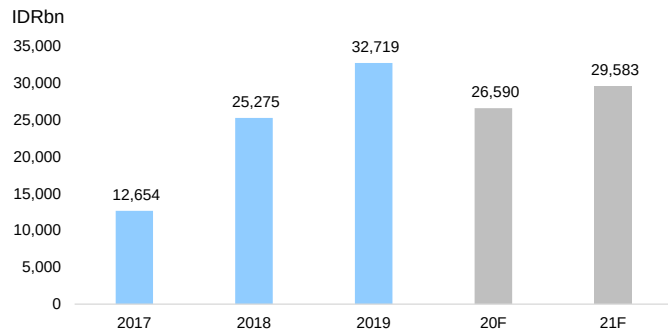
	3Q19	2Q20	3Q20	QoQ	YoY	9M19	9M20	YoY	9M20/Cons.
Revenue	10,131	4,024	8,811	119%	-13%	24,557	18,037	-27%	76%
Gross profit	1,231	747	1,595	114%	30%	3,378	2,904	-14%	90%
Operating profit	509	314	989	215%	94%	1,241	1,440	16%	135%
EBITDA	834	546	503	-8%	-40%	2,099	1,440	-31%	71%
Net profit	214	367	750	105%	251%	642	835	30%	242%
Margins									
GPM	12%	19%	18%			14%	16%		
EBIT margin	5%	8%	11%			5%	8%		
EBITDA Margin	8%	14%	6%			9%	8%		
NPM	2%	9%	9%			3%	5%		
Revenue breakdown:									
Gold	7,416	2,434	6,578	19%	-4%	17,026	12,986	-4%	
Ferronickel	1,303	1,055	1,244	51%	26%	3,612	3,265	26%	
Nickel ore	735	89	574	-24%	39%	2,493	663	39%	
Bauxite ore	179	248	170	-69%	6%	476	444	6%	
Production breakdown:									
Ferronickel (Tni)	6,035	6,447	6,371	-1%	-4%	19,052	19,133	2%	
Nickel Ore (wmt)	2,601,354	745,250	1,488,931	15%	54%	7,395,247	2,863,000	27%	
Gold (oz)	16,267	12,989	17,822	8%	1%	47,743	45,150	-6%	
Bauxite (wmt)	506,690	476,336	490,680	18%	49%	1,104,097	1,298,000	43%	
Sales volume breakdown:									
Ferronickel (Tni)	6,546	6,666	6,462	-15%	-20%	19,703	19,507	2%	
Nickel Ore (wmt)	1,597,253	167,606	1,041,394	24%	232%	5,498,041	1,209,000	103%	
Gold (oz)	352,726	90,633	270,442	42%	35%	858,810	524,947	14%	
Bauxite (wmt)	555,105	509,900	385,823	911%	221%	1,166,375	951,000	138%	

Source: Company data

Aneka Tambang posted an IDR750bn earnings in 3Q20 (+105% QoQ, +251% YoY), totalling to IDR835bn in 9M20 (+30% YoY) and at a huge outperformance to Street estimates (242%), already surpassing Street's FY20F earnings. Revenue was slightly down YoY, but recovered QoQ with 9M20 in line with Street estimates at 76%. The outperformance came from cost savings in both in COGS and opex, resulting in margins expansion (GPM: 16% vs 14% last year, NPM at 5% vs 3%). In revenue breakdown, ferronickel and nickel ore revenue grew by 26% and 39% YoY as the company increased domestic sales in ore, mostly to Morowali.

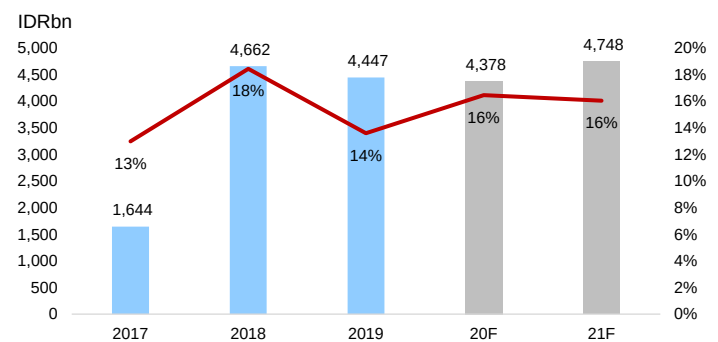
Financial projection

Figure 12: ANTM's revenue



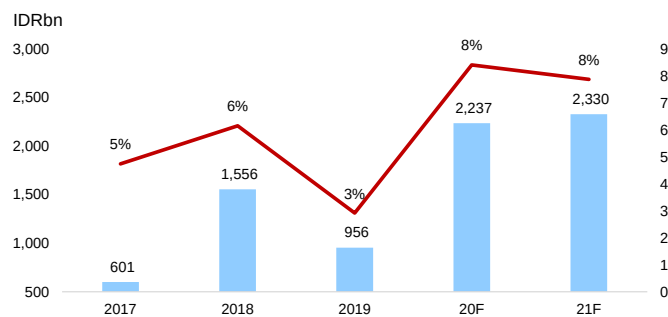
Source: Company data, RHB

Figure 13: ANTM's GP and GPM



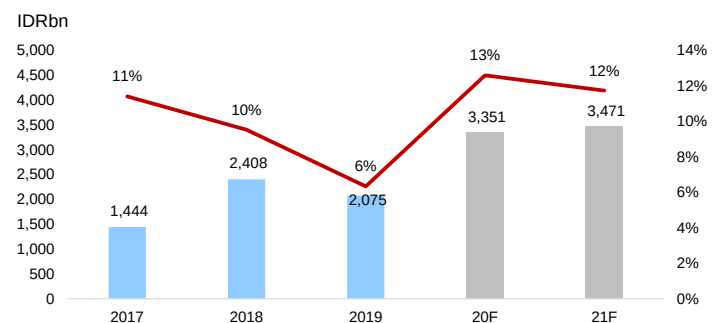
Source: Company data, RHB

Figure 14: EBIT and EBIT margin



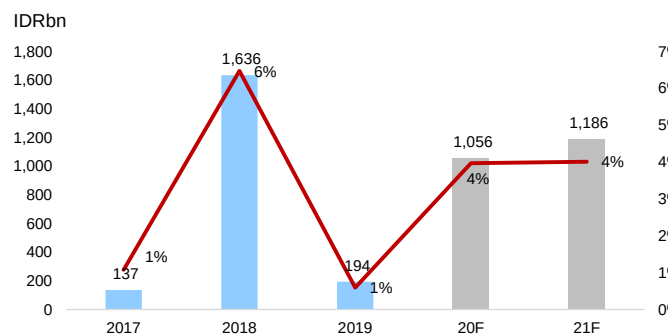
Source: Company data, RHB

Figure 15: EBITDA and EBITDA margin



Source: Company data, RHB

Figure 16: Net profit and NP margin



Source: Source: Company data, RHB

Figure 17: Cash level

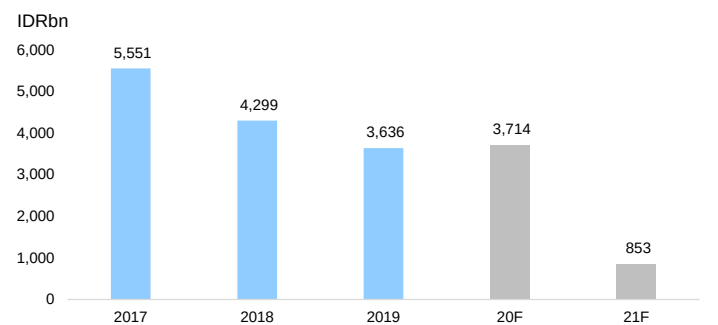
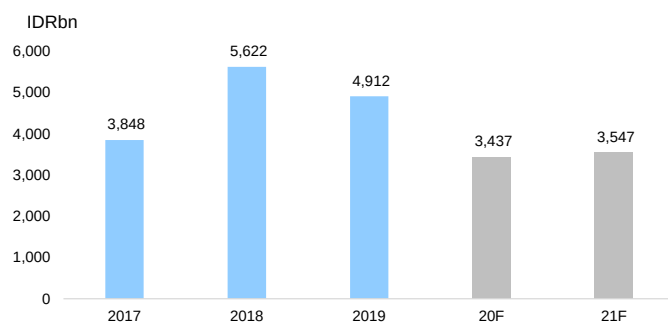
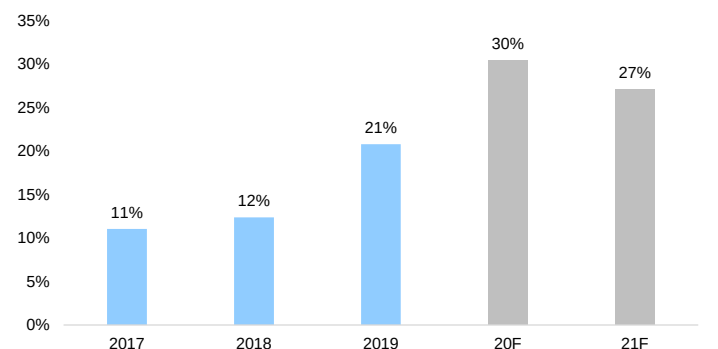
Note: *Assuming no new additional debt
Source: Company data, RHB

Figure 18: Net debt



Source: Company data, RHB

Figure 19: Net debt to equity

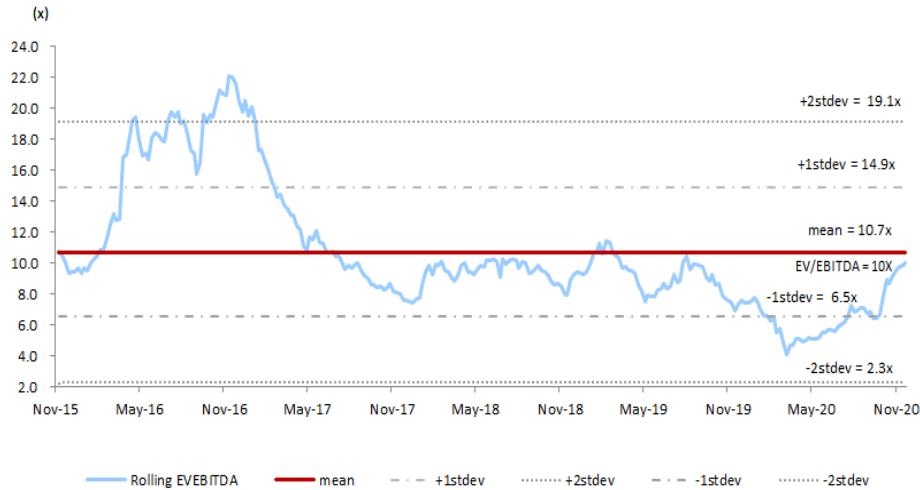


Source: Company data, RHB

Valuation

We derive our 12M TP of IDR1,600 using a target of 10x FY21F EV/EBITDA, set at its 5-year mean, which in our view is justified given the current nickel price level.

Figure 20: ANTM's 5-year EV/EBITDA band



- ◆ ANTM is currently trading at 10x EV/EBITDA, slightly below its 5-year mean
- ◆ We believe it is fairly valued at 10x, +1SD from its 5-year mean

Source: RHB, Bloomberg

Figure 21: ANTM's EV/EBITDA valuation

FY21F EBITDA (IDRbn)	3,471
10x EV/EBITDA	34,714
Cash (IDRbn)	853
Total Debt (IDRbn)	4,400
Market Cap (IDRbn)	39,967
# of shares (m)	24,030
TP	1,663
TP rounded	1,600

Source: RHB

Risks

Downside risks that could impact INCO's share price performance include:

- i. Nickel price correction due to lower-than-expected export and domestic demand resulting in lower ASP for ferronickel and nickel ore;
- ii. Production disruption;
- iii. Weakening in the USD as its revenue is in the USD although this may also mean lower gold purchase price for ANTM;
- iv. Higher-than-expected oil prices which may impact higher cash cost;
- v. Regulatory changes.

Company Profile

Integrated in 5 Jul 1968 under the government regulation No. 22/1968 as Perusahaan Negara Aneka Tambang, ANTM was a state-owned company from a merger of several state-owned mining companies and projects, namely the State General Mining Company, the State Bauxite Mining Company, the Tjktok State Gold Mining Company, the State Precious Metals Company, PT Nickel Indonesia, the Diamond Project and other projects under the Bapetamb.

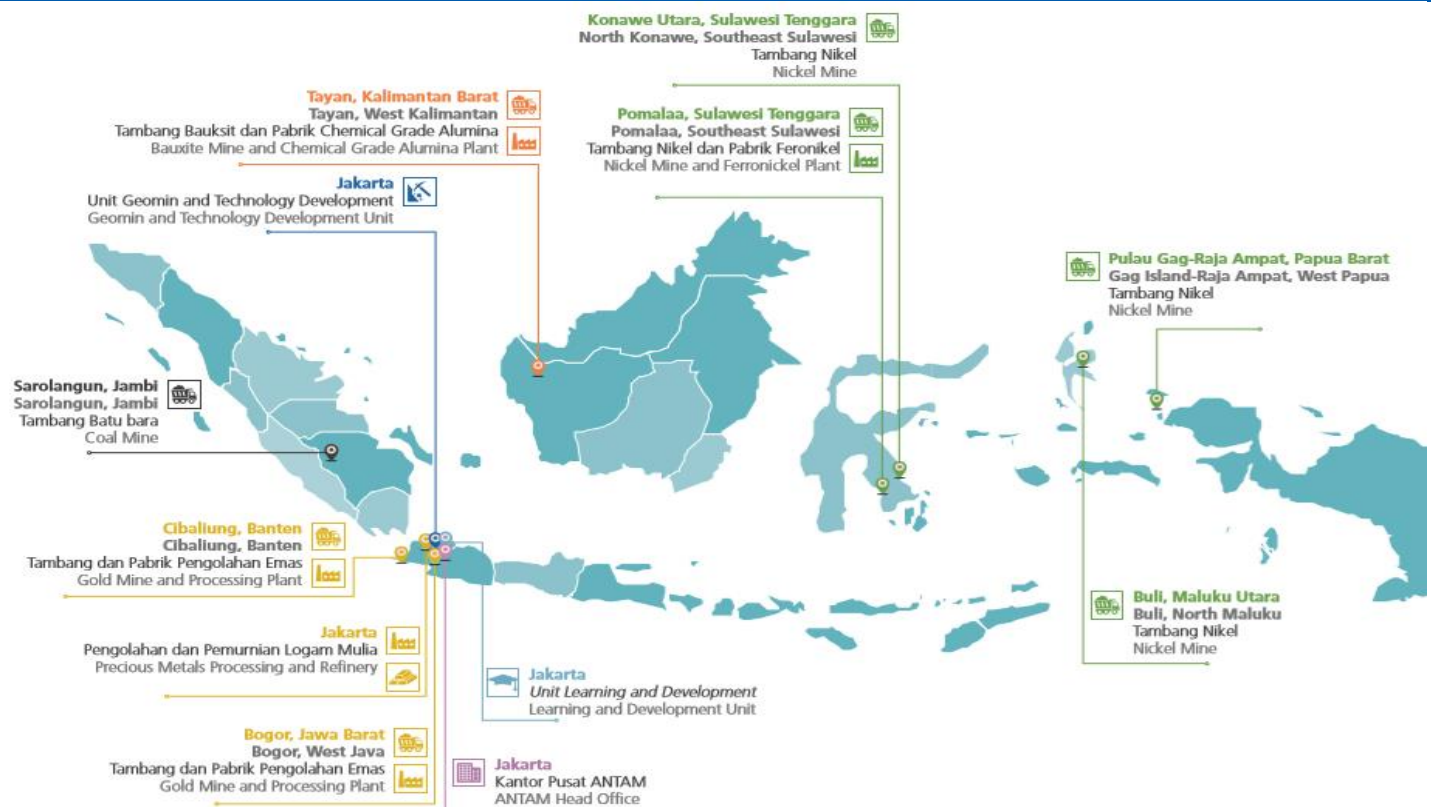
ANTM is a vertically integrated, export-oriented, diversified mining and metals company, although with a shift in the regulatory landscape, it is now more focussed on domestic sales in nickel ore as well as increasing domestic sales in gold for better margins. ANTM undertakes all activities from exploration, excavation, processing through to marketing of nickel ore, ferronickel, gold, silver, bauxite and coal. With location all over Indonesia.

Figure 22: Shareholder and subsidiary structure



Source: Company

Figure 23: ANTM's current operations area



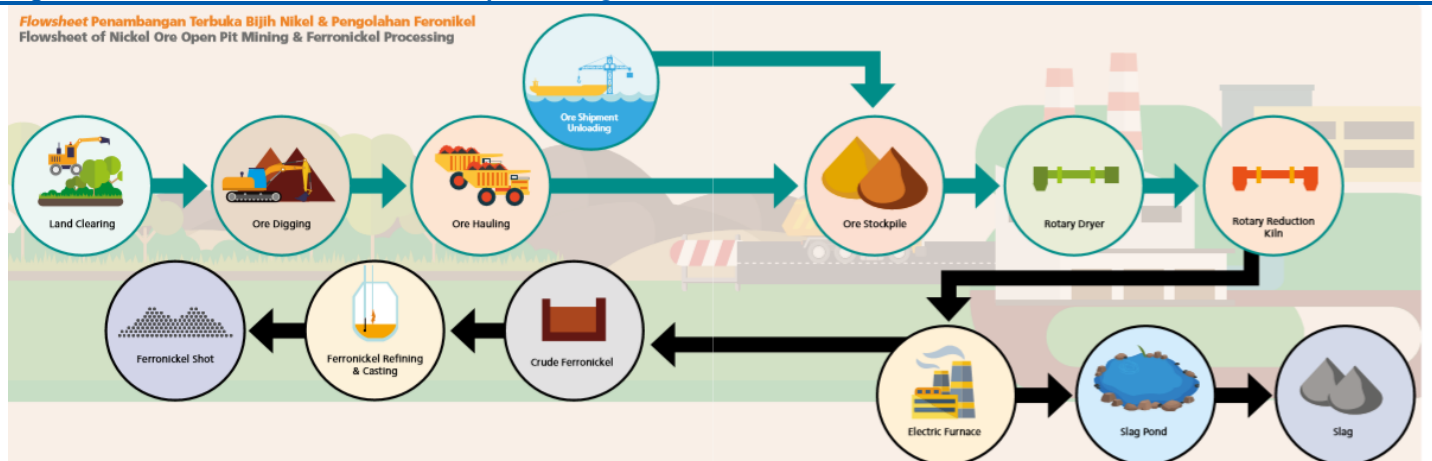
Source: Company

Operating segments

Nickel ore and ferronickel. ANTM's largest contributor in EBIT is its nickel ore and ferronickel business. Nickel ore originated in the nickel mine in Pomalaa in southeast Sulawesi. The company also owns mines in east Halmahera, North Maluku, and Gag Island in West Papua. The company has a total proven and probable nickel reserve of 297m wmt comprised of 207m wmt saprolite nickel ore (high grade 1.5-1.8%) and 90m wmt limonite nickel ore (low grade <1.5%).

The company owns three ferronickel smelters (Ferronickel Plants (FeNi) II, III, and IV) with four production lines and an annual combined capacity of 27,000 tonnes nickel in ferronickel (TNi). The processing plant in Pomalaa utilises the RKEF method in which the nickel ore is smelted in an electric furnace to produce ferronickel pellets with 20-25% nickel and 75-80% iron composition. It takes c.75-90 wmt of nickel ore to produce one tonne of nickel contained in ferronickel.

Figure 24: ANTM's end-to-end ferronickel processing flow sheet



Source: Company, Error! Bookmark not defined.

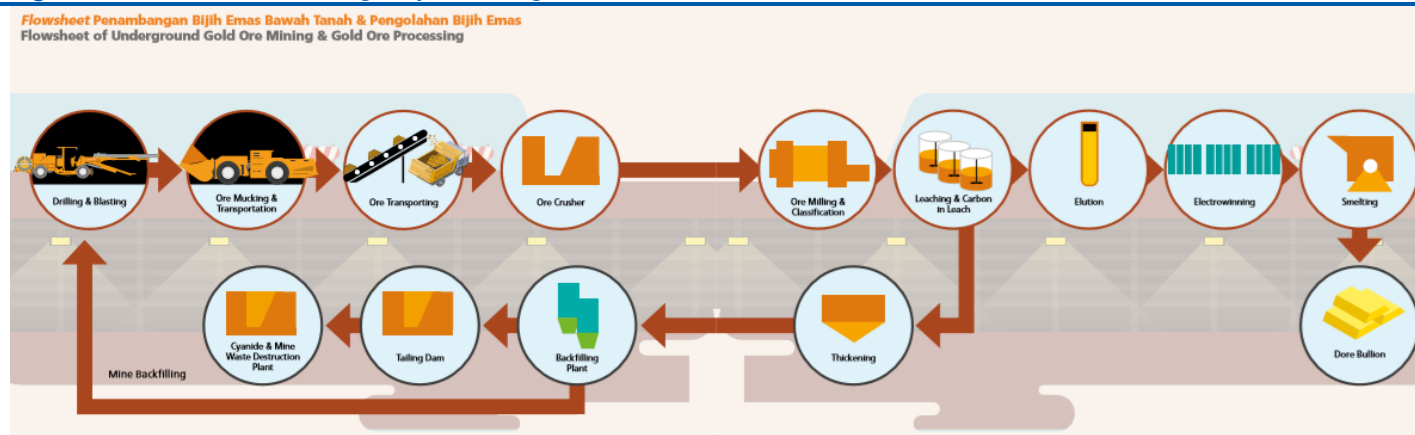
8 December 2020

Basic Materials | Mining

Gold and silver sales, mining, and refining. Gold and silver are produced from mining and smelting of gold ore into gold bullion. ANTM currently mines gold ore from its underground gold mines in Pongkor, West Java and Cibaliung, Banten. Pongkor's gold production ranges between 1,500-2,000 kg (48,226-64,302 t.oz) annually. Meanwhile, Cibaliung production ranges between 800-1,000 kg (25,720-32,150 t.oz) of gold annually.

ANTM also owns and operates a precious metals refinery with an annual production capacity of 75 tonnes (1,929,045 t.oz) of fine gold and 250 tonnes (8,037,686 t.oz) of fine silver. The Logam Mulia refinery is the only precious metals refinery in Indonesia which is accredited by the London Bullion Market Association that guarantees of weight and purity of ANTM's precious metals gold product and can be traded internationally. Hence, ANTM buys gold ores, refines them in its facilities, and sells them internationally and domestically.

Figure 25: ANTM's end-to-end gold processing flow sheet

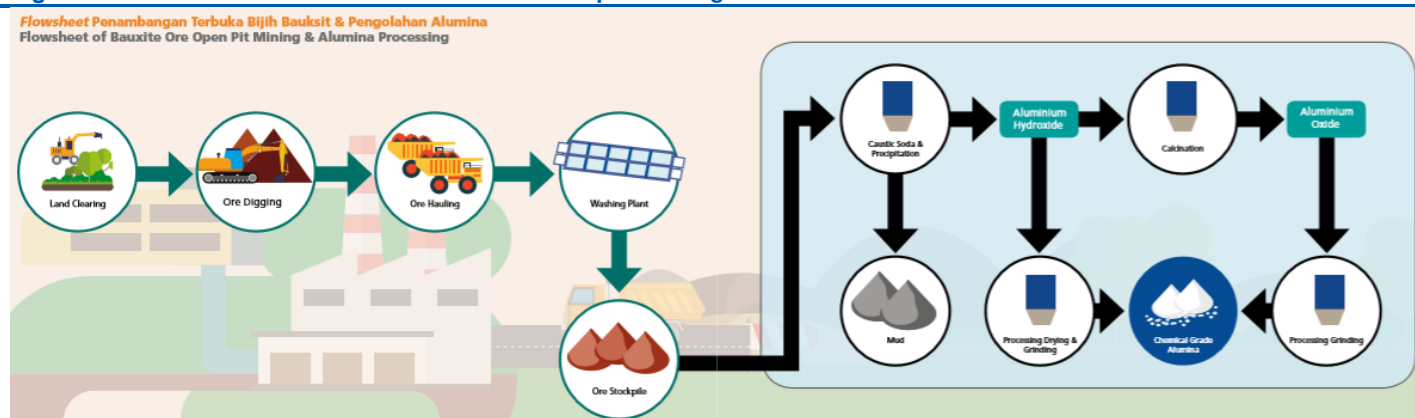


Source: Company, *Error! Bookmark not defined.*

Bauxite and alumina. ANTM's bauxite commodity is produced at the Tayan bauxite mine. The mined bauxite is fed for consumption at the Tayan chemical grade alumina (CGA) plant in Tayan, West Kalimantan. The mine is conducted with in an open pit method using trucks and excavators. After the ores are mined, they are washed and screened to be transported to the Tayan plant, which is located next to the mine.

The Tayan CGA plant process up to 850,000 wmt of washed bauxite pa, resulting in an annual production capacity of 300,000 tonnes of CGA. However, currently, the utilisation is still at 71,000 tonnes, which is targeted to increase to 100,000 tonnes this year. For the project to be economically viable, the company still needs to stabilise utilisation up to 200,000-250,000 tonnes pa.

Figure 26: ANTM's end-to-end bauxite and alumina processing flow sheet



Source: Company, *Error! Bookmark not defined.*

Appendices

Figure 27: ANTM's company milestones

Year	Description
1968	ANTM was formed by a merger from several Indonesian government projects & mining companies
1974	- Change of PN ANTAM to Perusahaan Negara Perseroan Terbatas ("Perusahaan Perseroan") based on Government Regulation No 26 Year 1974 - Change of ANTAM to Perusahaan Perseroan Terbatas based on the Company's Establishment Act No. 320 dated December 30 1974
1975	Issuance of Finance Minister Decree No. Kep. 1768/MK/IV/12/1974, on the Capital of the Establishment of Perusahaan Perseroan (Persero) PT Aneka Tambang to Perseroan Terbatas with the name PT Aneka Tambang, which was resolved by the Minister of Law and Human Rights based on Decree No. Y.A. 5/170/4 dated May 21 1975
1976	Commercial operations of Ferronickel I Plant (FeNi I) in Pomalaa, Southeast Sulawesi.
1979	Gebe Island nickel mine commenced operations
1994	Pongkor gold mine commenced operations
1995	Commercial operation of FeNi II Plant
1997	The company launched an IPO by selling 35% of its shares to the public and listed on the Indonesia Stock Exchange in 1997. Funds raised from the IPO were used to support ferronickel project III expansion.
1998	Gee Island nickel mine commenced operations
1999	The Company listed its shares in Australia
2001	Tanjung Buli nickel mine commenced operations
2002	ASX Listing
2003	ANTM issued US\$200m bond to finance FeNi III Plant project
2007	Commenced operations of FeNi III Plant
2009	ANTM acquired Cibaliung gold mine
2010	Signing of EPC contract of Tayan CGA project Cibaliung gold mine & Tapunopaka nickel mine commenced operations
2011	- Construction of Tayan CGA Project commenced - Acquisition of Sarolangun Coal Mining - Opening of Pakal Island nickel mine
2012	- Groundbreaking of Coal Fired Power Plant & Line-4 of the Pomalaa Ferronickel Plant Expansion Project - Tapunopaka nickel mine commenced operations
2013	Commissioning of Tayan Chemical Grade Alumina Plant
2014	Commissioning of jetty facilities, belt conveyor & Refining-3 of the Pomalaa Ferronickel Plant Expansion Project
2015	- Rights issue which included State Capital participation went successful with oversubscription and nearly IDR5.38trn proceeds - Signing of MoU with Inalum and Chinalco - Launching of gold with batik motifs - Operations of Furnace-4 commence
2016	- EPC Contract of East Halmahera Ferronickel Development Project - Innovation on BRANKAS services - Launch of jewellery products - Strategic alliance with Newcrest in gold exploration - Launch of Green Fine Aggregate products
2017	- Ferronickel production and sales reached an all-time high - ANTM acquired Gold PROPER - ANTM remain as one of the low cost ferronickel producer globally - ANTM commenced export of gold products to Japan - ANTM obtained mineral export license for low grade nickel ore and washed bauxite ore - First piling of East Halmahera Ferronickel Plant Development Project (P3FH) - ANTM became part of the Holdings of Industrial Mining State-Owned Enterprise
2018	- The 50th Year Anniversary, ANTM supports the development of mineral downstream industry in Indonesia - Launching the gold thematic product & Indonesian batik motif gold series II - Innovation on design & packaging of gold minted bar product - ANTM continues to post an all-time high of ferronickel production and sales & sales of gold - ANTM acquires the full ownership in PT Indonesia Chemical Alumina

Source: Company, **Error! Bookmark not defined.**

Figure 28: Board of Commissioners

Name	Position	Description
Lieutenant General TNI (Ret.) Agus Surya Bakti, M.I.Kom. 	President Commissioner	Appointed as President Commissioner of the company in Dec 2019. He has no concurrent position and no affiliation with other board members. Graduated from Indonesian Armed Forces Academy (1984), LEMHANAS of the Republic of Indonesia (2011), and Master of Communication, Hasanuddin University (2017). Previously, he was Secretary of Coordinating Ministry for Political, Legal and Security Affairs (2018-2019), Commander Intelligence Assistant (2018), Military Commander XIV/Hasanuddin (2017), Military Commander VII/Wirabuana (2015), Deputy-1 for Prevention, Protection and Deradicalization of the National Agency for Combating Terrorism (2012), and Deputy Assistant Territorial Chief of Army Staff (2010)
Lieutenant General TNI (Ret.) Agus Surya Bakti, M.I.Kom. 	Independent Commissioner	Appointed as Independent Commissioner of the company in May 2017. He previously worked as Rector of University of Indonesia (2007-2012); Dean of the Faculty of Social and Political Science, University of Indonesia (2002-2007); Secretary and member of MWA, University of Indonesia (2001-2002); Deputy Director of Japanese Center Studies, University of Indonesia (1997-2002); Head of Center for Urban and Regional Studies, University of Indonesia (1997-1999). Currently, he is Professor of Social and Political Science in University of Indonesia and Expert Staff to the Deputy Head of State Intelligence Agencies (BIN).
Ir Anang Sri Kusuwardono 	Independent Commissioner	Appointed as Independent Commissioner since May 2017. He was Mining Exploration Data Processing Consultant (1990-1992), Database, Groundwater Modelers and Geologists in Newcrest, Newmont and Freeport Indonesia (1992-2011), President Commissioner of PT Prama Energi Nusantara (2011-now), and President Commissioner of PT Prama Bumi Utama (current). The current affiliation does not violate the OJK regulation concerning Board of Directors and Board of Commissioner of a public company. Does not affiliate with other board members.
Zaelani, S.E.. 	Commissioner	Appointed as the Commissioner of the company in May 2012. With working experience as expert Staff to the Head of BIN (March 2020-now; Main Secretary of BIN (2014-February 2020); Deputy IV in Economics to the Head of BIN (2010-2014); Expert Staff in Economics of BIN (2007); Director of Counter Terrorism DE III of BIN (2006); Director of Sosek Raising DE V of the State Intelligence Agency (BIN) (2004); Staff of Politics Section in the Embassy of the Republic of Indonesia at Teheran, Iran (1997-2000); Case Officer BAKIN in East Java (1989-1997); and Case Officer of State Intelligence Coordination Agency (BAKIN) in Lampung (1987-1988). His concurrent position does not violate the OJK regulation concerning Board of Directors and Board of Commissioner of a public company.
Ir. Dadan Kusdiana, M.Sc. 	Commissioner	Appointed as the Commissioner of the company in Apr 2019. Previous working experience includes expert Staff of Natural Resources MEMR (2017-2019); Head of Communication, Public Information Service, and Cooperation MEMR (2017); and Secretary of Director General of New Energy, Renewable Energy and Conservation Energy of the Ministry of Energy and Mineral Resources (MEMR) (2016-2017). Concurrent position as Head of Research and Development MEMR (2019-now). He is not affiliated with other members of board of directors or board of commissioners. His concurrent position does not violate the OJK regulation.
Arif Baharudin, S.E., M.B.A., C.A. 	Commissioner	Appointed as Commissioner of the company in Apr 2019. Previously he was Secretary of Fiscal Policy, Ministry of Finance (2015-2017); Head of Center Analysis and Harmonization Policy, Secretariat General, Ministry of Finance (2013-2015); Director of Separated State Assets, Directorate General of State Assets Management (2011-2013); Head of Accounting Standards, Bapepam, Ministry of Finance (2008-2009); Head of Transaction and Securities Agency, Bapepam, Ministry of Finance (2006-2008). Concurrent position as Expert Staff of Financial Services and Capital Market Policy and Regulation, Ministry of Finance. He is not affiliated with other members of board of directors or board of commissioners. His concurrent position does not violate the OJK regulation concerning Board of Directors and Board of Commissioner of a public company.

Source: Company, **Error! Bookmark not defined.**

Figure 29: Board of Directors

Name	Position	Description
Dana Amin 	President Director	Appointed as President Director of the company in Dec 2019, he was Executive Advisor of PT Inalum (Persero) (2019); Land/Agrarian Reform Advisor Australia Indonesia Partnership for Economic Governance (AIPEG), One Map Project World Bank (2017-2019); Director of Project Management Office Holding SOE's Maritime (2017); and Operation Director of PT Pelabuhan Indonesia II (Persero) (2012-2016).
Hartono, S.T., M.Si. 	Director of Operations and Production	He was appointed as director of the company in Apr 2014. He has worked with ANTAM since 2012 from senior engineer to general manager. His concurrent position are President Commissioner of PT ANTM Niterra Halmahera and President Commissioner of PT Nusa Halmahera Mineral. He graduated with Masters of Science of Mining and Mineral Resources, Padjadjaran University (2008) and Bachelor of Geological Engineering, STTNAS (1996).
Apriland Hidayat Setia, S.T., M.M., M.B.A. 	Director of Commerce	Appointed as the Independent Director of the company in Apr 2019. He works in ANTAM since 2008 from trading ASM to Senior Vice president Corporate Secretary. He graduated with Master of Business Administration, Monash University (2005). Master in Management, STIE IPMI (2004); and Bachelor Degree of Mining, Bandung Institute of Technology (1998). He has no concurrent positions.
Ir. Luki Setiawan Suardi 	Director of Human Resources	He was appointed as a director in Apr 2019. Has a diverse work experience from C&B Analyst Astra International (1991-1993); Principle Consultant PwC (1996-2002); Principle Consultant IBM Business Consulting (2002-2004); Principle Consultant Mercer (2004-2008); Head Human Resources of PT Bank Permata Tbk (2008-2014) Chief Human Resources Officer of Astra Aviva Life (2014-2018); Chief Administration Officer of PT Trakindo Utama (2018-2019). His concurrent position as President Commissioner of PT Menara Antam Sejahtera.
Anton Herdianto, S.E., Ak., M.Si. 	Director of Finance	He was appointed in Dec 2019. He was. Senior Executive Vice President of Operational Finance PT Inalum (Persero) (2018-2019; Senior Vice President Small Medium Enterprise Banking Group of PT Bank Mandiri (Persero) Tbk (2017-2018); Member of Supervisory Board Bank Mandiri Pension Fund (2015-2018); Senior Vice President Strategy and Performance Management Group of PT Bank Mandiri (Persero) Tbk (2014-2016); Finance Director of PT Mandiri Tunas Finance (2010-2014); and Vice President Change Management Office Group of PT Bank Mandiri (Persero) Tbk (2005-2010).
Risno, S.T. 	Director of Business Development	He was appointed as a director in Dec 2019. He was President Director of PT Gag Nikel (2018-2019); President Director of PT ANTM Resourcindo (2017-2018); Operations and Planning Director of PT ANTM Resourcindo (2016-2017); Vice President Operations of ANTM's Bauxite Mining Business Unit (2013-2016). He has no concurrent position.

Source: Company, Error! Bookmark not defined.

Recommendation Chart



Source: RHB, Bloomberg

Date	Recommendation	Target Price	Price
2020-12-07			

Source: RHB, Bloomberg

8 December 2020

Basic Materials | Metals

Vale Indonesia (INCO IJ)

Buy

Pure Proxy For Surging Nickel Prices; BUY

Target Price (Return): IDR5,900 (+16%)
 Price: IDR5,100
 Market Cap: USD3,593m
 Avg Daily Turnover (IDR/USD) 64,419m/4.43m

Analyst

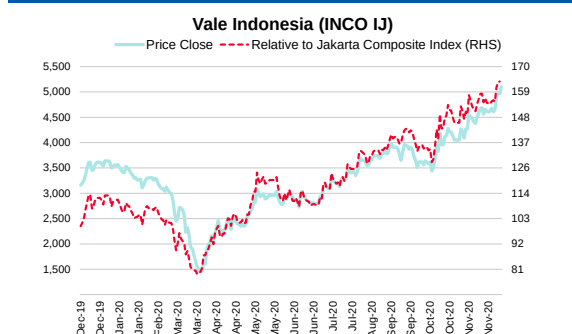
Ghibran Al Imran
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- **Initiate coverage with a BUY and IDR5,900 TP, 16% upside** premised on Vale Indonesia's 100% nickel in matte revenue contribution benefiting from the higher FY21F nickel ASP, improving margins from cost cutting initiatives that should be the new norm, and future monetisation of limonite nickel ores through high pressure acid leaching (HPAL) smelting for electric vehicle (EV) battery nickel production.
- **Pure proxy for nickel (beneficiary of nickel price increase).** INCO is our pick for a pure nickel play, considering its 100% nickel in matte revenue contribution. It is also the only company in Indonesia that produces nickel in matte. Its ASP highly correlates with LME's nickel prices (1-month lagging) with an average of 20% discount. Hence, any price point change in nickel prices would highly correlate to its share price, which may be an upside or downside risk.
- **Fixed buyer with potential in expanding to other markets.** INCO's sales are 100% contributed to its overseas parent, which acts as a fixed buyer for its nickel in matte production. Hence there are no risks of lower sales even if demand drops. However, management is planning to expand its sales to unaffiliated parties for additional sales. Potential sales to Indonesia Asahan Aluminium (MIND ID)/domestic market are also possible considering Indonesia's plan to expand more towards more value-added industries.
- **Cost saving initiatives in 2020, likely the new norm.** INCO has been in a major cost cutting programme since 2018, already cutting a total of USD35m (5% of its 2019 COGS) to widen its margins. The company is targeting another USD34m in cost savings in 2020F, USD21m of which has been realised by 9M20. The company has been lowering high sulphur fuel oil (HSFO) and diesel usage per ton production, which is reflected in its improving gross and EBIT margins to 15% and 14% in 9M20, from 4% and 2% in 9M19.
- **Monetising lower grade nickel through HPAL development** On top of saprolite nickel ore (high grade of >1.5%) reserve, INCO also has limonite ore reserve, which remains untapped. Limonite ores are extracted through HPAL, which is used as a sulphide mix to turn into nickel sulphate, the main component for electric vehicle (EV) battery precursor. With plans of lithium ion (li-ion) battery production in Indonesia, low-grade nickel ores can have a higher value. However, INCO's HPAL smelter is still under development. The project – done with its shareholder, Sumitomo Metal Mining, using its technology and expertise – is expected to be operational by 2025.
- **Valuation.** We derive our 12M TP of IDR5,900 using a target of 13x FY21F EV/EBITDA, set at +1SD from its 5-year mean, which in our view is justified given the current nickel price level.
- **Risks** include weak ASP, lower production, the USD, oil prices, and regulatory.

Share Performance (%)

	YTD	1m	3m	6m	12m
Absolute	40.1	19.4	30.4	68.3	60.9
Relative	47.9	10.5	19.3	50.9	67.0
52-wk Price low/high (IDR)				1,440 – 5,100	



Source: Bloomberg

Forecasts and Valuation	Dec-18	Dec-19	Dec-20F	Dec-21F	Dec-22F
Total turnover (IDRb)	776,900	782,012	810,700	814,385	994,950
Recurring net profit (IDRb)	60,100	64,244	97,255	131,970	167,449
Recurring net profit growth (%)	-	6.9	51.4	35.7	26.9
Recurring P/E (x)	843.19	788.79	521.05	383.99	302.63
P/B (x)	26.9	26.1	24.9	23.4	21.7
P/CF (x)	382.59	na	na	na	na
Dividend Yield (%)	na	na	na	na	na
EV/EBITDA (x)	544.72	490.74	407.21	279.09	234.12
Return on average equity (%)	3.3	3.0	4.8	6.2	7.3
Net debt to equity (%)	net cash	net cash	net cash	net cash	net cash

Source: Company data, RHB

Note:

Small cap stocks are defined as companies with a market capitalisation of less than USD1bn.

Financial Exhibits

Asia	Financial summary (IDR)	Dec-18	Dec-19	Dec-20F	Dec-21F	Dec-22F
Indonesia	Recurring EPS	6.05	6.47	9.79	13.28	16.85
Basic Materials	BVPS	189.58	195.41	205.02	218.12	234.76
Vale Indonesia	Return on average equity (%)	3.3	3.0	4.8	6.2	7.3
INCO IJ						
Buy						
Valuation basis	Valuation metrics	Dec-18	Dec-19	Dec-20F	Dec-21F	Dec-22F
EV/EBITDA	Recurring P/E (x)	843.19	788.79	521.05	383.99	302.63
	P/B (x)	26.9	26.1	24.9	23.4	21.7
	FCF Yield (%)	0.1	0.0	(0.4)	(0.4)	(0.2)
	EV/EBITDA (x)	544.72	490.74	407.21	279.09	234.12
	EV/EBIT (x)	544.72	490.74	407.21	279.09	234.12
Key drivers	Income statement (IDRb)	Dec-18	Dec-19	Dec-20F	Dec-21F	Dec-22F
i. ASP (nickel prices);	Total turnover	776,900	782,012	810,700	814,385	994,950
ii. Production and sales volume;	Gross profit	104,001	116,454	137,617	195,385	230,226
iii. Lower fuel costs.	EBITDA	92,423	102,724	123,881	180,718	214,880
	Operating profit	92,423	102,724	123,881	180,718	214,880
	Net interest	(2,237)	847	4,752	4,762	4,772
Key risks	Pre-tax profit	82,617	89,136	122,348	166,966	211,963
i. Weaker ASP;	Taxation	(22,105)	(31,736)	(26,916)	(36,732)	(46,632)
ii. Production miss;	Reported net profit	60,512	57,400	95,431	130,233	165,331
iii. USD and oil prices.	Recurring net profit	60,100	64,244	97,255	131,970	167,449
Company Profile	Cash flow (IDRb)	Dec-18	Dec-19	Dec-20F	Dec-21F	Dec-22F
Vale Indonesia produces nickel in matte, an intermediate product, from lateritic ores at its integrated mine and processing facilities near Soroake, Sulawesi	Change in working capital	89,907	(63,649)	(4,496)	3,771	(36,296)
	Cash flow from operations	132,452	(106,368)	(69,171)	(57,518)	(17,810)
	Capex	(83,784)	125,295	(125,000)	(125,000)	(100,000)
	Cash flow from investing activities	(83,784)	125,295	(125,000)	(125,000)	(100,000)
	Cash flow from financing activities	(40,429)	(24,391)	(947)	(35)	(35)
	Cash at beginning of period	221,699	301,153	249,035	213,988	222,958
	Net change in cash	8,239	(5,464)	(195,118)	(182,552)	(117,845)
	Ending balance cash	229,246	296,072	53,917	31,436	105,113
	Balance sheet (IDRb)	Dec-18	Dec-19	Dec-20F	Dec-21F	Dec-22F
	Total cash and equivalents	316,760	249,035	213,988	222,958	351,958
	Tangible fixed assets	1,434,510	1,467,462	1,592,462	1,717,462	1,717,462
	Total investments	14,363	15,470	15,470	15,470	15,470
	Total assets	2,202,452	2,222,688	2,318,250	2,440,702	2,626,872
	Total long-term debt	0	0	138	104	69
	Total liabilities	318,725	280,995	281,126	273,345	294,184
	Total equity	1,883,727	1,941,693	2,037,124	2,167,357	2,332,688
	Total liabilities & equity	2,202,452	2,222,688	2,318,250	2,440,702	2,626,872
	Key metrics	Dec-18	Dec-19	Dec-20F	Dec-21F	Dec-22F
	Revenue growth (%)	23.4	0.7	3.7	0.5	22.2
	Gross margin (%)	13.4	14.9	17.0	24.0	23.1
	Operating EBITDA margin (%)	11.9	13.1	15.3	22.2	21.6
	Net profit margin (%)	7.8	7.3	11.8	16.0	16.6
	Capex/sales (%)	10.8	(16.0)	15.4	15.3	10.1
	Interest cover (x)	13.6	26.3	8,678.1	15,815.5	25,049.5

Source: Company data, RHB

Investment Thesis

Pure proxy for nickel: initiate buy with xx upside

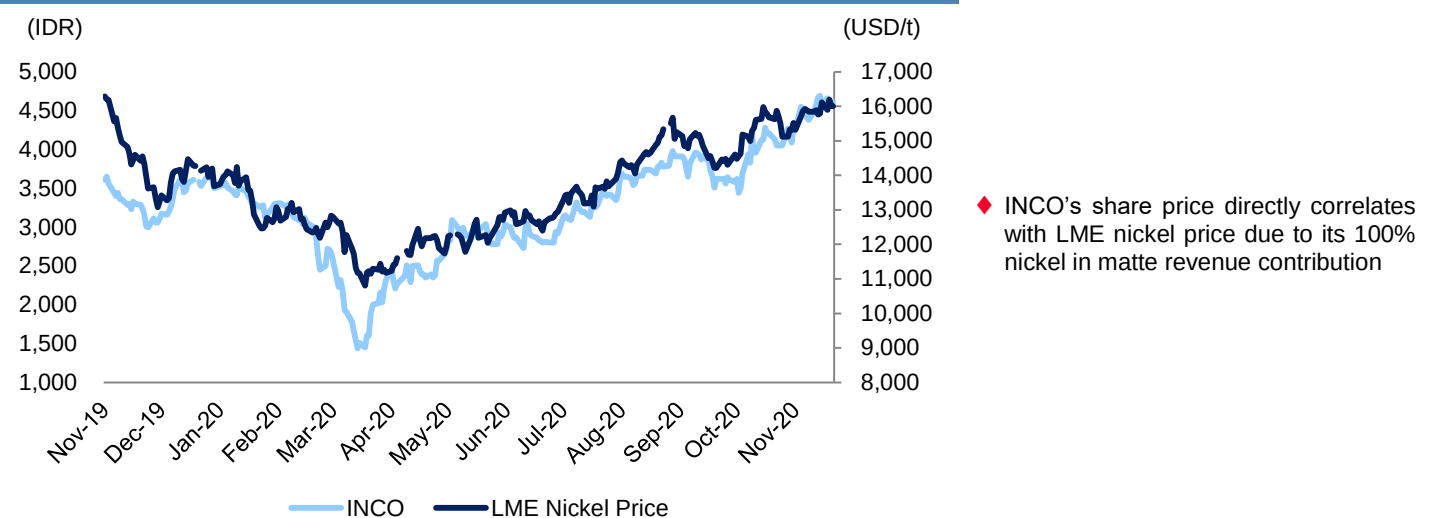
Initiate coverage on INCO with a BUY call and 12-month TP of IDR5,900, implying 16% upside. Our bullish stance is premised on:

- v. The only nickel in matte producer in Indonesia with 100% contribution in revenue from nickel, benefiting from the current nickel price surge;
- vi. Improving margins from cost-cutting initiatives;
- vii. Monetising in limonite nickel content through HPAL smelter.

As such, we believe INCO is fairly valued at 13x (+1SD from its 5-year mean) FY21F EV/EBITDA, implying a TP of IDR5,900.

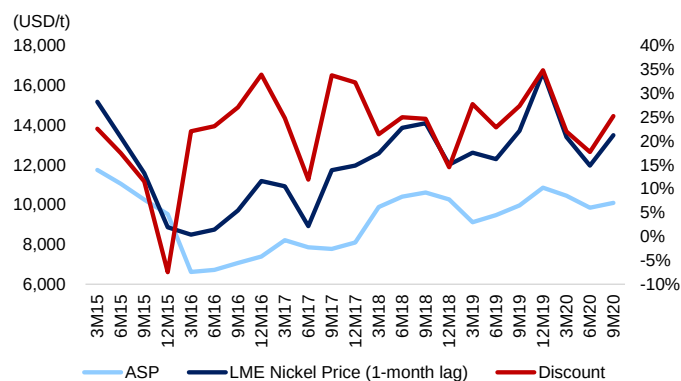
Pure nickel play, riding on the surging nickel price. INCO is our pick for a pure nickel play, considering its 100% nickel in matte revenue contribution. It is also the only company in Indonesia that produces nickel in matte. Its ASP is also highly correlated with the LME nickel price (1-month lagging) with an average of 20% discount. Hence any price point change in nickel prices highly correlates to its share price which may be an upside or downside risk.

Figure 1: LME nickel price movement vs INCO



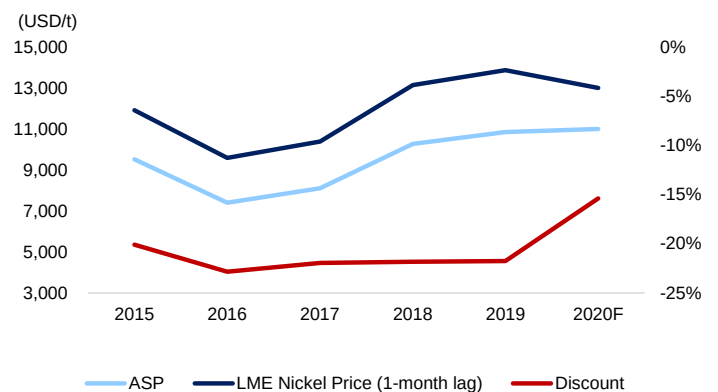
Source: Bloomberg

Figure 2: INCO's quarterly nickel ASP and discount to LME



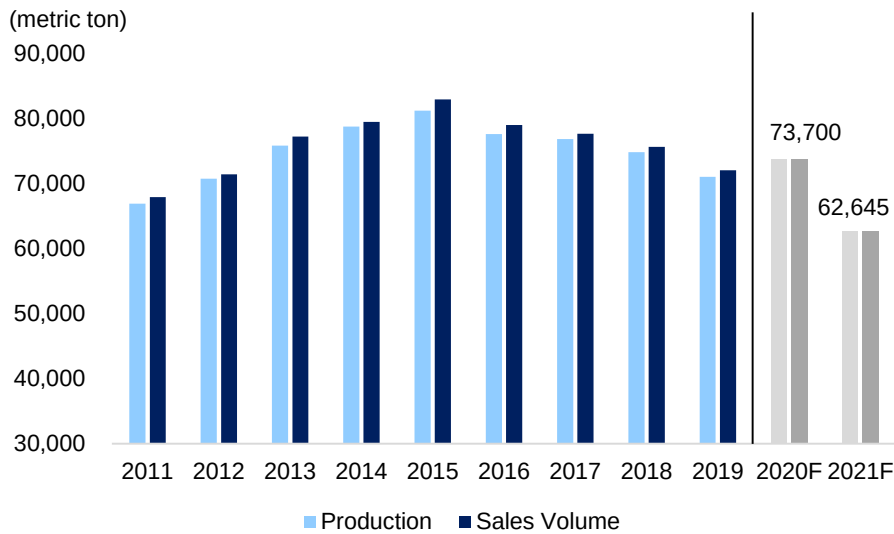
Source: Bloomberg

Figure 3: INCO's quarterly nickel ASP and discount to LME



Source: Bloomberg

Figure 4: LME nickel price movement vs INCO



♦ The company has a total capacity of c.80,000 tonnes of nickel in matte annually

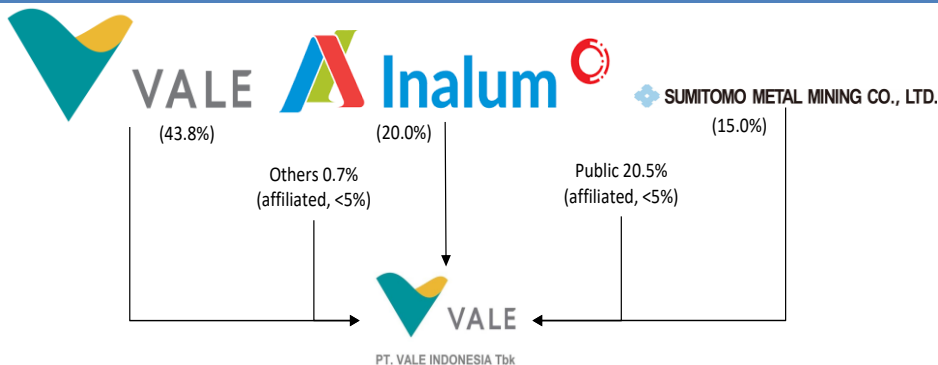
Source: Company data

The company has a built production capacity of c.80,000 tonnes of nickel in matte, annually. This year the company guided for a 73,000 tonne production target, representing a 4% increase from last year's production. By 9M20, the company already achieved a 55,792 tonne production, representing a 76% achievement towards its FY target, in line. Next year however, the company will face lower production as it is planning a rebuild in one of its furnaces for an estimated period of 4-5 months (during 2Q-3Q21), hence we estimate a 10-12.5% downside risk towards production. However, this may be offset by the 15-18% upside on ASP going from a lower FY20 ASP of c.USD11,000 per tonne.

Fixed buyer while expanding to global markets. INCO is owned by Vale Canada (Vale) (43.8%, majority, consolidated), Inalum (20%), and Sumitomo Metal Mining (15%) with the remaining 20.5% publicly listed and 0.7% owned by affiliates of Vale and Sumitomo. Inalum has completed a IDR5.5trn stake sale for 20% of Vale and Sumitomo's stake (at c.IDR2,770 per share) as an obligation to the Indonesian Government in order to extend its operations through 2025.

INCO's sales are 100% contributed to both its overseas parent, which acts as a fixed buyer for its nickel in matte production. Hence there are no risks of lower sales even if demand drops. The key upside/downside risks to its revenue are global nickel prices. However, management is planning to expand its sales to unaffiliated parties for additional sales. Potential sales to MIND ID/domestic market are also possible considering Indonesia's plan to expand more towards more value-added industries.

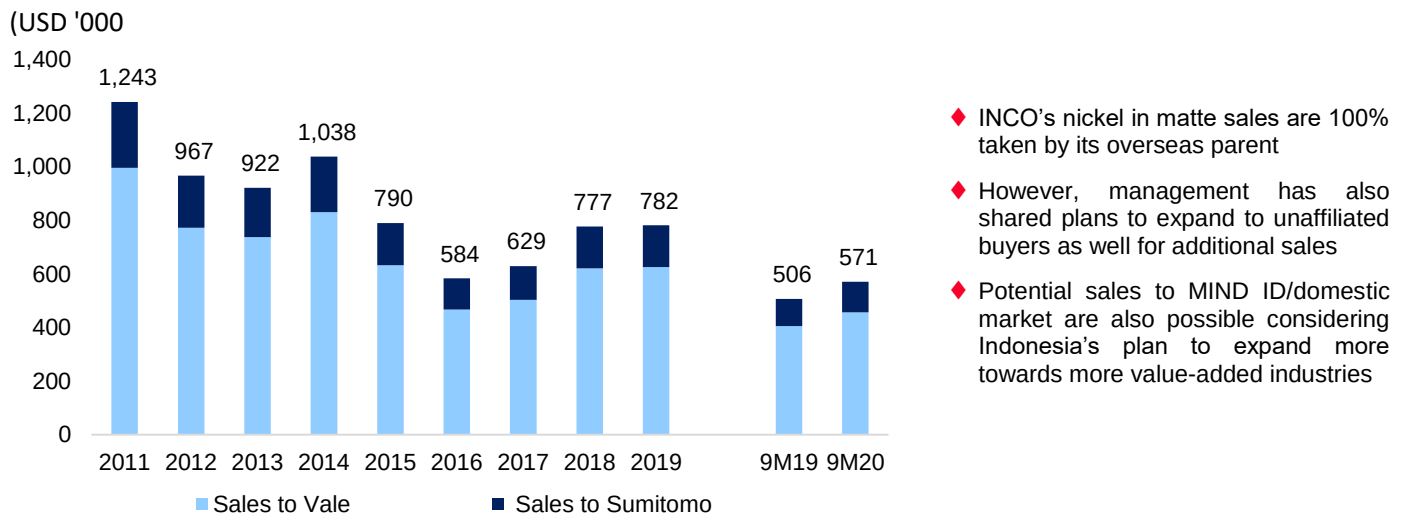
Figure 5: INCO's shareholding structure



♦ INCO is a subsidiary of Vale Canada and Sumitomo Metal Mining and Inalum after the stake sale in Jul 2020 from its former majority shareholders (Vale and Sumitomo)

Source: Company

Figure 6: INCO's sales breakdown



Source: Company data

Cost saving initiatives in 2020, likely the new norm. INCO has been in a major cost cutting programme since 2018, already cutting a total of USD35m (5% of its 2019 COGS) to widen its margins. The company is targeting another USD34m in cost savings in 2020F, USD21m of which has been realised by 9M20. As the largest cost component in its cash cost is fuel costs, this is naturally the main target. The company has been lowering high HSFO and diesel usage per tonne production from 19.6 litres per tonne in 9M19 to 18.2 litres per tonne in 9M20 (-7% YoY) for HSFO, which is used for fuel in its reducing kiln as well as lowering diesel usage from 1,331 litres per tonne in 9M19 to 1,038 litres per tonne (-22% YoY).

The efficiency in fuel usage was possible due to its new electric boiler, fully operational since Feb 2019, which is fully powered by a hydroelectric power plant. The new electric boiler replaces the older model, which uses HSFO. The usage of the new boiler contributes to a savings of c.USD5m pa from the savings of 67,047 barrels of HSFO pa.

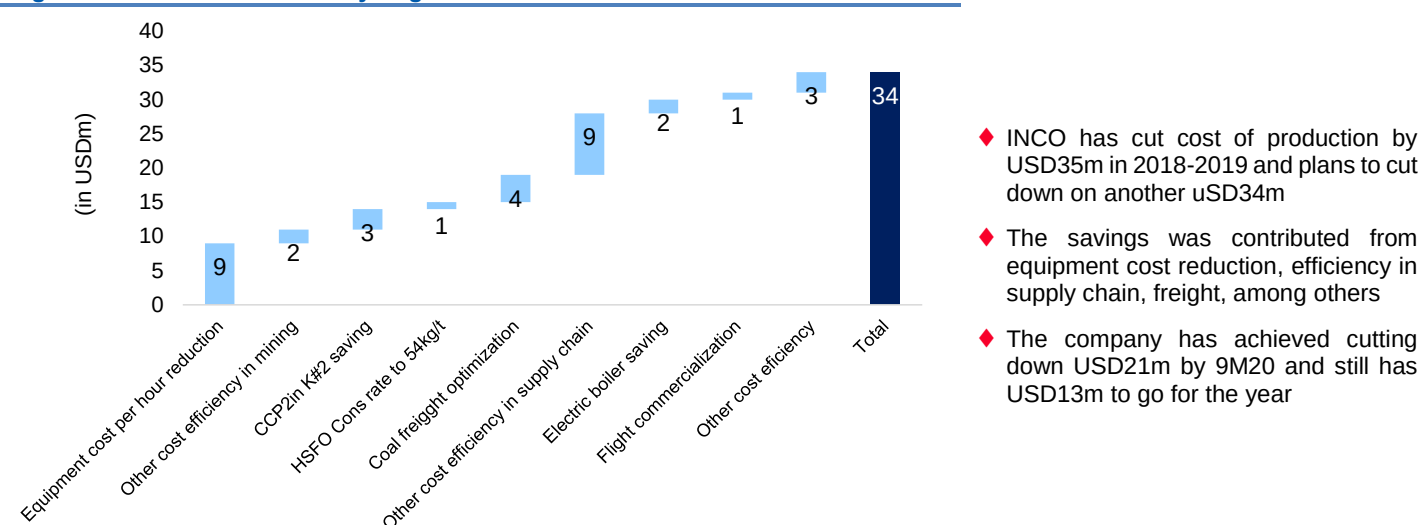
With the lower costs, we believe better margins are the norm going forward. In 9M20, the company expanded its gross and EBIT margins to 15% and 14% from a mere 4% and 2% last year. We estimate gross margins may be well above 15% going forward with EBITDA margins well above 30% after the new cost structure as well as better ASP.

Figure 7: INCO's cost efficiency in fuel

		2Q20	3Q20	QoQ	9M19	9M20	YoY
HSFO	Volume (barrels)	316,336	363,237	14.8%	992,769	1,012,730	2.0%
	Volume/t	16.9	18.6	10.1%	19.6	18.2	-7.4%
	Average price (USD)	39.3	36.4	-7.4%	69.1	42.0	-39.2%
Diesel	Volume (kl)	18,547	19,058	2.8%	67,284	57,942	-13.9%
	Volume/t	991.8	978.5	-1.3%	1,331.5	1,038.5	-22.0%
	Average price (USD)	0.4	0.3	-28.2%	0.6	0.4	-30.5%
Coal	Volume (mt)	108,936	116,805	7.2%	280,696	318,170	13.4%
	Volume/t	5.8	6.0	3.4%	5.6	5.7	2.7%
	Average price (USD)	102.7	96.8	-5.7%	124.7	101.5	-18.6%

Source: Company data

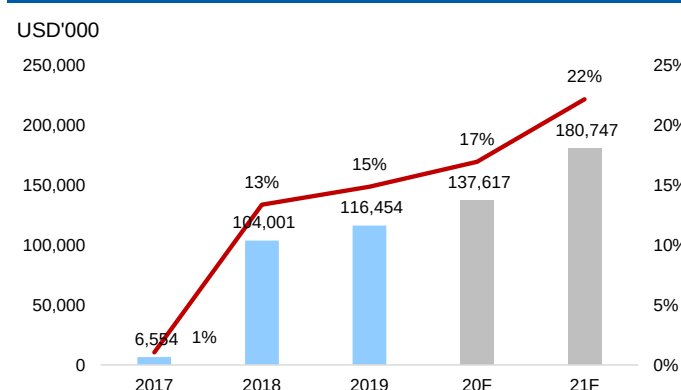
Figure 8: INCO's cost efficiency target



Source: Company data

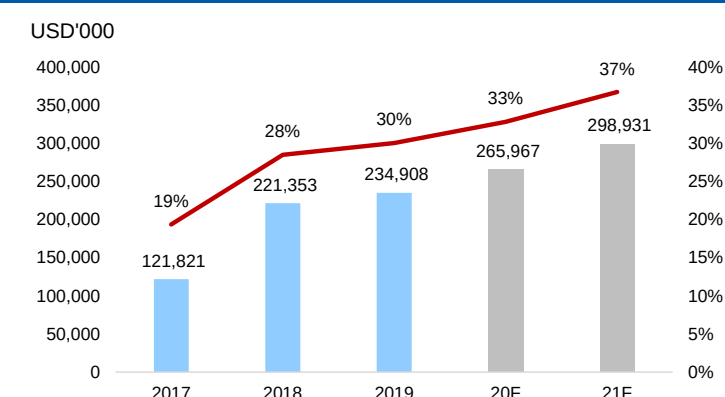
Due to the lower volume usage in fuels as well as efficiencies in other processes, we project better margins going forward for the company. Despite the expected recovery in oil prices in 2021F, from our in-house forecast of Brent crude oil price at USD43 per bbl in 2020 to USD55 per bbl in 2021F (27% YoY), the lower volume in usage as well as better nickel ASP from USD11,000 per tonne average in 2020F to USD13,000 per tonne in 2021F (18% YoY), margin expansion should still be seen in 2021F.

Figure 9: INCO's GP and GPM



Source: Company data, RHB

Figure 10: INCO's EBITDA and EBITDA margin



Source: Company data, RHB

Monetising lower nickel grades through HPAL development. On top of INCO's saprolite nickel ore (high grade of >1.5%) reserve, which is the main ingredient for its nickel in matte product smelted through a rotary kiln electronic furnace (RKEF), the company still has c.113 tonnes proven probable limonite ore reserve which is still untapped. Limonite ores are extracted through HPAL, which is used as a sulphide mix turned into nickel sulphate, the main component for EV battery precursor. With plans of li-ion battery production in Indonesia, low-grade nickel ores can have higher value.

However, the catch is, INCO's HPAL smelter remains under development. The project – done with its shareholder, Sumitomo Metal Mining, using its technology and expertise – is expected to be operational by 2025. Capex is estimated at USD2.5bn with a capacity of 40,000 tonnes pa. As HPAL technology is still relatively new territory, risks in the realisation of the smelter is also still very high. This is where Sumitomo Metal Mining's experience and expertise come in as it is an operator in two HPAL projects already in the Philippines.

Figure 11: Past HPAL project summary

Projects	Country	Operator	Capex (USDm)	Unit Capex (USD/kt Ni)
Successes in both Capex and Opex				
Coral Bay	Philippines	SMM	500	21
Moa Bay	Cuba	Sherritt	451	12
Failure in Capex, Success in Opex				
Ramu	Papua New Guinea	MCC	2,100	64
Taganito	Philippines	SMM	1,300	36
Ambatovy	Madagascar	Sherritt	5,500	92
Failure both in Capex and Opex				
Goro	New Caledonia	Vale	6,200	103
Ravensthorpe	Australia	FQM	2,480	69
Murrin Murrin	Australia	Glencore	1,485	29
Shutdown & Overhaul				
Gordes	Turkey	Meta	360	36
Bulong	Australia	Wingstar	160	16
Cawse	Australia	Wingstar	234	26
Average				46

Source: Energy and Mineral Resources Ministry

◆ There are already 11 HPAL projects globally, with only two proven attaining full successful production

◆ HPAL smelting requires higher capex and experience

◆ Sumitomo Metal Mining (SMM) has been an operator in two projects, which shows its expertise and experience

Financial Performance

Superb 9M20 due to surge in nickel price and cost savings

Figure 12: INCO's 9M20 results review

(In USDm)	3Q19	2Q20	3Q20	QoQ	YoY	9M19	9M20	YoY	9M20/Cons.
Revenue	214	186	211	13%	-2%	506	571	13%	74%
Gross profit	44	20	44	121%	1%	21	85	304%	61%
EBIT	42	18	42	131%	2%	11	80	607%	62%
Net profit	26	24	24	-3%	-11%	0	77	N/A	78%
Margins:									
Gross	20%	11%	21%			4%	15%		
EBIT	19%	10%	20%			2%	14%		
NET	12%	13%	11%			0%	13%		
ASP (USD/ton)	10,712	9,300	10,556	14%	-1%	9,963	10,556	6%	
Production (tons)	19,820	18,701	19,477	4%	-2%	50,531	55,792	10%	
Sales volume (tons)	19,999	19,887	19,954	0%	0%	50,831	56,554	11%	
Cash cost ex. Royalty (USD/ton)	6,252	5,817	5,782	-1%	-8%	7,848	6,315	-20%	
Production cost (USD/ton)	8,598	8,856	8,535	-4%	-1%	9,607	8,711	-9%	
All-in cost (USD/ton)	8,705	8,949	8,636	-3%	-1%	9,800	8,807	-10%	
HSFO volume (barrels)	392,269	316,336	363,237	15%	-7%	992,769	1,012,730	2%	
HSFO average price per barrel	71.97	39.30	39.30	0%	-45%	69.1	41.99	-39%	
Diesel volume (KL)	18,977	18,547	19,058	3%	0%	67,284	57,942	-14%	
Diesel average price per liter	0.66	0.39	0.39	0%	-41%	0.59	0.41	-31%	
Coal volume (t)	139,746	108,936	116,805	7%	-16%	321,336	318,170	-1%	
Coal average price per t	95.28	102.66	102.66	0%	8%	108.91	101.47	-7%	

Source: Company data

Earnings in 3Q20 was USD24m (-3% QoQ, -11% YoY), with brought 9M20 earnings to USD77m (up from USD160,000 in 9M19) which is slightly above Street estimates at 78%. Its revenue was in line at USD571m (74% of Street), which came from higher QoQ nickel ASP with stable production. Production was at 55 kilo tonnes (kt) (+10%), 19.4kt in 3Q20 which was still in line with its FY target of 73.7kt. Cost saving initiatives are still on track with cash cost lowered to USD6,291 per tonne (-20% YoY) which significantly lifts gross margin to 15% compared to 4% in 9M19 (21% in 3Q20). The company saved USD21m in 9M20, and is on track towards its USD34m target for the year.

Figure 13: INCO's earnings sensitivity to nickel prices

Increase/decrease in nickel price (USD/tonne)	2020F earnings change (USDm)	% change
-50	-2,852	-3.0%
11,000	95,431	0.0%
50	2,852	3.0%

Source: RHB

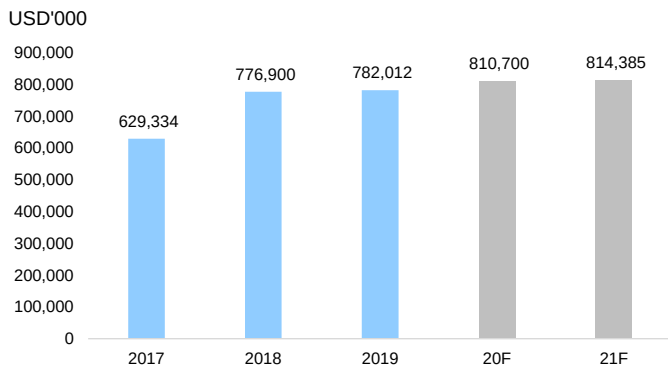
As INCO sells 100% from nickel in matte, its earnings is directly related to nickel prices. Every USD50 appreciation in nickel prices (from our baseline USD11,000 per tonne ASP in FY20F), earnings may increase by 3%.

8 December 2020

Basic Materials | Metals

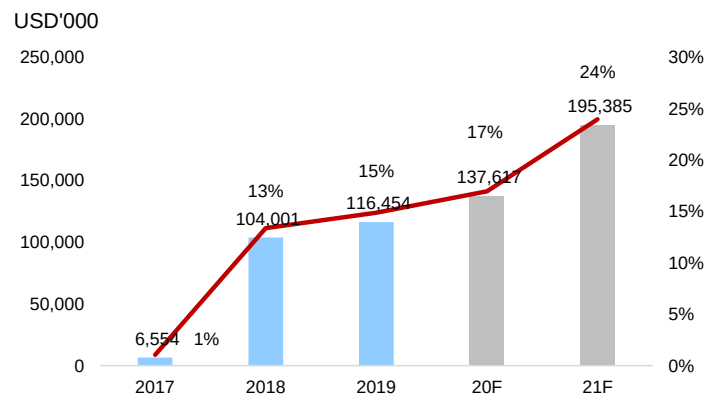
Financial projection

Figure 14: INCO's revenue



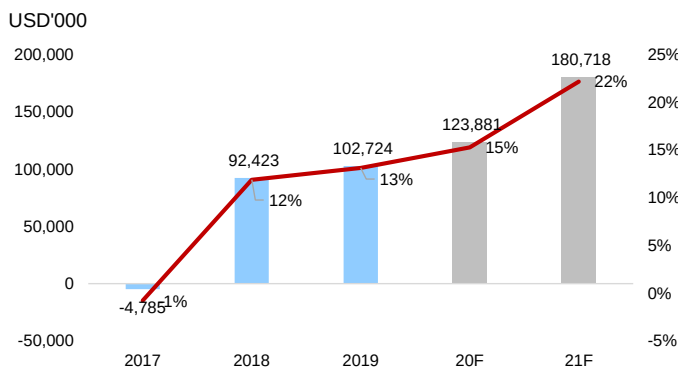
Source: Company data, RHB

Figure 15: INCO's GP and GPM



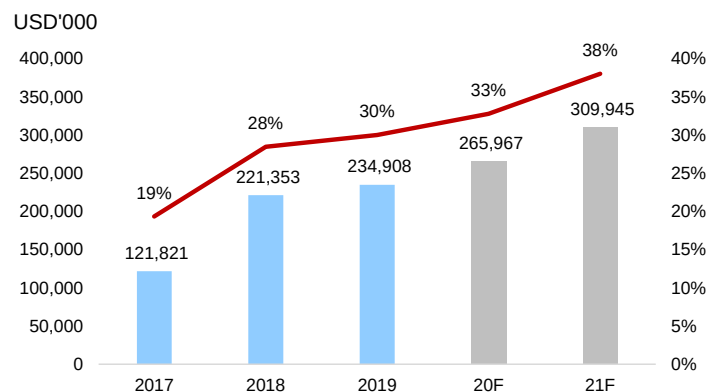
Source: Company data, RHB

Figure 16: EBIT and EBIT margin



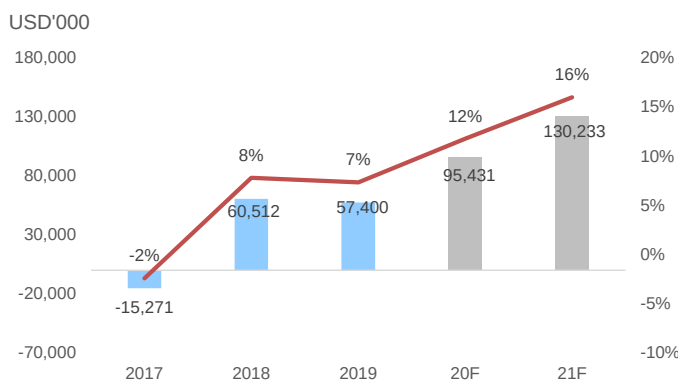
Source: Company data, RHB

Figure 17: EBITDA and EBITDA margin



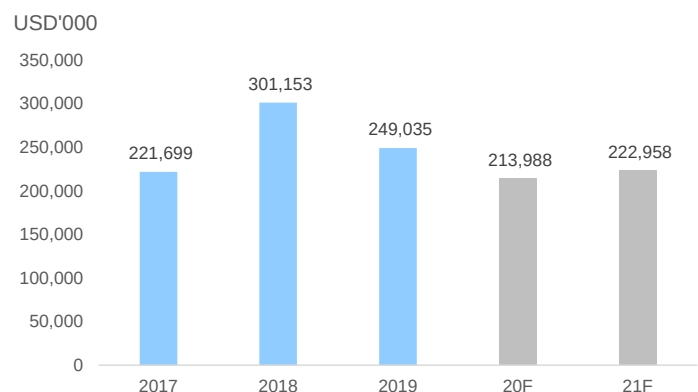
Source: Company data, RHB

Figure 18: Net profit and NP margin



Source: Company data, RHB

Figure 19: Cash level



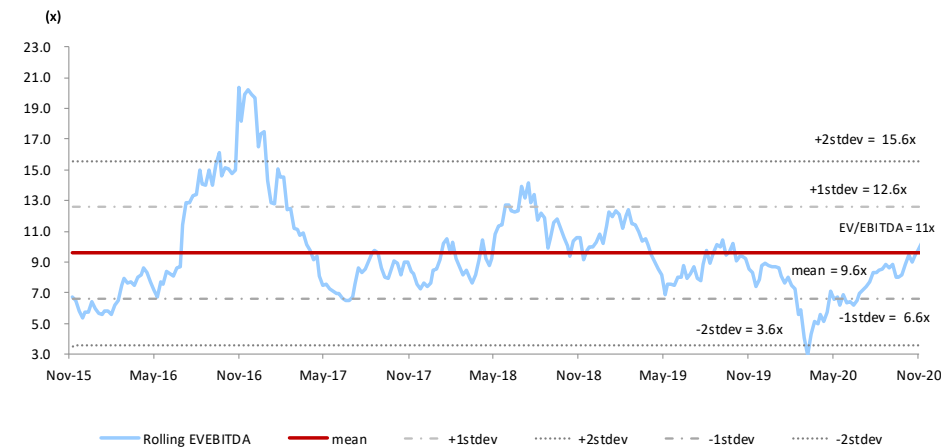
Source: Company data, RHB

INCO has an ample cash level, especially after paying off its long-term debt in 2018, the company is now a net cash company.

Valuation

We derive our 12M TP of IDR5,900 using a target of 13x FY21F EV/EBITDA, set at +1SD from its 5-year mean, which, in our view, is justified given the current nickel price level.

Figure 20: INCO's 5-year EV/EBITDA band



- ◆ INCO is currently trading at 11x EV/EBITDA, slightly over its 5-year mean
- ◆ We believe it is fairly valued at 13x, +1SD from its 5-year mean

Source: RHB, Bloomberg

Figure 21: INCO's EV/EBITDA valuation

FY21F EBITDA (USDm)	309.9
13x EV/EBITDA	4,029
USD/IDR FY21F	13,400
EV in IDR	53,992,493
Cash (IDRm)	4,755,593
Total Debt (IDRm)	11,954
Market Cap (IDRm)	58,760,039
No of shares (m)	9,936
TP	5,913
TP rounded	5,900

Source: RHB

Risks

Downside risks that could impact INCO's share price performance include:

- i. Nickel price correction due to lower-than-expected demand, resulting in lower ASP;
- ii. Production disruption next year due to prolonged furnace rebuild;
- iii. Weakening in the USD as its revenue is in the USD;
- iv. Higher-than-expected oil prices, which may impact higher cash cost with fuel contributing 24% of total cash cost;
- v. Regulatory changes.

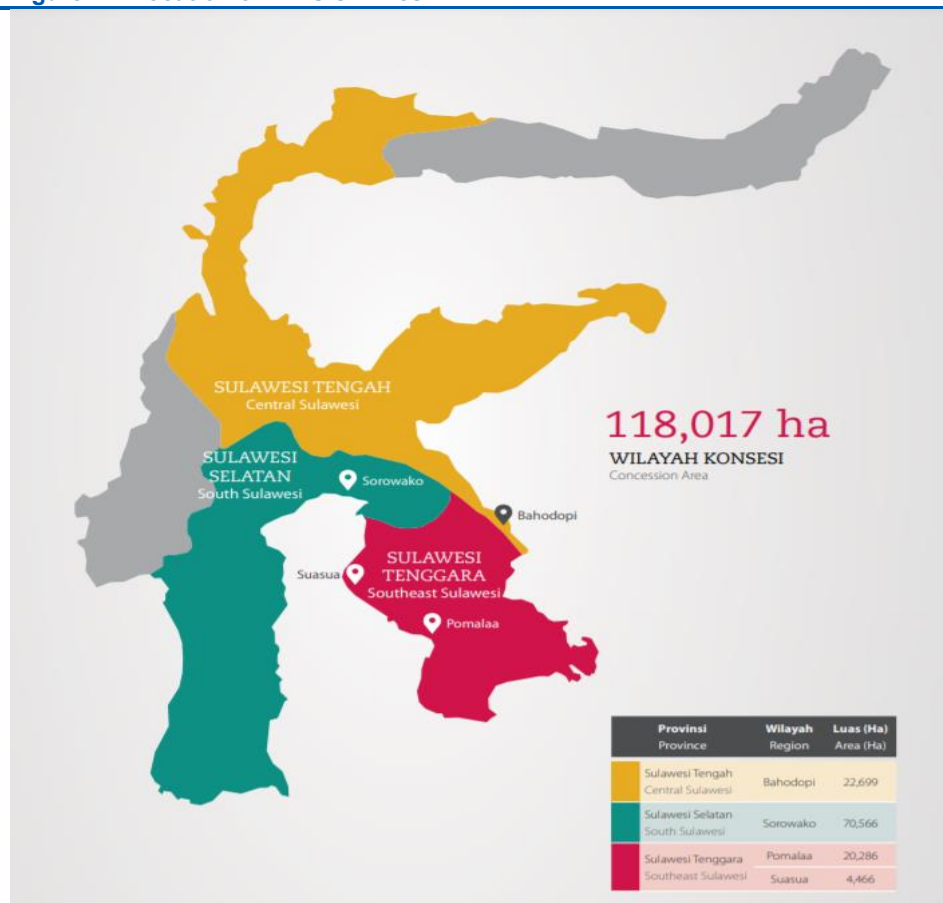
Company Profile

PT Vale Indonesia (INCO) mines nickel ores and processes them into nickel in matte. The company has been doing this for over 50 years in Sulawesi, Indonesia. The average volume of nickel production per year reaches 75,000 metric tons. INCO uses pyrometallurgical technology (in melting the laterite nickel ore). Nickel in matte is then purchased entirely by its parent companies, Vale Canada and Sumitomo Metal Mining.

The company mines nickel ores in the Sulawesi area with a total land concession of 118,017ha. The projects in Sulawesi are located in:

- i. Sorowako (South Sulawesi): 70,566ha – Operational;
- ii. Bahodopi (Central Sulawesi): 22,699ha – Under development;
- iii. Pomalaa (South-east Sulawesi): 20,286ha – Under development;
- iv. Suasua (South-east Sulawesi): 4,466ha.

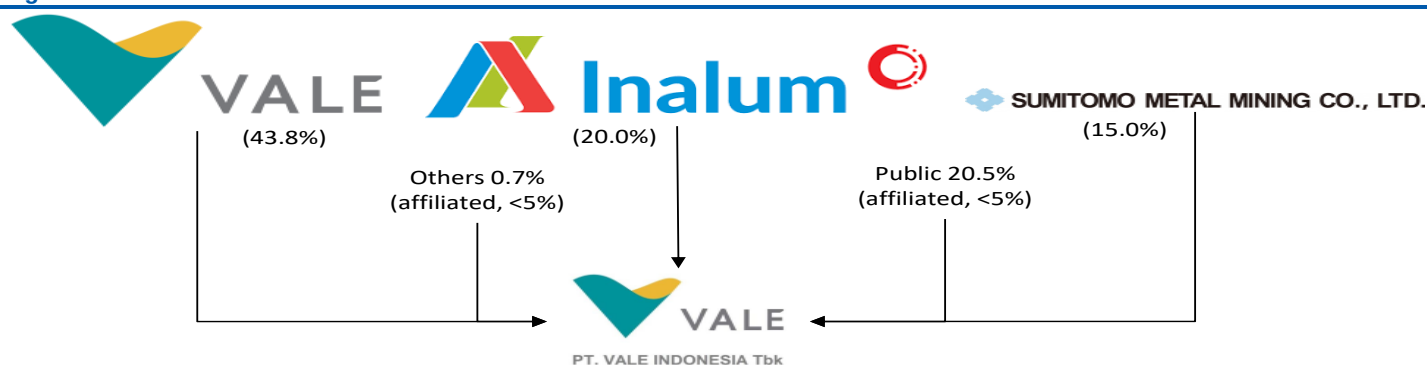
Figure 22: Location of INCO's mines



Source: Company, **Error! Bookmark not defined.**

Vale Canada, part of Vale Base Metals and the second largest nickel producer in the world, currently owns 43.8% of INCO. While Sumitomo Metal Mining owns 15%. MIND ID also owns 20% of INCO after a 20% combined divestment from both Vale and Sumitomo as a part of a deal with the Indonesian Government to prolong its business permit until 2025. Some subsidiaries owned by Vale Indonesia are PT Bahodopi Nickel Smelting Indonesia (99.9% ownership) & PT Kolaka Nickel Indonesia (99.9% ownership).

Figure 23: Shareholders



Source: Company, **Error! Bookmark not defined.**

Sorowako Mine

The only operating mine owned by INCO is located in Sorowako, with a total land concession of 70,566ha. The mine has been operating for over 50 years. The mine is carried out as open-pit mining by removing saprolite layer for high-grade nickel ores. The mine has a total of proven and probable nickel ore reserve of 107.6 tonnes by 2019 with a grade of 1.73%.

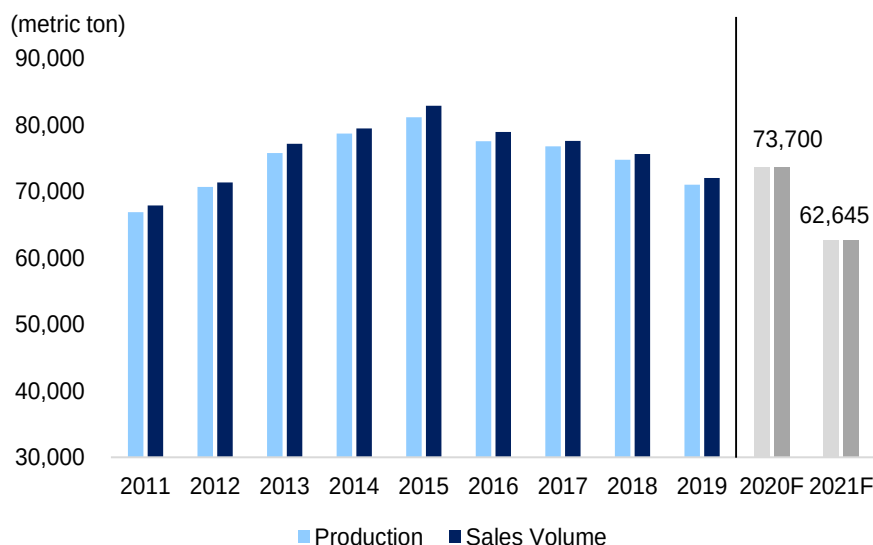
Figure 24: Sorowako's mine reserves

	2019		2018	
	Tonnes	Percentage Grade	Tonnes	Percentage Grade
Proven	66.2	1.72	101.8	1.76
Probable	41.4	1.75	14.7	1.64
Total	107.6	1.73	116.5	1.74

Source: Company data

The smelting process into nickel in matte through the RKEF method is also done in Sorowako with a total production capacity of 240ton of nickel in matte daily (average at 75,000ton annually). The company plans to achieve a higher production at 80,000ton/year like what they achieved in 2015.

Figure 25: INCO's historical production of nickel in matte



Source: Company data, **Error! Bookmark not defined.**

Bahodopi and Pomalaa projects

The company is also continuing its plan to construct two smelters in Bahodopi, Morowali Regency, Central Sulawesi and in Pomalaa, Kolaka Regency, Southeast Sulawesi. The project in Bahodopi, is to build a smelter to process saprolite nickel ore and produce ferro nickel, a main material for stainless steel making. In Pomalaa, the project is to build a processing facility with HPAL technology to process limonite ore and produce intermediate products which can be further processed into material for EV batteries. Some key permits in Pomalaa have been received, while the company is in progress of acquiring permit for Bahodopi expected in 2021F. In addition, the company is currently acquiring land for a port near its Pomalaa HPAL smelter project.

Figure 26: INCO's production facilities

Facilities	Total Owned
Dryer Kiln	3 Units
Reduction Kiln	5 Units
Electric Furnace	4 Units
Converter	3 Units
Screening Stations	5 Units
Coal Mill	1 Units

Source: Company, RHB

Figure 27: INCO's supporting facilities

Facilities	Description	Total Owned	Capacity (MW)
Hydroelectric Power Generators	PLTA Larona	3	165
	PLTA Balambano	2	110
	PLTA Karebbe	2	90
	Mirlees Blackstone Diesel Generator	5	30
	Caterpillar Diesel Generator	23	23
Thermal Power Generator	Steam Turbine Generator	1	15

Source: Company data, RHB

Appendices

Figure 28: INCO's company milestones

Year	Description
1968	Establishment of PT Inco and the signing of a Contract of Work (CoW) between PT Inco and the Indonesian Government for a 30-year concession
1973	Construction of a single pyrometallurgical processing line in Sorowako
1978	PT Inco starts commercial production
1990	Inco Limited sells 20% of its shares in PT Inco to the public, which are listed on the Indonesian Stock Exchange
2011	GMS held on 27 Sep approved the change of Company name from PT International Nickel Indonesia Tbk to PT Vale Indonesia Tbk
2014	The company and the Indonesian Government signed an amendment to the CoW as mandated by Law No. 4 of 2009 Concerning Mineral and Coal Mining
2018	50 years of INCO contributing to Indonesia and the world
2019	Heads of Agreement on the second divestment of 20% of the company's shares with PT Indonesia Asahan Aluminium or Mining Industry Indonesia (MIND ID)

Source: Company, **Error! Bookmark not defined.**

Figure 29: Board of Commissioners

Name	Position	Description
Mark James Travers 	President commissioner	Appointed as President Commissioner of the company in Aug 2019. He is also Interim Chief Executive Officer, Vale Base Metals; Chairman of Log-In Logistica Intermodal S. A.; Executive Director of Base Metal Division at Vale Australia (IP) Pty. Ltd. Graduate with Bachelor of Arts (Honors) and Joint Master o Business Administration, from University of Western Ontario, Canada; Bachelor of Laws degree from York University's Osgoode Hall Law School, Toronto, Canada
Mahendra Siregar 	Independent Commissioner	Appointed as Independent Commissioner since Aug 2019. He was Investment Coordinating Board Chairman, 2013-2014; Deputy Minister of Finance, 2011-2013. Before Vale, President Commissioner, PT Rajawali Nusantara Indonesia, 2012; Deputy Minister of Trade, 2009-2011. He submitted his resignation letter as the company's Vice President Commissioner and Independent Commissioner on 4 Nov 2019, following his appointment as the Deputy Minister of Foreign Affairs for the Republic of Indonesia. Currently he is also Commissioner at PT Semen Indonesia; Commissioner at AKR Corporindo; Independent commissioner at Unilever Indonesia; independent commissioner at PT AJ Sequislife.
Raden Sukhyar 	Independent Commissioner	Appointed as the Independent Commissioner of the company in Mar 2017. With his working experience outside Vale as Director General of Minerals and Coal, Ministry of EMR, 2013-2015; President Commissioner of PT Aneka Tambang Tbk, 2012-2015. Head of Geological Agency of EMR, 2008; Commissioner of PT Pertamina Geothermal Energy, 2005 – 2009. Currently he is an expert to the Minister of Industry for Natural Resources and EMR Working Group, National Committee on Economics and Industry (KEIN) Members.

	Commissioner	Appointed as Commissioner of the company in Apr 2014. Previously he was General Manager of Administration Department Non-Ferrous Metal Division, SMM, Ltd in 2014. Graduated with Masters of Engineering in Metallurgy from Kyushu Institute of Technology. Currently as General Manager Non-Ferrous Metal Division at SMM.
	Commissioner	Appointed as Commissioner of the company in Apr 2019. Before he was Southeast Port Operations Executive Manager, 2013-2016; Carajas Railway Operations; Director, Vale Brasil, 2009- 2013; Railway Operations Engineer, 2001-2009. Concurrent: Integrated Planning Director, Vale Base Metals, 2018-present; Commissioner, PT Kolaka Nickel Indonesia (2019 - present); and Commissioner, PT Bahodopi Nickel Smelting (2019 - present).
	Independent Commissioner	Appointed as Independent Commissioner of the company in Aug 2016. Previously he was Vice President of Corporate Affairs and Communications, Vale Base Metals (2009 - 2018). Director of Corporat Affairs, Vale Base Metals (2007 - 2009); Public Affairs Department, Inco Limited (1989 - 2007) concurrent position as Vice President of Corporate Affairs, Communications and Sustainability, Vale Base Metals (2018 present); Co-Chair of Brazil - Canada Chamber of Commerce (2018 - present); and Vice-Chair of Mining association of Canada (2019 - present).

Source: Company, **Error! Bookmark not defined.**

Figure 30: Board of Directors

Name	Position	Description
	President Director	Appointed as President Director of the company in Sep 2011, he was Independent Commissioner in 2009-2011. Before Vale he was BP Indonesia Head of Country, 2007-2009. His concurrent position as Director of PT Bahodopi Nickel Smelting Indonesia (Company's Subsidiary) and Director of PT Kolaka Nickel Indonesia (Company's Subsidiary) Graduated with Bachelor and Master Degree in Law from Universitas Indonesia. Master of Business Administration (International Business) from University of Southern California, USA.
	Director	She was appointed as a director of the company in Apr 2013. She does not have any concurrent position as of 2019. Previously she was Business Planning and Performance Manager, Vale Base Metals Asia Pacific & Africa, 2010-2013 and Project Financing and Financial Evaluation Manager, PT Vale, 2007-2010. She graduated with a Bachelor's Degree in Economic Accounting from Universitas Indonesia and holds an MBA from UCLA Anderson School of Management and National University of Singapore.

Bernardus Irmanto 	Independent Director	Appointed as the Independent Director of the company in Oct 2010. He was PT Vale General Manager Shared Services Operations, 2009 – 2010 and PT Vale IT General Manager 2007 – 2009. He graduated with a Bachelor's Degree in Computer Science from Universitas Gadjah Mada, Yogyakarta; and holds a Master's Degree in Science and Computer Engineering from University of New South Wales in Sydney, Australia; as well as a Global Executive MBA programme from the University of California Los Angeles and National University of Singapore.
Dani Widjaja 	Director	He was appointed as a director in Apr 2012. He has a long professional history with the recent as Processing Plant Director, PT Vale, 2015; Indonesia Growth Program Project Director, PT Vale, 2012. Before joining PT Vale he was Karebbe HEPP Project Deput Director, PT Vale, 2009; Assistant Project Manager, Panasia Group Bandung, 1995-1998; and Section Leader, PT Industri Pesawat Terbang Nusantara, Bandung, 1992-1995.
Agus Superiadi 	Director	He was appointed in Apr 2019. He was Senior General Manager Strategic Business Development & Growth Projects, PT Vale, 2016-2018. He graduated with a Bachelor of Science from Institut Teknologi Bandung.
Vinicius Mendes Ferreira 	Director	He was appointed as a director in Apr 2019. He worked in Vale and its subsidiaries since 1995. He was Copper Director, Vale Copper Operations, South Hub – Canaa Dos Carajas Brazil 2018; Nickel Director, Vale Nickel Operation, Onça Puma Ourilândia Do Norte Brazil, 2017-2018; and Chief Executive Officer, Val Tecnoed Desenvolvimento Tecnológico, Brazil, 2011-2017.

Source: Company, **Error! Bookmark not defined.**

Recommendation Chart



Source: RHB, Bloomberg

Date	Recommendation	Target Price	Price
2020-12-07			

Source: RHB, Bloomberg

RHB Guide to Investment Ratings

Buy:	Share price may exceed 10% over the next 12 months
Trading Buy:	Share price may exceed 15% over the next 3 months, however longer-term outlook remains uncertain
Neutral:	Share price may fall within the range of +/- 10% over the next 12 months
Take Profit:	Target price has been attained. Look to accumulate at lower levels
Sell:	Share price may fall by more than 10% over the next 12 months
Not Rated:	Stock is not within regular research coverage

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