The Komodo

On the ground in Indonesia

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Indonesia
Materials

CLSA has a long journalistic history. This ***ad hoc*** piece is written with information gathered from independent on the ground sources. This note is produced independently and is intended to provide more colour and detail to trends in the marketplace.

Snooping on the nickel

Channel check sees no relax on nickel, supply deficit in 2016

Our channel checks with a nickel pig-iron smelter firm and government officials suggest that Indonesia will not be able to step in and offset supply cuts from the Philippines despite the 47% YoY surge in Indonesia's nickel exports in 1H16. Several nickel smelters have come online but many are running on low utilization while some ongoing projects face financing and ore-supply issues. We also don't see the government relaxing the export ban for nickel, though we see that more likely to happen for copper. Our conclusion is that the global nickel supply deficit is likely to reach above 100k tons this year, which should support nickel prices and the nickel producers.

Building smelter: Meeting with a nickel pig-iron producer

We met with a nickel pig-iron smelter firm Central Omega (DKFT IJ – NR) to gauge what's happening in Indonesia's NPI segment. Indonesia posted a record NPI export volume of 23k tons of nickel content in 1H16, a 360% YoY growth. Central Omega is expected to start producing in 1Q17 as it secured enough funding for its project.

Minerals export relaxation ban: Not for nickel

There has been much discussion in the past week that the government may relax the mineral export ban, which will include nickel. Our take: Nickel is unlikely to get a relaxation as it has shown since 2014 that it has been able to improve the export value of nickel ore to processed nickel. Our channel checks with government officials suggest a similar conclusion.

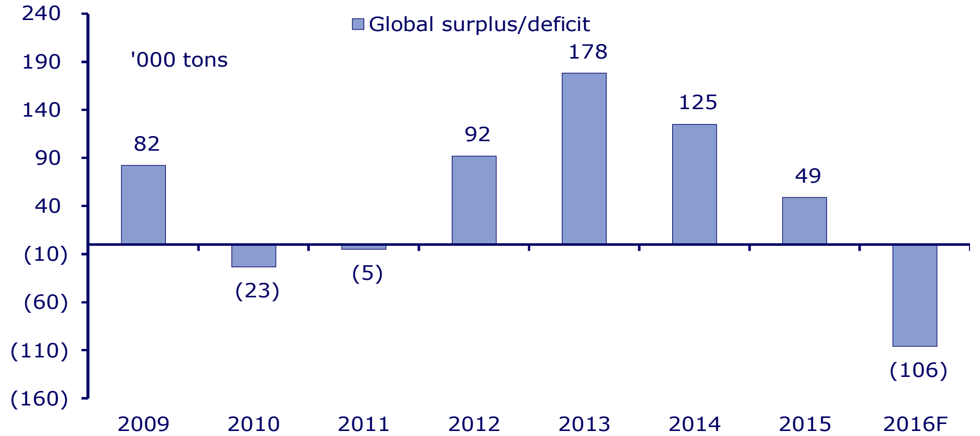
Supply-demand model: Global nickel market turning to deficit

The conclusion for the two findings above is that it supports our view on a nickel supply deficit in 2016. We run three scenarios on potential supply disruption from the Philippines and new supply from Indonesia. Our base case is that the global nickel market will face a deficit of 106k tons in 2016.

Key benefactors: Nickel producers as price is expected to rebound

The deficit will benefit nickel producers, especially the ones with high-grade nickel product and content, because it means any improvement in LME nickel price will increase its ASP. For Indonesia market, we like Vale Indonesia (INCO IJ – BUY) due to high nickel content in its product and low production cost.

Global nickel market to face deficit in 2016



Source: INSG, CLSA, Bloomberg

For important disclosures please refer to page 8.

NPI producer Central Omega expects production to start in 2017

Meeting a smelter player

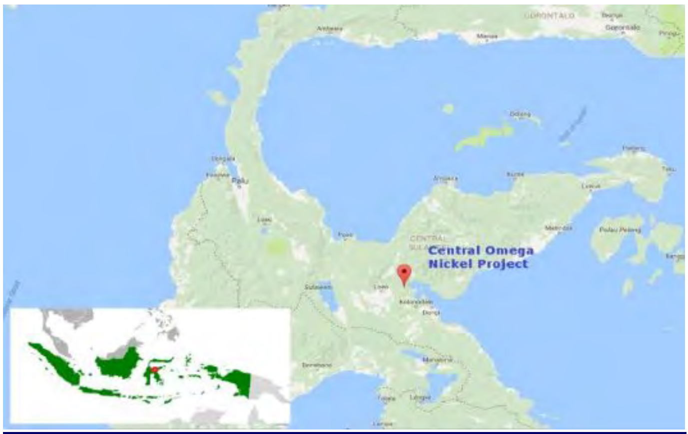
We met with an Indonesian nickel smelter player, Central Omega Resources (DKFT IJ – NR), to gauge what's happening in the nickel supply-side development from Indonesia, especially regarding the nickel pig-iron (NPI) production.

Our channel checks are crucial because if Indonesia's nickel supply increases significantly higher than market expectations, it could offset the Philippines' declining output. It could cause a global surplus, resulting in a weaker nickel price.

Central Omega is a mid-sized nickel-ore producer out of Central Sulawesi. In 2013, the company decided to build a nickel pig-iron smelter to comply with the Indonesian government's mining law, which is banning any mineral raw-material export starting in 2014 unless the producer builds downstream operations.

Figure 1

Central Omega nickel project location



Source: Company, CLSA

Figure 2

Central Omega NPI smelter project (80% completed)

Source: Company

The NPI project is almost completed as the company is aiming for early-stage production in 1Q17. The company's China partner, Macrolink Mineral, has committed to take up all the NPI output from the smelter.

Figure 3

Central Omega NPI project

Project owner	Central Omega Resources
Installed capacity	100,000 tons/year NPI
Nickel content capacity (8-10% of NPI)	8,000-10,000 tons/year
Buyer	China's Macrolink Mineral
Location	North Morowali, Central Sulawesi
Power supply	9MW coal-fired power plant
Technology	Blast furnace
Projected operation	1Q17
Estimated cost	US$90m
Financiers	Indonesia ExIm bank ($40m loan)

Source: Company, CLSA

For nickel ore, the company has three nickel-mining operations close to the smelter. This is helpful as it reduces production costs, which the company expects to be around US$7k-8.75k/TNi. The total reserves are about 7m tons of nickel ore with an additional 5m tons of resources.

Central Omega is not alone. There are 24 ongoing developments of NPI smelter projects in Indonesia, according to the government recent data. Seven are already in the production stage while the rest are still under construction.

Central Omega already secured $40m financing from the Indonesian ExIm bank and raised about $50m of shareholders equity to finance the projects. Thus, they have enough to complete the project.

Figure 4

Indonesia's NPI smelter players

	Company	Region	Status	Production	Capacity ('000 TNi)
1	PT Indoferro	Java	Producing	2016	20.0
2	PT Cahaya Modern Metal Mining	Sulawesi	Producing	2014	0.7
3	PT Sambas Mineral Mining	Southeast Sulawesi	Producing	2015	1.0
4	PT Fajar Bhakti Lintas	Sulawesi	Producing	2015	8.0
5	PT Gebe Industry Nickel	North Maluku	Producing	2015	0.5
6	Zheshi Group	North Maluku	Producing	2016	9.6
7	PT Integra Mining Nusantara	Sulawesi	Construction	2016	1.7
8	PT Kharisma Elit	Sulawesi	Construction	2017	0.6
9	PT Pernick Sultra	Sulawesi	Construction	2017	0.3
10	PT Putra Mekongga	Sulawesi	Construction	2016	1.2
11	PT Twins Gold Sultra	Sulawesi	Construction	N/A	-
12	PT Anugerah Sakti Utama	Sulawesi	Construction	N/A	-
13	PT Ang and Fang Brother	Sulawesi	Construction	2016	1.7
14	PT Jilin Metal Indonesia (Billy Group)	Sulawesi	Construction	2016	3.6
15	PT Titan/Utmah	Sulawesi	Construction	2016	2.8
16	PT Multi Baja Industri	Tuban, East Java	Construction	2018	8.8
17	PT Central Omega Resources	Sulawesi	Construction	1Q17	8.0
18	PT Bima Cakra Perkasa Mineralindo	Java	Construction	2020	29.6
19	PT Karyatama Konawe Utara (Hankin Group)	Southeast Sulawesi	Construction	2016	3.2
20	Tsingshan Group Phase II	Sulawesi	Construction	2018	24.0
21	Ningbo Brillimetal	Sulawesi	Construction	2017	2.0
22	Ibris Nickel/ Stargate Pacific	Bulungun	Announced	N/A	48.0
23	PT Bhineka Sekarsa	Sulawesi	Cancelled	2017	24.0
24	PT Surya Utama Saga	Sulawesi	Cancelled	2017	0.8
	Total expected capacity				200

Source: CLSA, Bloomberg, Government of Indonesia

Others are not so lucky. Our channel checks suggest that at least two projects are already being cancelled due to struggles to get financing. Some nickel-smelter investors have already voiced concerns in the media, including Hankin Group, as they are struggling to get financing for the project.

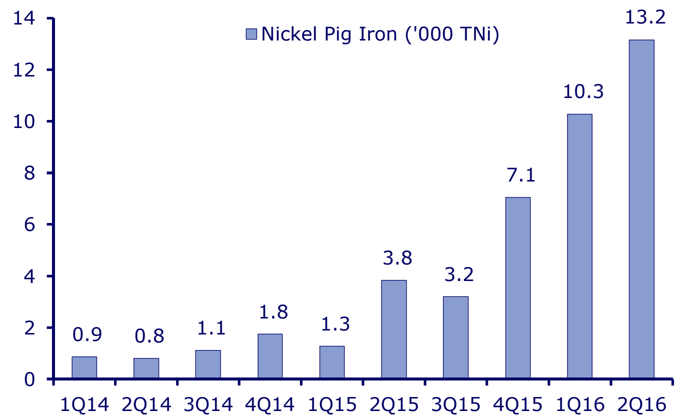
Central Omega also pointed out that smelters without direct access to the nickel mines will be struggle on two things: 1) Production costs are higher for nickel miners due to higher transportation costs; and 2) The crackdown on illegal nickel mining and the moratorium on new mining permits will make it hard for nickel smelters with no direct access to nickel mines to obtain ore.

Lastly, in 2015 alone, the average utilization rate for NPI smelters was less than 40%. This could be two things: 1) new smelters' production volume is typically low in the first year; and 2) production costs were quite high (average US$10-11k/t), while the average LME nickel price in 2015 was only around US$11-12k/t. We think the latter was more of a factor on low utilization.

With the three facts above, we believe the majority of the upcoming nickel-smelter projects will likely be delayed or even cancelled, with the exception being those that already secured funding, due to financing unavailability as well as high production costs that don't justify investment at the current LME nickel price.

Figure 5

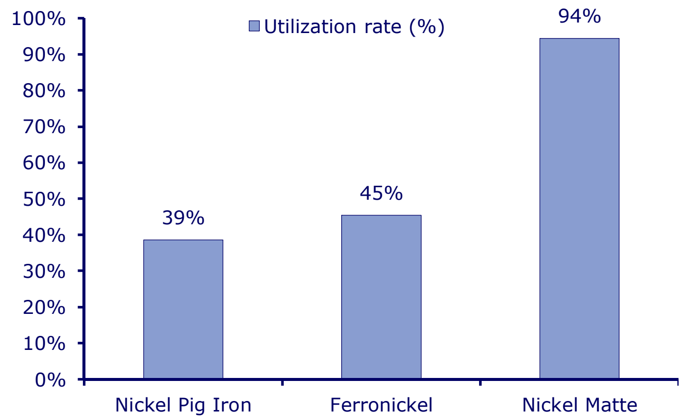
Indonesia's NPI export on quarterly basis



Source: CLSA, BPS, Note: Nickel content assumption for NPI is 8%/t

Figure 6

NPI, Ferronickel and Nickel Matte utilization rate - 2015



Source: CLSA, BPS, Government of Indonesia

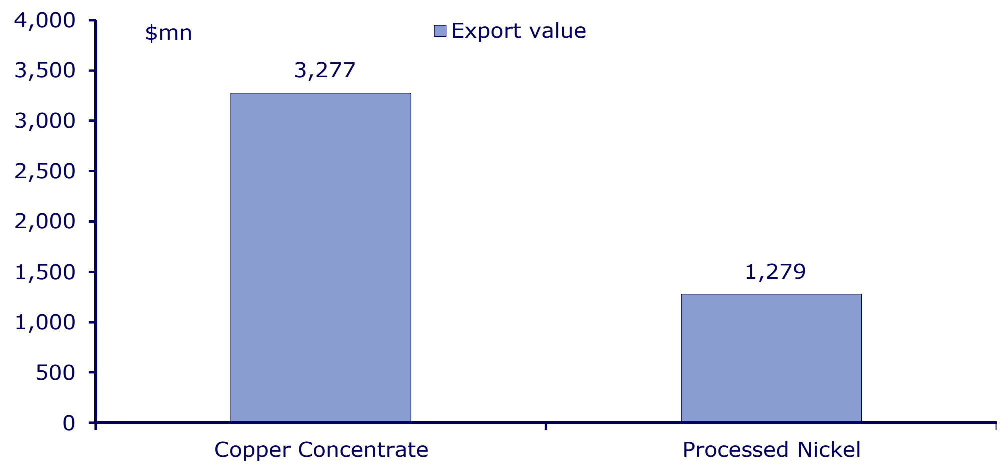
Relaxation of mineral export ban: Not for Nickel

In the past week, the newly elected coordinating minister for energy and maritime, Luhut Panjaitan (he is also the interim energy & mining minister), has been discussing a plan to relax the export ban for selected minerals within three to five years, depending the miners' progress of building smelters.

Copper export value was more than double (2.6x) nickel value in 2015, indicating larger royalty and taxes

Figure 7

Indonesia's Copper export value vs Processed Nickel export value - 2015



Source: CLSA, BPS

We believe the plan is focused toward copper concentrate because the export value of copper and its contribution to government revenue was quite big compared to other base-metal products, including nickel.

Figure 8

Mineral export ban works wonders for nickel's product value

	Value (US$bn)	Volume (TNi)	Volume growth (%)	Value US$/TNi	Value vs 2015	Avg LME nickel price ($/t)	LME Price vs 2015
Processed Nickel export- 2015	1,279	132,647	42%	9,640		11,985	
Processed Nickel export- 2013	1,189	93,126	0	12,763	(24%)	15,480	(23%)
Nickel ore export- 2013	1,685	1,166,451	N/A	1,445	667%	15,480	(23%)

Source: CLSA, BPS, Bloomberg

The second economic reason that supports the argument is that the mineral export ban started in 2014 has boosted processed nickel production by 42% in 2015 vs 2013.

What's even more impressive is that Indonesia managed to stop nickel-ore exports that were only worth US$1,445/t in 2013. This is way below the value per tonnage of processed nickel value in 2015, which was worth US$9,640/t. If that 1.2m tons of nickel ore in 2013 were processed at the $9,640/t nickel value, the export value would be US$11bn.

Thus, economically, we don't export the government will relax the export ban for nickel ore.

The final reason is that the two big copper miners, Freeport and Newmont, still haven't been able to develop the smelters as they are also still under negotiation with the government regarding the extension of contracts of work that is due over the next few years.

Our channel checks with our government contacts also suggest the relaxation plan will not include: Nickel, tins, gold and silver. This is because the government believes the smelter development for those minerals is already underway and some are already producing.

The government expects to complete its revision of the mining law before January 2017, which will include the relaxation plan. The reason is by January 2017, the current regulation on the complete mineral export ban will be fully implemented without any exceptions.

For context, Indonesia introduced a new mining law in 2009 with the aim to have more downstream mineral mining industries. By 2014, Indonesia issued a regulation that required mineral miners to complete their smelters before January 2017 or they will face a complete export ban without exception.

Global nickel supply deficit is on the cards

Our channel checks with a smelter company and the argument of no relaxation for the nickel export ban is coming down to one conclusion - that it confirms our thesis of global supply nickel will face deficit in 2016.

Here are the key points from our nickel supply-demand model:

- Our base case is that we expect the Philippines' shipment of ore to China to decline by 19% in 2016 to 36.5m tons from 45m tons in 2015. The 45m tons of ore for 2015 was the figure from Nickel Asia.
- Our model suggests the total volume decline of 111k tons of nickel content from the Philippines. This is using an assumption of 1.3% of nickel grade.
- Our decline output assumption is on: a) bad weather and depleting high-grade nickel reserves, which is expected to reduce the shipment by 11% YoY; and b) the mining audit that has so far shut down eight nickel mines, representing about 8% of the country's total output.
- Indonesia ferro-nickel shipments to China surged by 51% YoY in 1H16 to 24.5k tons of nickel content. Our base case is that we expect the supply to grow by 31% by the end of 2016 to 48k tons of nickel content.
- Indonesia NPI shipments to China also rose to 23k tons of nickel content in the 1H16, a 360% YoY increase, and we expect it to reach 59k tons of nickel content, a 282% YoY growth as more smelters come online in Indonesia.
- That brings a total surge of Indonesian nickel content imports by 55k tons in 2016.
- Meanwhile, our bull case is using an assumption of another 10% output cut from the Philippines from more mines shutting down next week by Gina Lopez, the environmental and mineral resources minister.
- Our bear case, on the other hand, assumes lesser mining shutdown worldwide of only 25k tons of nickel content in 2016, a 50% discount to the current estimate. We also assume no more supply disruption from the Philippines and Indonesia's new supply to rise to 73k tons, a 35% higher than our base estimate, by the end of 2016.

Figure 9

Global nickel supply-demand (in '000 TNi)

	2016		
	Base Case	Bull Case	Bear Case
Global nickel demand	1,960	1,960	1,921
Global nickel supply (including mining shutdown worldwide)	1,910	1,910	1,935
Potential supply disruption			
Philippines	111.2	158.0	111.2
Bad weather & depleting ore reserves	64.4	64.4	64.4
Mining shutdown	46.8	93.6	46.8
Potential new supply			
Indonesia	54.7	54.7	73.2
Ferronickel	11.4	11.4	25.1
Nickel Pig Iron	43.3	43.3	48.1
Global nickel surplus (deficit)	(106.5)	(153.3)	(24.3)

Source: CLSA, Nickel Asia, BPS, Bloomberg

Valuation details - Vale Indonesia Tbk INCO IJ

We derive our target price for Vale Indonesia based on the average of our DCF and EV/Ebitda valuations. For the DCF, we use a WACC of 9% (terminal growth rate, zero; Rfr 5%; debt to equity 75:25). For EV/Ebitda, we apply a 10x multiple to 17/18CL in line with the EV/Ebitda for the past three years.

Investment risks - Vale Indonesia Tbk INCO IJ

The biggest risk would be if nickel prices do not pick up. Two more remote risks are if crude becomes stronger or the USD becomes weaker. We think these are unlikely. Regulatory noises seem to have been muted following the completion of renegotiation. However, if the gov't ever decides to remove the mineral ore ban, then there is a risk of sell-off by the market.

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Companies mentioned

Antam (N-R)
Central Omega Resources (N-R)
Freeport McMoRan (FCX US - US$10.60 - SELL)[2]
Hankin Group (N-R)
Independence (IGO AU - A$3.88 - SELL)[1]
Macrolink (N-R)
Medco Energi (N-R)
Newmont Mining (N-R)
Nickel Asia (N-R)
Vale (VALE US - US$5.64 - SELL)[1]
Vale Indonesia (INCO IJ - RP2,900 - BUY)[1]
Western Areas (WSA AU - A$2.56 - OUTPERFORM)[1]

[1] Covered by CLSA; [2] Covered by CLSA Americas

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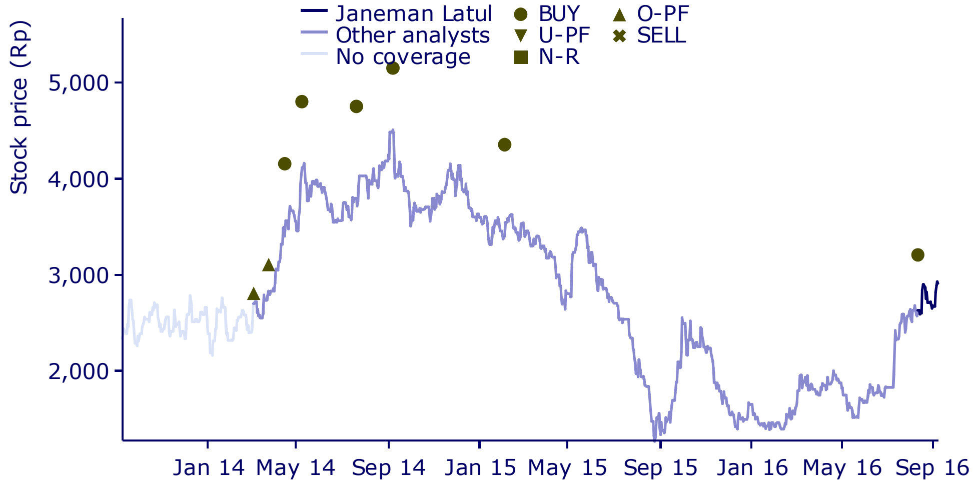

Date	Rec	Target	Date	Rec	Target
12 Aug 2016	BUY	3,200.00	09 May 2014	BUY	4,800.00
05 Feb 2015	BUY	4,350.00	16 Apr 2014	BUY	4,150.00
08 Sep 2014	BUY	5,150.00	25 Mar 2014	O-PF	3,100.00
21 Jul 2014	BUY	4,750.00	05 Mar 2014	O-PF	2,800.00

Source: CLSA

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