

NICKEL COBALT - SULPHATE INDUSTRY FOR BATTERIES

NORTH KOLAKA

PROJECT LOCATION

Center of Mining Industri Area (PKIP) Lalawai,
Tolala district, Kolaka Regency,
Southeast Sulawesi Province.
Land Area: 250 Ha
Land Status: APL
Flat Topography
Close to the source of raw material
Nickel Ore Mine

CAPACITY
144,000 TON

Mixed Sulphate Precipitate (MSP) per year
with 20 years of operation period

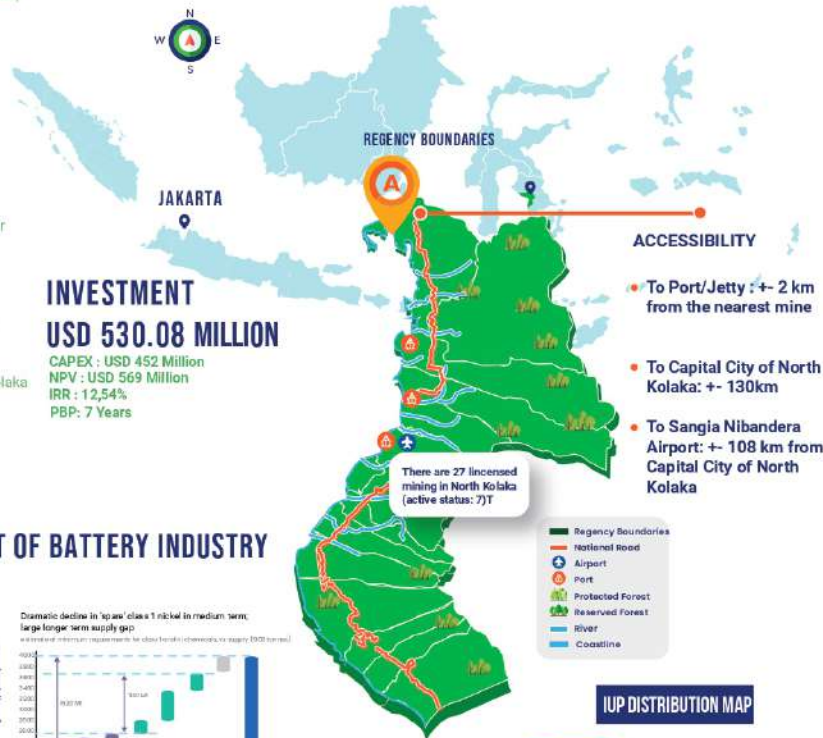
FEED STOCK

4.43 Million Limonite Nickel Ore per year
Nickel Content 0.9 – 1.5 %
Cobalt Content 0.04 – 0.1 %
Potential Nickel Ore Reserves of North Kolaka
District 159 Million Tons

PORT : 71 HA

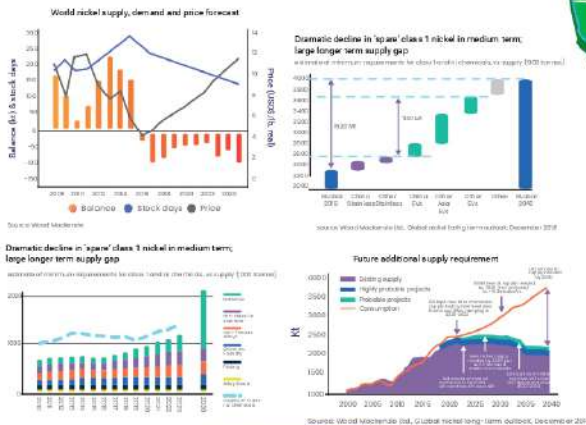
ACCESSIBILITY

WHY INVEST ?



Potential of Mining Area (ha) in North Kolaka	
NICKEL	84.112
GOLD	23.000
COAL	1.945
IRON	2.500
MANGANESE	200
MARBLE	100
LIMESTONE	500
CHROMITE	2.083

THE POTENTIAL MARKET OF BATTERY INDUSTRY



- Nickel production until 2028 is still dominated by the fullfillment of the stainless steel industry
- Increasing production and use of electric vehicles (EV) until 2040 resulting in a supply gap of Nickel Sulphate 1.3 – 1.83 Million Tons

MARKET OVERVIEW

ADDED VALUE OF NICKEL PROCESSED PRODUCT

Limonite Ore	= US\$ 17/ MT
Saprolite Ore	= US\$ 32/MT
Nickel Sulphate	= US\$ 4.960/ MT
Cobalt Sulphate	= US\$ 14.330/ MT
Nickel Matte	= US\$ 15.000/ MT
NCAO	= US\$ 40.000/MT
Lithium Battery	= US\$ 240/KWh



DOMESTIC PRICE VS GLOBAL PRICE

JANUARY	DEGREE OF THE MINISTER OF ENERGY & MINERAL RESOURCES	INTERNATIONAL
2019	10.890,68/DMT	USD 10.791/DMT
2020	13.875,68/DMT	USD 12.740/DMT

COMPARED TO LAST YEAR, NICKEL PRICE HAS INCREASED UP TO 30%

CENTRAL GOVERNMENT SUPPORT

LAW no.4/2009	LAW 23/2010	GOV. REG 1/2014	GOV. REG 1/2017
Regulation of the Minister of Energy and Mineral Resources No. 25 of 2010	Regulation of the Minister of Energy and Mineral Resources No. 1/2014	Regulation of the Minister of Energy and Mineral Resources No. 1/2014	Regulation of the Minister of Energy and Mineral Resources No. 1/2017
1. Minimum limits for mineral processing and refining products.	1. Minimum limits for mineral processing and refining products.	1. Minimum limits for mineral processing and refining products.	1. Minimum limits for mineral processing and refining products.
2. Export recommendations are provided under supervision.	2. Export recommendations are provided under supervision.	2. Export recommendations are provided under supervision.	2. Export recommendations are provided under supervision.
3. Provisions for the physical progress of smelter construction in submitting requests for recommendations and	3. Provisions for the physical progress of smelter construction in submitting requests for recommendations and	3. Provisions for the physical progress of smelter construction in submitting requests for recommendations and	3. Provisions for the physical progress of smelter construction in submitting requests for recommendations and
4. Administrative sanctions for physical progress of smelters that do not meet 50% of the cumulative target in the 6 months	4. Administrative sanctions for physical progress of smelters that do not meet 50% of the cumulative target in the 6 months	4. Administrative sanctions for physical progress of smelters that do not meet 50% of the cumulative target in the 6 months	4. Administrative sanctions for physical progress of smelters that do not meet 50% of the cumulative target in the 6 months

LOCAL GOVERNMENT SUPPORT

Regional Themes and Priorities in 2021



NICKEL ORE RESOURCES AND RESERVES



INDONESIA
Measured Resources
2,63 Billion Tons
Proven Reserves
985 Million Tons

SOUTHEAST SULAWESI PROVINCE
Measured Resources
1,33 Billion Tons
Proven Reserves
381 Million Tons

NORTH KOLAKA REGENCY
Measured Resources
319 Million Tons
Proven Reserves
159 Million Tons