

Communities Affected by Transition Mineral in Indonesia

February 12, 2025

Sawung

WALHI/FoE Indonesia



Transisi Energi

FOSSIL FUELS



Large mining quantities

In 2021, 15 billion tonnes of fossil fuels were extracted.¹



Generate huge rents

Oil and gas exports alone represented a value of USD 2 trillion in 2021.³



Combusted as fuel

Fossil fuels are primarily burned as fuel, accounting for approximately 94% of their usage.⁵



Energy security risk

A disruption in the supply of fossil fuels can lead to immediate energy shortages and price spikes.



Not recyclable

Fossil fuels are primarily consumed through combustion and cannot be recovered or repurposed.

CRITICAL MATERIALS



Low mining quantities

Some 10 million tonnes energy transition minerals were produced in 2022 for low-carbon technologies.²



Generate smaller profits

Exports of copper, nickel, lithium, cobalt and rare earths generated 96 billion in 2021.⁴



Input to manufacturing

Critical materials are housed within energy assets that typically have a 10–30 year lifespan.



Energy transition risk

Disruptions in the supply of critical minerals can delay the construction of new clean energy assets, but do not affect current energy prices or supply.



Reusable and recyclable

High potential for reducing use, reusing and recycling.

Cobalt	²⁷ Co
Democratic Republic of the Congo	70.0%
Indonesia	5.4%
Russian Federation	4.8%
Australia	3.2%
Canada	2.1%
Cuba	2.0%
Philippines	2.0%
Others	10.5%

Copper	²⁹ Cu
Chile	23.6%
Peru	10.0%
Democratic Republic of the Congo	10.0%
China	8.6%
United States	5.9%
Russian Federation	4.5%
Indonesia	4.1%
Australia	3.7%
Zambia	3.5%
Mexico	3.3%
Kazakhstan	2.6%
Canada	2.4%
Poland	1.7%
Others	16.1%

Dysprosium	⁶⁶ Dy
China	48.7%
Myanmar	23.1%
Australia	7.6%
United States	2.9%
Canada	2.7%
Others	15.0%

Graphite	⁶ C
China	64.6%
Mozambique	12.9%
Madagascar	8.4%
Brazil	6.6%
Others	7.5%

Iridium	⁷⁷ Ir
South Africa	88.9%
Zimbabwe	8.1%
Russian Federation	2.9%
Others	0.1%

Lithium	³ Li
Australia	46.9%
Chile	30.0%
China	14.6%
Argentina	4.7%
Brazil	1.6%
Others	2.2%

Manganese	²⁵ Mn
South Africa	35.8%
Gabon	22.9%
Australia	16.4%
China	4.9%
Ghana	4.7%
India	2.4%
Brazil	2.0%
Ukraine	2.0%
Côte d'Ivoire	1.8%
Malaysia	1.8%
Others	5.3%

Neodymium	⁶⁰ Nd
China	45.8%
Australia	23.1%
Greenland*	8.2%
Myanmar	7.4%
Brazil	4.4%
India	2.1%
Others	9.0%

*Kingdom of Denmark

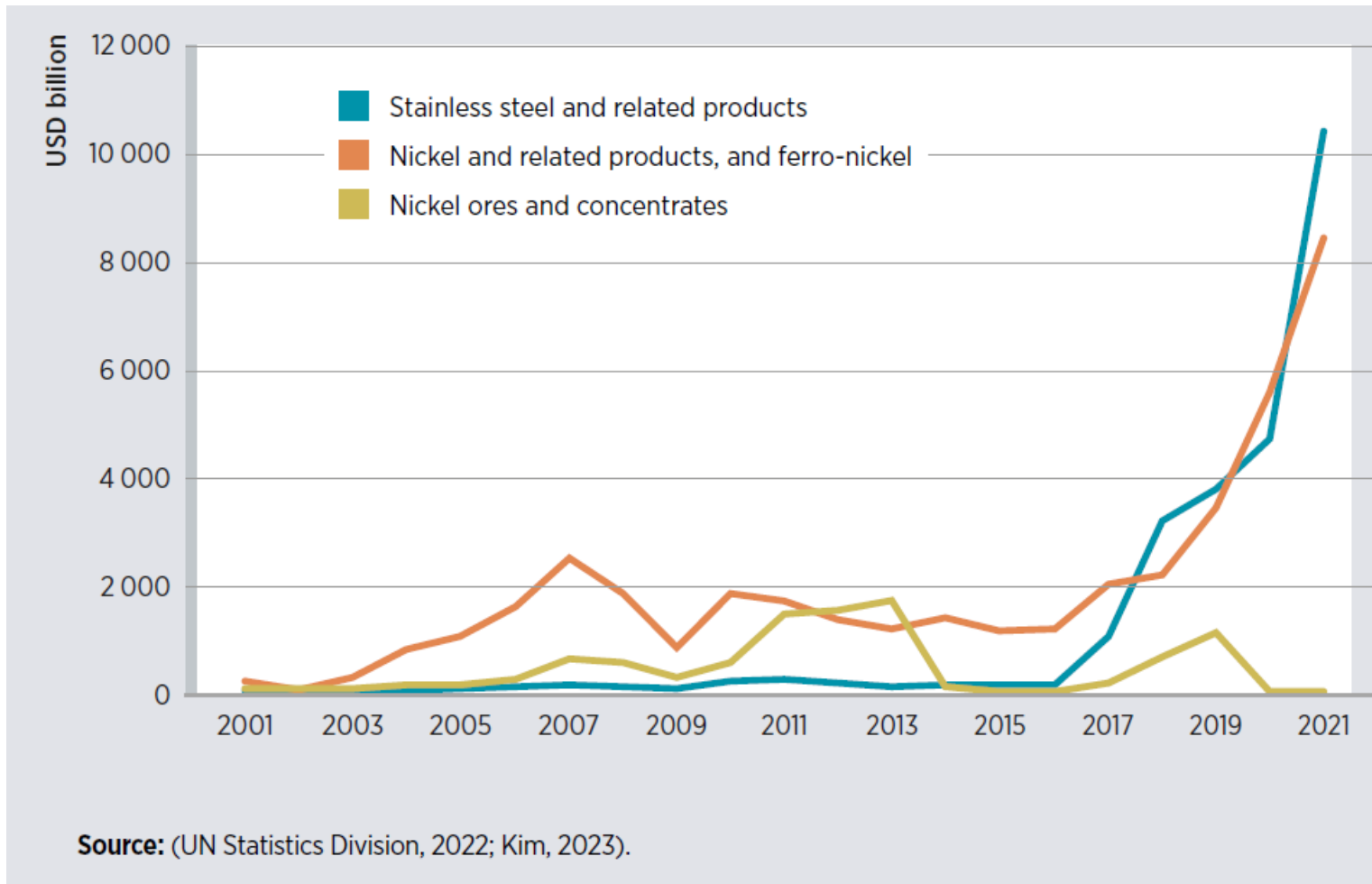
Nickel	²⁸ Ni
Indonesia	48.8%
Philippines	10.1%
Russian Federation	6.7%
France (New Caledonia)	5.8%
Australia	4.9%
Canada	4.0%
China	3.3%
Brazil	2.5%
Others	13.9%

Platinum	⁷⁸ Pt
South Africa	73.6%
Russian Federation	10.5%
Zimbabwe	7.8%
Canada	3.1%
United States	1.7%
Others	3.3%

* latest data available as of 2023

Source: (US Geological Survey and US Department of the Interior, 2023; JRC, 2020; USGS, 2023b).

Indonesia Nickel Product Ekspor \$



Perkembangan Ekspor Nikel dan Produk Nikel Indonesia

Tahun	Nilai (US\$)			Berat (Kg)	
	Bijih nikel	Ferro nikel	Nikel dan barang daripadanya	Bijih nikel	Ferro nikel
2010	532,446,129	373,596,120	1,435,873,060	17,566,047,388	80,141,696
2011	1,428,040,011	470,120,738	1,217,975,282	40,792,164,833	78,837,659
2012	1,489,084,347	336,764,138	993,317,965	48,449,392,135	77,121,342
2013	1,685,247,617	232,038,214	941,569,462	64,802,857,120	6,818,828
2014	85,913,010	292,133,409	1,058,062,058	4,160,120,660	83,749,431
2015	0	330,332,112	806,080,508	0	181,699,869
2016	0	571,298,623	595,513,650	0	411,438,077
2017	155,189,439	1,331,356,652	646,654,846	4,882,727,800	1,016,014,982
2018	628,026,535	1,361,123,814	790,515,322	19,764,458,737	846,994,788
2019	1,097,012,524	2,595,556,909	813,159,313	32,380,134,812	1,593,695,385
2020	117	4,738,860,405	808,419,686	1,405	2,871,507,780
2021	43	7,087,354,344	1,284,499,463	65	3,503,988,031
2022	29	13,621,270,768	5,977,671,430	492	5,779,785,224

Indonesian Nikel

Saporlite; Low Fe, Ni 1,5%-3%,
Type of smelter in Indonesia Blast
Furnance dan RKEF

Product: Nikel Pig Iron, Nikel Matte

Limonite; Hi Fe , Ni 0,8%-1,5%,

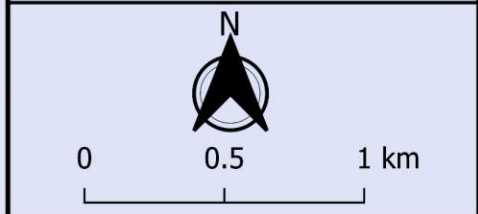
Type smelter in Indonesia High
Pressure Acid Leaching


Product: Nickel Sulfate





**PETA KONSESI IZIN USAHA
PERTAMBANGAN
DI PULAU FAU
KAB. HALMAHERA TENGAH
PROV. MALUKU UTARA**



legenda:
IUP MALUT 

Keterangan:
Luas Pulau FAU. 15,99 KM2

Terdapat 1 (satu) IUP NIKEL
PT Aneka Niaga Permai
Dengan luas Konsesi: 459. 66 Ha
SK IUP: 2012/12/28
Tanggal berakhir: 2032/12/24
Pejabat: Bupati



Impact To Community



Impact To Community





Impact To Community



Dokumentasi orang desa dan anak – anak terkena penyakit gatal – gatal di Desa Tanauge.



Impact To Community

2025-01-05 00:00 - 2025-01-05 23:59, Sentinel-2 L2A, True color



Credit: European Union, contains modified Copernicus Sentinel data 2025, processed with EO Browser

Copernicus sentinelhub



Community Demand

- Stop land and sea grabbing
- Stop Pollution
- Environment Restoration and damage compensation
- Stop mining ekspansion
- Health assasment and treatment



Terima Kasih
Thank You
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