



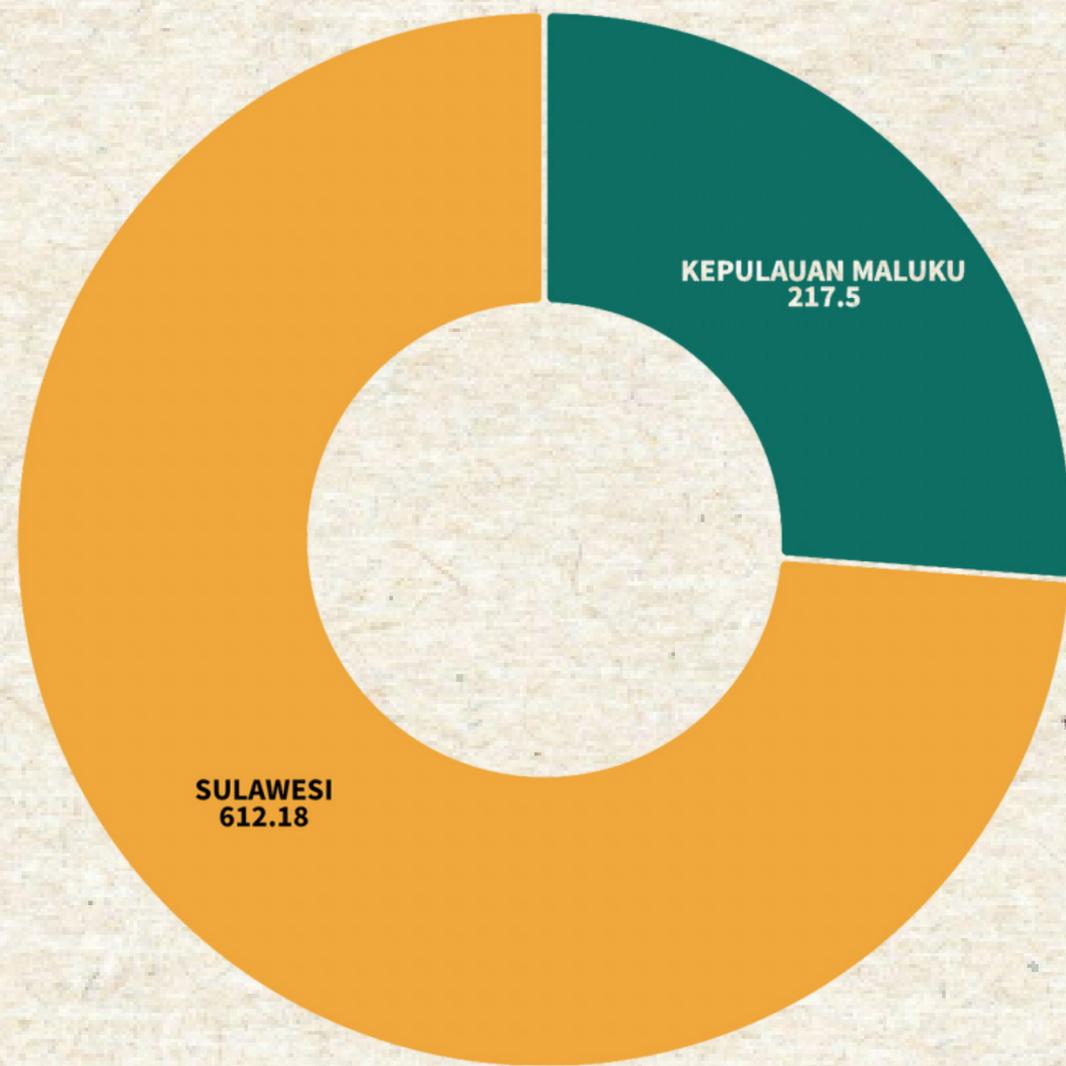
INDONESIA

NICKEL INDUSTRY

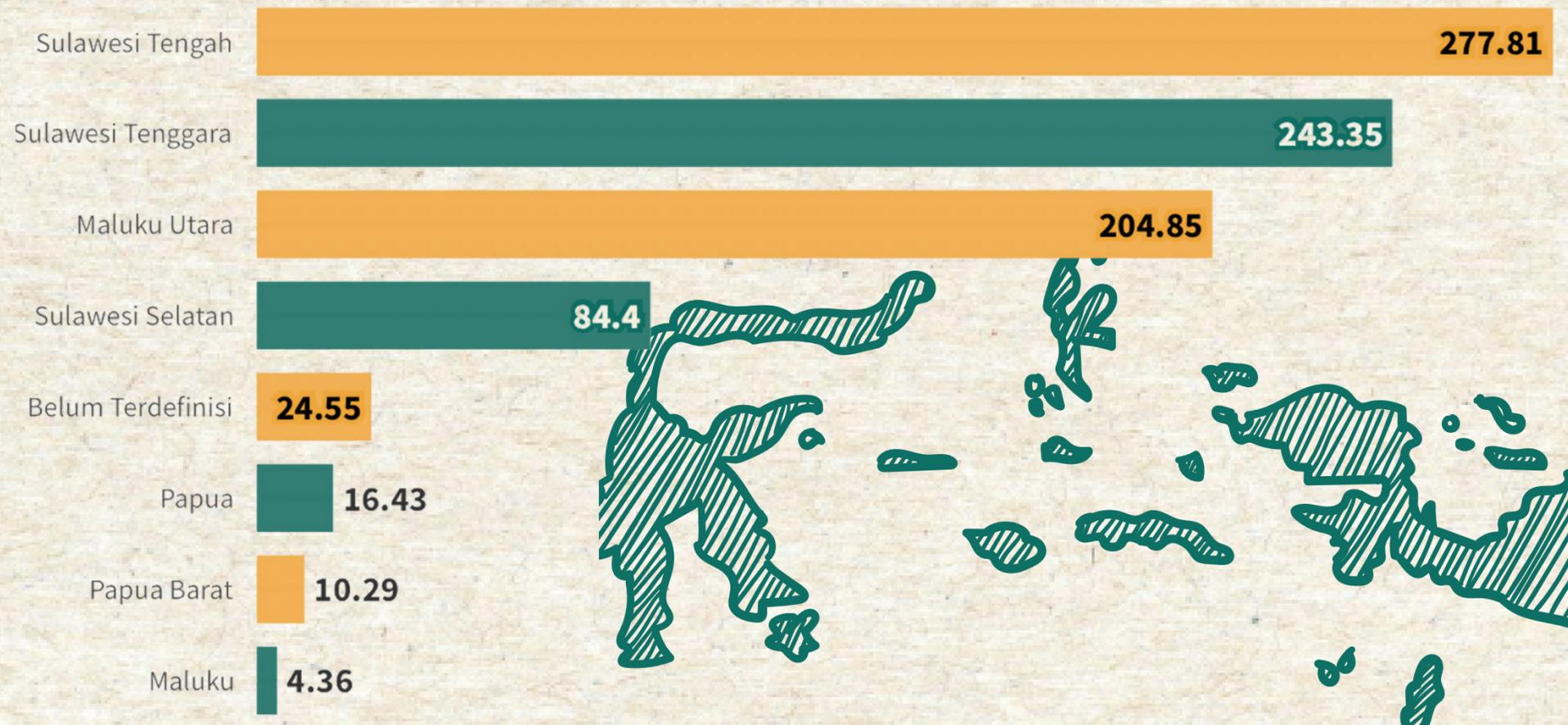
MADANI Berkelanjutan

NICKEL CONCESSIONS ARE CONCENTRATED IN FOREST & BIODIVERSITY-RICH ISLANDS

Islands with nickel concessions

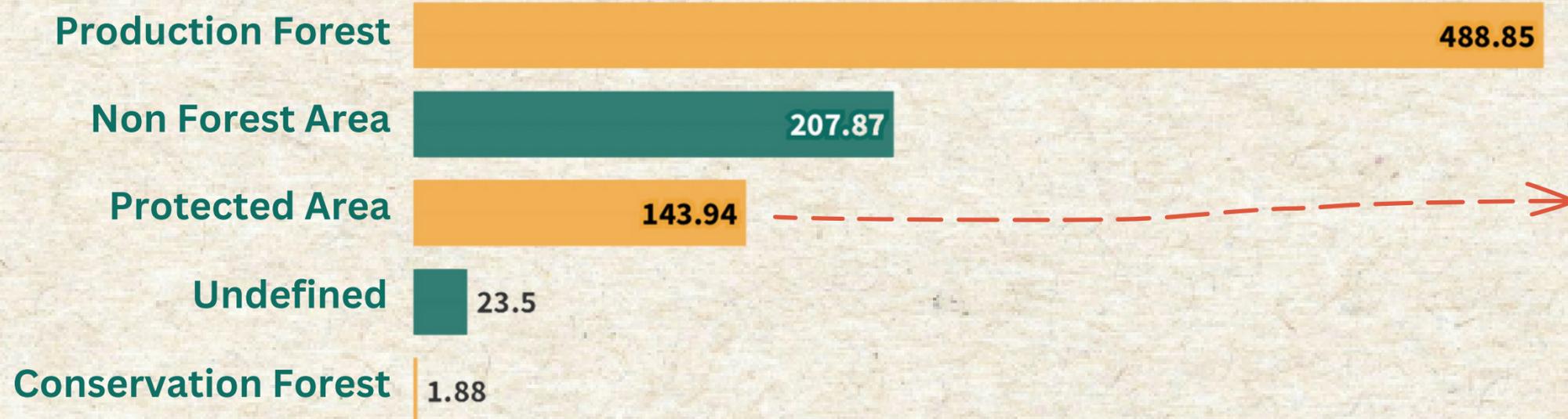


Concessions Area per Province (ha)



MOST OF NICKEL CONCESSIONS ARE FOUND IN FOREST AREA

73% CONCESSIONS ARE IN FOREST ZONE



INDICATION OF PROBLEM BECAUSE
THERE SHOULD NOT BE OPEN MINING IN
PROTECTED FOREST



542k ha Remaining natural forests in
nickel concessions

65.000 HA OF FOREST WERE LOST

IN NICKEL CONCESSIONS IN THE LAST DECADE

History of Deforestation in Nickel Concessions

**65 thousand ha of
forest were lost in the
last 10 years.
One third occurred in
2015-2016.**

Year	Number of Deforestation caused by nickel
2011-2012	193 ha
2012-2013	10,576 ha
2013-2014	2,914 ha
2014-2015	7,328 ha
2015-2016	22,465 ha
2016-2017	7,977 ha
2017-2018	8,414 ha
2018-2019	1,510 ha
2019-2020	2,815 ha
2020-2021	1,517 ha

DEFORESTATION THREAT

IN NICKEL CONCESSIONS



542,000 ha
natural forests at risk

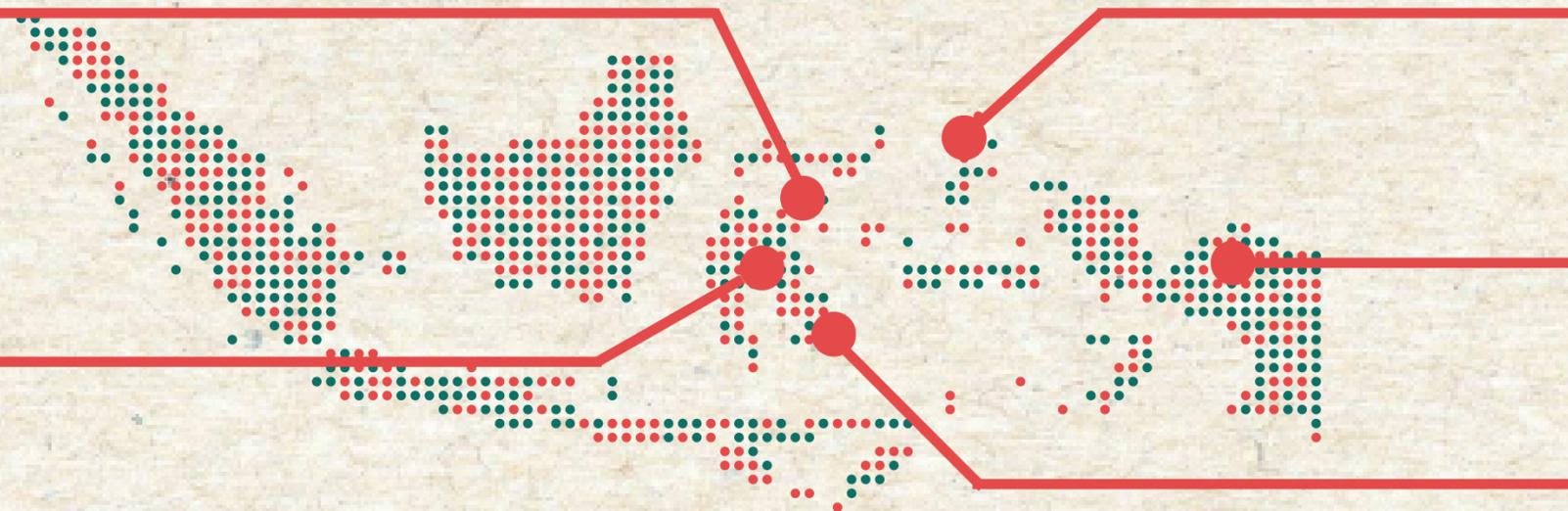
197,000 ha
Central Sulawesi

122,000 ha
Southeast Sulawesi

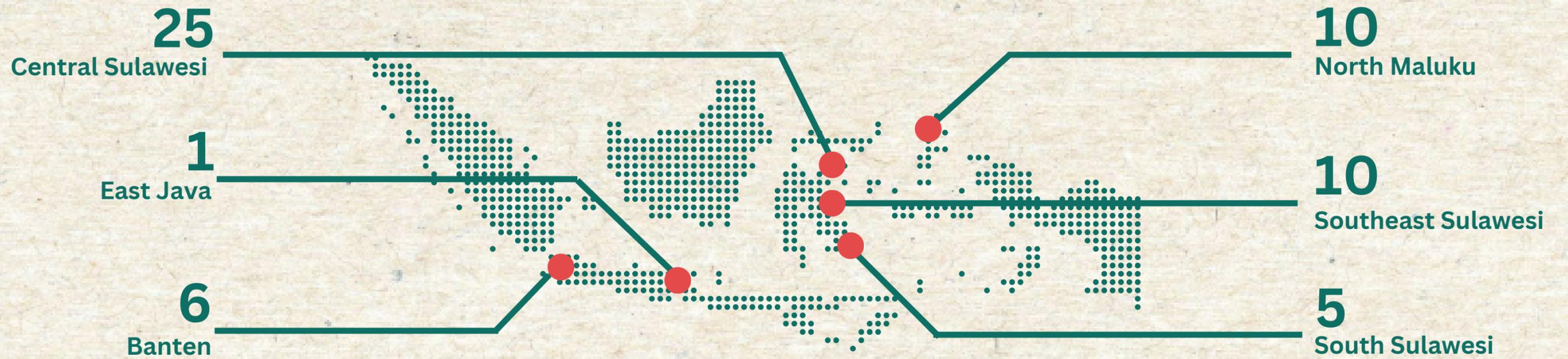
151,000 ha
North Maluku

16,000 ha
Papua

49,000 ha
South Sulawesi



MORE SMELTERS CAN DRIVE DEFORESTATION IN THE FUTURE



 **2**
Owned State

 **14**
National Strategic Projects

SMELTERS CATEGORIZED AS STRATEGIC NATIONAL PROJECTS (SNPs)

SNPs are given a lot of regulatory privileges

NO	Companies	Location	NO	Companies	Location
1	PT Ang And Fang Brother	Central Sulawesi	8	PT Ceria Nugraha Indotama	Southeast Sulawesi
2	PT Artabumi Sentra Industri	North Maluku	9	PT Macika Mineral Industri	Southeast Sulawesi
3	PT Sulawesi Resources	Central Sulawesi	10	PT Virtue Dragon Nickel Industry	Southeast Sulawesi
4	PT Wanxiang Nickel Indonesia	Central Sulawesi	11	PT Sinar Deli Bantaeng	South Sulawesi
5	PT Artha Mining Industry	Southeast Sulawesi	12	PT Aneka Tambang P3FH (State Owned)	North Maluku
6	PT Bintang Smelter Indonesia	Southeast Sulawesi	13	PT Aneka Tambang Niterra Haltim (State Owned)	North Maluku
7	PT Sungai Raya Nickel Alloy Indonesia	Southeast Sulawesi	14	PT Teka Mining Resources	North Maluku

MOST OF SMELTERS ARE LOCATED

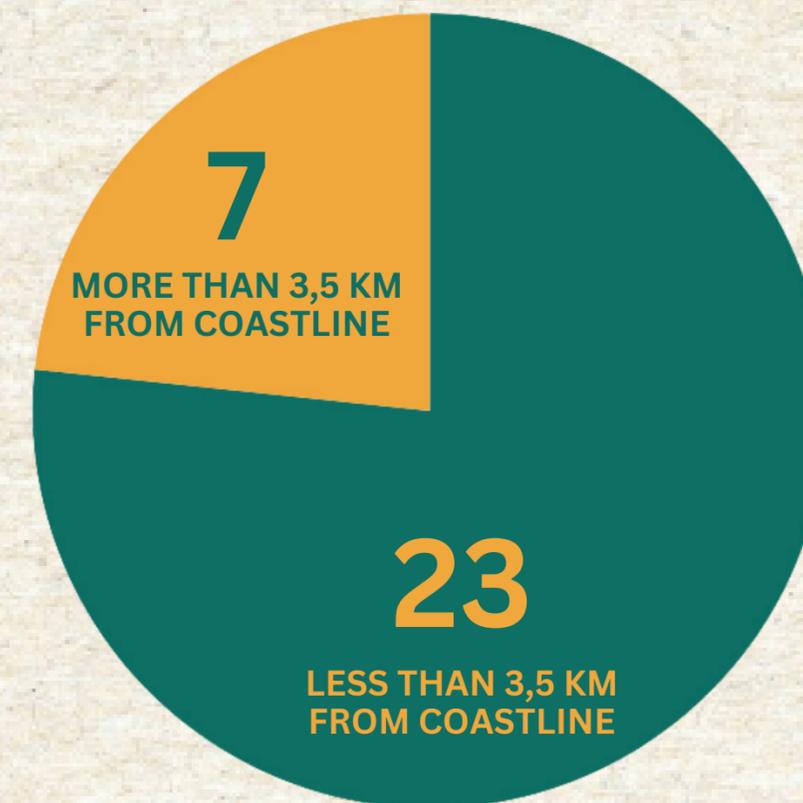
LESS THAN 3,5 KM FROM THE COASTLINE

TOP 5 BIGGEST SMELTERS IN INDONESIA

No	Corporate	Location
1	PT Virtue Dragon Nickel Industry	Southeast Sulawesi
2	PT Tsingshan Steel Indonesia	Central Sulawesi
3	PT Walsin Nickel Industrial Indonesia	Central Sulawesi
4	PT Yashi Indonesia Investment	North Maluku
5	PT Sulawesi Mining Investment	Central Sulawesi

Source: Petromindo Nickel Outlook 2022

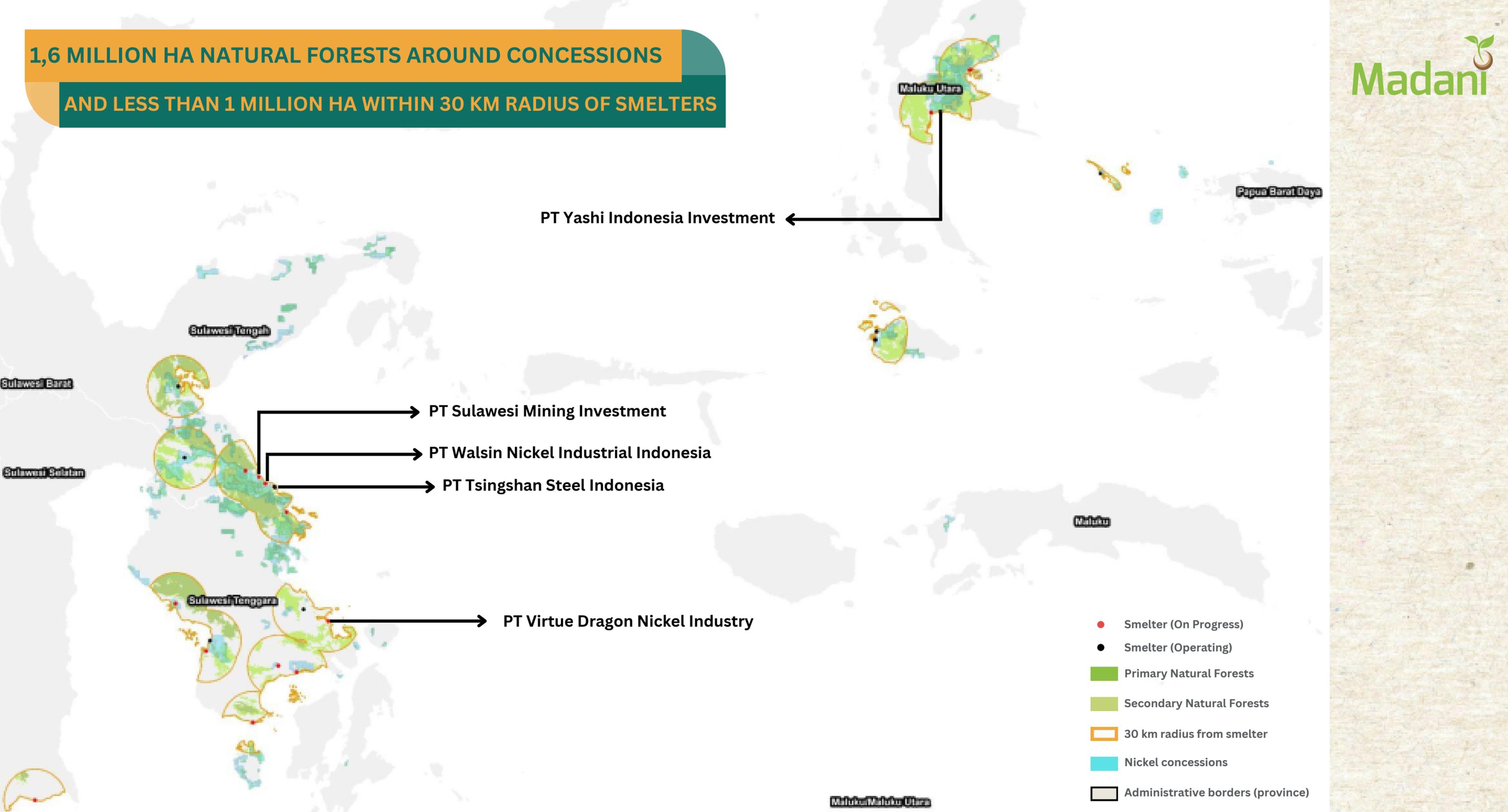
SMELTER LOCATION COMPARED TO COASTLINE



80% OF SMELTERS ARE ONLY LESS THAN 3,5 KM FROM THE COASTLINE

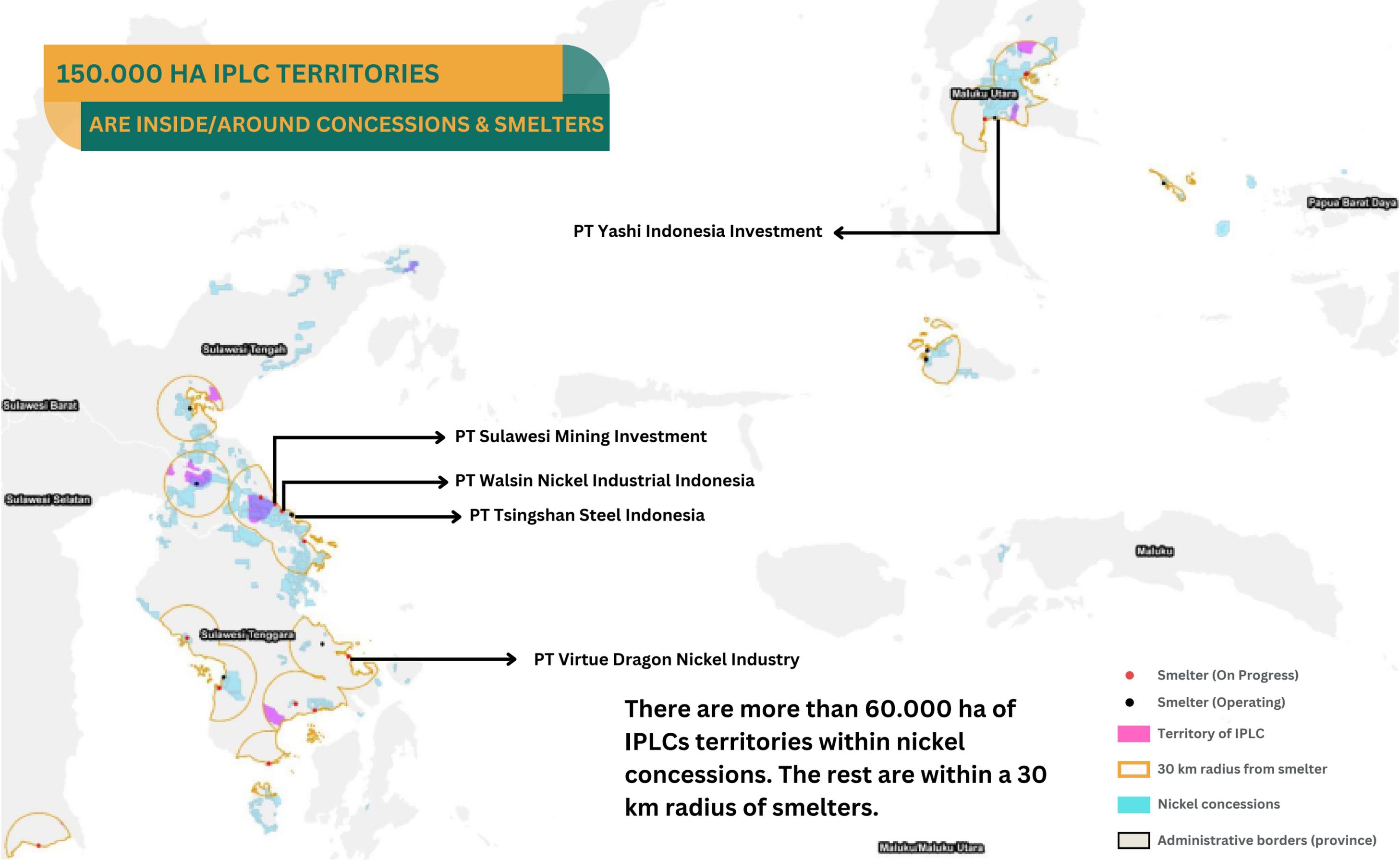
1,6 MILLION HA NATURAL FORESTS AROUND CONCESSIONS

AND LESS THAN 1 MILLION HA WITHIN 30 KM RADIUS OF SMELTERS



150.000 HA IPLC TERRITORIES

ARE INSIDE/AROUND CONCESSIONS & SMELTERS

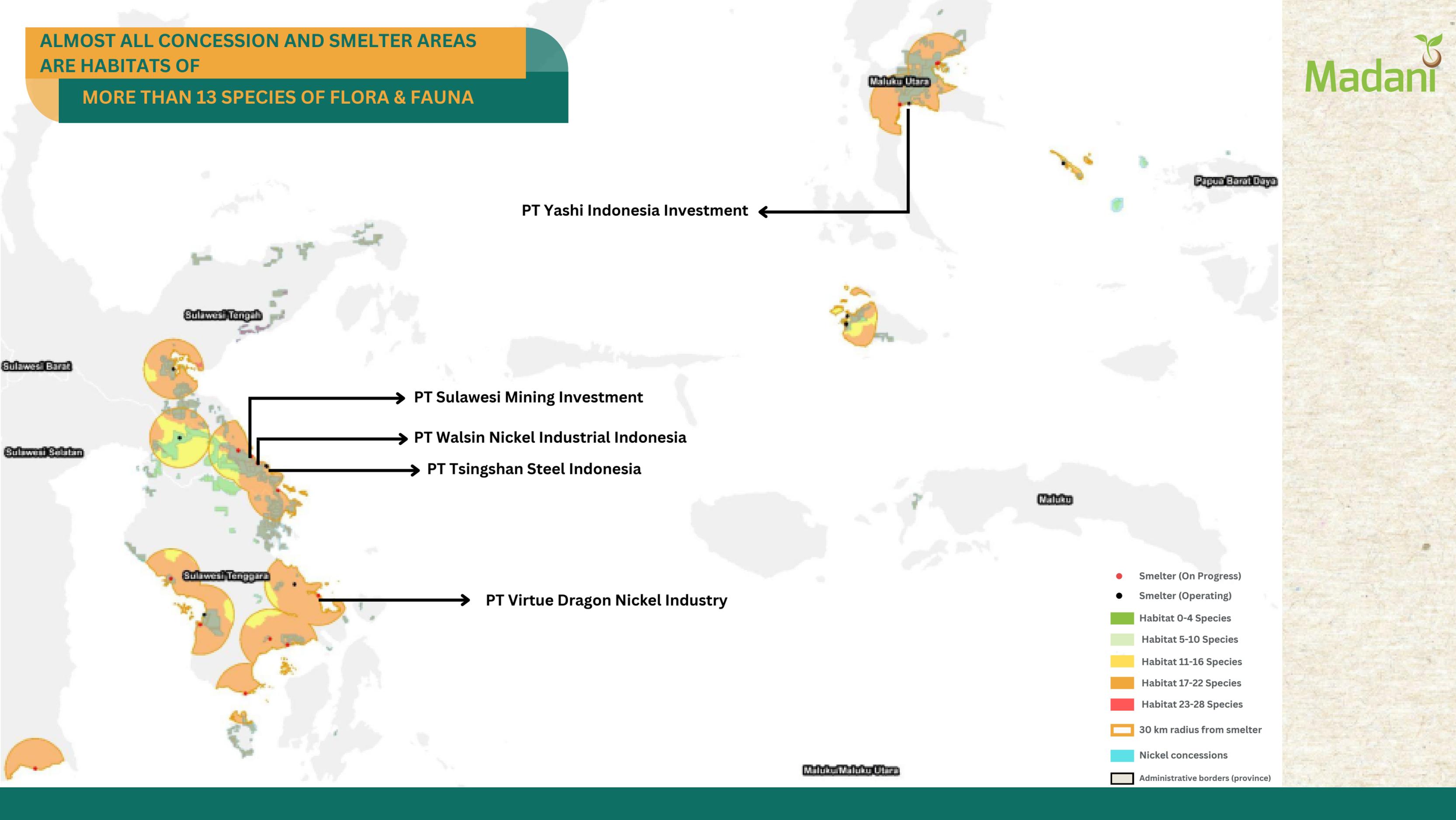


There are more than 60.000 ha of IPLCs territories within nickel concessions. The rest are within a 30 km radius of smelters.

Maluku Utara

ALMOST ALL CONCESSION AND SMELTER AREAS
ARE HABITATS OF

MORE THAN 13 SPECIES OF FLORA & FAUNA



MORE THREATS

THAN SAFEGUARDS

SAFEGUARDS

- **Forestry Law; prohibition of open mining in protected forests**
- **Moratorium policy partially protects primary forests and peatland, but excludes permits issued before 2011 and National Strategic Programs**
- **Environmental Impact Assessment as a condition for permit issuance**

THREATS

- **Smelters as a National Strategic Project are given regulatory privileges**
- **Economic incentives may drive nickel exploration**
- **Legal amnesty and activation of problematic mining**
- **No sustainable standard for nickel mining and smelters**
- **Systemic corruption**
- **Privilege to nickel concessions in Protected Forest by President Law 41/2004 (revised by Law 3/2023 but not change the issues)**

IPLC RIGHTS

ARE NOT PROTECTED



FPIC



FPIC



FPIC



HOW INVESTORS CAN PUSH FOR SUSTAINABLE NICKEL INDUSTRY

-  Demand strong social and environmental safeguards, including FPIC
-  Avoid mining in natural forests and small island area
-  Demand Good Mining Practices with strong transparency & traceability