

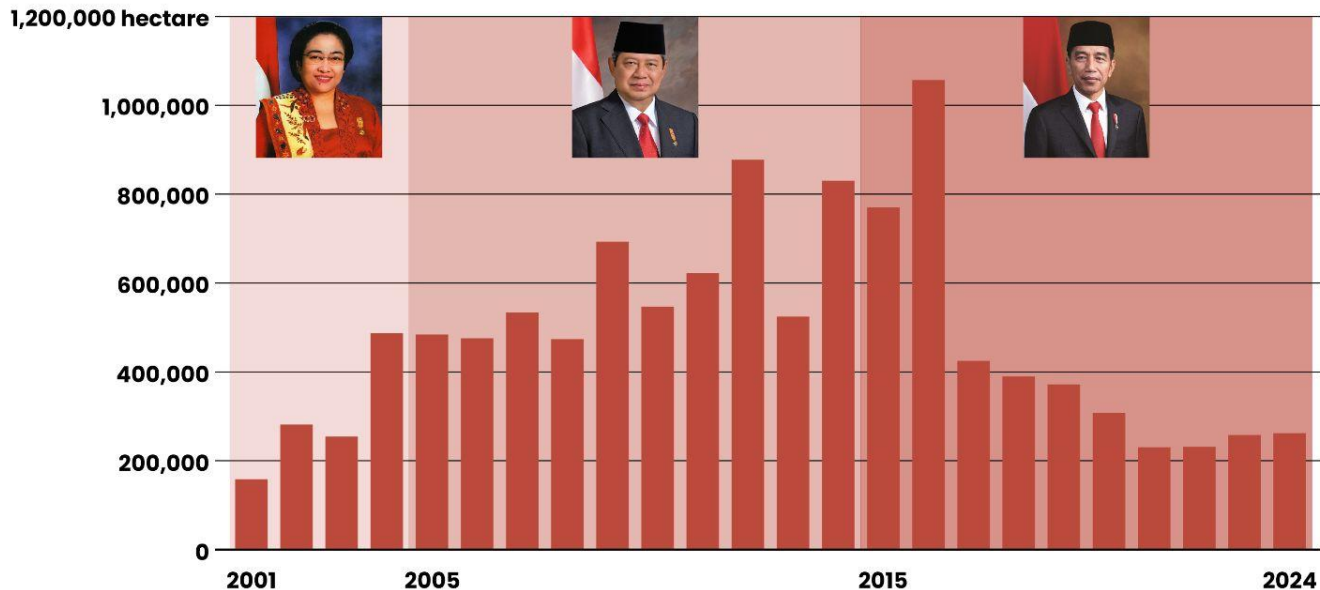


STATUS OF DEFORESTATION IN INDONESIA 2025

AURIGA NUSANTARA – MARCH 2026

Overview

Deforestation in Indonesia (2001-2024)



2011

Forest Moratorium

presidential instruction of no new permit in the primary forest and peatland area

2015

Paris Agreement

countries' agreement in limiting global warming to well below 2°C – preferably 1.5°C – above pre-industrial levels

2018

Oil palm Moratorium

2021

Glasgow Declaration

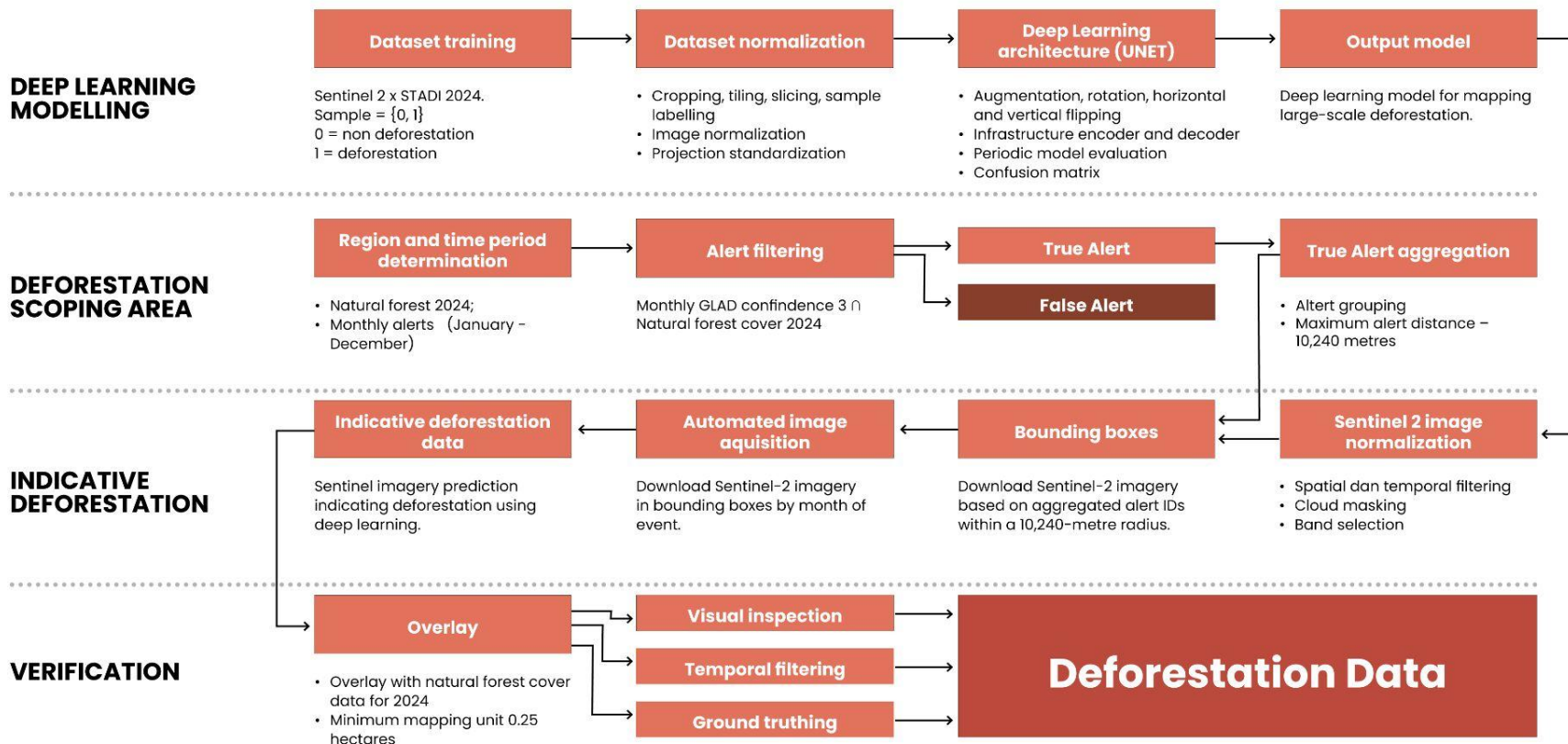
agreement of 144 countries for collective effort in halting and reversing forest loss and land degradation.

Auriga Nusantara has been publishing annual deforestation data for Indonesia since 2023. It does so to promote the democratization of deforestation data and prevent data monopolies that could obscure on-the-ground realities and distance public policies and/or practices in the field away from the empirical need to halt deforestation in Indonesia.

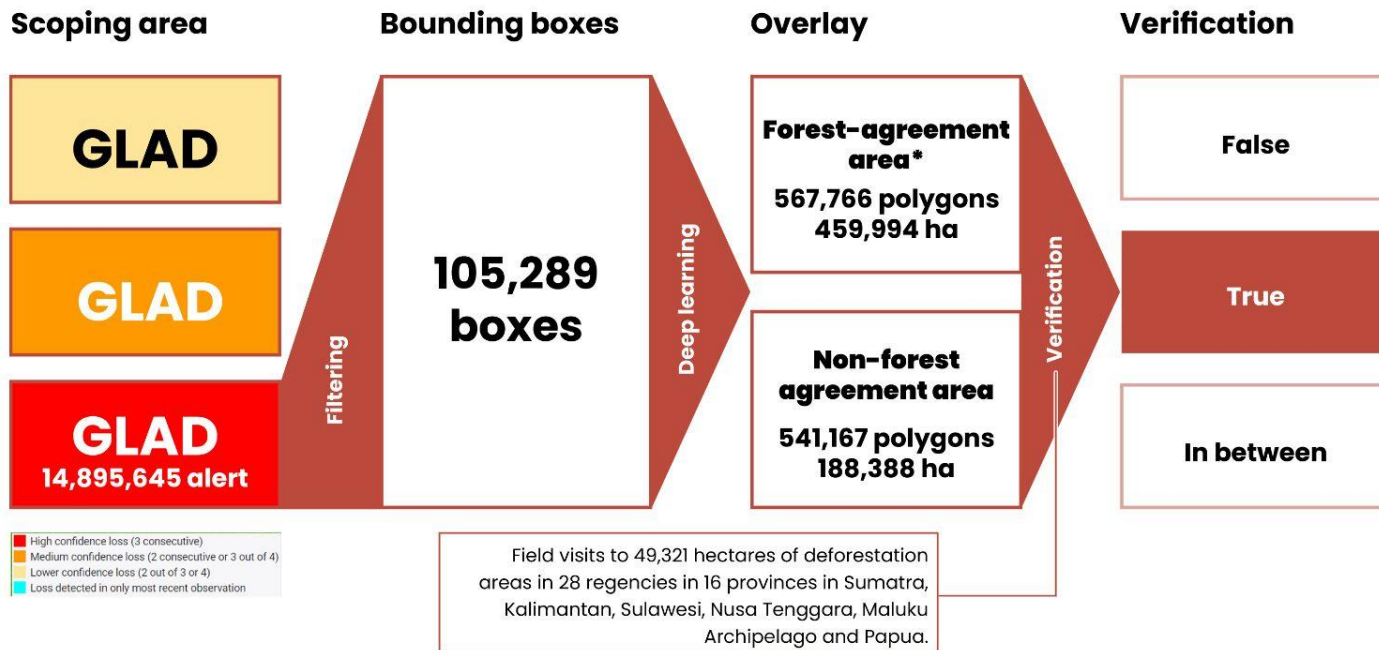


METHODOLOGY

Stages and data processing



Stages – In figures



*) Forest cover agreement (or disagreement):

- MapBiomass Indonesia Collection 3 (minus 2024 deforestation)
- Ministry of Forestry
- European Commission Joint Research Centre's Tropical Moist Forest data
- Google's Forest Persistence

Verification/Inspection

Results of visual inspections of indicative deforestation outside forest-agreement areas

Indicative deforestation			TRUE		IN BETWEEN		FALSE	
Strata (ha)	Area (ha)	Polygons	Polygons	Percentage	Polygons	Percentage	Polygons	Percentage
<0,5	69,989	456,262	Not inspected					
0,5 > 1	35,813	52,224						
1 > 5	54,037	30,326	15,346	50.60%	241	0.79%	14,739	48.60%
5 > 10	10,798	1,599	789	49.34%	9	0.56%	801	50.09%
10 > 50	12,114	705	329	46.67%	9	1.28%	367	52.06%
> 50	5,638	51	15	29.41%			36	70.59%
TOTAL	188,388	541,167	16,479		259		15,943	

"TRUE" polygons were included as deforestation data, while "FALSE" and "IN BETWEEN" polygons were deleted and not included in deforestation data.

Results of visual inspections of indicative deforestation inside forest-agreement areas

Indicative deforestation			TRUE		FALSE	
Strata (ha)	Polygons	Area (ha)	Polygons	Percentage	Polygons	Percentage
<0.5	380,169	72,081	Only polygons in conservation and concession areas were inspected			
0.5 - 1	103,617	71,079				
1 - 5	73,096	140,499				
5 - 10	6,445	44,009				
10 - 50	3,947	74,196	3,502	88.73%	445	11.27%
> 50	492	58,131	448	91.06%	44	8.94%
TOTAL	567,766	459,994	149,304	26.30%		

In total, there were only 79,493 indicative deforestation polygons inside conservation areas, with 38,495 being classified as TRUE, and 40,998 as FALSE. Most of the FALSE polygons were due to land cover changes resulting from landslides and shifts in river courses (as the deforestation data being counted was for anthropogenic deforestation).

There were 154,818 indicative deforestation polygons inside concession areas, dengan 106,502 classified as TRUE, and 48,316 as false.

"FALSE" polygons were deleted and not included in deforestation data, while uninspected polygons (area strata <0.5 - 10 ha) were included in deforestation data.

Accuracy assesment

Deforestation data assesment shows an accuracy level of **89%**

Results of accuracy assesment on 2025 deforestation data

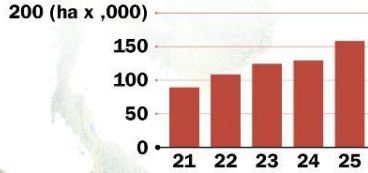
Deforestation area			Accuracy assesment		
Strata (ha)	Area (ha)	Polygons	Polygons sampled	TRUE	Accuracy
<0,5	59,743	322,725	261	227	87%
0,5 - 1	58,260	84,211	69	61	88%
1 - 5	149,159	77,445	63	59	94%
5 - 10	44,585	6,495	6	6	100%
10 - 50	69,113	3,648	3	3	100%
> 50	52,892	432	1	1	100%
Total	433,751	494,956	403	357	89%



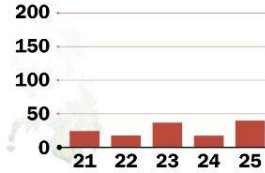
INDONESIAN DEFORESTATION 2025

Deforestation surged in 2025

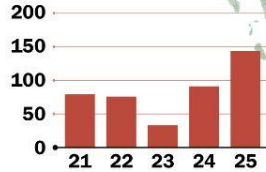
Kalimantan



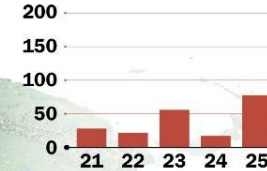
Sulawesi



Sumatra



Papua

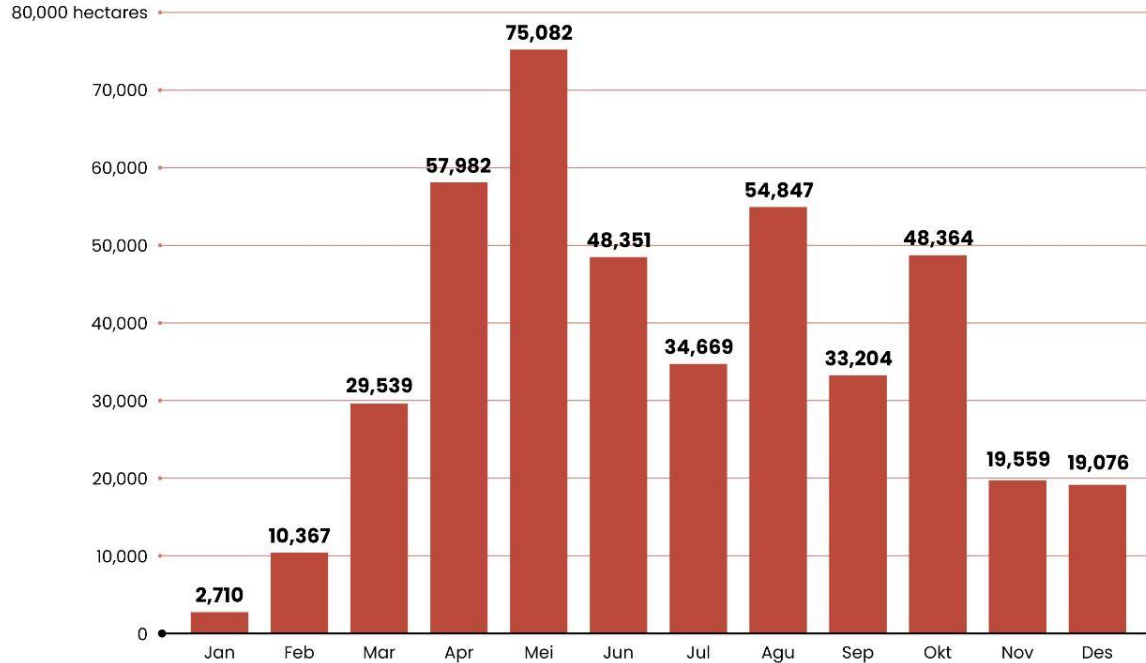


- All large islands experienced a surge in deforestation
- Kalimantan remained the highest for deforestation
- The greatest deforestation area expansion (60,337 hectares) occurred in Papua
- The highest percentage increase in deforestation (440%) occurred in Java.

Region	Deforestation (ha)			Expansion (2025 vs 2024)	
	2023	2024	2025	Hectares	Percentage
Kalimantan	124,611	129,896	158,283	28,387	22
Sumatera	33,311	91,248	144,150	52,902	58
Papua	55,981	17,341	77,678	60,337	348
Sulawesi	36,814	17,361	39,685	22,324	129
Maluku	4,034	3,537	7,527	3,990	113
Bali & Nusa Tenggara	2,052	1,780	4,209	2,429	136
Jawa	582	411	2,221	1,810	440
Total	257,385	261,575	433,751	172,176	66



Monthly deforestation



- Deforestation in Indonesia averaged 36,176 hectares per month.
- Deforestation was highest from April–October, with May recording the highest monthly deforestation rate.



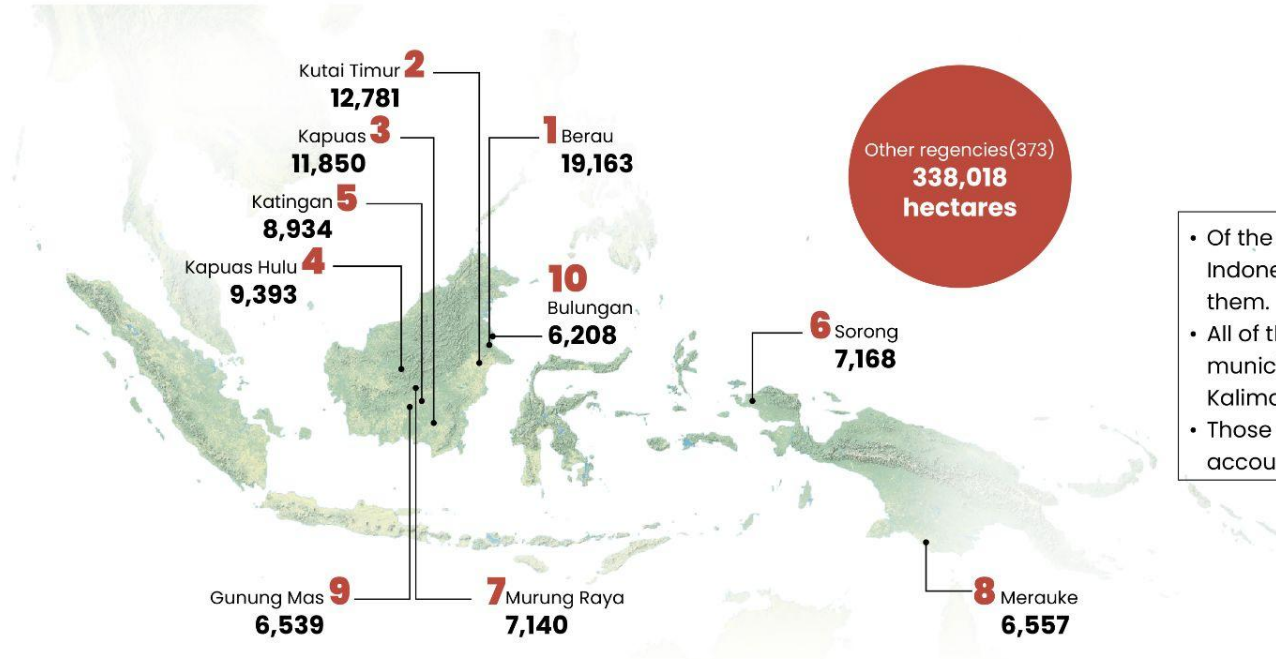
Deforestation by province

2025	2024	Province	2025 (ha)	2024 (ha)
1	↗ 3	Central Kalimantan	56,900	33,389
2	↘ 1	East Kalimantan	47,135	44,483
3	↗ 7	Aceh	38,157	8,962
4	↘ 2	West Kalimantan	31,876	39,598
5	↗ 12	Central Papua	26,978	6,360
6	↗ 20	West Sumatra	26,940	2,606
7	↗ 10	North Sumatra	20,512	7,303
8	8	North Kalimantan	19,716	8,767
9	↘ 4	Riau	17,812	20,812
10	↗ 18	Highland Papua	16,468	2,688
11	↗ 11	Central Sulawesi	15,839	7,019
12	↘ 6	Jambi	15,334	14,839
13	↗ 15	Bengkulu	13,095	4,300
14	↘ 5	South Sumatra	9,771	20,184
15	↗ 17	Southwest Papua	9,459	2,966
16	↗ 21	West Papua	9,108	2,303
17	↘ 14	Southeast Sulawesi	9,104	4,413
18	↗ 24	Papua	8,421	1,768
19	↘ 13	South Papua	7,248	5,010

2025	2024	Province	2025 (ha)	2024 (ha)
20	↗ 23	South Sulawesi	5,526	1,928
21	↗ 26	West Sulawesi	4,867	1,170
22	↘ 19	North Maluku	4,454	2,648
23	↗ 22	Gorontalo	3,849	2,180
24	↗ 27	Maluku	3,072	889
25	↘ 16	South Kalimantan	2,656	3,659
26	↗ 29	East Nusa Tenggara	2,335	497
27	↘ 25	West Nusa Tenggara	1,813	1,276
28	↗ 32	Lampung	1,111	145
29	↗ 30	Riau Archipelago	965	387
30	↗ 35	Banten	784	55
31	↗ 33	West Java	690	87
32	↘ 31	East Java	657	209
33	↘ 28	North Sulawesi	495	650
34	↘ 9	Bangka Belitung Archipelago	454	7,956
35	↘ 34	Central Java	89	59
36	36	Bali	61	7
37	37	Yogyakarta Special Region	0	0.3
Total			433,751	261,575

- The top ten provinces for deforestation in 2025, in order, were Central Kalimantan, East Kalimantan, Aceh, West Kalimantan, Central Papua, West Sumatra, North Sumatra, North Kalimantan, Riau and Highland Papua. In 2024, the order was East Kalimantan, West Kalimantan, Central Kalimantan, Riau, South Sumatra, Jambi, Aceh, North Kalimantan, Bangka Belitung Archipelago and North Sumatra.
- The three provinces experiencing disastrous floods and landslides in northern Sumatra in late 2025 experienced extraordinary surges in deforestation: Aceh (426%), North Sumatra (281%) and West Sumatra (1,034%).

Deforestation by regency



- Of the 514 regencies and municipalities in Indonesia, deforestation occurred in 383 of them.
- All of the top ten regencies and municipalities for deforestation are in Kalimantan dan Papua.
- Those top ten regencies and municipalities accounted for 22% of national deforestation.

Deforestation in forest estates vs other land use areas

Deforestation in Forest Estate and Other Land Use Areas (APL)

Region	Forest Estate					Other Land Use Areas	Total (hectares)
	Protection Forest	Production Fores	Convertible Production Forest	Limited Production Forest	Conservation Estates		
Kalimantan	4,034	59,567	9,172	35,938	1,575	47,997	158,283
Sumatra	34,123	21,949	2,690	24,912	13,899	46,577	144,150
Papua	31,110	6,067	10,344	7,818	7,487	14,853	77,678
Sulawesi	7,487	6,752	1,697	9,257	1,865	12,627	39,685
Maluku	717	1,453	1,499	2,369	56	1,432	7,527
Bali and Nusa Tenggara	1,934	370	4	444	104	1,352	4,209
Java	807	195		75	91	1,053	2,221
Total	80,213	96,354	25,406	80,812	25,077	125,890	433,751

- Based on MapBiomias Indonesia Collection 3 data (Indonesia annual land cover 1990–2023) minus deforestation for 2024, Indonesia’s natural forest cover amounted to 94.8 million hectares, with 9.7 million hectares inside APL areas.
- Forest Estate is managed by the Ministry of Forestry, whereas APL areas are managed by regional governments or landowners/concession holders.

71%
of deforestation
occurred inside
forest estates

Deforestation in conservation areas*

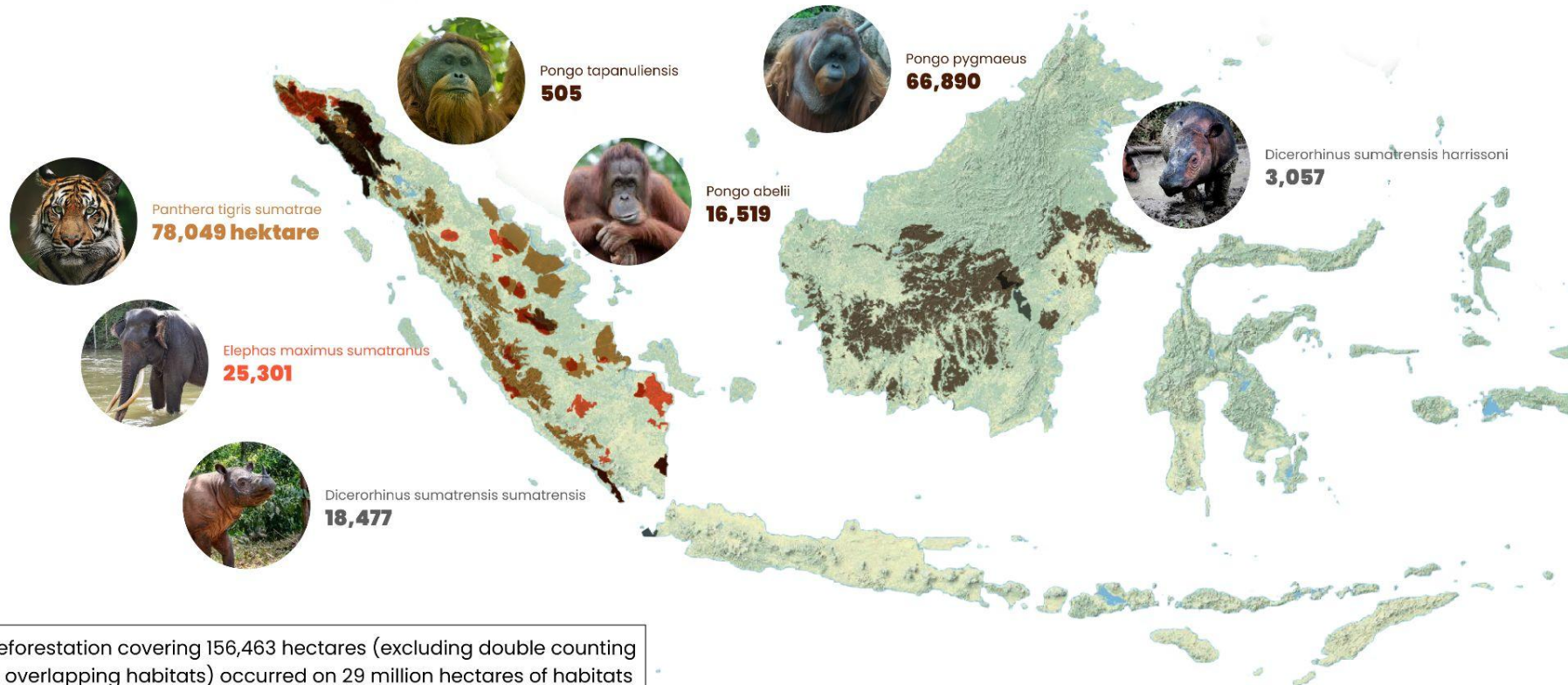


CONSERVATION ESTATE	DEFORESTATION (HA)
Kerinci Seblat National Park	6,362
Jayawijaya Mountains Wildlife Sanctuary	3,210
Mount Leuser National Park	1,379
Lingga Isaq Game Reserve	1,199
Enarotali Nature Reserve	1,049
Memberamo Foja Wildlife Sanctuary	950
Lorentz National Park	889
South Tamrau Highlands Nature Reserve	796
Batang Pangean I Nature Reserve	779
Bukit Rimbang Bukit Baling Wildlife Sanctuary	539
Other conservation estates (153)	7,924
Total	25,077

KEY BIODIVERSITY AREA	DEFORESTATION (HA)
Batang Toru	5,021
Kerinci Seblat	2,776
Gunung Leuser	2,277
Barumun-Rokan Peat Swamp Forest	2,248
Bukit Baka-Bukit Raya	2,004
Routa	1,830
Wanggar - Weyland Catchment	1,240
Trumon - Singkil	1,132
Sangkulirang	1,128
Dirgahayu Rimba	1,026
240 other key biodiversity areas	25,400
Total	46,081

*) Covering conservation areas, key biodiversity areas and protected species habitats

Deforestation in iconic megafauna habitats



Deforestation covering 156,463 hectares (excluding double counting in overlapping habitats) occurred on 29 million hectares of habitats for iconic species: tigers, rhinos, elephants and orangutans.

Deforestation in food reserve forests

Deforestation inside 20.6 million hectares of food, energy and water reserves

NO	PROVINCE	HECTARES
1	Central Kalimantan	13,455
2	West Sumatra	8,289
3	West Kalimantan	6,286
4	Aceh	6,240
5	East Kalimantan	6,089
6	North Sumatra	4,934
7	Southeast Sulawesi	3,724
8	Central Sulawesi	3,466
9	Jambi	3,278
10	Riau	3,106
11	Bengkulu	2,904
12	West Sulawesi	2,609
13	North Kalimantan	2,411
14	Papua Highlands	1,819
15	South Sumatra	1,390
16	Maluku	1,247
17	North Maluku	1,207
18	South Kalimantan	1,178
19	South Papua	1,061

NO	PROVINCE	HECTARES
20	Central Papua	982
21	Papua	922
22	South Sulawesi	756
23	West Papua	404
24	West Nusa Tenggara	336
25	Southwest Papua	283
26	Gorontalo	272
27	Lampung	175
28	North Sulawesi	153
29	East Nusa Tenggara	145
30	West Java	118
31	East Java	63
32	Riau Archipelago	44
33	Central Java	24
34	Banten	19
35	Bangka Belitung Archipelago	18
36	Bali	1
TOTAL		79,408

18 %
of deforestation in
2025 occurred in
forests that provide
food, energy and
water

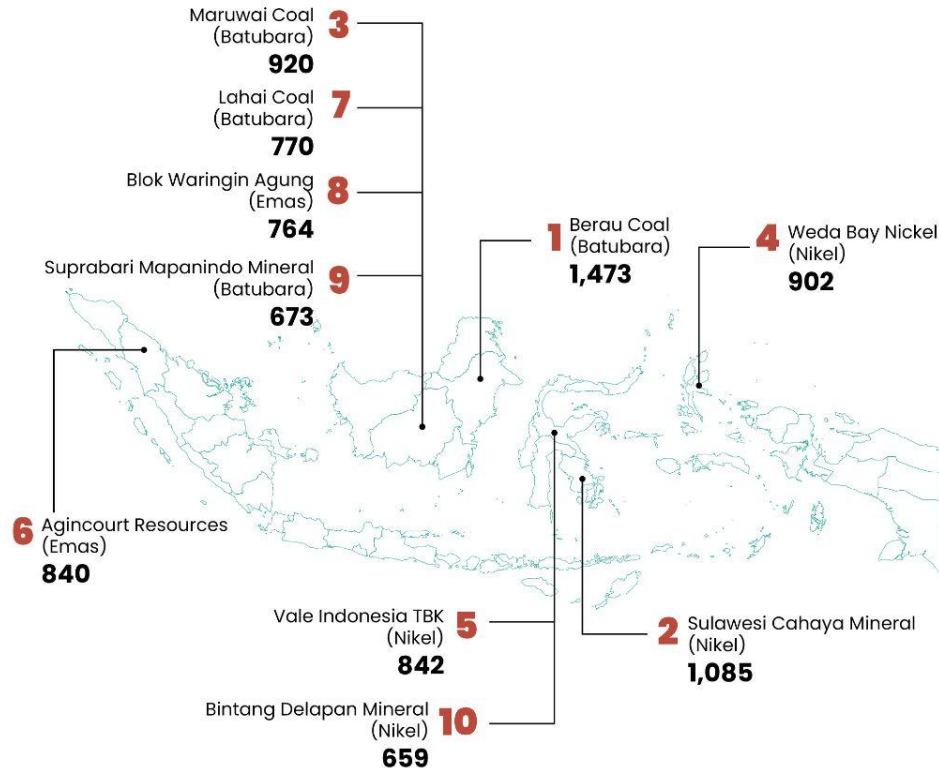
- At the end of December 2024, the Government allocated 20.6 million hectares of forest estate for food, energy and water reserves. Auriga Nusantara analyses indicate 8.8 million hectares of these reserves being natural forest.
- These reserves were centres of deforestation in 2025, accounting for 79,408 hectares or 18% of national deforestation.

Deforestation in concession areas

Region	Mining	Forestry	Oil palm	Total
Kalimantan	24,317	82,548	18,148	125,013
Sumatera	4,967	15,860	5,674	26,501
Papua	983	9,161	9,781	19,925
Sulawesi	8,107	857	4,193	13,158
Maluku	2,606	2,351	87	5,044
Bali dan Nusa Tenggara	112	121	1	234
Java	70		25	95
Total	41,162	110,898	37,910	189,970

- Almost half (44%) of all deforestation occurred inside concession areas, with forestry concessions contributing the largest share (58%).
- Most concession area deforestation (66%) occurred in Kalimantan.

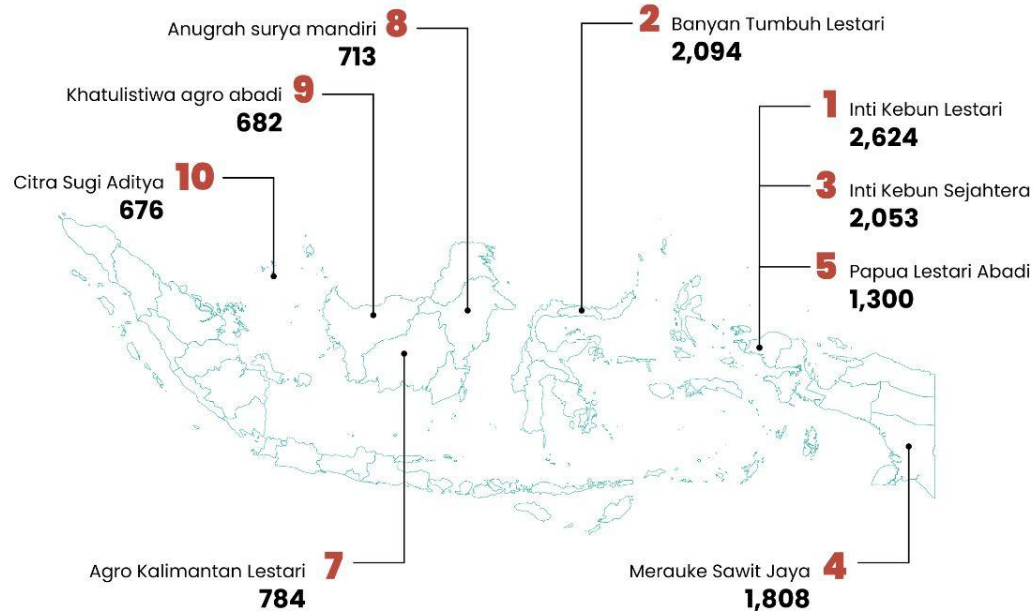
Deforestation in mining concessions



1,131 other licenses
32,233
hectares

- Deforestation totalling 41,162 hectares occurred inside 1,140 mining concessions throughout 2025.
- 22% (8,929 hectares) of deforestation occurring inside mining concessions was attributable to the top ten deforesting companies.
- In addition to nickel, gold mining is also currently undergoing expansion in Indonesia.

Deforestation inside oil palm concessions

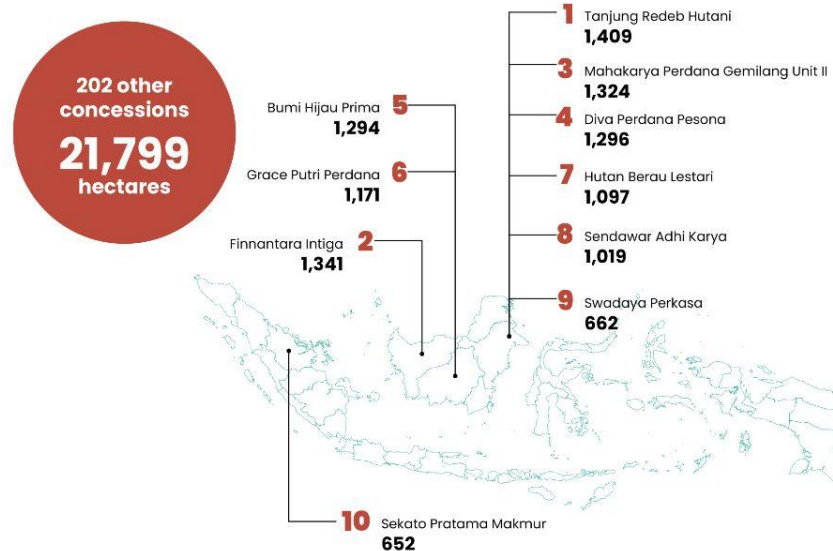


- Deforestation totalling 37,910 hectares occurred inside 719 oil palm concessions throughout 2025.
- 36% (13,610 hectares) of deforestation occurring inside oil palm concessions was attributable to the top ten deforesting concession companies.
- Centres for corporate oil palm/concession expansion were Kalimantan and Papua.

Deforestation in forestry concessions

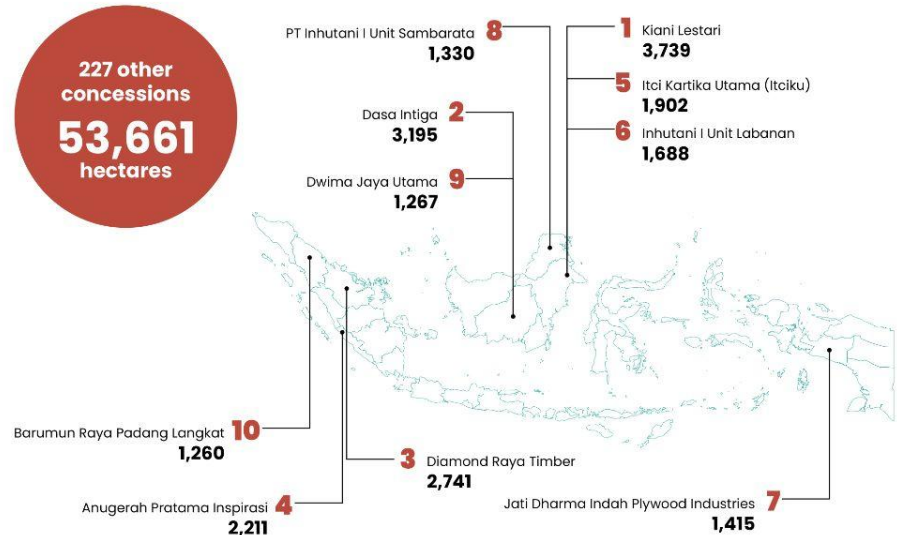
Deforestation amounting to 110, 898 hectares occurred inside 486 forestry concessions: logging (74,409 hectares), pulpwood plantations (33,063 hectares), ecosystem restoration (671 hectares) and other forestry concessions (2,754 hectares).

Top ten pulpwood plantation concessions for deforestation



- Deforestation occurred inside 212 pulpwood plantation concessions.
- 34% of deforestation inside pulpwood concessions was attributable to the top ten companies.

Top ten logging concessions for deforestation



- Deforestation occurred inside 237 logging concessions.
- 28% of deforestation inside logging concessions was attributable to the top ten companies.



FIELD VERIFICATION

Production forest estate,
Bireun, Aceh, December 2025



PT Indah Nusa Puri forest utilization concession,
Aceh, December 2025



PT Toba Pulp Lestari, forest utilization concession,
Aek Raja, North Sumatra, December 2025



PT Toba Pulp Lestari, forest utilization concession,
Aek Raja, North Sumatra, December 2025



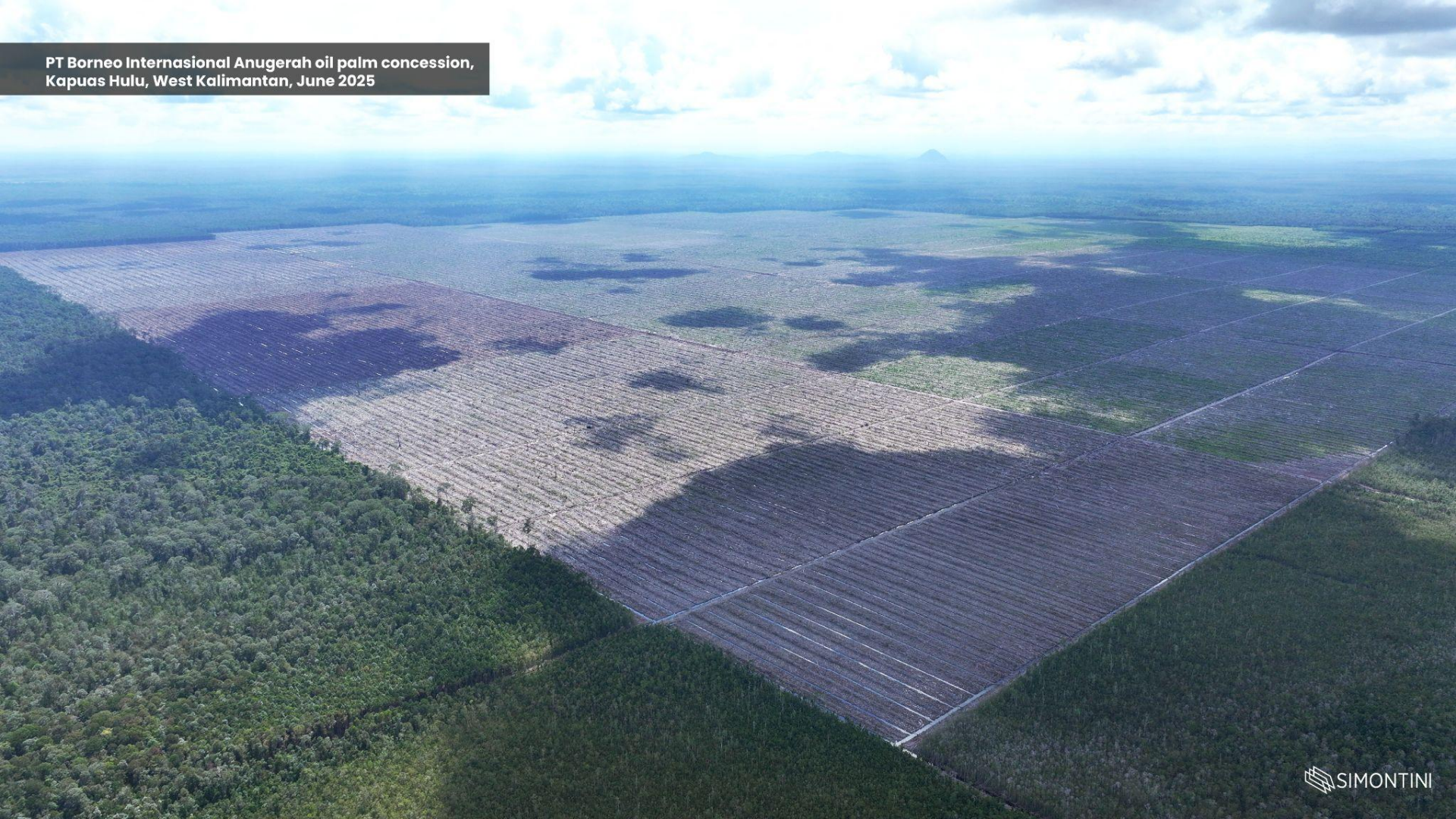
Deforestation in a protection forest estate,
Sijunjung, West Sumatra, December 2025



PT Bencoolen Mining concession area,
North Bengkulu, Bengkulu, May 2025



PT Borneo Internasional Anugerah oil palm concession,
Kapuas Hulu, West Kalimantan, June 2025



PT Equator Sumber Rezeki plantation concession,
Kapas Hulu, West Kalimantan, June 2025



**PT Alam Lestari Indah oil palm concession,
North Barito, Central Kalimantan, July 2025**



PT Industrial Forest Plantation forest utilization
concession, Kapuas, Central Kalimantan, July 2025



PT Hutan Berau Lestari forest utilization concession,
Berau, East Kalimantan, May 2025



PT Indosubur Sukses Makmur forest utilization
concession, East Kutai, East Kalimantan, January 2025



**PT Sendawar Adhi Karya forest utilization
concession, West Kutai, East Kalimantan**



Mentarang hydroelectric power plant,
Malinau, North Kalimantan, October 2025



PT Vale Indonesia mining concession,
Bahodopi, Central Sulawesi, October 2025



PT Banyan Tumbuh Lestari forest utilization
concession, Pahuwato, Gorontalo, May 2025



PT Aneka Tambang mining concession,
Kolaka, Southeast Sulawesi, December 2025



PT Gema Kreasi Perdana mining concession,
Konawe Islands, Southeast Sulawesi, March 2025



PT Indonesia Pomalaa Industry Park mining concession,
Kolaka, Southeast Sulawesi, December 2025



PT Sulawesi Cahaya Mineral mining concession,
Konawe, Southeast Sulawesi, June 2025



PT Vale Indonesia mining concession,
Kolaka, Southeast Sulawesi, December 2025



PT Nusa Karya Arindo mining concession, East
Halmahera, North Maluku, December 2025



PT Sumberdaya Arindo mining concession,
East Halmahera, North Maluku, December 2025



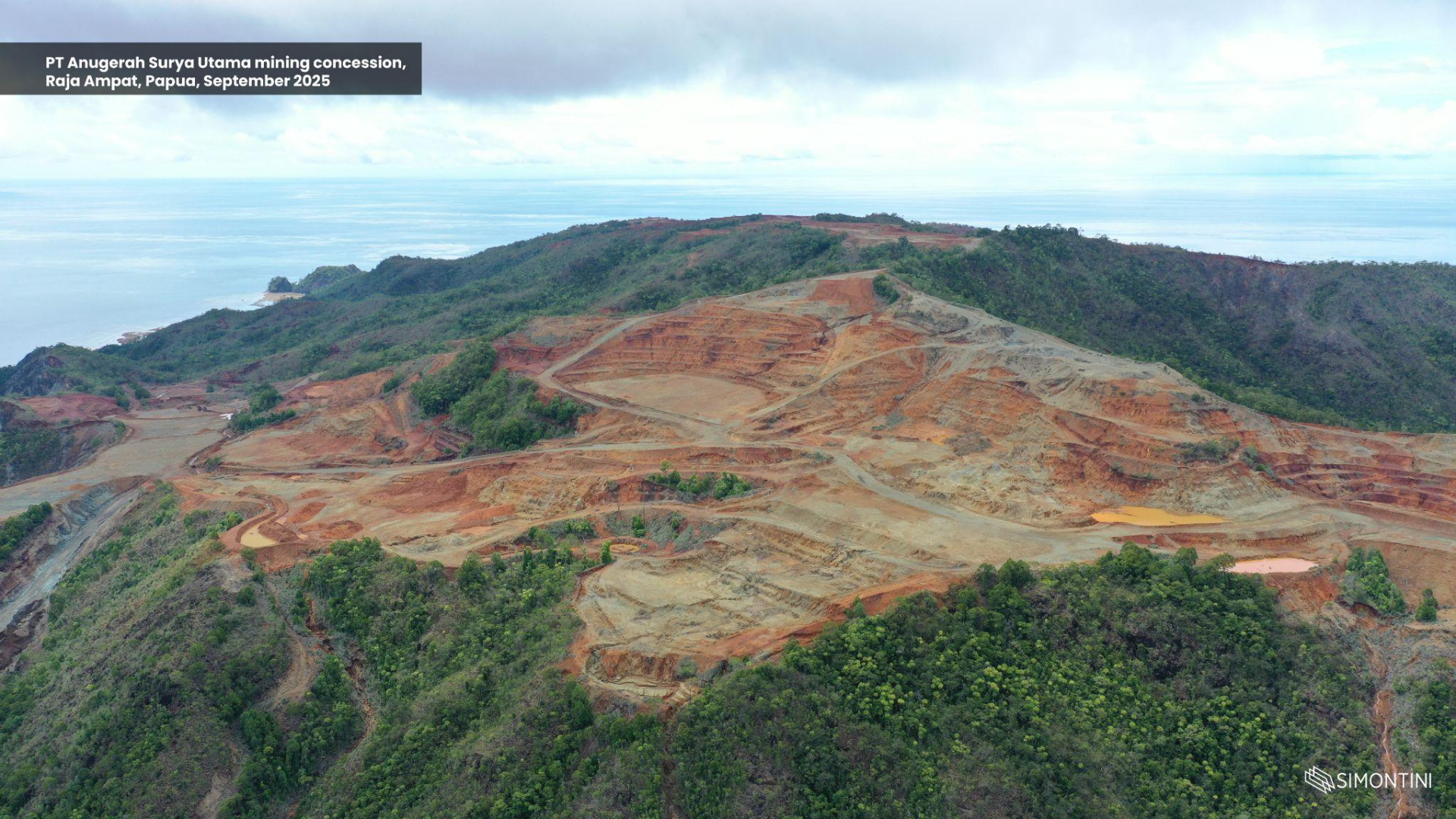
Weda Bay Nickel mining concession, Central
Halmahera, North Maluku, December 2025



Convertible production forest estate,
Raja Ampat, Papua, September 2025



PT Anugerah Surya Utama mining concession,
Raja Ampat, Papua, September 2025



PT Jati Dharma Indah Plywood Industries forest utilization
concession, Nabire, Central Papua, December 2025





THANK YOU