

Forests Under Siege

The Hidden Cost of Timber Plantation Expansion in Central Kalimantan

Deforestation carried on by PT Industrial Forest Plantation (IFP) and PT Bumi Hijau Prima (BHP)



Save Our Borneo | www.saveourborneo.org

Jl. Tilung XI, Savero Lane, Lot 4, Palangka Raya 73112, Central Kalimantan , Indonesia

Phone/WhatsApp: +62 812-6225-5465 | info@saveourborneo.org

Compilation Year: 2025, 2026

Introduction



Central Kalimantan (Central Borneo) is Indonesia's largest province, spanning 15.3 million hectares. Its tropical forests support endemic flora and fauna and serve as the primary livelihood base for local communities. Yet the region is under mounting pressure from deforestation. Between 2020 and 2024, Global Forest Change data recorded the loss of 479,889 hectares of forest cover in Central Kalimantan, driven by plantations, mining, and settlements.

Pressure is especially acute in the Kapuas River basin, where companies holding Industrial Timber Plantation (HTI) permits, locally known as PBP, are clearing natural forest at scale to supply the pulp and wood pellet industries. Two companies stand out for the size and impact of their operations: **PT Industrial Forest Plantation (IFP)** and **PT Bumi Hijau Prima (BHP)**.

Both hold government-issued permits, yet their activities raise serious ecological concerns, particularly given Indonesia's commitment under the **FOLU Net Sink 2030** policy (Forestry and Other Land Use Net Sinks) to make the forestry sector a net carbon sink. Save Our Borneo (SOB) initiated this monitoring exercise to assess the gap between stated commitments and on-the-ground reality.



Research Questions

1. How do land-clearing activities by HTI companies affect deforestation rates in the Kapuas River basin?
2. Have these companies fulfilled their environmental obligations under Indonesian law?

Methodology

Desk Study: Analysis of official documents, watershed maps, peatland data, deforestation records, and orangutan habitat data. Spatial analysis using GIS and satellite imagery to track land-cover change over time.

Field Investigations: On-site visits to verify conditions, assess ecological impact, and validate findings from the desk study.

Study Rationale

PT IFP and PT BHP were selected as monitoring targets for three reasons. First, both operate within the Kapuas River Basin, a priority area for ecological restoration. Second, their combined concession area is significantly larger than other HTI permit holders in the basin, meaning their activities have a disproportionate impact on forest cover. Third, they are representative of broader plantation forest governance challenges in Central Kalimantan.

The Kapuas River Basin carries a heavy legacy of ecological disruption, including from the large-scale Peatland Development Project (PLG, 1995–1997), which degraded peatland hydrology across much of the region. Recovery efforts have continued, but exploitation pressures persist, and have intensified.

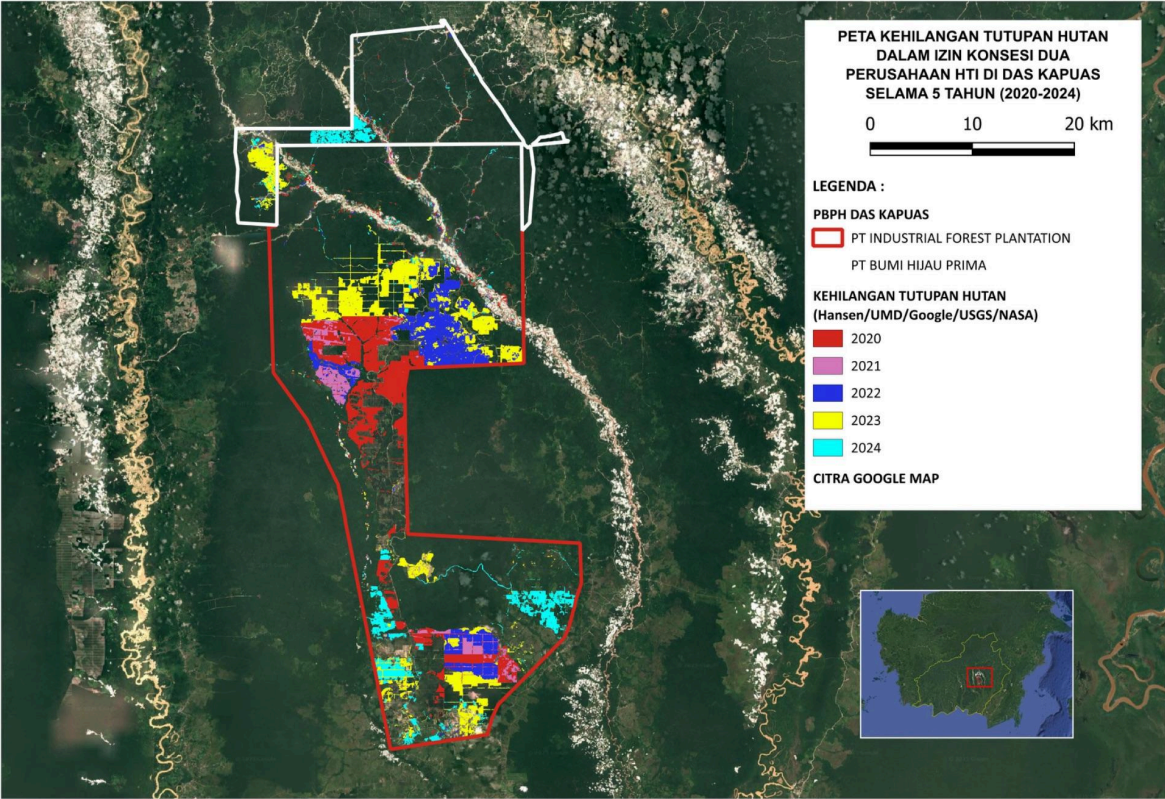
Company Profiles

PT Industrial Forest Plantation (IFP) holds a PBPH-HTI permit covering 100,989 hectares in Mantangai Subdistrict, Kapuas Regency (coordinates: 114°00'05" – 114°18'35" BT and 1°22'55" – 1°53'40" LS), initially granted in 2009 (SK 664/Kpts-II/2009) and revised in 2014. The company cultivates Acacia and Eucalyptus for fiber.

PT Bumi Hijau Prima (BHP) holds a concession of 20,352 hectares bordering PT IFP's area, covering Bajuh Village (Kapuas Tengah Subdistrict) and Muroi Raya Village (Mantangai Subdistrict). Its permit was issued in 2021 and renewed in 2022. BHP cultivates sengon and balsa under a clear-cutting with artificial regeneration (THPB) silvicultural system.

Deforestation from Land Clearing

Deforestation analysis used Global Forest Change (GFC) data from the GLAD Laboratory at the University of Maryland, cross-referenced with Sentinel-2 satellite imagery from the Copernicus Browser.



Sentinel-2 imagery confirms significant land-cover change in both concessions between 2020 and 2024.

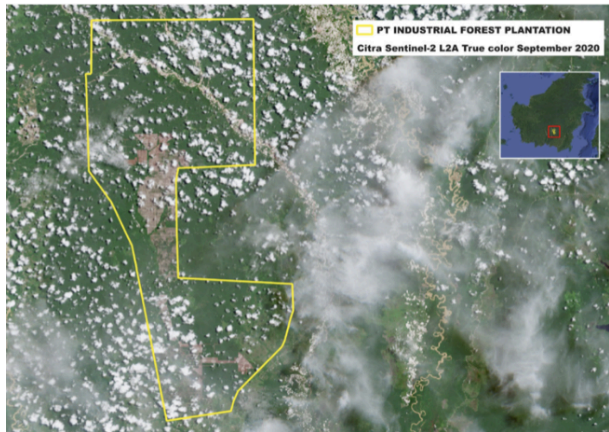
COMPANY	YEAR AND AREA OF FOREST LOSS WITHIN COMPANY PERMITS (Ha)						TOTAL
	2020	2021	2022	2023	2024		
1 PT INDUSTRIAL FOREST PLANTATION (IFP)	7.271	1.845	5.218	7.211	3.097	24.642	
2 PT BUMI HIJAU PRIMA (BHP)	105	32	71	777	981	1.966	
GRAND TOTAL	7.376	1.877	5.289	7.988	4.078	26.608	

Between 2020 and 2024, total forest loss in the Kapuas Watershed reached 78,534 hectares. Of this, 26,608 hectares (33.88%) occurred within the concessions of PT IFP and PT BHP.

- PT IFP: 24,642 hectares lost (24.39% of its concession area), with clearing detectable prior to 2020 as well.
- PT BHP: 1,966 hectares lost since permit issuance in 2021, with rapid acceleration in 2023, 2024.

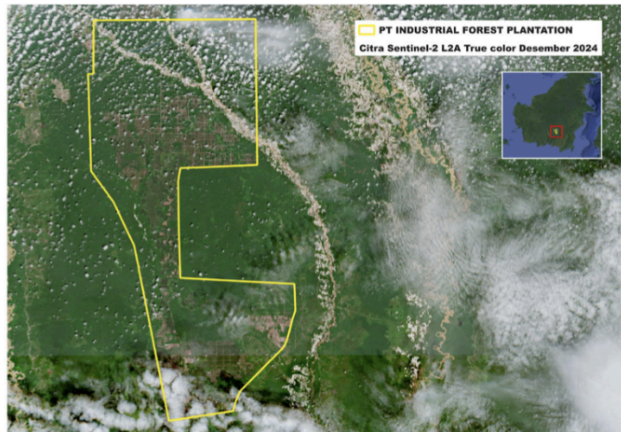
PT Industrial Forest Plantation (IFP)

Citra Sentinel-2 2020



Forest Loss Area in 2020 from Global Forest Change data: 7,271 Ha

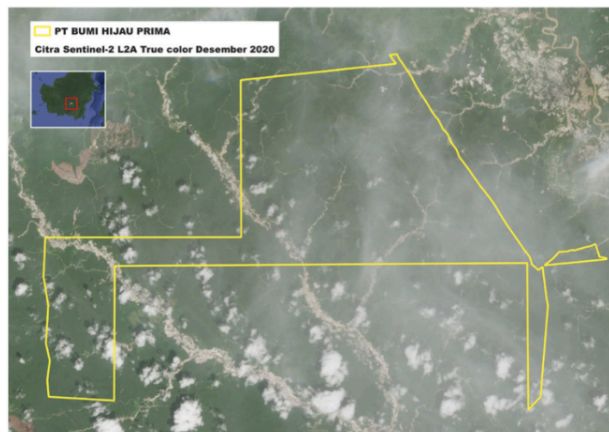
Citra Sentinel-2 2024



Forest Loss Area in 2020-2024 from Global Forest Change data: 24,642 Ha

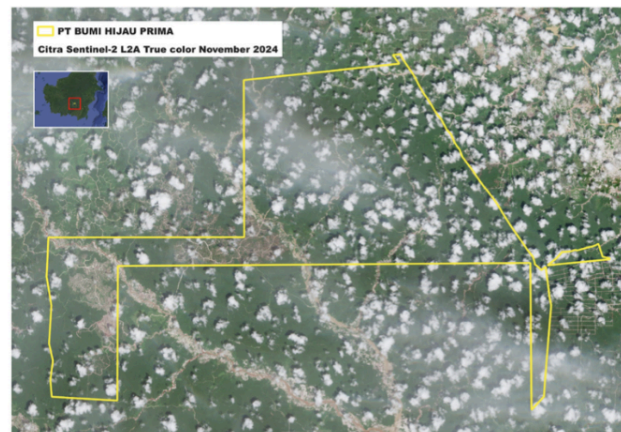
PT Bumi Hijau Prima (BHP)

Citra Sentinel-2 2020



Forest Loss Area in 2020 from Global Forest Change data: 105 Ha

Citra Sentinel-2 2024



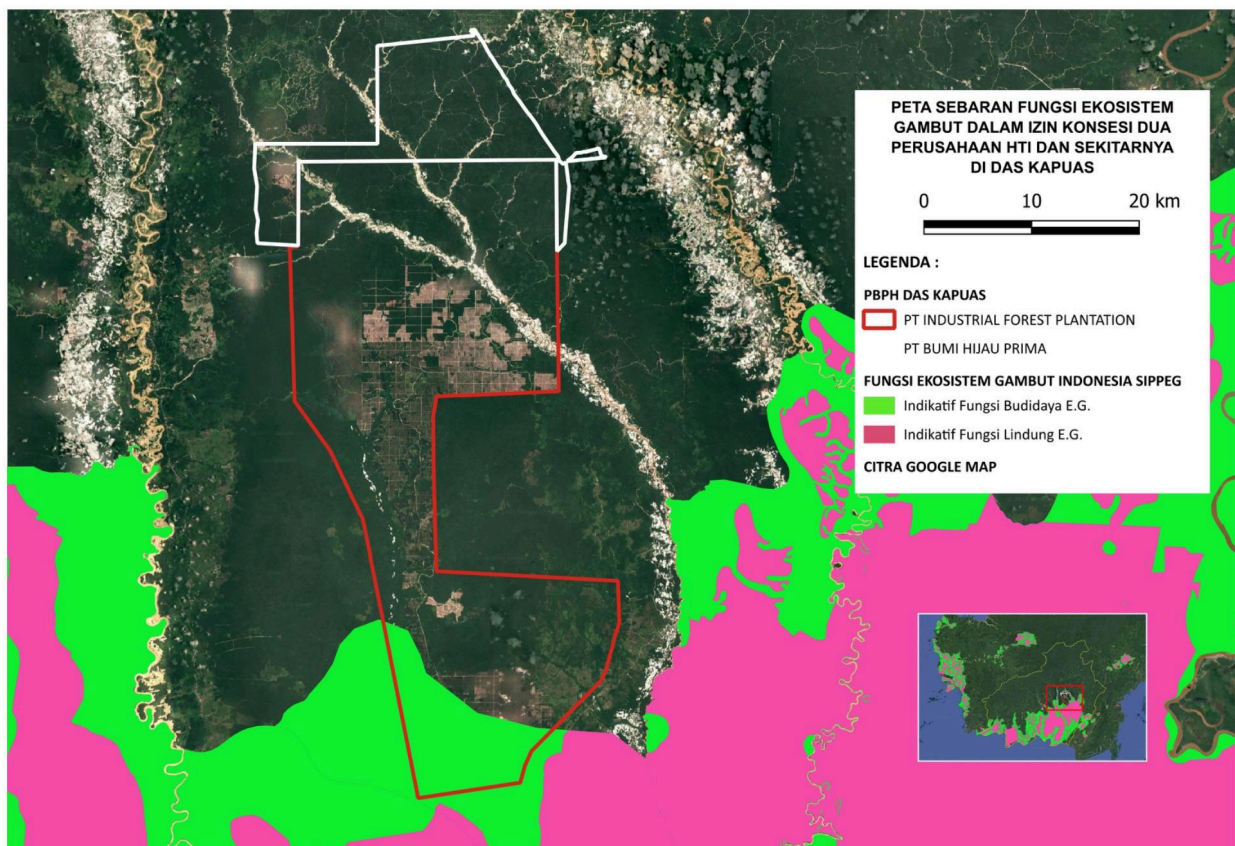
Forest Loss Area in 2020-2024 from Global Forest Change data: 1966 Ha

Peatland Ecosystems Within Concession Areas

Central Kalimantan contains 35 Peatland Hydrological Areas (PHAs) totalling 4.67 million hectares. These are classified into two functional zones: **Conservation Function** (FEG), deep peatlands (≥ 3 m) critical for water regulation and carbon storage, and **Cultivation Function** (FBEG), shallower peatlands that may be used, within strict limits.

Spatial analysis using 2021 SIPPEG data reveals that **PT IFP's concession contains 10,829 hectares of FBEG (cultivation) peatland**, of which **3,289 hectares were deforested between 2020 and 2024**. PT BHP's concession contains no formally classified peatland, but both companies operate within the same watershed, meaning damage in one area can affect surrounding peatlands.

Dried-out peat is highly fire-prone. Research published by CIFOR confirms that peatland degradation can trigger recurring fire and pollution events that affect entire watersheds, a risk that grows with each hectare cleared.



SIPPEG FEG satellite imagery. Data outside the permit has been excluded in calculation of converted peatlands

Peat Ecosystem Function Area in Company Concessions (ha)

Company	Indicative Cultivation Function	Indicative Protection Function
PT INDUSTRIAL FOREST PLANTATION	10.829	0
PT BUMI HIJAU PRIMA	0	0
Grand Total	10.829	0

Area of Forest Loss in the Last 5 Years in the F.E.G. Area (ha)

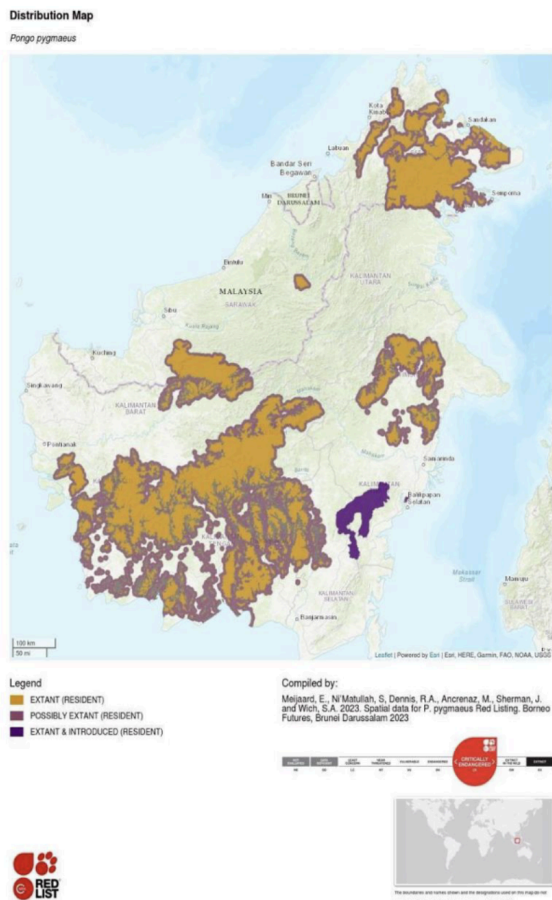
Company	Indicative Cultivation Function	Indicative Protection Function
PT INDUSTRIAL FOREST PLANTATION	3.289	0
PT BUMI HIJAU PRIMA	0	0
GRAND TOTAL	3.289	0

Orangutan Habitats Within Concession Areas

Using IUCN Red List spatial data (2024) for the Bornean orangutan (*Pongo pygmaeus*), overlaid with concession boundaries, we found that orangutan habitats, both "Extant" and "Possibly Extant", cover virtually the entire area of both concessions.

- **PT IFP**: 66,382 ha extant; 35,040 ha possibly extant, nearly equal to the total concession area.
- **PT BHP**: Similar proportions relative to its permit area.

Between 2020 and 2024, deforestation affected **20,050 hectares of confirmed orangutan habitat** and a further **6,558 hectares of possible habitat** across both concessions. The scale of this habitat loss is consistent with the orangutan's IUCN Critically Endangered status.

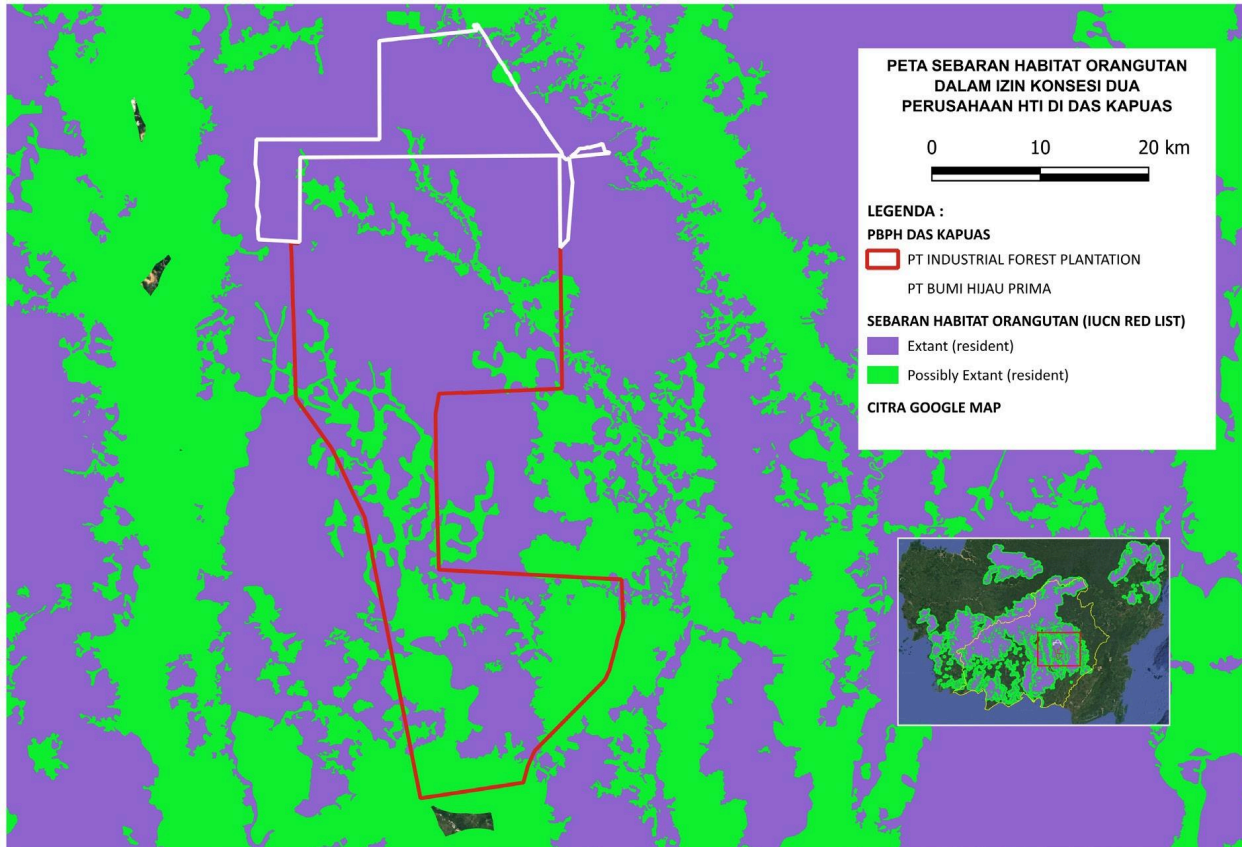


Orangutan distribution map:

- Extant (resident): This area is permanently inhabited by orangutans.
- Extant & introduced (resident): This area is inhabited by introduced orangutans, not their natural/historical population.
- Possibly Extant (resident): This area is likely still inhabited by orangutans.

We then analyzed the spatial distribution data of orangutans (IUCN Red List) by overlaying it with the data layers of the permit boundaries of the two HTI companies in the Kapuas River Basin. We did this to determine whether orangutans were distributed within the companies' concession areas.

This map shows that both existing and possibly existing orangutan distribution areas are located within the HTI concession areas in the Kapuas Watershed. This means that the areas within these HTI concessions remain permanent orangutan habitat. However, the existence of other orangutan habitats likely remains unverified.



Mapped area of orangutan distribution categorized as existing and possibly existing within the HTI concession areas in the Kapuas Watershed, calculated using the geometry calculation method

Indonesia's FOLU Net Sink 2030 policy (Forestry and Other Land Use Net Sinks), operationalised through a Central Kalimantan Work Plan document, establishes 12 Operational Plans (OPs) requiring companies to take specific conservation and emission-reduction actions. Key among these is **RO11: Protection of Conservation Areas**, which targets 54.47% of PT IFP's concession and 90.96% of PT BHP's concession.

Field verification and spatial analysis reveal a stark mismatch between these plans and actual conditions:

- **PT BHP.** The majority of the 1,966 hectares deforested between 2020 and 2024 lies within Zone RO11. What should be a conservation area has been converted to sengon and balsa monocultures. Field teams observed logging roads bisecting forest blocks, timber stockpiles, a base camp, and a nursery in deforested RO11 zones. Two gibbons (*Hylobates* sp.) were recorded at one location within an active RO11 zone.

- **PT IFP:** The concession is dominated by acacia plantations at varying stages of growth, with natural forest patches fragmented by road networks. Remnant forest suspected to be High Conservation Value (HCV) is surrounded by plantations. Field teams recorded gibbons and probable orangutan nests at a point classified under RO8 (increased carbon stock without rotation). New clearing for acacia planting was identified in 2025 within an RO4 zone.

Orangutan Distribution Area Within Company Concession Permits (Ha)

Concession Permit Area	Extant (resident)	Possibly Extant (resident)	
PT INDUSTRIAL FOREST PLANTATION	66.382	35.040	100.989
PT BUMI HIJAU PRIMA	19.796	736	20.352
Grand Total	86.178	35.776	

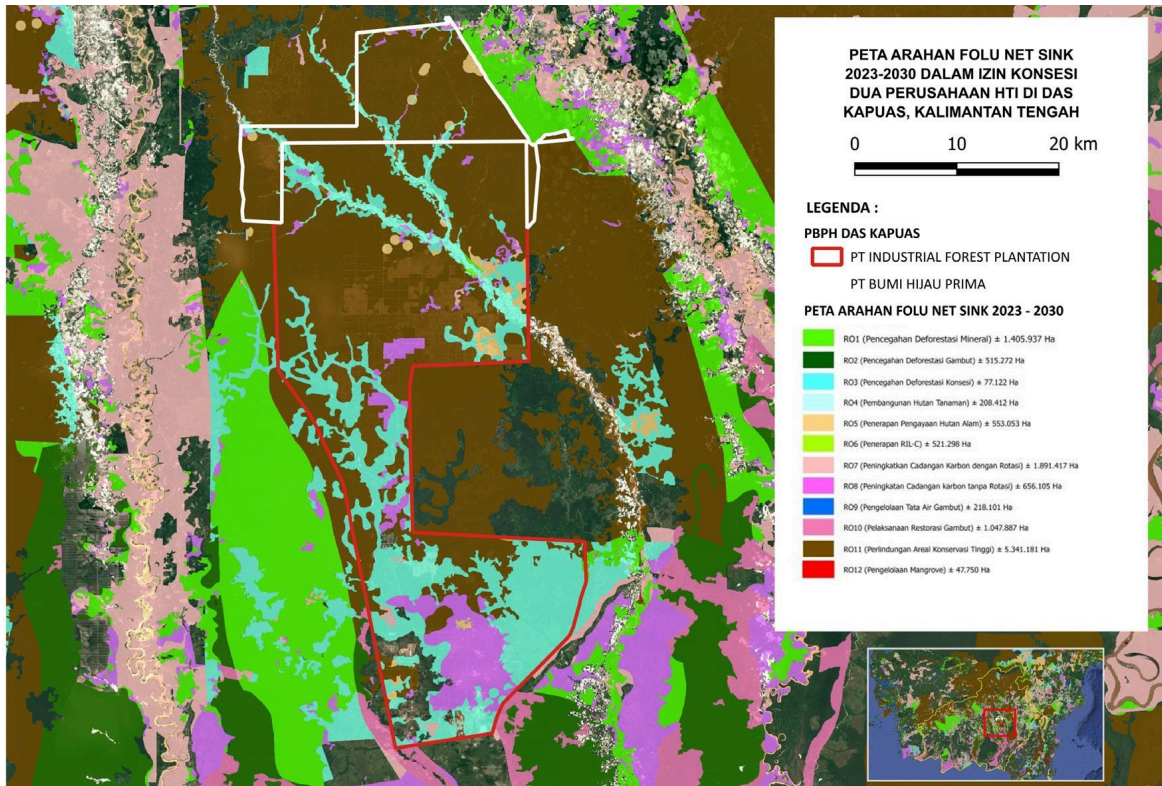
Notably, 9,253 hectares of deforestation occurred before the Work Plan was even approved in 2022, suggesting the plans were written around existing damage rather than preventing it.

Orangutan Distribution Area Within Company Concession Permits (Ha)

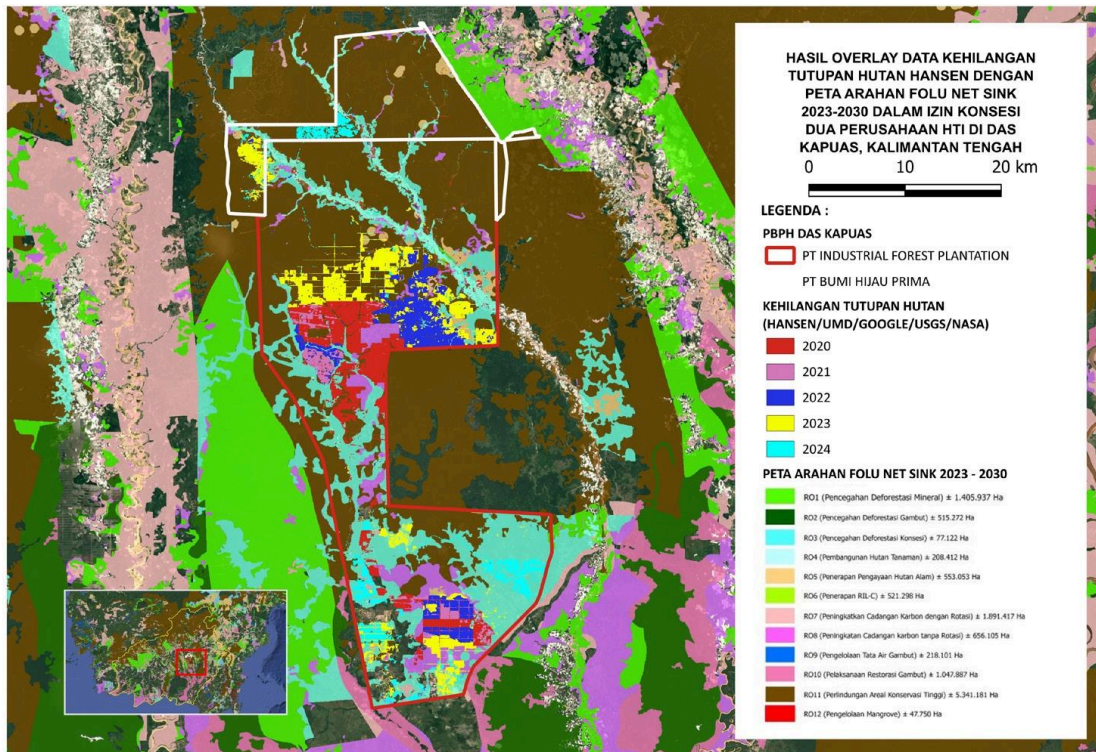
Concession Permit Area	Extant (resident)	Possibly Extant (resident)	TOTAL cover loss in 5 years
PT INDUSTRIAL FOREST PLANTATION (IFP)	18.129	6.512	24.641
PT BUMI HIJAU PRIMA (BHP)	1.921	46	1.967
Grand total	20.050	6.558	26.608

F. FOLU Net Sink 2030, Commitments vs. Reality

Forestry and Land Use Net Sink 2030 RenJa Map



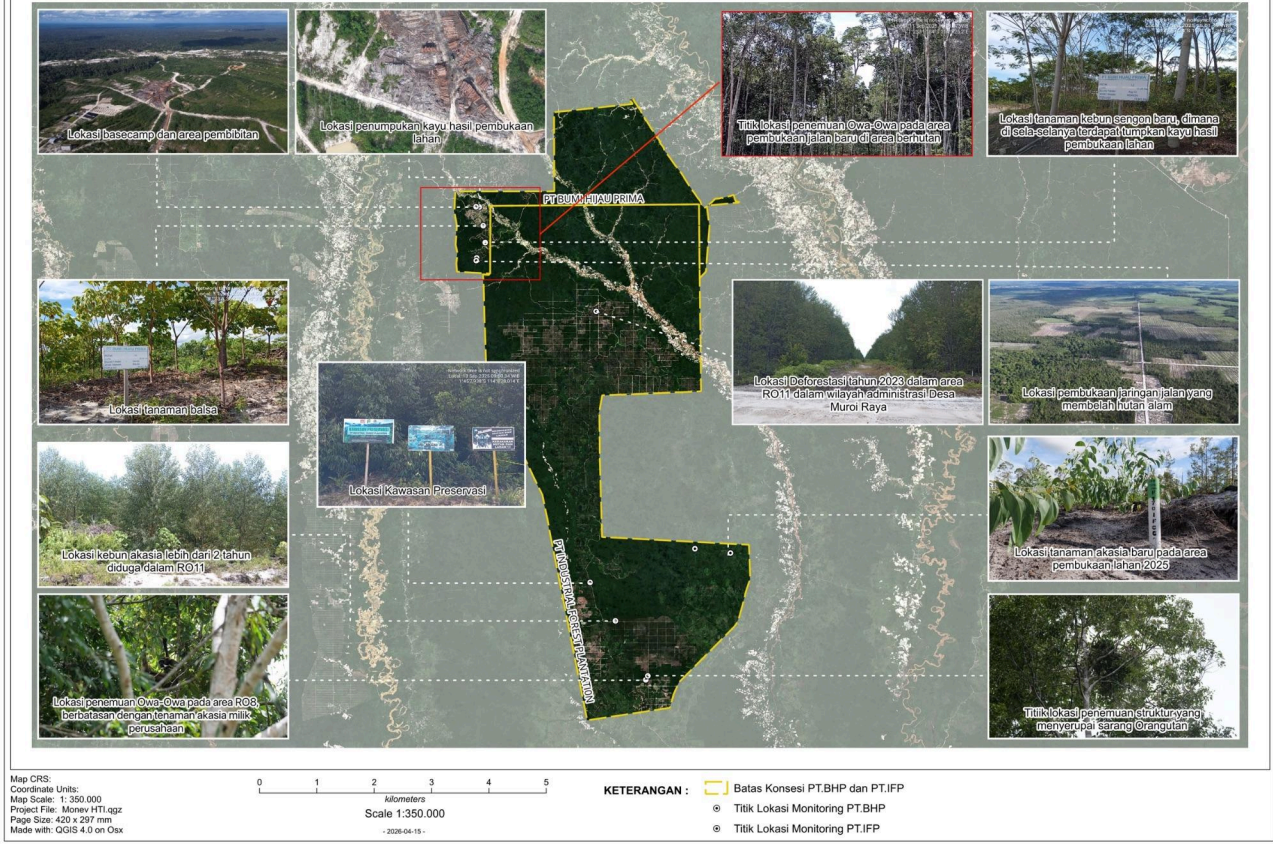
Company Target	PBPH Area (Ha)	RO11 (Ha)	% RO11 of PBPH
PT Industrial Forest Plantation	100.989	55.010	54,47%
PT Bumi Hijau Prima	20.352	18.512	90,96%



Based on the permit overlay and the table above, we can see that the HTI companies' involvement in climate mitigation actions does not cover the entire RO. From RO1 to RO12, there are sections not included in their action plans. We analyzed that most of these activities are focused on RO4, for plantation forest development, and RO11, for conservation area protection, as indicated by the large targeted areas. ROs concerning deforestation and peatland are not prioritized. However, carbon-related items in RO6, RO7, and RO8 appear to be gaining traction, as evidenced by the number of areas filled in by each company.

We also analyzed the distribution of RO11 interventions (Conservation Area Protection) across the two companies holding HTI Forest Utilization Business Permits (PBPH). The results show significant variation in the proportion of activity area to the total PBPH permit for each company, as follows.

PETA TITIK MONITORING RO DI PT.IFP dan PT.BHP



Road that cutting through natural forest in the rehabilitation area within the PT BHP concession



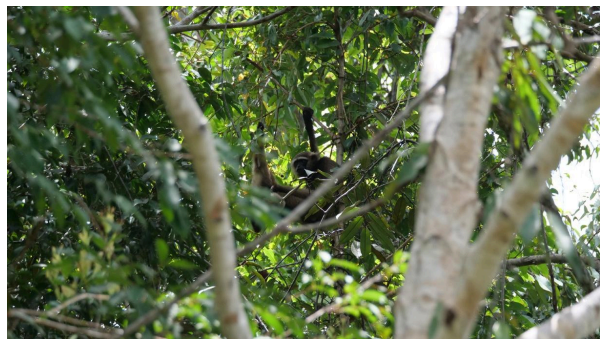
Land clearing within the PT BHP concession



Base camp area, nursery, log storage from land clearing in the within the PT BHP concession (RO11)



Road and plantation development causing fragmentation of natural forest in PT IFP's concession

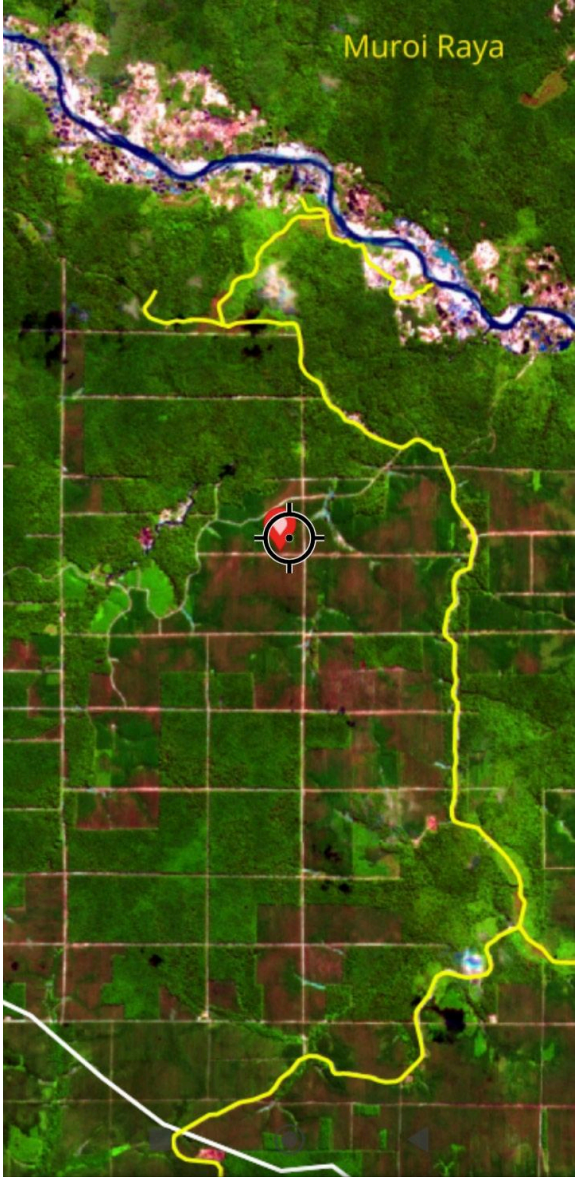


Gibbons spotted inside in the PT IFP concession (RO8 area)

G. Legal and Policy Failures



New plantation mark at deforestation sites in 2025 in the PT IFF concession (RO4 area)

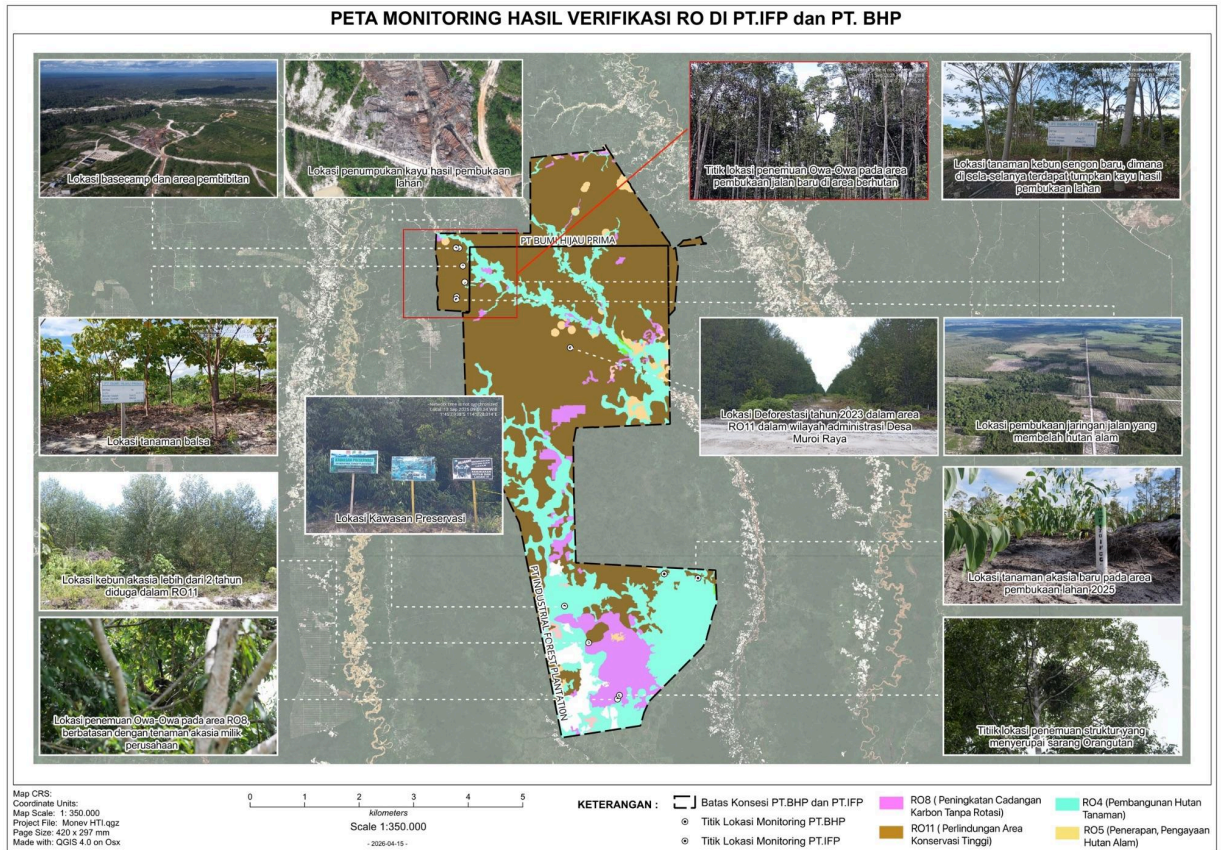


Sentinel Satellite Image of the PT IFF concession area in the Muroi Raya Village area



RO11 in the PT IFF concession area, near the Muroi Raya Village area

RO VERIFICATION RESULT MONITORING MAP AT PT. IFP and PT. BHP



Indonesia's constitutional and statutory framework provides a clear basis for forest protection. Article 28H of the 1945 Constitution guarantees the right to a healthy environment. Article 33 requires natural resources to be managed for the people's welfare. Law No. 32 of 2009 on Environmental Protection enshrines the precautionary principle and imposes mandatory oversight obligations on government officials at all levels.

Yet structural failures are evident at multiple levels:

- **Policy contradiction:** The Job Creation Law (Law No. 6 of 2023) removed the requirement to maintain forest cover over at least 30% of each watershed, replacing it with a vague government discretion standard. This directly undermines the FOLU Net Sink target by stripping away the legal mechanism needed to achieve it.
- **Greenwashing risk:** Presidential Regulation No. 110/2025 on carbon economic value instruments allows companies to purchase carbon credits through voluntary markets rather than directly reducing

emissions. Without rigorous oversight, this risks legitimising greenwashing. A 2021 Oxford Net Zero study found that only 20% of 4,000+ surveyed companies met genuine net-zero criteria.

- **Oversight failure:** The scale of deforestation across 2020–2024, within concessions subject to mandatory government supervision under Article 71 of Law No. 32/2009, suggests systematic monitoring failures. The absence of timely corrective action may constitute state liability (state omission) for ecological damage.
- **EUDR exposure:** The EU Deforestation Regulation (EUDR, Regulation (EU) 2023/1115) requires that timber and other covered commodities entering the EU market be deforestation-free after 31 December 2020, legally produced, and supported by geolocation data. The 26,608 hectares of documented deforestation within PT IFP and PT BHP's concessions could feed directly into the European Commission's country risk assessment. A high-risk classification for Indonesia would impose stricter scrutiny on all related exports, raise compliance costs, and invite formal complaints and sanctions, including fines of up to 4% of EU annual revenue.

PART III, RECOMMENDATIONS

SOB's monitoring is not intended to assign blame, but to support fair and sustainable environmental governance in the public interest. Based on our findings, we address the following recommendations to three responsible parties.

Central Government

(Ministry of Forestry, Ministry of Environment, and relevant agencies):

1. Conduct a comprehensive review of PBPH-HTI permits for PT IFP and PT BHP, with deforestation data as primary evidence.
2. Revise the FOLU Net Sink 2030 targets to align with realistic, measurable Operational Plans that genuinely address deforestation.
3. Strengthen environmental monitoring and enforcement systems at the national level.
4. Impose a moratorium on land clearing within HTI concessions in priority watersheds, including the Kapuas.

Regional Governments:

1. Activate mandatory oversight functions under Law No. 32 of 2009.
2. Integrate civil society monitoring data, including SOB's findings, into local policy evaluation.
3. Establish a multi-stakeholder oversight mechanism for concession monitoring.
4. Strengthen protection of natural forest landscapes in the Kapuas River Basin.

PT IFP and PT BHP:

1. Immediately cease clearing of natural forest, particularly in areas of high conservation value such as RO11 zones and orangutan habitats.
2. Improve transparency regarding land-clearing and replanting plans, including public disclosure of annual work plans.
3. Take active responsibility for protecting endemic wildlife habitats within and adjacent to their concessions.

Only through genuine reform, grounded in accountability, transparency, and respect for ecological limits, can Indonesia fulfil its constitutional mandate and meet the sustainability standards increasingly required by international markets.



REFERENCES

- Ancrenaz et al. (2024). IUCN Red List: *Pongo pygmaeus*. IUCN.
- Borrega, M. & Gibson, L.J. (2015). Mechanics of balsa wood. *Journal of Materials Science*, 50(2), 753-765.
- CIFOR (2015). Dispelling Haze: Causes and Impacts of Land Fires. *Forest News*.
- CIFOR-ICRAF (2014). Major Atmospheric Emissions from Peat Fires in Southeast Asia.
- Central Kalimantan Environmental Agency (2024). Environmental Management Report.
- European Space Agency/Copernicus (2024). Sentinel-2 imagery, 2020-2024.
- Greenpeace UK. *Net Expectations: Assessing the role of carbon dioxide removal in companies' climate plans*.
- Hansen, M.C. et al. (2024). Global Forest Change Data. Google Earth Engine/USGS/NASA.
- Krisnawati, H. et al. (2011). *Paraserianthes falcata*: Ecology, silviculture, and productivity. CIFOR.
- Ministry of Environment and Forestry (2021). SIPPEG Peatland Ecosystem Spatial Data.
- Ministry of Environment and Forestry (2022). FoLU Net Sink 2030 Work Plan, Central Kalimantan. Ref. A-10/Renja-KalTeng/09/2022.
- Ministry of Environment and Forestry (2023). SIGAP FoLU Net Sink 2030 Interactive Map.
- Mongabay (2019). Kalimantan Environmental Coverage. mongabay.co.id.
- Oxford Net Zero (2021). *Taking Stock: A Global Assessment of Net Zero Targets*. ECIU.
- Pantau Gambut (2025). Functions of Peatland Ecosystems. pantaugambut.id.
- Subekti, R. Reactualizing FOLU Net Sink 2030 to Reduce Carbon Emissions. *BHL Journal*.
- World Resources Institute (2000). *Deforestation*. Washington, D.C.: WRI.