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# THE CLIMATE BOMB IS TICKING

Call for Zero Deforestation  
to Protect the Climate

**MINIMUM  
CRITERIA FOR  
THE PALM OIL  
SECTOR**

POLICY STATEMENT APRIL 2008

**GREENPEACE**

Protecting the world's ancient forests

**image** Plantations around Riau, owned by the two giant pulp and paper producers, Asia Pacific Resources International Holdings Ltd. (APRIL) and Asia Pulp and Paper (APP). In order to accommodate this industrial activity the natural peat and boggy environment is cleared, creating the perfect environment for fires. The forest fires in Sumatra, Indonesia, have now become an annual phenomenon, thanks to the effects of unsustainable logging. They cause a thick smog-like haze over the entire region, threatening the health of millions of people and contributing to the problem of climate change.

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Greenpeace is an independent global campaigning organisation that acts to change attitudes and behaviour, to protect and conserve the environment and to promote peace.

**front cover image**  
Rainforest on fire due to  
climate change effects from  
"El Nino". Jambi Province,  
Sumatra, Indonesia

©LILY/GREENPEACE

**image** Hariyanto Manalu chops down a tree as he clears forest in preparation to expand the Duta Palma Palm oil plantation.



Tropical forest destruction is responsible for about one-fifth of current global greenhouse gas (GHG) emissions.<sup>1</sup>

Keeping the global temperature increase below 2°C (compared to pre-industrial levels) means GHG emissions must peak by 2015 and by this time the world must be set on track for drastic reductions in overall emissions.<sup>2</sup>

Ending deforestation in tropical forests is critical to protecting the global climate, biodiversity and forest dependent communities. Eliminating deforestation in just eight tropical countries – Bolivia, Brazil, Cameroon, the Democratic Republic of the Congo, Ghana, Indonesia, Malaysia and Papua New Guinea – would nearly halve the annual rate of global forest loss.<sup>3</sup>

Historically the main driver of deforestation in Brazil and Bolivia has been the expansion of the beef and soya industries; the main driver of deforestation in Indonesia and Malaysia, – and one of the key drivers in Papua New Guinea and the Solomon Islands – has been the expansion of the palm oil industry.<sup>4</sup> The logging that precedes these industries in most cases opens up the forest and provides added financial incentive to deforestation for agriculture.

Globally, governments have a critical role to play in reducing GHG emissions from deforestation and degradation. Financial incentives – initially voluntary but ultimately via binding international legal mechanisms being developed under the UNFCCC – are fundamental to protecting forests for climate and biodiversity. Greenpeace has developed a *Forest for Climate* proposal where industrialised nations would be able to meet a proportion of their overall GHG emissions reductions by paying into a *Forest for Climate* fund, enabling the protection of forests and the climate whilst providing financial support for forest communities and governments committed to forest protection.<sup>5</sup>

While such international financial incentives for forest carbon and biodiversity protection are being negotiated, unilateral action by governments, supported by industry, is critical to stemming forest destruction. Greenpeace has played a leading role in reducing deforestation in the Brazilian Amazon, through its work with the soya sector and the Brazilian government to bring about a moratorium on deforestation for soya plantations.<sup>6</sup>

As a next step towards reducing global GHG emissions linked to deforestation, unilateral action by government and industry in Southeast Asia and the western Pacific is necessary to mitigate the emissions resulting from the rapid expansion of the palm oil sector. Moratoria provide the necessary time and space to establish a network of protected areas and areas dedicated to environmentally responsible and socially just forest use through a process of participatory land use planning that ensures respect for indigenous and other forest community rights.

This document focuses on the key principles defining such a moratorium.

## Oil Palm Plantation Expansion is the Leading Cause of Deforestation in Southeast Asia

The burning and degradation of Southeast Asia's peat forests alone accounts for four per cent of current global GHG emissions,<sup>7</sup> releasing two billion tonnes of GHG every year.<sup>8</sup> These emissions result from peat forest clearance and peat soil drainage for plantation expansion.

Indonesia accounts for 90% of these emissions,<sup>9</sup> making it the third highest emitter of greenhouse gases globally, behind the USA and China.<sup>10</sup> Indonesia also has the fastest deforestation rate of any major forested country.<sup>11</sup> A 2007 UNEP report identifies oil palm plantations as the leading cause of rainforest destruction in Indonesia, and estimates that 98% of forests may be destroyed by 2022.<sup>12</sup>

Indonesia is now the largest palm oil producer in the world, with plans to expand oil palm plantations over a further 20 million hectares.<sup>13</sup> Despite the potential availability of already cleared lands, forests continue to be cleared for oil palm plantations because companies profit from selling timber logged during forest clearance to pulp mills and timber traders. The industry already controls huge landbanks of forested areas that it has yet to clear, and is aggressively grabbing control of further forest areas in the Indonesian provinces of Papua and Kalimantan.

Malaysia, the second largest palm oil producer in the world has plans to expand oil palm plantations into customary lands of indigenous forest communities. In Sarawak, the state government is pursuing a vision to transform the region into the '*oil palm state of Malaysia*' – meaning at least a four-fold increase in plantation area.<sup>14</sup> By 2010, the state plans to increase the area of oil palm plantations by some 400,000 hectares<sup>15</sup> in Sarawak; 40% of the area under oil palm will then be Native Customary Rights (NCR) land.<sup>16</sup> Malaysian oil palm companies – some government owned – are also playing leading roles in forest destruction in Indonesia.

The expansion of the oil palm industry is driven by increasing global demand for palm oil for food and cosmetic products, palm seed cake for animal feed, and the rising demand for biodiesel.

Palm is now the world's largest volume vegetable oil, taking a third of the global vegetable oil market.<sup>17</sup> Palm oil use in food continues to increase, partly as food manufacturers shift to using palm oil instead of hydrogenated fats and partly as it replaces other edible oils being used for biodiesel. Although demand has increased rapidly in recent years, the real boom has yet to happen. Global demand for palm oil is predicted to more than double by 2030 compared to 2000, and to triple by 2050.<sup>18</sup>

The international voluntary industry initiative for 'sustainable' palm oil, the Roundtable on Sustainable Palm Oil (RSPO), represents 40% of palm oil production. Currently, it is not sufficiently robust to address deforestation and peatland degradation in Southeast Asia. For instance, current RSPO Principles and Criteria do not address GHG emissions resulting from the establishment of oil palm plantations. More broadly, certification is delivered at a plantation level, not a company level; consequently, the initiative risks failing to check the destructive expansion of sector.

In numerous cases, RSPO producer members are establishing plantations in peatlands or High Conservation Value forest areas.



## Minimum Criteria for the Palm Oil Sector

A broad evaluation of the sustainability of palm oil supplies needs to be based on a comprehensive and credible set of criteria and indicators. In terms of the land conflicts and other human rights impacts of the sector on local and indigenous forest communities, Greenpeace supports the demands by NGOs in Indonesia, including RSPO Board member Sawit Watch,<sup>19</sup> for existing conflicts to be resolved prior to any oil palm expansion.<sup>20</sup>

As a first step to mitigating the GHG emissions and other biodiversity and social impacts associated with the expansion of the sector in the region the following minimum criteria should be required of all palm oil producers operating in Indonesia, Malaysia, Papua New Guinea and the Solomon Islands. These criteria support the establishment and enforcement of a moratorium on deforestation and peatland degradation by the palm oil sector.

These criteria must be satisfied as preconditions to any purchase or contract to purchase palm oil or other palm products from the oil palm plantations companies, subsidiaries and affiliate suppliers (hereafter referred to as 'group'). Compliance with the criteria at a group level must be demonstrated through independent, third-party verification by a credible organisation.

The criteria shall not be used to justify future deforestation, degradation of peatlands or High Conservation Value areas of any kind in any other places.

### 1. No new plantations within mapped forest areas

All group operations shall respect an immediate moratorium on the establishment of plantations inside the attached mapped forest areas,<sup>21</sup> which identify areas of remaining forests, including peat forests, in July 2007 and cover the whole of Indonesia, Malaysia, Papua New Guinea and Solomon Islands.<sup>22</sup>

*Notes on verification:* These forest cover maps have been developed by SarVision-Wageningen University in collaboration with the Indonesian Ministry of Forestry. Additionally, further analysis of satellite data by Greenpeace highlights intact forest landscapes (peatland and non-peatland) which remain minimally disturbed by human economic activity and are greater than 500 km<sup>2</sup>.<sup>23</sup>

### 2. No plantations resulting in the degradation of peatlands

All group operations shall not degrade peat soils and other fragile soils.

*Notes on verification:* Companies must verify compliance through comprehensive assessment by accredited independent experts, including analysis of peat soil distribution maps and on-the-ground observation. Peat soil distribution maps by Wetlands International already exist for most of Southeast Asia.

This criterion, applied only at the plantation level rather than the group level, is recognised in RSPO Criteria 7.1 and 7.4.

### 3. No plantations or expansion post-November 2005 resulting from deforestation or degradation of High Conservation Value areas

Post-November 2005, all group operations including the expansion of existing operations have not replaced or degraded forest areas or other areas needed to maintain or enhance one or more cultural or environmental High Conservation Values.

*Notes on verification:* Groups must verify compliance through comprehensive and participatory independent social and environmental impact assessment by accredited independent experts, including on-the-ground observation.

This criterion, applied only at the plantation level rather than the group level, is recognised partially in RSPO Criterion 7.3. Although this criterion singles out 'primary' (unlogged) forest, the majority of deforestation emissions in Southeast Asia result from clearance of forest areas no longer classified as primary, and guidance on Criterion 7.3 states: 'plantation development should not put indirect pressure on forests'. Consequently, post-November 2005 plantations or expansion must avoid deforestation of all forest land.<sup>24</sup>

### 4. No plantations or plantation expansion established on indigenous peoples' and other forest dependent community land without their free, prior and informed consent

All group operations shall not be established on local peoples' land without their free, prior and informed consent.

*Notes on verification:* This criterion, applied only at the plantation level rather than the group level, is recognised in RSPO Criterion 7.5.

### 5. Establish full supply chain traceability and segregation systems which exclude palm oil from groups that fail to meet these criteria

The sector shall establish supply chain traceability and segregation systems, including third party verification and monitoring that ensures that no palm oil enters the supply chain from producer groups who fail to meet these criteria..

*Notes on verification:* Companies that trade or consume palm oil products originating in Indonesia, Malaysia, Papua New Guinea and the Solomon Islands must exclude from their supply chain groups who fail to meet these criteria.

## ANNEX 1: What constitutes high conservation value?

High Conservation Value criteria include:<sup>25</sup>

**HCV1. Criteria species habitat:** Areas containing globally, regionally or nationally significant concentrations of biodiversity values (e.g. endemism, endangered species, refugia). For example, the presence of orang-utans, Sumatran tigers, sun bears.

**HCV2. Wildlife rich landscape:** Globally, regionally or nationally significant large landscape-level areas where viable populations of most if not all naturally occurring species exist in natural patterns of distribution and abundance. For example, species of tree-kangaroo in Papua and Papua New Guinea.

**HCV3. Unique ecosystems:** Areas that are in or contain rare, threatened or endangered ecosystems. For example, native Eucalyptus woodlands and savannah in Merauke in the southern part of Papua, karst ecosystem and savannah drylands (eg in Sulawesi), small islands (eg Raja Ampat and Moluccas), and highlands peat-swamp (eg upper Mamberamo basin).

**HCV4. Critical ecosystem services:** Areas that provide basic ecosystem services in critical situations (e.g. watershed protection, erosion control). For example, watershed services provided by peat swamp forests in Riau.

**HCV5. Subsistence resources:** Areas fundamental to meeting basic needs of local communities (e.g. subsistence, health). For example, key hunting or foraging areas for communities living at subsistence level.

**HCV6. Cultural identity:** Areas critical to local communities' traditional cultural identity (ie areas of cultural, ecological, economic or religious significance identified in cooperation with such local communities). For example, sacred burial grounds.

**image** An aerial shot taken from the helicopter shows a palm oil plantation near the Forest Defenders Camp.



## Endnotes

- 1 IPCC WGIII (2007): 104 'Figure 1.2: Sources of global CO2 emissions, 1970-2004 (only direct emissions by sector)'
- 2 IPCC Fourth Assessment report Working Group III states that to keep temperature rise below 2°C, global emissions need to peak by 2015 and then be reduced by 50-85% by 2050 (from 1990 levels). This means industrialised countries cutting their emissions by 25-40% by 2020 and by 80-95% by 2050. UNFCCC (2007): p5, Table 1, 'Characteristics of greenhouse gas stabilization scenarios'; p20, Table 4 'Estimates of emission reductions by Annex I Parties using various methods'
- 3 FAO 2005
- 4 Using average annual deforestation rates from FAO 2005. Source for data on Brazil, Bolivia, Indonesia, Malaysia and Papua New Guinea: Grieg-Gran 2006; source for data on Solomon Islands: Office of Auditor General (2005)
- 5 This commitment would be additional to industrialized countries commitment to reduce domestic emissions. A minimum mandatory commitment would ensure a steady and significant stream of funds; and a cap on payments would prevent countries from using this as an excuse to do nothing at home. Source: Hare and Macey (2007)
- 6 Recent investigations of newly deforested areas in the Amazon by Greenpeace and the Brazilian soya traders federation (ABIOVE) shows that soya is not currently being grown in these areas
- 7 IPCC WG III (2007): 3
- 8 Hooijer et al 2006
- 9 Hooijer et al 2006
- 10 3Gt (billion tonnes) CO2 per year through deforestation during the 1990s. Source: WRI (2007) Climate Analysis Indicators Tool vs 4.0
- 11 FAO 2005
- 12 Nelleman et al (2007): 28
- 13 Colchester et al (2006) Table 1.2 'Provincial government plans to expand oil palm plantations' 26
- 14 MLDS 2008
- 15 Area under oil palm plantation in 2006 was 591,471ha. Source MPOB 2006; Area proposed under oil palm plantation in 2010 would be 1 m ha, Source MLDS 2008
- 16 MLDS 2008
- 17 USDA (2007) p.4 - as opposed to 29% for soya
- 18 FAO (2006) 56
- 19 In January 2008, 513 conflicts between communities and companies were being monitored by Sawit Watch. Some of these conflicts can be traced back to earlier land disputes, particularly from the Suharto era when the land rights of communities received even less recognition than today. Most recent conflicts are also about land rights, but other disputes arise over levels of compensation, unmet promises, and over smallholding arrangements. Source: Sawit Watch and Friends of the Earth (2008)
- 20 Personal communication with Norman Jiwan, Sawit Watch Program Manager in charge in RSPO, 5 February 2008;
- 21 FAO defines forests as tree-dominated ecosystems with a minimum canopy cover of ten per cent. Source: FAO 2005
- 22 The maps are based on the REDD (Reduced Emissions from Deforestation and Degradation) monitoring system developed by SarVision-Wageningen University in collaboration with the Indonesian Ministry of Forestry. The system is based on MODIS/SPOT Vegetation satellite data which is updated every 3 months. The resolution is 250-1000 metres
- 23 See [www.intactforests.org](http://www.intactforests.org) for further details and maps
- 24 FAO defines forests as tree-dominated ecosystems with a minimum canopy cover of ten per cent. Source: FAO 2005
- 25 HCV Network 2008

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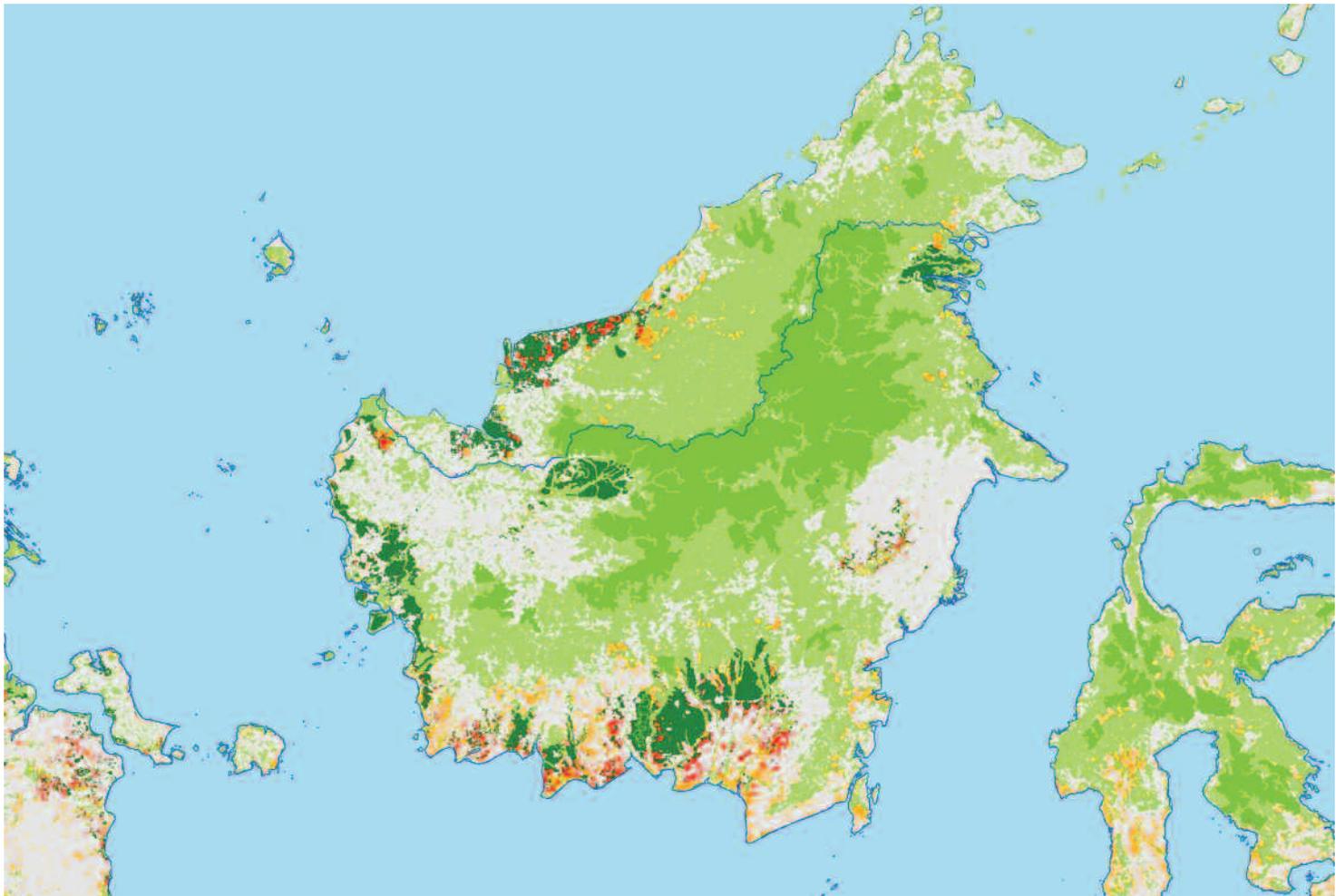
Maps for the basis of zero deforestation in Southeast Asia and Western Pacific: Remaining tropical rainforests as of July 2007 and areas of deforestation since 2000



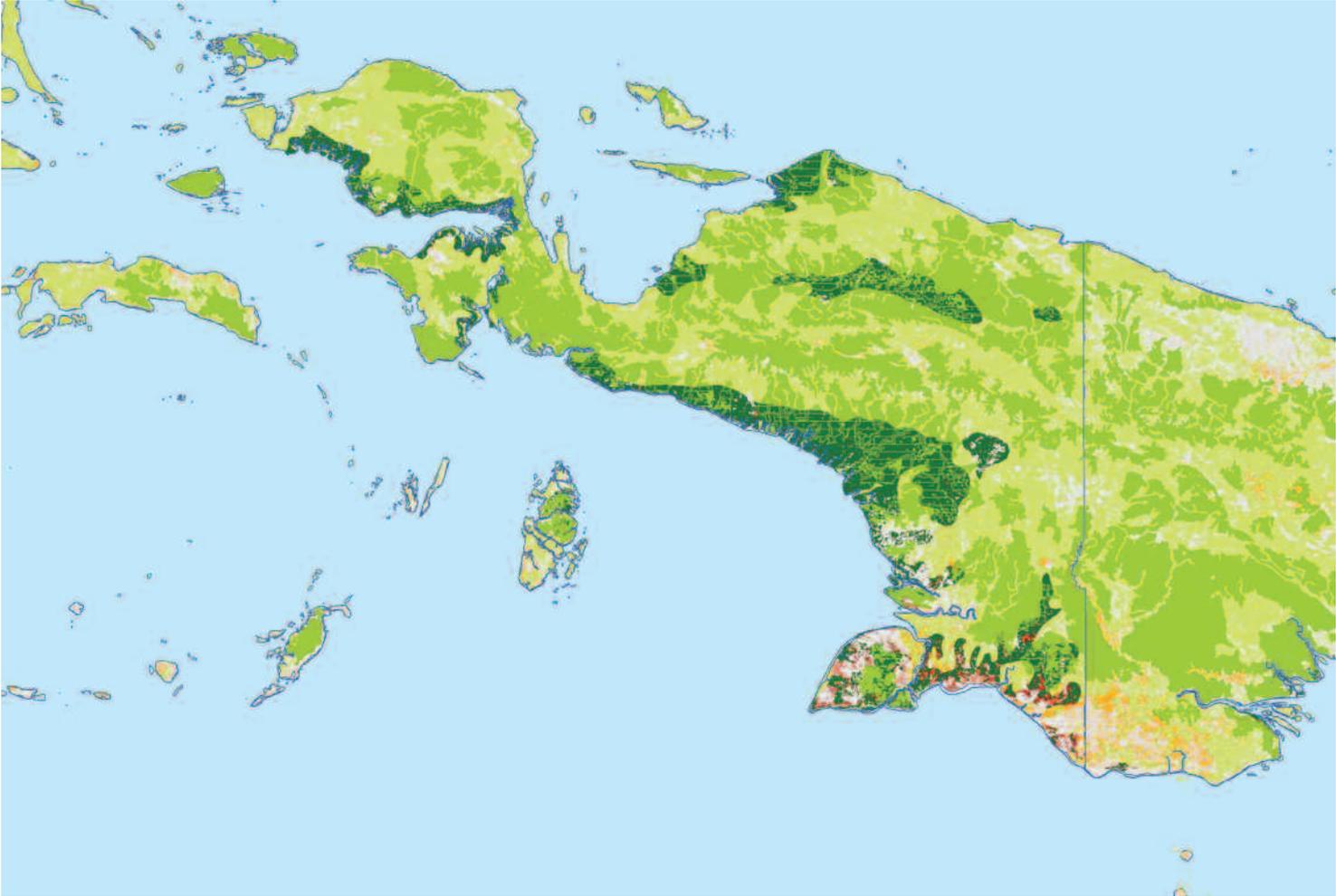
**Maps for the basis of zero deforestation in Sumatra, Indonesia: Remaining tropical rainforests as of July 2007 and areas of deforestation since 2000**



Maps for the basis of zero deforestation in Borneo: Remaining tropical rainforests as of July 2007 and areas of deforestation since 2000



**Maps for the basis of zero deforestation in Papua, Indonesia: Remaining tropical rainforests as of July 2007 and areas of deforestation since 2000**



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