Burning Issues:

FIVE YEARS OF FIRES

INDONESIA’S PRO-BUSINESS ‘OMNIBUS LAW’ GIVES MORE IMPUNITY TO BIGGEST PLANTATION SECTOR BURNERS

Greenpeace Southeast Asia - Indonesia 2020
Table of Contents

- Executive summary ........................................... 2
- Political context ............................................. 5
- Key findings .................................................. 9
- How was this analysis undertaken? ..................... 13
- Fires are closely related to palm oil and pulp companies ........................................... 17
- Law enforcement commitment .......................... 35
- Oligarchs behind forest fires and efforts to weaken law enforcement ................................. 43
- Conclusion .................................................... 51
- Demands ....................................................... 53
- References ..................................................... 54
Executive Summary

The 2015 fire season in Indonesia was the worst in nearly two decades, with the blaze for almost a month causing daily carbon emissions that exceeded those from the entire US economy. In response to this crisis, the Government of Indonesia pledged to improve accountability measures on the companies responsible for preventing land under their management from burning. The government intends to penalize companies with large forest fires and those that violate rules that have been established. It also plans to establish a system of fines for material compensation and restoration—yet according to the ministry, as of April 2016, only one company has completed the fines. The Ministry itself has imposed fines, including criminal charges against companies and individuals for fires, resulting in four guilty verdicts. Considering the scale of the burning, with the damage in 2016 approaching that seen in 2015, the government’s response does not seem to be adequate.

Today Indonesia’s forests, peatlands and communities face a new threat. Working hand-in-hand with the plantation sector, the government of Indonesia has drafted and passed into law an “environment bill” that contains enforcement regulations that are designed to weaken environmental protections and lower the standards to which companies from the palm oil and pulp sectors are held when opening up new areas for their plantations. This measure is systematically weakening the role of the government and reduces accountability.

Undue influence by vested interests: Indonesia’s palm oil and pulp business associations (GAPKI and APP) were part of the bill that was carried against the government with drafting the omnibus bill, and thus had wide scope to influence its design to the benefit of these sectors. These business associations identified Greenpeace as blocking the large burned area within their concessions over the 2015-2016 period.

Weakened liability: Under the new regulations companies with fires in their concessions will enjoy even more impunity than the current concept of strict liability for environmental harms has been weakened.

Weakened transparency and weakened enforcement: These efforts to limit companies’ responsibility for the damage caused by land and forest fires are being made at the same time as transparency on law enforcement is diminishing. Together, these efforts are a recipe for more major fire disasters to happen in the future, contributing to a health crisis, biodiversity and economic crisis affecting the region and the world.

Our planet and its people are facing a triple emergency of climate change, threats to biodiversity, and a growing threat to health diseases. Radical and systemic transformation of the natural resource sector is essential to addressing these challenges and achieving social justice. The Indonesian government, its trade partners, the plantation sector and the consumer companies that profit from it must recognize their role in creating these crises and assume their responsibility for tackling them.

Radical action is needed from consumer companies, traders, plantation companies and governments to ensure that the law enforcement, policy trade and financial drivers—rather than undermine— the urgent need to address, reduce and regulate natural ecosystems that fuel in human health, gas emissions and uphold the rights of communities and workers.

The Indonesian government must:

- Align the economy with goals of biodiversity and climate protection, along with social justice.
- Ensure that public finance, trade policy and cooperation efforts do not drive further deforestation, but instead support nature restoration and a transition to a green, just and resilient economy. Leaders soon must be taken:
  - to review the Omnibus bill to prioritise people and the environment;
  - to undertake and expand the long-promised concession review covering all natural resource sector landholdings,
- Increase transparency: Indonesian communities support the principles that access to public information is a fundamental right and that disclosure of public interest information in an administrative officer. Greater transparency must be provided with respect to company concessions, including locations and beneficial ownership, and the progress of law enforcement efforts (with a focus on accountability);
- Ensure joined-up action by responsible authorities on cases involving land and other legal violations within the natural resource sector, including the plantation sector;

The market must:

- Drop destroyers: Close the market to products linked to deforestation, ecosystem destruction and abuses of human rights, in particular the rights of Indigenous Peoples;
- Drastically reduce trade of forest and ecosystem risk commodities (FEROs): To address a sector that works with nature and respect local communities, overall trade and consumption of commodities such as palm oil and pulp needs to be reduced. This starts with the rapid phase-out of deforestation from food crops.
- Stand for transparency: Honour zero-deforestation commitments and make full supply chain transparency a condition of trade. Supply systems to have open and comprehensive monitoring systems in place by no later than January 2021.

2. Sriyanto (1995); (2017); see Box 4 (2017)
4. The author acknowledges an Indonesian source for the information in this paragraph.
5. The author acknowledges an Indonesian source for the information in this paragraph.
6. Interview with member of Indonesian government,无敌 14 April 2020 (details held by Greenpeace Indonesia)
7. The author acknowledges an Indonesian source for the information in this paragraph.
8. The author acknowledges an Indonesian source for the information in this paragraph.
9. Interview with member of Indonesian government,无敌 14 April 2020 (details held by Greenpeace Indonesia)
10. The author acknowledges an Indonesian source for the information in this paragraph.
11. The author acknowledges an Indonesian source for the information in this paragraph.
Political Context

In 2015, one of the greatest environmental disasters of the 21st century unfolded in Indonesia as nearly 2,600,000 hectares (ha) of land burned. Deliberate fire setting to clear land for oil palm plantations was identified as a likely contributing factor. Reacting to the large-scale destruction, the Indonesian government promised to do better, saying it had learned from its mistakes and would focus more on prevention measures and law enforcement.

But despite government promises to punish companies found to be delib erating fires in a bid to the recurring fires crisis, palm oil and pulp firms continue to operate with few or no serious sanctions. Without strong deterrence, fires again flared up across large swathes of land and forest inside companies’ concessions in 2019, contributing to the burning of another 1,688,500 ha of land—area 27 times the size of Greater Jakarta. In total, 4,410,500 ha burned in Indonesia from 2015 to 2019, equal to nearly 8 times the area of the island of Bali, according to Greenpeace analysis of official government burned area maps. Instead of making good on its promises to hold errant companies accountable to help avoid further repeats of these fires disasters, the government and lawmakers recently passed an omnibus deregulation bill into law that weakens law enforcement on polluters. The bill was deliberated by lawmakers at breakneck speed, despite criticism over proposed changes that will dismantle environmental protections for the sake of attracting investment. The omnibus law waters down a stipulation in the 2009 Environmental Protection and Management Law that says companies are strictly responsible for fires that occur in their concessions, however they are caused.

The new law was drafted with the involvement of the palm oil and pulp business associations, both of which have long campaigned for the weakening of fire prevention efforts—particularly peatland fire prevention policies—and law enforcement measures such as permit revocation. Keeping peatland wet is an integral part of fire prevention policies, as dry peat ignites very easily and can burn for a long period of time.

The associations were also behind a lawsuit in 2017 that demanded that the Constitutional Court rule that companies can only be held responsible for burning in their concessions if there is evidence that shows they are the ones that started the fires—the same thing proposed in the omnibus law.

With the law having been passed, the palm oil and pulp sectors will be relieved of responsibility for prior damage that they have inflicted on Indonesia’s peatlands, and it will protect them from future liability for damage to the environment and fires in their concessions. This perception of immunity could well embolden them to persist in clearing land by burning, exacerbating the risk of future haze episodes and public health crises in Indonesia and throughout Southeast Asia that could match or even surpass the intensity of those faced in 2015 and 2019.

After the disastrous fires in 2015, Indonesia’s fire season saw a temporary decline in intensity as weak El Niño conditions resulted in a wetter climate and mild dry seasons. But in 2019, there was a significant uptick in fires, approaching the levels reached in 2015. That year also saw the return of the transboundary haze, as winds bore toxic smog from burning lands and forests on the islands of Sumatra and Kalimantan all the way to the neighboring countries of Singapore and Malaysia. This triggered a diplomatic spat between Indonesia and Malaysia, with ministers engaging in heated debate over who was to blame for the haze crisis.

As top officials continued to bicker, nearly a million people in Indonesia were suffering from respiratory problems, with their lungs filled with hazardous pollutants from the toxic haze. Neighboring Malaysia and Singapore also suffered from the pollution as air quality across the region worsened to unhealthy levels during the fire episode, resulting in a public health crisis.

The recurring fires have also resulted in tremendous economic losses. The World Bank estimates the 2015 fires have cost Indonesia more than $16 billion from the country’s economy, equivalent to 1.9% of its GDP. And the 2019 fires have resulted in $5.2 billion in damage, equivalent to 0.5% of the country’s economy.

Indonesia Burned Area 2015-2019 (Hectares)

![Graph showing burned area](https://example.com/burned-area-graph)

**Notes:**
- Selingo (2019a)
- Selingo (2019b)
- World Bank (2020)
- Greenpeace (2019)

**Sources:**
- World Bank (2020)
- Greenpeace (2019)
- Selingo (2019a)
- Selingo (2019b)
- World Bank (2020)
- Greenpeace (2019)
The 2019 haze crisis is a reminder that land and forest fires are still very much a problem in Indonesia. It occurred in spite of government efforts that saw hundreds of millions of dollars spent on water-bombing helicopters, firefighters and weather modification efforts10—and of the government promising to hold to account those responsible, including companies that had fires on their land11.

According to article 49 of Indonesia’s Forestry Law of 1999, license owners are responsible for forest fires in their areas12. This concept, known as strict liability, is backed up by article 88 of the 2009 Environmental Protection and Management Law, which stipulates that anyone whose actions or business activities pose a serious threat to the environment is strictly responsible for any losses that are caused, without the need to prove their misconduct13.

If a company’s concessions burn it can therefore be punished with a wide variety of sanctions, such as fines, revocation of permits and civil and criminal lawsuits14. But in spite of having a range of legal tools available to tackle these issues, the evidence suggests that the government is using them only selectively, and in some cases not at all, with low enforcement measures seemingly not touching many of the companies whose concessions have seen the most land burn. And now, the concept of strict liability has been weakened by the omnibus law15.

Greenpeace mapping analysis using official government data16, combined with available data on government actions taken against companies that had fires on their land, confirms that many of the companies with the largest burned areas across their concessions between 2016 and October 2019 (the end of the fires season) have largely gone unpunished. The majority of concession holders operate with seeming impunity, even if in some cases the same concessions burn every year. Indeed, the available data shows that eight of the 10 palm oil companies with the largest burned areas in their concessions during this period have not received any sanctions. Between 2015 and 2019 only one palm oil company and three pulp companies17 had their permits revoked by the government for fires in their concessions, and none of these were on the compiled list of the companies with the largest burned areas across that period.

The present analysis is a follow-up to last year’s briefing Indonesian forest fires crisis: Palm oil and pulp companies with largest burned areas are going unpunished, which similarly found that almost none of the palm oil and pulp companies whose concessions had seen the largest areas of land burn during the 2016–2018 period had been punished through serious government sanctions18. Many of these companies had fires in the concessions again in 2019.

This year’s analysis has been complicated by a decline in transparency on the part of the government. Whereas last year the Indonesian government provided Greenpeace with a relatively complete dataset of information about the more serious civil and administrative sanctions that had been imposed, this year extremely little data has been shared, in spite of numerous Freedom of Information requests and follow-ups. Greenpeace is therefore working with the best available data, consisting of government data supplemented with data from other sources, in order to carry out the present analysis. It is likely, as a result, that there is some underreporting of sanctions within this briefing.

---

12 President of the Republic of Indonesia (2009).
13 President of the Republic of Indonesia (2009).
14 Minister of Environment and Forestry & Head of National Forest of the Republic of Indonesia (2020).
16 See annex A of Greenpeace International (2018) for further details on methodology and data.
17 See annex B of Greenpeace International (2018) for further details on methodology and data.
18 Letter no. 5.44/PM/PMNKT/2018 dated 17 July 2018, Copy held by Greenpeace Indonesia.
19 Greenpeace Southeast Asia (2019).
Key findings

Palm Oil

All 10 of the palm oil companies that had the largest areas of land burn in their concessions between 2010 and 2019 had fires on their land in multiple years. Nine of them had significant areas (>5%) burn more than once, and three of the companies had fires in their concessions in four of the five years.

Four of the five companies that saw the most land burn in their concessions across the 2015–2019 period were also among the five with the most area burned in 2019. None of them has received any government sanctions.

In total, 67,200 ha of land, representing 26% of the total burned area (263,200 ha) inside palm oil concessions in Indonesia last year, went up in flames in the concessions of the 10 companies with the largest burned areas in 2019.

PT Semora Ushara Jaya’s parent group, Sungai Budu/Tunas Beru Lampung, is also the palm oil group with the largest burned area across its holdings in the period 2015–2019 — some 26,600 ha — and in 2018, when 18,800 ha within its concession areas were engulfed in flames. The group received two administrative sanctions in 2016, but none from 2015 to 2018. Despite the fires, PT Semora Ushara Jaya’s concession being responsible for the vast majority of the group’s total burned area, the sanctions it received were not related to this company.

PT Semora Ushara Jaya had the most burned area of all the palm oil companies, both across the period 2015–2019 — a total of 264,700 ha — and in 2019, when 17,500 ha burned within its concession boundaries.
Burning Issues: Five Years of Fires

Indonesia’s pro-business “omnibus law” gives more impunity to biggest plantation sector burners

Pulp

Three of the five companies with the largest burned areas in their concessions from 2016 to 2019 are linked to the Widjaja family, who control the Sinar Mas Group and Asia Pulp & Paper (APP). This includes the company that had the largest total burned area across Indonesia – 82,600 ha, an area larger than Singapore – PT Bumi Melati Hijau. In this one concession alone, 40,400 ha burned in 2019 alone. The total burned area across all pulp concessions linked to the Widjaja family group amounted to 314,200 ha over the 2015–2019 period, with 77,500 ha burning – a quarter of this for the first time in 2019. The available data shows that the group received a total of 30 sanctions between 2015 and 2018, but just one in 2019.

In 2019, the 10 pulp companies with the largest burned areas in their concessions saw a total of 86,600 ha of their land go up in flames, accounting for 47% of the total burned area inside pulpwood concessions (185,000 ha).

Four of the five companies that saw the most land burn in their concessions across the 2015–2019 period were also among the top five in 2019 alone. All of these companies received sanctions related to fires on their lands between 2015 and 2019, yet all of them still saw parts of their concessions burn in 2019. According to the available data, none of the four were sanctioned for the fires that year, despite being repeat offenders.

Six of the companies had fires in their concessions during either three or four years between 2015 and 2019, while two – PT Selaras Inti Semesta of Medco Group and PT Sinar Mas, controlled by the Tanoto family/Royal Golden Eagle (RGE)/APRIL – had their concessions burn every single year.

All 10 of the pulp companies with the biggest burned areas in their concessions from 2015–2019 had some of their land burn repeatedly. Eight of these saw significant areas burn more than once.
How was this analysis undertaken?
a. Methodology

To conduct this year’s analysis, Greenpeace used best available data from various sources, including official data that was either publicly available or obtained from Freedom of Information requests. Figures about burned areas in this briefing have been rounded up or down to the nearest hundred hectares, except where otherwise mentioned.

Since 2015 the Government of Indonesia has been producing annual data and maps on total areas burned, which enables the spatial analysis of burned areas year by year in different regions and across Indonesia. For the present analysis Greenpeace used the latest burned area map, released in March 2020, which shows areas burned in 2019. This map has been combined with the annual burned area maps for the years 2015 to 2018 to determine the total area burned during the period 2015–2019, as well as which areas burned in 2019 had already seen fires in one or more of the previous years. For the cumulative total, such areas are counted only once.

In order to identify concessions that had fires within their boundaries between 2015 and 2019 and the companies and groups that control these concessions, the burned area maps were overlaid with Greenpeace’s pulp and palm oil concession maps. Despite ongoing efforts by non-governmental organisations (NGOs) to press the government to release concession data, a nationwide consolidated dataset on concessions is still not readily available in Indonesia. Therefore, Greenpeace is working with the best data available obtained from a variety of sources. While all reasonable effort has been made to ensure that the concession data is accurate, due to the multiple data sources and lack of government and company transparency, there may be some inaccuracies in the data used for the analysis. And because the concession data is being constantly updated and the changes integrated into Greenpeace’s concession boundary maps, a direct comparison between last year’s and this year’s dataset of burned concession areas is not possible.

For this briefing, Greenpeace also conducted an analysis of burning in areas covered by rights to cultivate (Hak Guna Usaha, HGU) licenses. The methodology used for this is similar to that used for the analysis of burned concessions, but this analysis focuses only on burned lands within HGU areas. Greenpeace relied on official government data for this segment, and this data is assumed to be accurate. In cases where companies have taken issue with the accuracy of the data, they have been asked to provide evidence that they have sought changes or corrections to the government’s figures. In cases where that evidence has been provided, reference to it is included in this report.

To identify company groups which control the burned concessions and HGU areas, Greenpeace used a broad definition of corporate group – one that is not restricted by formal parent–subsidiary company relationships. Instead, companies are considered to belong to a group if they have shared family, financial, managerial and/or operational control, or if they self-describe as part of the group. Thus, a plantation company and a corporate group are owned or run by members of the same family, the plantation firm is presumed to be a part of the group. This is because a large segment of the plantation industry, especially in Southeast Asia, is controlled by individuals and families who do not organise their businesses as traditional groups with a parent company and subsidiaries, but instead rely on complicated, informal and opaque group structures.

The approach used to determine group affiliation for the companies covered in this briefing is in line with the Accountability Framework initiative (AFI) guidelines. As with the compilation of concession boundary data, group identification is a continuous process, reflecting the discovery of new links and information. Prior to publication, presumed groups were provided with the opportunity to comment.

To gauge the effectiveness of law enforcement in mitigating land and forest fires in Indonesia, Greenpeace then cross-checked the accumulated data with details of sanctions given to companies. There are three forms of sanctions: administrative, civil and criminal. Administrative sanctions may include warning letters, administrative sanctions such as suspension of operations, administrative sanctions such as suspension of operations, and revocation of licenses. In the case of civil sanctions, companies are fined civil lawsuits against companies whose concession area burned on their property, if found guilty, the fines are required to pay fines as compensation for the environmental damage caused by the fire and rehabilitate the burned areas. Criminal sanctions are imposed by law enforcers, usually the police and can result in prison sentences of up to 15 years and fines of up to $10 trillion rupiah ($680,000) for individuals and companies found to be responsible for fires.

To obtain details about government sanctions that have been imposed, including the names of the companies that have received administrative, civil and criminal sanctions, Greenpeace made a series of Freedom of Information requests to the Ministry of Environment and Forestry. The data provided by the ministry to Greenpeace, however, is incomplete, particularly for the year 2019 and with information on administrative sanctions notably missing. Greenpeace is making use of official complaint procedures to try to obtain complete information about the sanctions that have been issued; this process is ongoing.

In the meantime, where possible, the data provided by the ministry has been supplemented with information from other sources, such as reports and PowerPoint presentations published by the government and media reports. While some of the data on criminal sanctions this briefing reports on was obtained from media reports, most of this information was acquired through Freedom of Information requests.

Due to the uncertainty surrounding the 2019 sanction data, the decision was taken to report the data for the year separately from the sanction data for the 2015–2018 period.

Even though the majority of the sanction data was obtained from official sources, Greenpeace found some disparities in the reporting. For example:

- Data from various official sources shows that a total of 62 administrative sanctions were imposed by the government in relation to the 2019 fires. However, according to the Ministry of Environment and Forestry’s latest law enforcement performance report, 241 administrative sanctions were issued in 2019.
- On the Ministry of Environment and Forestry, it was quoted by the media as saying that at least 63 companies received administrative sanctions for fires that occurred in 2015, but the ministry’s law enforcement report states that only 27 administrative sanctions were issued in 2015.
Fires are closely related to palm oil and pulp companies

While slash-and-burn agriculture has long been practiced by farmers in Indonesia, it was not until this practice was industrialized by large corporations in recent decades that the problem of land and forest fires grew out of control. These companies own long-term concessions to develop plantations within forested areas, many in swampy peat landscapes rich in carbon.

One of the crops whose production has increased massively in Indonesia in recent years is oil palm. Fuelled by growing demand for vegetable oil for consumption as well as biofuel, the area of oil palm plantations in Indonesia has exploded from 209,200 ha in 1980 to 16.4 million ha in 2019, catapulting the country into the world’s top slot as a producer and exporter of palm oil.** The unlimited expansion of the palm oil industry has come at the expense of the degradation and destruction of rainforests across Indonesia, with clearance often involving the use of fire.

On-the-ground investigations have found indications of palm oil companies deliberately burning aging crops to replace them with new ones, with fires blazing only in unproductive areas.** New oil palm trees usually appear shortly after the burning.

Pulpwood companies also have been accused of still using fire to clear land for plantations, despite the practice having been declared illegal by the Indonesian government.** For example, a new investigative report by Indonesian and Malaysian media and NGOs (Tempo, Mongabay, Borneo Voice, Malaysian Anti-Corruption Foundation, and Anti-Corruption and Human Rights) in 2019 found indications of the company preparing to establish new pulp plantations by burning land to drain water from peatlands in June–August 2019, before fires were detected in these areas.

Aerial photographs taken for the investigation by a hidden drone camera in August 2020 show that the burned areas had turned into blocks of cleared peat ready to be planted with acacia trees.**

- **Findings in palm oil concessions

Greenpeace analysis of official government data on burned areas together with best available concession maps shows that a significant percentage of the fires that ravaged Indonesia in the 2015–2019 period occurred within palm oil concessions.** As Table 1 shows, a total of 67,200 ha burned in the 15 palm oil concessions identified as having the largest burned areas within their borders in 2019 alone. Including the years 2015–2018, that total increased to 125,300 ha. The available data on government sanctions shows that remarkably few of the palm oil companies identified here received any administrative, civil or criminal sanctions for the extensive burning that occurred on their lands, even though in all cases there were fires in at least two years of the period considered.

---

** Kustodewi (2019)
** Hambrecht (2020)
** Noonan (2020)
** Teguh, E. (2020)
** Decree of the Governor of the Republic of Indonesia (1990), and President of the Republic of Indonesia (2005)
** Mongabay (2020)
** Mongabay (2020)
** According to Greenpeace’s analysis, some 252,200 ha of the approximately 1,034,900 ha that burned in Indonesia in 2015–19 of the 15 burned areas were located within the boundaries of palm oil concessions.
BURNING ISSUES: FIVE YEARS OF FIRES

Indonesia’s pro-business “ambiasa bar” gives more impurity to biggest plantation sector burners.

Table 1: Top 10 palm oil companies ranked according to the total burned area mapped in their concessions for the period 2015–2019.

<table>
<thead>
<tr>
<th>No</th>
<th>Palm Oil Company</th>
<th>Palm Oil Group</th>
<th>Hectares</th>
<th>Percentage</th>
<th>SANCTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>PT Sameer Lestari Jaya</td>
<td>Sungai Budi/Tunas Baru Lampung</td>
<td>28,000</td>
<td>8%</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>PT Kotingtan/Majur Sejatika</td>
<td>LIPPO/Agro Internasional</td>
<td>19,000</td>
<td>5%</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>PT Globalindo Agung Lestari</td>
<td>Genting</td>
<td>17,000</td>
<td>5%</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>PT Resekki Alam Samesta Raya</td>
<td>Sopchi</td>
<td>11,000</td>
<td>3%</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>PT Bawang Opa Mita Perkasa</td>
<td>Best Agro Plantation</td>
<td>11,000</td>
<td>3%</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>PT Dondymakor Indah Lestari</td>
<td>SIEPEF</td>
<td>10,000</td>
<td>3%</td>
<td>3</td>
</tr>
<tr>
<td>7</td>
<td>PT Melk Karya Karunia</td>
<td>MYKI</td>
<td>10,000</td>
<td>3%</td>
<td>3</td>
</tr>
<tr>
<td>8</td>
<td>PT Amra Energi Resources</td>
<td>Rajawali/Eagle High</td>
<td>10,000</td>
<td>3%</td>
<td>3</td>
</tr>
<tr>
<td>9</td>
<td>PT Bulungan Citra Agro Persada</td>
<td>TSH Resources</td>
<td>10,000</td>
<td>3%</td>
<td>3</td>
</tr>
<tr>
<td>10</td>
<td>PT Karya Luhur Sari</td>
<td>Best Agro Plantation</td>
<td>8,000</td>
<td>2%</td>
<td>1</td>
</tr>
</tbody>
</table>

* See comment concerning PT Globalindo Agung Lestari in Table 2.

Table 2: Top 10 palm oil corporate groups ranked according to the total burned area mapped in their concessions for the period 2015–2019.

<table>
<thead>
<tr>
<th>No</th>
<th>Palm Oil Group</th>
<th>Burn Area</th>
<th>Hectares</th>
<th>Percentage</th>
<th>SANCTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sungai Budi/Tunas Baru Lampung</td>
<td>28,000</td>
<td>8%</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>LIPPO/Agro Internasional</td>
<td>19,000</td>
<td>5%</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Genting</td>
<td>17,000</td>
<td>5%</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Sopchi</td>
<td>11,000</td>
<td>3%</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Best Agro Plantation</td>
<td>11,000</td>
<td>3%</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>SIEPEF</td>
<td>10,000</td>
<td>3%</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>MYKI</td>
<td>10,000</td>
<td>3%</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Rajawali/Eagle High</td>
<td>10,000</td>
<td>3%</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>TSI Resources</td>
<td>10,000</td>
<td>3%</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Best Agro Plantation</td>
<td>8,000</td>
<td>2%</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

* In response to Greenpeace’s opportunity to comment letter, a representative of Genting Plantations Bhd (GENP) stated that the company has no management control or any direct relation with PT Varta Majutama, one of the concessions included in the group’s total. However, Greenpeace identified PT Varta Majutama as a subsidiary of Genting Bhd, which according to its 2019 annual report has a 95% share in PT Varta Majutama and a 55.4% share in GENP.11 The company also stated, as it did in response to last year’s briefing, that the map Greenpeace has for PT Globalindo Agung Lestari is incorrect. Greenpeace has considered the information provided by GENP regarding this concession but found again that it does not contain evidence that changes the present analysis.12

** In response to Greenpeace’s opportunity to comment letter, a representative of Sampoerna-Agro stated that the land in PT Tanja Bintama’s concession had been returned to the government in February 2016 and that the company was dissolved and liquidated in July 2016. However, Sampoerna-Agro’s 2019 annual report lists PT Tanja Bintama as a subsidiary in the development stage, with a note that it is “currently under liquidation.”13 Greenpeace therefore stands by its decision to consider PT Tanja Bintama as part of the Sampoerna-Agro group.

Table 3 shows the number of years that fires occurred in the concessions of the palm oil companies identified in Table 1 during the 2015–2019 period, as well as which of these companies are members of the Indonesian Palm Oil Association (Gulungan Penguasa Kelapa Sawit Indonesia, GAPKI).14 GAPKI is a powerful lobbying group representing close to 700 member companies that has historically opposed government actions to improve the sustainability of the palm oil industry.

10 Tanja Bintama is a member of the Sungai Budi group. See Sungai Budi, 11 Tanja Bintama, 12 Greenpeace’s identification of PT Varta Majutama’s concession. See Sungai Budi, 13 Sampoerna-Agro, 14 GAPKI is a powerful lobbying group representing close to 700 member companies that has historically opposed government actions to improve the sustainability of the palm oil industry.
Table 3: Top 10 palm oil companies including number of years of fire occurrences and GAPKI membership.

<table>
<thead>
<tr>
<th>No</th>
<th>PO NAME</th>
<th>PO GROUP</th>
<th>YEARS FIRES OCCURRED 2015-2019</th>
<th>GAPKI MEMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>PT Sambora Usaha Jaya</td>
<td>Sungai Budi/Tunas Baru Lampung</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>PT Kalibungii Maha Sejati</td>
<td>LIPYC/Agroindo Semesta</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>PT Globobindo Agung Lestari</td>
<td>Qingting</td>
<td>4</td>
<td>✓</td>
</tr>
<tr>
<td>4</td>
<td>PT Rezki Alami Samaeta Raya</td>
<td>Soechi</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>PT Bangun Cipta Mitra Perkasa</td>
<td>Best Agro Plantation</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>PT Nindimwaker Iskandar Lestari</td>
<td>SREP</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>PT Nukar Karya Kautunpan</td>
<td>MAKIN</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>PT Amuro/Energy Resources</td>
<td>Rajawali/Eagle High</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>PT Bulungan Citra Agro Persada</td>
<td>TS Resources</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>PT Karyat Luhur Soehi</td>
<td>Best Agro Plantation</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

- Of the two companies that were issued with government sanctions as a result of fires on their land, only one—PT Bulungan Citra Agro Persada, a member of Sabo-based plantation firm TSH Resources Berhad, which supplies major palm oil traders and global consumer brands—received sanctions in the period of 2015–2018 as well as in 2019, according to the available data. While the government had already suspended the company’s license in 2015, PT Bulungan Citra Agro Persada’s concessions continued to suffer from repeated burning. In 2019 fires scorched 4,300 ha of the company’s land, resulting in another administrative sanction.

- Of the two companies that were issued with government sanctions as a result of fires on their land, only one—PT Bulungan Citra Agro Persada, a member of Sabo-based plantation firm TSH Resources Berhad, which supplies major palm oil traders and global consumer brands—received sanctions in the period of 2015–2018 as well as in 2019, according to the available data. While the government had already suspended the company’s license in 2015, PT Bulungan Citra Agro Persada’s concessions continued to suffer from repeated burning. In 2019 fires scorched 4,300 ha of the company’s land, resulting in another administrative sanction.

- PT Sambora Usaha Jaya is part of the Sungai Budi/Tunas Baru Lampung group, which is largely a result of the fires in this concession—was also the palm oil group with the largest burned area across its holdings in the 2015–2019 period. In total, 28,600 ha of land burned in Sungai Budi’s palm oil concessions between 2015 and 2019, a quarter of this repeatedly. The data obtained by Greenpeace shows that during this period the government issued the group with three administrative sanctions and one criminal sanction—but none of these sanctions were imposed on the Sungai Budi concession with the largest burned area. PT Sambora Usaha Jaya, despite fires occurring on its land during three years over that period, PT Sambora Usaha Jaya

- Finally, it had its concession sealed in 2019, but the action in itself is not a sanction and is only a part of the investigative process. As in most other cases where concessions have been sealed, no clear information has been provided by the ministry about the area sealed or when the seal will be lifted. At this point it is not clear if the sealing of PT Sambora Usaha Jaya’s concession was or will be followed up with sanctions.

- Soechi—the palm oil group with the second-largest burned area across its holdings in the 2015–2019 period, a total of 19,000 ha—has received no sanctions at all from the government, according to the available data.
BURNING ISSUES: FIVE YEARS OF FIRES

Indonesia's pro-business "inflexible law" gives more impunity to biggest plantation sector burners.

Legend
Burned Area 2015-2019
Burned Times
1
2
3
4
Burned 2015
Burned 2019
Outside
Concessions
Palm Oil

BURNED AREA 2015 - 2019
INSIDE PALM OIL CONCESSION

Source:
1. KNPB Burned Area 2016-2020
2. CIF Concession Completion 2020
3. Oil Analysis 2020

2020
To see how this regulation has been implemented, Greenpeace made a Freedom of Information request to the Ministry of Agrarian and Spatial Planning in 2019. The response showed that as of 24 September 2019, no company had had its license revoked, despite numerous HGU permit holders having had fires in their concessions after the law was passed and despite various government officials, including President Joko Widodo, having issued multiple threats to revoke the permits of companies whose concessions burned.37

Therefore, Greenpeace decided to do a separate analysis on plantation companies and burned HGU areas to see which firms should have had their licenses revoked and/or paid fines for fires in their areas.

Greenpeace analysis revealed five concessions where more than 50% of the confirmed HGU areas burned in 2019, and where the burned area totaled more than 300 ha. The total area burned across these five concessions amounted to nearly 5,800 ha. Among the concessions is that of PT Bulungan Citra Agro Persada, which also appeared in the list of the 10 palm oil companies with the largest burned areas. An analysis of the government’s burned area map overlaid with HGU data from the Ministry of Agrarian and Spatial Planning shows 2,900 ha — 55% of the company’s HGU area — burned within PT Bulungan Agro Persada’s concession in North Kalimantan in 2019. According to Article 5 of Regulation 79/2019 from the Ministry of Agrarian and Spatial Planning, based on the size of the burned HGU area PT Bulungan Agro Persada should have paid a fine of 2.9 trillion rupiah ($247 million) to the government for the 2019 fire alone, or have had the permit for the company’s entire concession revoked.

Another concession on this list is PT Bombo Indi Tani (parent company unknown). In 2019 nearly 5,460 ha of PT Bombo Indi Tani’s HGU area — some 65% — was burned, resulting in thick smoke choking nearby villages.38 In the same year, the police launched an investigation into the fire, however, the result of the investigation remains unclear to this day and the concession remains in operation, with law enforcers not using the ministry’s regulation to revoke the company’s permit. Based on Article 5 of the regulation, Greenpeace calculated that PT Bombo Indi Tani should be liable for 6.36 trillion rupiah ($543 million) in fines.

In its response to Greenpeace’s inquiry on the matter,39 dated 24 September, 2019, the Ministry of Agrarian and Spatial Planning said it had never enforced its regulation by revoking the HGU permits of burned concessions or forcing companies to pay fines, despite having the authority and indeed the obligation to do so. To justify its lack of action the ministry claimed that it had not found evidence of any company deliberately setting fires in their HGU areas, which it argued would be necessary to revoke the HGU permits. However, the regulation does not include this stipulation. Were the ministry to exercise its right to hold just these five companies to account by imposing the mandated fines, the state would stand to receive some 5.75 trillion rupiah ($490 million) in compensation for the fires on their lands — nearly 7% of the country’s healthcare budget for COVID-19 in 2020 (88 trillion rupiah, or $7 billion)40.

The regulation also states that HGU permit holders with fires on their land covering less than 50% of the total area should be punished by immediate revocation of their land use rights for the burned areas. Greenpeace analysis revealed 10 palm oil companies that fall into this category and that saw over 1,000 ha of confirmed HGU areas burn in 2019. In total, fires razed 20,700 ha of land in these companies’ concessions during that year.
Table 5: Palm oil companies with more than 1,000 ha but less than 50% of HGU licensed areas burned in 2019.

<table>
<thead>
<tr>
<th>No</th>
<th>Palm Oil Company</th>
<th>Palm Oil Group</th>
<th>HGU Number</th>
<th>HGU AREA (Ha)</th>
<th>Annual Area (2018)</th>
<th>Annual Burnt Percentage</th>
<th>SANCTIONS</th>
<th>GARPEI MEMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>PT Dendy Merker Indah Lestari</td>
<td>SIEP</td>
<td>4000171200000014</td>
<td>12,213</td>
<td>3,749</td>
<td>22%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>PT Martindo Agro Nusantara Benarkuslasan</td>
<td>NPC Resources</td>
<td>1609002000000072 1701400000000065</td>
<td>12,222</td>
<td>3,478</td>
<td>29%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>PT Sumbar Alam Sebaran</td>
<td>NPC Resources</td>
<td>1609002000000072 1701400000000065</td>
<td>7,999</td>
<td>2,266</td>
<td>29%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>PT Kuntap Jaya Wartindo</td>
<td>Jayta Agro Wartindo</td>
<td>1701400000000065 1700100000000070</td>
<td>5,991</td>
<td>2,127</td>
<td>36%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>PT Tri Seto Lestari Mandir</td>
<td>NPC Resources</td>
<td>51000020000000146 51000020000000146</td>
<td>6,875</td>
<td>1,785</td>
<td>30%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>PT Pinnatama Kresamos</td>
<td>Bakrie</td>
<td>6008071200000007 6008071200000007</td>
<td>11,165</td>
<td>1,669</td>
<td>15%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>PT Mossmont Intan Barakat</td>
<td>Bakrie</td>
<td>17020000000020043 17020000000020043</td>
<td>3,955</td>
<td>1,669</td>
<td>42%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>PT Mossmont Intan Barakat</td>
<td>Bakrie</td>
<td>17020000000020043 17020000000020043</td>
<td>3,999</td>
<td>1,605</td>
<td>38%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>PT Agroestrat Mandiri</td>
<td>Sino Mas (IAE)</td>
<td>14070002000000178 14070002000000178</td>
<td>6,270</td>
<td>1,361</td>
<td>22%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>PT Sawit Sipak Saptanis</td>
<td>Sipak Sipak Emas</td>
<td>1609002000000085 1609002000000085</td>
<td>11,188</td>
<td>1,021</td>
<td>9%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
<td>65,797</td>
<td>20,691</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: HGU areas based on data from http://atlas.istbapol.go.id/layers/geonode.hgu_seluruh_indonesia, accessed 22 February 2019. This table includes only palm oil companies that had more than 1,000 ha burn inside HGU areas. Areas in this table are not rounded to the nearest 100 ha to permit an accurate calculation of the percentage burned. Confirmed HGU number, commodity and location data is available at https://bmb.minagri.go.id/. Sanctions here refer to sanctions from the police and the Ministry of Environment and Forestry.

One of these companies, PT Mossmont Intan Barakat, had two separate HGU areas burn in 2019. It was the only company to receive any government sanctions.

Of the 10 companies in this list, PT Dendy Merker Indah Lestari held the largest burned area. Even though only 22% of the company’s HGU area was burned in 2019, fires still razed some 3,700 ha.

- **Findings in pulp plantations**

A significant percentage of the land and forest fires that ravage Indonesia each year also occur within pulpwood concessions. By comparing the best available maps of concession areas with official government burned area maps, Greenpeace was able to identify the 10 pulp companies with the largest burned areas in their concessions over the 2016–2019 period. The analysis shows that a total of 338,600 ha burned in these 10 concessions, some over the five-year period, with a significant percentage of the burning taking place in 2019 and at least some areas in each concession burning more than once.

Table 6: Top 10 pulp companies ranked according to the total burned area mapped in their concessions for the period 2015–2019.

<table>
<thead>
<tr>
<th>No</th>
<th>Pulp Company</th>
<th>Pulp Group</th>
<th>Burned Area (Ha)</th>
<th>Percentage</th>
<th>Hectares</th>
<th>Year 2015</th>
<th>Year 2016</th>
<th>Year 2017</th>
<th>Year 2018</th>
<th>Year 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>PT Sumatra Risang Lestari</td>
<td>Tanoto Group, RGE (APRIL), affiliated</td>
<td>10,060</td>
<td>1,460</td>
<td>9%</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>PT Sumatra Risang Lestari</td>
<td>Tanoto Group, RGE (APRIL), affiliated</td>
<td>12,000</td>
<td>4,000</td>
<td>33%</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>PT Sebengan Bumi Andika</td>
<td>Maroindo</td>
<td>21,000</td>
<td>2,000</td>
<td>9%</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>PT Sebengan Bumi Andika</td>
<td>Maroindo</td>
<td>32,000</td>
<td>2,000</td>
<td>6%</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>PT Sebengan Bumi Andika</td>
<td>Maroindo</td>
<td>32,000</td>
<td>2,000</td>
<td>6%</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>PT Sebengan Bumi Andika</td>
<td>Maroindo</td>
<td>21,000</td>
<td>2,000</td>
<td>9%</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>PT Sebengan Bumi Andika</td>
<td>Maroindo</td>
<td>6,000</td>
<td>2,000</td>
<td>33%</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>PT Sebengan Bumi Andika</td>
<td>Maroindo</td>
<td>6,000</td>
<td>2,000</td>
<td>33%</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>PT Sebengan Bumi Andika</td>
<td>Maroindo</td>
<td>6,000</td>
<td>2,000</td>
<td>33%</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>PT Sebengan Bumi Andika</td>
<td>Maroindo</td>
<td>6,000</td>
<td>2,000</td>
<td>33%</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **This designation includes all third-party suppliers of APP that are not recognised as APP’s subsidiaries – that is, there is no direct APP share ownership relationship with these companies. Nonetheless, as direct suppliers of APP they are considered linked to the Widjaja family/Sinar Mas group and some appear to be owned by the Widjaja family/Sinar Mas outside the APP structure.**

- **This designation includes all third-party suppliers of APRIL that are not recognised as APRIL’s subsidiaries – that is, there is no direct APRIL share ownership relationship with these companies. Nonetheless, as direct suppliers of APRIL they are considered linked to the Tanoto family/Royal Golden Eagle group.**

- **This includes APP and its subsidiaries.**

- **APRIL’s response to Greenpeace’s opportunity to comment letter states that PT Sumatra Risang Lestari and PT Sumatra Sylva Lestari have each received only one administrative sanction, with the complaint against PT Sumatra Lestari closed in 2018. This contradicts the information provided to Greenpeace by the Ministry of Environment and Forestry. APRIL also contested Greenpeace’s findings with regard to the burned area figures presented to them (see comment in Table 7).**

The one pulp group name that jumps out in Table 6 is the Widjaja family/Sinar Mas, which is linked to five of the 10 pulp companies with the largest burned areas in their concessions between 2015 and 2019. Unsurprisingly, this company is also at the top of the list of the pulp groups Greenpeace identified as having the largest burned areas across all of their holdings during this period (Table 7). Nine of these groups were issued with one or more government sanctions between 2015 and 2018, only to see fires on their lands again in 2019.
Table 7: Top 10 pulp corporate groups ranked according to the total burned area mapped in their concessions for the period 2015–2019.

<table>
<thead>
<tr>
<th>No.</th>
<th>Pulp Group</th>
<th>Burned Area Hectares</th>
<th>Percentage</th>
<th>SANCTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Widjaja family/Sinar Mas (APP affiliated)*</td>
<td>283,400</td>
<td>73,300</td>
<td>26%</td>
</tr>
<tr>
<td>2.</td>
<td>Marubeni</td>
<td>74,100</td>
<td>5,600</td>
<td>8%</td>
</tr>
<tr>
<td>3.</td>
<td>Tanoto family (Royal Golden Eagle (RGE)/APRIL affiliated)**</td>
<td>39,400</td>
<td>73,300</td>
<td>18%</td>
</tr>
<tr>
<td>4.</td>
<td>Widjaja family/Sinar Mas/APP*</td>
<td>30,800</td>
<td>4,000</td>
<td>13%</td>
</tr>
<tr>
<td>5.</td>
<td>Perum Parahutani</td>
<td>28,600</td>
<td>14,200</td>
<td>50%</td>
</tr>
<tr>
<td>6.</td>
<td>Sungai Budj75</td>
<td>18,300</td>
<td>9,900</td>
<td>54%</td>
</tr>
<tr>
<td>7.</td>
<td>Medco</td>
<td>15,000</td>
<td>2,800</td>
<td>18%</td>
</tr>
<tr>
<td>8.</td>
<td>Tanoto family/Royal Golden Eagle (RGE)/APRIL**</td>
<td>14,700</td>
<td>600</td>
<td>4%</td>
</tr>
<tr>
<td>9.</td>
<td>Royal Lestari Utama (Barito Pacific / Michelin JV)***</td>
<td>9,500</td>
<td>2,600</td>
<td>27%</td>
</tr>
<tr>
<td>10.</td>
<td>Multistrada Arah Sarana (MASA)****</td>
<td>9,400</td>
<td>8,000</td>
<td>85%</td>
</tr>
</tbody>
</table>

* Greenpeace analysis shows a total burned area in all the concessions linked to the Widjaja family group in the palm oil and pulp sectors of 321,500 ha. In response to Greenpeace’s opportunity to comment letter, an APP representative argued that in various cases the mapped burned areas and the calculations of total burned areas differed from the company’s information and that the methodology Greenpeace had applied might be overstating the burned areas identified within the group’s concessions. The company sent a similar response to Greenpeace’s submission last year. Greenpeace is using the latest official data from the Indonesian government, as explained in the methodology section, and assumes this data to be correct. Potential inaccuracies of mapped burned areas therefore should be resolved between the company and the responsible department of the government. The information concerning sanctions shared by APRIL in their response letter contradicts the information communicated to Greenpeace by the Ministry of Environment and Forestry. Greenpeace has no further details to understand these differences.

** In response to Greenpeace’s opportunity to comment letter, a representative of Royal Lestari Utama stated that PT Lestari Asri Jaya operates only in the natural rubber industry despite holding an industrial forest plantation (Hutan Tanaman Industri, HTI) permit, and that Greenpeace’s findings regarding the burned areas within the concession were wrong. However, the company did not provide any evidence to substantiate these claims.

*** In response to Greenpeace’s opportunity to comment letter, a Multistrada Arah Sarana representative stated that the company “no longer has ownership in PT Multistrada Agro International (MAI) or its subsidiary PT MyCVeS,” having divested “before Michelin’s acquisition in March 2019.” In fact, the Indonesia Stock Exchange company profile for MAI shows that it is now 99.64% owned by Michelin and the two companies are listed subsidiaries. As the period considered in this briefing relates primarily to the period prior to the Michelin acquisition, Greenpeace maintains the MASA listing for what are now Michelin operations.

Table 8: Top 10 pulp companies including number of years of fire occurrences and APHl membership.

<table>
<thead>
<tr>
<th>No.</th>
<th>Pulp COMPANY</th>
<th>Pulp GROUP</th>
<th>YEARS FIRE OCCURRENCES</th>
<th>APHl Member</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>PT Bumi Makmur Hiji</td>
<td>Widjaja family/Sinar Mas (APP affiliated)*</td>
<td>4</td>
<td>✔</td>
</tr>
<tr>
<td>2.</td>
<td>PT Bumi Andalas Permai</td>
<td>Widjaja family/Sinar Mas (APP affiliated)</td>
<td>3</td>
<td>✔</td>
</tr>
<tr>
<td>3.</td>
<td>PT Musi Hutani Perada</td>
<td>Marubeni</td>
<td>3</td>
<td>✔</td>
</tr>
<tr>
<td>4.</td>
<td>PT Sibirangan Bumi Andalas Wood Industries</td>
<td>Widjaja family/Sinar Mas (APP affiliated)</td>
<td>2</td>
<td>✔</td>
</tr>
<tr>
<td>5.</td>
<td>PT Sumatera Riang Lestari</td>
<td>Tanoto family/Royal Golden Eagle (RGE)/APRIL affiliated**</td>
<td>2</td>
<td>✔</td>
</tr>
<tr>
<td>6.</td>
<td>PT Paramita Mula Langgeng</td>
<td>Sungai Budj</td>
<td>5</td>
<td>✔</td>
</tr>
<tr>
<td>7.</td>
<td>PT Solana Int Semesta</td>
<td>Medco</td>
<td>3</td>
<td>✔</td>
</tr>
<tr>
<td>8.</td>
<td>PT Arum Atasi</td>
<td>Widjaja family/Sinar Mas (APP affiliated)</td>
<td>4</td>
<td>✔</td>
</tr>
<tr>
<td>9.</td>
<td>PT Sumatera Syah Lestari</td>
<td>Tanoto family/Royal Golden Eagle (RGE)/APRIL affiliated**</td>
<td>5</td>
<td>✔</td>
</tr>
<tr>
<td>10.</td>
<td>PT Rembo Hutani Maks (Sumatra Sakti)</td>
<td>Widjaja family/Sinar Mas (APP affiliated)</td>
<td>3</td>
<td>✔</td>
</tr>
</tbody>
</table>

* See comment related to response from APRIL in Table 7.

Table 7 includes some of the key findings from these tables, with additional context where relevant:

- Nine of the 10 pulp companies with the largest burned area in their concessions over the 2015–2019 period received government sanctions between 2015 and 2018. In spite of these sanctions, fees continued to be paid across these companies’ pulp concessions – all had fees on their licks in 2019 for the second, third, fourth or even fifth year. According to the available data, only one of these 10 companies received sanctions for the 2019 fees: PT Paramita Mula Langgeng, a member of the Sunga Budi group, was named as a suspect in a criminal case for the burning of 6,600 ha in its concession. The company had previously received a warning letter in 2018.
- Half of the companies listed in Table 6 – including the concession with the largest burned area in 2015–2019, PT Bumi Makmur Hiji – are linked to the Widjaja family/Sinar Mas (APP)
PT Bumi Mekar Hijau had fires in its concession during the four years in the 2015-2019 period. In 2015, the Ministry of Environment and Forestry filed a civil lawsuit against the company as a result of fires on 20,000 ha of its land in 2014. After initially being acquitted, the company was found guilty by the high court in 2016 and ordered to pay 70 billion rupiah (US$6 million) in fines—a silver lining of the 7.3 trillion rupiah sought by the Ministry of Environment and Forestry. PT Bumi Mekar Hijau also had its license temporarily suspended for the 2015 fires. Shortly after the government announced the suspension of the company’s license, the Widjaja family/Sinar Mas/APP-owned company claimed that it was “independently owned and operated.” However, a detailed analysis of corporate registry documents in 2018 shows apparent close links between PT Bumi Mekar Hijau and the group.

Despite the sanctions it received for earlier fires on its lands, the company saw 40,400 ha of its concession burn in 2019—the largest area of any pulp concession in Indonesia that year. In total, an area larger than Singapore (87,600 ha) burned between 2015 and 2019 in PT Bumi Mekar Hijau’s concession area.

Besides the recurring fires, peatland clearing—a practice that is typically done ahead of planting pulpwood trees such as acacia and eucalyptus and renders the peat extremely flammable—also continues to happen in PT Bumi Mekar Hijau’s concession. According to an analysis by Greenpeace, at least 2,910 ha of peat were cleared between August 2018 and June 2020 within the concession boundaries.

Another Widjaja family/Sinar Mas/APP-related company, PT Araia Azadi, had fires in its concession during every year in the 2015-2019 period, with a total of 84,400 ha of its land burning—yet it received no sanctions from the government. Greenpeace also found evidence of peat clearing on this company’s land and in another concession linked to the Widjaja family/Sinar Mas/APP PT. Bumi Andeas Permai.

In 2020, fires were burning again in PT Araia Azadi’s concession, with the company accused of having set them deliberately to clear the land to plant acacia.

The corporate groups with the largest burned areas across their pulpwood concessions in the 2015-2019 period are all private firms, with the exception of one state-owned forestry company, PT Perhutani. This company saw a total of 28,500 ha burn in its concessions during this period, the fifth-largest amount of any pulp group. Nevertheless, the data Greenpeace was able to obtain shows that PT Perhutani has never received any serious sanctions, such as criminal charges or civil lawsuits. The company has only received warning letters pertaining to the fires on its land. No sanctions have been issued for fires in 2019, according to the available data, despite 50% of the burning (14,200 ha) taking place during that year.

---

92 For an in-depth analysis of fire ownership and management structures of APP’s pulpwood suppliers, see Ricih Asta Ming Sujadi et al. (2018).
93 Ming Sujadi, Ricih Asta, and Maya Purnawati (2018).
94 Ming Sujadi, Ricih Asta, and Maya Purnawati (2018).
95 Greenpeace (2019).
97 Habibie Arif Mahfiedin et al. (2015).
98 Greenpeace Southeast Asia (2020).

---
Law enforcement commitment

a. Overview of commitments

Even before the disastrous haze episode of 2015, the Indonesian government had acknowledged the importance of law enforcement and protecting peatlands in tackling the recurring fires. In 2014, Kurniawan Mangkusubroto, the former head of the now-defunct Presidential Work Unit for Development, Monitoring, and Control (UKP4), reportedly stated that if burning occurred in the concessions of companies that were failing to meet fire prevention and control standards, they should immediately have their permits revoked.  

In the same year, President Joko Widodo visited Sungai Tuhor in Riau province, which had been shrouded in toxic smog frompeat fires for weeks. During the visit, made a month after he was sworn into office, the president vowed to combat the annual fires. Among the promises he made were to create all peatlands and to revoke the permits of companies that converted peatlands into monoculture plantations, such as for pulp and palm oil.  

95 UKP4 (2014)  
96 Ministry of State/Decentral, Republic of Indonesia (2014)
BURNING ISSUES: FIVE YEARS OF FIRES

Indonesia’s pro-business “omnibus law” gives more impurity to biggest plantation sector burners

Towards the end of the haze crisis in October 2015, Luhut Binsar Panjaitan, then Coordinating Minister of Political, Legal and Security affairs, suggested that the root cause of the annual forest fires was the unbridled expansion of monoculture plantations. This massive expansion resulted in the clearance of large swathes of peat forests in Indonesia, rendering them highly flammable. Therefore, Luhut recommended that companies that failed to prevent their concessions from burning should have their permits revoked. He also said the law should be enforced for all parties responsible for the annual land and forest fires.1

“This is the mistake of a policy that we made, distributing peatlands to become plantations. I do not want to look for past mistakes, but do not repeat them again in the future.
“We have to enforce the law indiscriminately. Even if he/she is the richest person in Indonesia, if he/she does something wrong, then it is wrong.”
Luhut Binsar Panjaitan, 21 October 2015

“I’ve already told the forestry minister to review again [the permits of] companies that convert peatlands into monoculture plantations.”
“If we look from above, it doesn’t look problematic. It looks green. But what kind of green? Is it green from forests, or is it green from palm oil trees or monoculture forests?”
President Joko Widodo, 27 November 2014

1 Quoted in Greenpeace report (2016)
BURNING ISSUES: FIVE YEARS OF FIRES

Indonesia’s pro-business “rembesis law” gives more impunity to biggest plantation sector businesses

I think in 2015 and 2016 there were [companies’ permits] revoked, some were frozen and some were given warnings. I hope in 2017 warnings are no longer used as a form of punishment. If [we are] stern, all will protect [land from] fires.

‘The figure of (state) losses in 2015 isn’t a small number. There were 220 trillion rupiah in losses. Law officers have to be stern and solve existing forest fire cases. I remind again that there should not be compromise no more in relation to forest fires. Finally process, [the cases] and immediately execute (the perpetrators) when there are already legally binding verdicts so that there is no more (companies) dare to act recklessly.’

President Joko Widodo, 23 January 2017

Besides threatening to revoke companies’ licenses, President Widodo has also repeatedly threatened to sack public officials and law enforcers who fail to protect their areas from fires.***

‘If in your area there is a fire and it is not handled properly, the rules of the game will remain the same, it should be removed. I repeat, should there be fires, I will call the police chief, change the police chief.’

President Joko Widodo, 23 January 2017

Despite the repeated calls for harsher action and threats of enforcing the relevant laws, Rasio Ridho Sani, the Director General of Law Enforcement at the Ministry of Environment and Forestry, stated in June 2020 that the current efforts are still not enough.****

‘Our enforcement capacity is not sufficient yet and we have not achieved the deterrent effect.’

Rasio Ridho Sani, 8 June 2020
b. Overview of sanctions

The government has made many overreaches over the past few years—about finally holding companies to account for fires on their lands—but how many of these have been fulfilled?

The data obtained by Greenpeace from government and other sources shows that between 2015 and 2019 a total of 238 companies received 256 administrative sanctions relating to fires in their concessions, in the form of warning letters, written warnings, government compliance orders, freeing of land for reforestation or license revocations. These sanctions are in principle imposed based on the severity of the fires, with warning letters being the mildest form of administrative sanction and revocation of license the most severe. The majority of these companies—121—received government compliance orders, 115 got warning letters, 1 had a written warning and 17 had their licenses revoked. Despite multiple threats from various government officials about being more proactive, with revocation of permit, only four companies—one pulp producer and one company owner—were stripped of their licenses during that period, and none of the companies that had their permits revoked appeared in the lists Greenpeace compiled of those with the largest amounts of land burned in their concessions.

The Ministry of Environment and Forestry claims that there has been a decrease in the number of administrative sanctions related to forest fires issued during this period—from 27 in 2015 to 341 in 2019, according to the ministry’s 2019 law enforcement report. Although, the data remained unreliable to confirm this number. While the recent increase could be attributed to the spike in fires in 2019, the numbers of civil and criminal cases and of convictions remained considerably stable over the last five years. Therefore, the jump in the number of administrative sanctions may have more to do with the government’s decision to only take this type of sanction as the main form of punishment for companies in forest fire cases.

The ministry’s Director General of Law Enforcement, Rasio Ridwanto, stated in September last year that the government had been prioritising administrative sanctions because they can be issued more quickly than other forms of sanctions. He also claimed administrative sanctions had proven to be effective, as shown by the declining intensity of forest fires in 2016, 2017 and 2018. However, Greenpeace’s analysis shows that the decline in land and forest fires in those years might have more to do with wetter dry seasons than sanctions imposed by the government. For instance, the available data shows that nine of the pulp concessions with the largest burned areas across the 2015-2019 period received administrative sanctions—in some cases more than one—yet all of them had fires on their lands in multiple years, including 2019. PT Sumatera Rang Rantau (a member of the Tanoto family) was given an administrative sanction in 2015 and 2019, the most out of the 10 companies— but still had 6,700 ha of its area burned in 2019. Another company linked to the same group, PT Sumatera Sylva Lestari, received two administrative sanctions and yet had fires in its concession during every single year from 2015 to 2019. Clearly, the deterrent factor of these sanctions remains unproven.

Environment and Forestry Minister Siti Nurbaya Bakar has argued that by using administrative sanctions, the government can force companies to obey the regulations and improve their fire prevention and mitigation facilities in order to prevent future fires. In the case of a company failing to obey the government’s order laid out in the administrative sanction, the ministry will impose harsher sanctions on the firm, according to Siti. For example, if a company has had its permit frozen but still doesn’t put in place the proper equipment to fight fires, then its permit will be revoked. The ministry might even file a civil lawsuit if it finds the administrative sanction to be ineffective in deterring the company from having its concession burned again. But if the ministry were enforcing these rules, then a company like PT Sumatera Rang Rantau might have been prosecuted in 2019, as it had its concession burned two years in a row. However, Greenpeace did not see any legal action taken against the company until later in 2020, when its concession burned again.

To further investigate the deterrent effect of government sanctions, Greenpeace looked at companies that received serious administrative sanctions in 2015 or 2016, and had fires in their concessions in subsequent years. There were seven companies that had their permits suspended as a result of fires on their lands in 2015 or 2016. Their concessions burned again in 2017.

Several other companies have also been taken to court by the Ministry of Environment and Forestry. Media reports suggest that the ministry filed civil charges against as many as 50 companies in forest fire cases between 2015 and June 2020, with 11 trials and legal proceedings to be continued. However, according to a ministry press release, only four companies were resolved, with the government pressing the issue against those companies for both 2015 and 2016, and both PT Kasiwi Unggul also received a government compliance order relating to the fires in its concession, and both PT Ricky Kumiyama Kopertasi also had civil charges brought against them.

In 2019, both companies’ concessions burned again. Despite having prior convictions, the available data suggests that the sanctions they received were light. PT Kasiwi Unggul was issued with another government compliance order and both concessions were sealed, without clarity on the follow-up.

As these cases show, being faced with strong sanctions being imposed as a result of conviction or even being convicted does not guarantee that a company will put the necessary measures in place to prevent fires from occurring on its lands in the future. Another company that got the government to take action to account previous offenses when considering what sanctions to apply to repeat offenders. The lack of a consistent strong response from the government makes the deterrent effect of even the most serious sanctions uncertain.
Oligarchs behind forest fires and efforts to weaken law enforcement

Indonesia's natural resources sector is dominated by the country's oligarchs, with the majority of palm oil and pulp plantations controlled by a small number of people. These powerful families and individuals are able to amass tremendous wealth by exploiting Indonesia's natural resources and subsequently use their power to defend their fortunes. Those fortunes enable them to climb political ladders and subsequently to influence policies and political decisions in their favour. If their powers are left unchecked, these oligarchs are capable of unleashing environmental damage far out of proportion to their numbers in society. This risk is particularly evident when looking at palm oil and pulp companies that have fired on their land over and over with apparent impunity, with the resulting haze polluting the air and harming people's health.

---

1. Bawag Bone (2019)
3. ZM/FR (2019)
5. Reuters (2016)
Burned concessions tied to tycoons

Sungai Budi/Tunas Baru Lampung, the palm oil group with the largest burned area across its holdings (28,600 ha) in the 2015–2019 period, is controlled by Widarto Dey, who appeared on the GlobeAsia list of the 150 richest people in Indonesia in 2019 with a total fortune of $415 million.

The group with the third-largest burned area across its palm oil concessions in this period (17,700 ha), Rajawali, is controlled by Peter Sondakh. Sondakh is currently the 16th richest person in Indonesia, with a net worth of $1.65 billion.

The group with the largest burned area across its pulp concessions (283,300 ha) in the 2015–2019 period, Sinar Mas/APP, is controlled by the Widjaja family. With a net worth of $9.6 billion, the family currently occupies the second spot in the Forbes list of Indonesia’s 50 richest.

Royal Golden Eagle, the pulp group with the third-largest burned area across its concessions during this period, is controlled by the family of Sukanto Tanoto. With a net worth of $1.4 billion, at present he is Indonesia’s 22nd richest person.
Ties to business associations

Many of the companies identified by Greenpeace as having the largest burned areas in their concessions in the 2015–2019 period are also members of the Indonesian palm oil or pulp business associations.

Four of the 10 palm oil companies on the list—PT Globalindo Agang Lestari, PT Dendymark Indah Lestari, PT Aru Energi Resources and PT Karya Luhur Sejahtera—are GAPKI members, while eight of the 10 pulp firms—PT Bumi Makmur Hija, PT Bumi Andalas Permai, PT Musa Hutan Pemedik, PT Sebangun Bumi Andalas Wood Industries, PT Perusahaan Muara Langgang, PT Selaras Inti Semesta, PT Abadi and PT Rimba Hijau—also are members of APH.

While claiming to support sustainable forestry practices, both GAPKI and APH have been campaigning for the relaxation of environmental safeguards in the management of the country’s land and forests.

GAPKI is a strong force in Indonesia, described as having “the power and influence to mould the future of the Indonesian palm oil industry.” The association was instrumental in preventing the government from ratifying the ASEAN Agreement on Transboundary Haze Pollution, a legally binding environmental agreement signed in 2002 by the Association of Southeast Asian Nations (ASEAN) member states to reduce haze pollution in the region. GAPKI was strongly against the ratification of the agreement, as this would enable ASEAN member states to pressure the Indonesian government to take more serious action to combat the haze problem. It took 12 years for Indonesia to take this step, becoming the last country in the region to do so in 2014.

In 2013, GAPKI opposed the government’s plan to extend its moratorium on new forest concessions, arguing that it would hinder the expansion of the palm oil industry in Indonesia. When the government pushed for stricter regulations in peatland management in 2014 by banning companies from culturing on deep carbon-rich peatlands, APH planned to challenge the peat protection regulation in court. Both APH and GAPKI objected to the regulation’s stipulation that the water level of peatlands should be maintained at a depth of less than 0.4 meters below ground to ensure that the peat stays wet and is less prone to fires. GAPKI argued that the condition was unfair to the industry as companies need to drain water from peatlands in order to render them suitable for industrial crops such as acacia and oil palm.

And when the government issued a revision of the peat protection regulation in 2016, APH sent an objection letter to President Widodo. In the letter, APH argued that the regulation would effectively kill the pulp industry as it mandated that companies set aside parts of their concessions for conservation as a part of a larger effort to rehabilitate degraded and easily combustible peatlands across the country.
Weakening of law enforcement

Besides lobbying against forest and peat protection measures, both palm oil and pulp businesses have also been campaigning for the weakening of law enforcement with regard to land and forest fires.

In 2015 – Indonesia’s worst annual fire season since 1997 – the government decided to freeze the permits of 23 pulp companies whose concessions had burned that year. In total, the permits for more than 900,000 ha of land were frozen. The decision triggered an immediate backlash from APH, which demanded the government lift the ban, arguing that it would hamper the supply of raw materials to the pulp and paper industry.

In 2017, both GAPPKI and APH tried to have a legal stipulation that holds companies strictly liable for fires on their concessions struck down by filing a judicial review at the country’s Constitutional Court. The concept of strict liability was introduced in the 2009 Environmental Protection and Management Law, and has been used by the government to hold companies to account for land and forest fires. In the lawsuit, the groups also requested the elimination of a regulation that allows small farmers to practice slash-and-burn agriculture, a mainstay of Indigenous cultures in Indonesia – palm oil and pulp companies have long blamed small farmers for fires on their concessions, claiming that the fires are set elsewhere and spread onto their land.

GAPPKI and APH eventually dropped their lawsuit, saying they needed more time to study the case. But the language used in the lawsuit appeared again in a draft of the recently passed omnibus law, which has been widely criticized as weakening social and environmental safeguards to accommodate business interests. The bill downgrades the strict liability provision by removing the phrase “without having to prove fault” from the article in question.

GAPPKI chairman Joko Supriyono and APH chairman Indroyono Soesilo were members of the government committee tasked with drafting the bill.
Conclusion

The evidence in this briefing highlights the ineffectiveness of past and current government efforts to combat land and forest fires in Indonesia by holding companies accountable. The available data on government-issued sanctions—while admittedly incomplete due to lack of information forthcoming from the Ministry of Environment and Forestry—shows how many of the palm oil and pulp companies and groups with the largest burned areas in their concessions over the 2015-2019 period have largely gotten away with no serious sanctions, despite fires occurring on their lands repeatedly. In the cases where sanctions have been issued, in most cases those sanctions do not appear to take appropriate account of the extent or frequency of the burning. The issue is further compounded by the lack of transparency, with little to no information readily available to the public on the exact locations of companies’ concessions or on the progress of law enforcement efforts.

The analysis shows that the government already has at its disposal multiple legal means to hold companies accountable for fires in their concessions. While there is no rule that forbids different government agencies from imposing sanctions on the same companies, there is a lack of coordination among state institutions, which often results in companies only receiving one or two sanctions from a single institution, such as the Ministry of Environment and Forestry or the police. This coordination vacuum between different authorities results in missed opportunities to follow through with legal actions in a stepwise manner.

The government is also implementing measures with a true deterrent effect. The narrative that Indonesia has pushed to the global community, which is that the country has succeeded in reducing its emissions from deforestation and forest degradation and thus is eligible to participate in the UN-REDD Programme. The REDD+ scheme enables forest-rich countries (e.g., Brazil and Indonesia) to request payments from other countries or organizations like the United Nations’ Green Climate Fund (GCF), if they can prove that they have succeeded in curbing their emissions by protecting their forests from destruction or degradation. This year, Indonesia has managed to get its REDD+ payment requests approved by the GCF and Norway. The former has agreed to pay $103.8 million, and the latter $56 million, with the money to be used for forest conservation and community empowerment programs. These decisions have been widely criticized, on the grounds that while taxpayers’ money from other countries is being spent on conserving Indonesia’s forests, the Indonesian government has failed to force companies responsible for some of those fires and their resulting emissions to pay for their mistakes.

Not only has the government not delivered on its promises to punish errant companies for forest fires, but it also is failing to protect the health of its citizens. Researchers noted that the air quality in Pekalongan, one of the Indonesian cities affected the most by the haze from the devastating fires in 2015, was perhaps the worst sustained air quality ever recorded worldwide. Yet as fires continue to burn across the country on a recurring basis, the government has considerably downplayed the scale of their impact on human health. While the official death toll from the 2015 fires is just 24, epidemiologists estimate that tens of thousands of people have died prematurely and tens of millions had their health affected by the resulting toxic smog. As long as companies with burning concessions are allowed to continue to operate as usual with few or no legal repercussions, the issue of forest fires will not go away in the foreseeable future.
Demands

The key barriers to ending deforestation and the use of fire to clear land are political, not scientific or technological. Transparency is key to ensuring that government does its job properly and that the commodities sector, including palm oil and pulp companies, acts in a manner that aligns with the country’s economy, the goals of biodiversity and climate protection and social justice. That means ensuring that public finance and trade policy do not drive further deforestation, but do support nature restoration and a transition to a green, just and resilient economy. Law enforcement – ensuring consequences for companies and political sectors who fail to defend the public good – is key to ensuring that public government statements translate into meaningful action.

Based on this analysis and its findings, Greenpeace recommends the following specific measures within the necessary wider rethink of government and corporate policy:

1. The Indonesian government must step up its law enforcement efforts by having state institutions with authority to enforce the laws on forest and land companies coordinate with each other and impose the heaviest sanctions possible. It is crucial to deter companies from allowing their concessions to burn again in the future.

2. The government and the private sector must provide greater transparency, not only with regard to concession data and beneficial ownership but also on the implementation and progress of law enforcement. This will enable more meaningful participation and engagement by civil society organisations in tackling the fire issue and allow them to monitor the government’s and companies’ efforts to fulfill their promises.

3. The government must revoke contentious articles in the omnibus law that potentially weaken law enforcement on forest fire cases and give more impunity to errant companies.

4. Palm oil and pulp companies must immediately stop using fire in their land management practices and instead implement practices that reduce fire risk and land-use emissions.

5. Palm oil and pulp companies with fires on their land must report these to the public, together with the results of independent investigations concerning the verification of the fire occurrences and their origins, and reports on the progress of any legal proceedings.

6. Both the government and palm oil and pulp companies must drastically increase their fire prevention efforts by taking steps to develop a resilient landscape, including through ecosystem and peatland restoration. Strong coordination between stakeholders is urgently required to develop effective and sustainable measures. The highly fragmented peat and forest landscapes of Indonesia, especially in Kalimantan and Sumatra, will otherwise see more frequent and intense fires happening in the near future.

7. One of the important underlying causes of land and forest fires is the large number of unresolved land rights conflicts between palm oil and pulp companies and local communities. As part of effective fire prevention, recognition of the land rights of local communities, customary land rights and customary forest (Hutan Adat) needs to be a principal condition.
A, 2019 compressor.pdf
gacy/
Euro/Akhir (2018) ‘Indonesian fires exposed 69 million to “killer haze” 16 November 2018 Euro/Akhir
https://asbestos.carmipornic.eu/carmipornic-air-monitoring-service-tracks-extent-and-pollution-fires-across-in-
donesia
Feinrad C (2020) ‘UN fund pays Indonesia for forest protection as deforestation rises’ 20 August 2020 Climate Change News
http://jalantikah.or.id/korporasi/12-korporasi-layak-jadi-terdakwa-pembakar-hutan-dan-lahan
Forbes website: ‘Indonesia’s 50 richest’
https://www.forbes.com/indonesia/50richest/list/#tab:overall
kan-lahan-rp-93m---next---PT-Thomas-FDI-divonis-rp-1-milyar-dan-ganti-kerugian-biaya-perbaikan-
lahan-rp-93m/
GAPKI website: ‘GAPKI history’
https://gapki.id/CONTENT/gapki-history/8 October 2020
GAPKI website: ‘GAPKI members’
Genting Berhad (2020) ‘Annual report 2019’
Ghelly S (2020) ‘Cumulative bil on job creation passed into law despite opposition’ 5 October 2020
GlobalAsia (2019) ‘150 richest Indonesians – Waldoro, 75’ 1 April 2019
https://www.pressreader.com/indonesia/globalasia/2019040
12/24419875/6496365
Golkim B (2017) ‘Indonesia’s plantation lobby challenges environmental law’ 7 June 2017 Mongabay
https://news.mongabay.com/2017/06/indonesia-plantation-l-
obby-challenges-environmental-law/
Green Climate Fund website: ‘FP130: Indonesia REDD+ RFP for results period 2014-2019’
https://www.greenclimatefund.org/project/1p130
https://www.greenpeace.org/malaysia/publication/2019/burn-
ing-down-the-house-how-unilever-and-other-global-brands-continue-to-fuel-indonesian-fires/


Indonesian Timber Exchange website "About APH". https://www.indonesiantimberexchange.com/about/aph


Minister of Environment and Forestry (2020b) "KLHK diperpanjang". https://jokowi.menlhk.go.id/siaran_pers/browse/2609


Kompas.com https://rasonal.kompas.com/read/2020/02/06/12122541/pk

Indonesia's pro-business 'innovative' give more impetus to big plantation sector burners


Per X et al (2018) Connecting Indonesian fires and drought with the type of El Niño and phase of the Indian Ocean Dipole
https://doi.org/10.1002/2018JD028042

n
Pinantara A (2020) ‘Indonesia to receive $56 million from Norway for reducing emissions’ 22 May 2020 The Jakarta Post
https://www.thejakartapost.com/news/2020/05/22/indonesia-

https://www.vidianews.com/Mengejek-Tanggung-Jawab-Korpor

President of the Republic of Indonesia (1999)
“Undang-Undang Republik Indonesia nomor 41 tahun 1999 tentang kehutanan”
https://www.riwayatku.com/undang-undang-republik-

President of the Republic of Indonesia (2009)
“Undang-Undang Republik Indonesia nomor 32 tahun 2009 tentang perulangan dan pengelolaan lahan hidup”

Kompas.com https://rasonal.kompas.com/read/2019/12/11/14034211/ba

Rajawal website: ‘Our founder’

Agrodonesia http://agrodonesia.co.id/2016/12/gakpi-pun-menggugat/

RGE website ‘Sukanto Tanoto’
https://www.rge.org/kd/agrodonesia/governance-leadership/sukanto-
tanoto accessed 8 October 2020

Rajuana (2022) ‘Territorial kartu PT Asara Abadi, Kapolda Kapan menempelakan “Kapolda Riau” 1 October 2020

Riau Posco (2020) ‘Ketua dinas innat poska kartuhu, KHK lokus sanksi administrasi’ 19 July 2020
https://raunews.com/jawatanku/ru/19/07/2020/235353/sukan-

Sapurno Agro (2020) Annual report’ 2019

https://news.detik.com/bisnis/read/3358358/usai-pts

https://doi.org/10.1007/s12649-019-0026-9

SPGini (Ministry of Environment and Forestry) website

Soesastromedjo W (2018) ‘Dokter: I promised KL and SPOre there be fewer fires this year’ 7 February 2018 The Times
https://www.stratetimes.com/asia-asia-jakarta/jakarta-promise

https://www.straitstimes.com/singapore-asia-indonesia-forests-fat-


https://putrus.com/gd/dokumen/information/putrus/17

Kompas

Sutardjito S (2020) ‘Ancaman kebakaran hutan di tengah pandemi’ (presentasi oleh kepala BNPT terkutu) 26 October 2020
https://drive.google.com/file/d/12_20xesm2sm5k5mXlmvn

https://www.youtube.com/watch?v=kF0zQzG43la

Tan S (2020) ‘Indonesia’s parliament passes contentious Job creation law’ 5 October 2020 Nikkei Asia
https://asia.nikkei.com/Politics/Indonesia-s-parliament-passes-job

https://tribun-jambi.tribunnews.com/2019/05/03/a.png-riau-


Tunas Baru Lampung website ‘Head office’ Factories / Subsidiaries

Uin Indonesia website: ‘Peat wilderness’
https://www.uin.ac.id/en/departments/ruang/geography/proy-
teks-tropical-peatland/peat-fires accessed 8 October 2020

UN - REDD Programme website ‘About REDD+’
https://www.unredd.org/about/what-is-redd-plus.html accessed 8 October 2020

https://www.cnnindonesia.com/olahraga/20190913095054-

https://books.google.co.id/books/about/The_Haze_Problem_i

Vesakka PT (2020) ‘Penagakan hukum belum bisa berelak jaya kasus karhutla’ 8 June 2020 AntaraNews
https://www.antaranews.com/berita/154928/penagakan-huk


https://www.mdpi.com/2072-4292/10/4/496


Young J (2019) ‘Indonesia’s forests are burning, and Malaysia and Singapore are choosing on the fences’ 12 September 2019

https://www.antaranews.com/berita/1029046/permintaan-anch-

"ISSUES: FIVE YEARS OF FIRES"