

GREENPEACE

INDONESIA'S FORESTS:

UNDER FIRE

Indonesia's fire crisis is a test
of corporate commitment
to forest protection



DESTRUCTION BY NUMBERS

Massive deforestation: Since 1990, one-fourth of Indonesia's forest has been lost – 31 million ha,¹ an area nearly the size of Germany.²

Plantation industries are the major driver: Nearly 40% of gross deforestation between 2011 and 2013 occurred in identified oil palm or pulpwood concessions.³

Of the deforestation that takes place **outside known concessions** (just under half of the total for 2011–13), analysis by the Center for International Forestry Research (CIFOR) in Riau suggests that a significant share is for **palm oil development**, both smallholder and industrial plantations.⁴

Lack of government transparency: Uncertainty around concessions is pervasive, because the government has refused to make up-to-date maps available in a form that allows analysis.

Undermining plantation industry transparency and reform: Government officials are seeking to undermine progressive companies and the 'No Deforestation' agenda, including by pushing back against deforestation commitments and forbidding companies from releasing their own concession maps to the public.⁵

Orang-utans: Indonesia's orang-utans have lost 4% of their forest habitat in just 2 years (2011–13), nearly half of that in West Kalimantan. Half of their remaining habitat is in concession areas.⁶

'Planned' government-sanctioned deforestation and development vision: The government has identified ~15 million ha⁷ of forest available for clearance and development largely for energy and agricultural crops, with palm oil a priority for the government.

Millions of hectares of forest at risk in oil palm concessions.⁸

Fires: About 20% of fire hotspots detected during 2015 (to 26 October) occurred within pulpwood plantation concessions and a further 16% within oil palm concessions.⁹

1 FAO (2010), MoFor (2014d)

2 CIA (2015a)

3 Greenpeace mapping analysis

4 Gaveau and Salim (2013)

5 Eg Directorate General of Plantation, Ministry of Agriculture (2015)

6 Greenpeace mapping analysis

7 MoEF (2015a) p34

8 Greenpeace mapping analysis

9 Greenpeace mapping analysis; see also Greenpeace International (2015).



TABLE OF CONTENTS

DESTRUCTION BY NUMBERS

INDONESIA'S PLANTATION SECTOR IN THE SPOTLIGHT – NOW OR NEVER FOR SUSTAINABILITY	2
--	---

BREAKING INDONESIA'S LEGACY OF DESTRUCTION	5
--	---

How is President Jokowi trying to solve the crisis?	5
---	---

Indonesia's landmark forest moratorium is not addressing deforestation	6
--	---

Government policy is fanning the flames	7
---	---

Are current company 'No Deforestation' zero-deforestation policies actually protecting forest?	9
--	---

INDUSTRIAL PLANTATION DEVELOPMENT IS DRIVING THE FIRES CRISIS	10
---	----

FACING THE CHOP: FORESTS AT RISK FROM INDUSTRY EXPANSION	11
--	----

THE RSPO – MORE NEEDED TO BREAK THE LINK BETWEEN PALM OIL AND FOREST DESTRUCTION	12
--	----

QUESTIONABLE REVISIONS TO THE MORATORIUM MAPS – THE CASE OF TANJUNG PUTING NATIONAL PARK	14
--	----

BUMITAMA	15
----------	----

Overview	15
----------	----

'No Deforestation' policy	15
---------------------------	----

Transparency	15
--------------	----

Trade links	15
-------------	----

Questionable moratorium revisions: How it is done	18
---	----

WHY FOREST CLEARANCE AND DRAINAGE BY 'SUSTAINABLE' COMPANIES IS A BURNING ISSUE	18
---	----

IOI: RSPO MEMBERSHIP DOES NOT STOP FIRES

PT BSS	18
--------	----

Summary	18
---------	----

Overview	18
----------	----

Trade links	18
-------------	----

'No Deforestation' policy	18
---------------------------	----

Transparency	18
--------------	----

Supply chain issues	18
---------------------	----

ALAS KUSUMA: FSC ASSOCIATION DOES NOT STOP CLEARANCE AND FIRES	22
--	----

Summary	22
---------	----

Transparency	22
--------------	----

The group does not provide readily accessible information on its group structure or operations.	22
---	----

Overview	22
----------	----

'No Deforestation' policy	25
---------------------------	----

Reputational issues with the Forest Stewardship Council	25
---	----

Trade links	25
-------------	----

TIME FOR ACTION	27
-----------------	----

Five steps to tackling the underlying causes of deforestation	27
---	----

References	28
------------	----

Acronyms	28
----------	----

Methodology	28
-------------	----

Bibliography	29
--------------	----

INDONESIA'S PLANTATION SECTOR IN THE SPOTLIGHT – NOW OR NEVER FOR SUSTAINABILITY

Indonesia's fire crisis, the result of decades of wholesale forest and peatland destruction, has put Indonesia's plantation industries in the global spotlight. Global consumer companies and traders must face up to their role in fuelling this disaster. Existing 'No Deforestation' policies and Roundtable on Sustainable Palm Oil (RSPO) membership are not enough.

President Joko Widodo has taken the long overdue political step of issuing an official instruction ordering an end to further development on peat¹ – a critical first move toward reversing this destructive commodity-driven legacy. His vice president,

Jusuf Kalla, has called for the full restoration of forests and peatlands by 2020.² His Minister for Environment and Forestry has said that her office is in the process of drawing up binding regulations to give legal force to the policy.³

The plantation sector – and the global market it supplies – must act quickly and decisively to support the president's reforms and agree industry-wide action to reverse deforestation and improve transparency and accountability within the forestry sector.



- 1 Government of Indonesia (2015), MoEF (2015e)
- 2 Tempo.co (2015b), Bimantara (2015)
- 3 Saturi (2015)

◀ 20 September 2015

A Greenpeace investigator captures GPS coordinates beside the burning remains of recently cleared peatland orang-utan habitat. The industrial development is in an area of West Kalimantan covered by the government moratorium on new permits for development on primary forest or peatland. In the absence of public land maps, it is impossible to tell who is responsible for the impacts of such development.

©Infansasti/Greenpeace

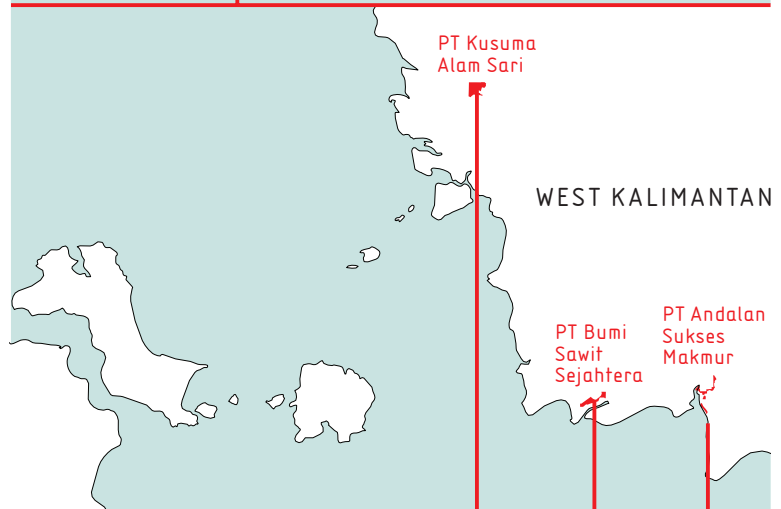
▶ A shopping basket full of household brands containing palm oil.

©Wahyu/Greenpeace

▼ Baby orang-utans at the Orangutan Foundation International's Orangutan Care Center near Tanjung Puting National Park in Central Kalimantan. ©Infansasti/Greenpeace



FROM CLEARED AND BURNT RAINFOREST TO SUPERMARKET, THE TAINTED PALM OIL CHAIN-OF-CUSTODY





25 August 2006
Burnt remains of forest on peatland that
has been cleared and drained for plantation
establishment.
©Dithajohn/Greenpeace



A young oil palm
plantation on peatland.
©Sutton-Hibbert/Greenpeace

BREAKING INDONESIA'S LEGACY OF DESTRUCTION

Global demand for palm oil and paper has fuelled the rapid expansion of Indonesia's plantation sectors. Over the past twenty-five years, Indonesia's palm oil production has increased nearly sixfold;¹ it is now the largest producer of palm oil in the world.² This has come at the cost of its environment. According to figures released by the Ministry of Forestry (MoFor), 31 million hectares of Indonesia's rainforest has been destroyed since 1990³ – an area nearly the size of Germany.⁴ Indonesia has now officially surpassed Brazil as the country with the world's highest rate of deforestation.⁵ Today, only half of its peatlands remain forested.⁶

This destruction created the volatile conditions for the forest and peatland fires that have burned across Indonesia since July. In September and October, daily greenhouse gas (GHG) emissions from the fires regularly surpassed the daily GHG emissions of the United States.⁷ Millions of people across Southeast Asia have been affected by the fires and haze. An estimated 500,000 people in Indonesia are suffering from acute respiratory illnesses,⁸ and billions of dollars of damage has been done to the economies of Indonesia and the wider region.⁹

Today's fire crisis has been many years in the making – and global companies bear much of the responsibility. Despite the overwhelming evidence that Indonesia's plantation sectors were expanding into forests and peatlands, with terrible consequences for the environment and local communities alike, consumer companies and traders continued to source palm oil and pulp and paper from suppliers linked to deforestation.

While many of the world's largest companies have now promised to abandon deforestation, the actions they have taken to date have yet to break the link between deforestation and global trade, let alone to address the long-term damage to Indonesia's environment. Nor have they tackled the underlying issues that threaten forest and peatland protection.

Field investigations and mapping analyses by Greenpeace¹⁰ have uncovered continued destructive operations by three major plantation groups operating in Kalimantan, Indonesian Borneo. Within the last year, Greenpeace monitoring has documented these companies, which supply the global market, destroying forests and peatlands despite sustainability pledges, and creating the conditions in which devastating fires have taken hold. One company is also directly implicated in the suspect acquisition of a peatland concession after the introduction of the 2011 forest moratorium. All three companies are members of leading sustainable certification groups, including the Forest Stewardship Council (FSC) and the Roundtable on Sustainable Palm Oil (RSPO).

Greenpeace is calling on the RSPO and FSC to investigate these findings and to remove these companies' certification and membership if they are found to have destroyed forest and

peatlands or played any role in fuelling the fire crisis. Greenpeace is also calling on the government to ensure that any forest or peatland burnt within concessions is restored to its natural condition rather than converted to new plantation areas, in accordance with the new Ministerial directive.¹¹

These companies continue to supply palm oil to the global market, despite recent evidence of continued forest and peatland destruction within their concessions. This highlights how commodity traders and their customers have failed to properly enforce their 'No Deforestation' policies. Greenpeace is calling on international companies to act quickly and decisively to close the market to such destructive operations through an industry-wide ban on deforestation. Companies must work together to ensure the plantation sector cleans up its act and implements the government's reforms, so that this year's crisis is not repeated.

HOW IS PRESIDENT JOKOWI TRYING TO SOLVE THE CRISIS?

In late October 2015, President Joko Widodo pledged to address one of the key causes of the immediate crisis by issuing an official instruction to end further development on peatlands, including within existing concessions.¹² His Minister for Environment and Forestry subsequently issued a circular ordering companies to block the canals draining and drying peatlands.¹³ The circular also



25 November 2014
President Jokowi during a visit to Riau after a call from a member of Sungai Tohor community called for him to see for himself the impacts of the annual fires. © Rante/Greenpeace

ordered that areas of burned peatland must not be turned into plantations, but instead rehabilitated.

In early November, the government convened a two-day International Peatland Conference, at which Vice President Jusuf Kalla announced an ambitious five-year programme to restore forests and peatlands.¹⁴ This programme is to include the establishment of a Peatland Restoration Agency (Badan Restorasi Lahan Gambut),¹⁵ with funding to be diverted from the National Disaster Management Body,¹⁶ the Ministry of Environment and Forestry (MoEF) and funds pledged by international donors, including US\$2.9 million promised when Presidents Obama and Widodo met in Washington in October 2015.¹⁷

However, not all ministries seem to be on board with the president's vision for peatland protection. Days after MoEF ordered that burned peatland should be rehabilitated instead of converted, the Minister for Agriculture, Andi Amran Sulaiman, told journalists that he hoped an additional 100,000ha of peat would be opened after the peat fires were over. 'We are requesting that peatlands which have burned are turned into plantation areas.'¹⁸

President Widodo's intended ban on further expansion into peatlands has enormous potential, not just to help prevent future fire crises, but to mitigate Indonesia's climate impact. But whether these measures will genuinely help to protect Indonesia's forests and peatlands depends on the president's ability to implement and enforce the decree across all ministries and all levels of national and regional government. Success means facing down the

vested interests that influence his ministers and continue to cling to the destructive business practices that have laid the foundations for the crisis that affects so many of his people. This will only happen with the support of progressive plantation sector companies and their customers.

INDONESIA'S LANDMARK FOREST MORATORIUM IS NOT ADDRESSING DEFORESTATION

The president's October 2015 decision to ban any further development on peatland is not the first attempt the government has made to rein in the plantation sector. A moratorium on the allocation of new concession permits on primary forest or peatland areas was declared in May 2011.¹⁹ A map – which has since gone through a number of revisions – was issued showing forest areas mandated for protection under the moratorium.²⁰

The Indonesian government repeatedly cites this moratorium as its main effort to address deforestation. However, it is widely flouted by companies and local government officials. Greenpeace analysis suggests that nearly a fifth of deforestation between 2011 and 2013 occurred within areas mapped as covered by the moratorium.

The latest version of the moratorium map²¹ includes 1.5 million ha of forest within identified concessions licensed for clearing.²² Either these concessions predate the moratorium, suggesting a worrying lack of transparency and poor communication between different levels of government, or they postdate the moratorium and have been awarded in defiance of its implementation.



1 July 2007
Clearance near Tesso Nilo National Park. The park has lost most of its forest in recent years, largely for palm oil, and large areas have burned repeatedly.
© Jufri/Greenpeace

26 March 2013

6°49'03.6"S, 140°31'14.28"E

Smoke rises from burning rows wood from recent forest clearance in the PT Berkat Citra Abadi oil palm concession. PT Berkat, part of the Korindo Group, is located in Merauke district, of Papua.

© Rante/Greenpeace



GOVERNMENT POLICY IS FANNING THE FLAMES

Just as seriously, the president's plan for forest and peatland protection is gravely undermined by government policy, laws and regulations and the actions of some of his ministers. Despite the moratorium, almost 15 million ha²³ of forest are still classed by MoEF as suitable for conversion to plantations – mostly in Kalimantan and Papua (see box). There are approximately 10 million ha of forest remaining in concessions that have already been allocated to companies to deforest.²⁴

Indonesian law and plantation sector regulations work against forest and peatland protection. A key concern is the 2014 Plantation Act, which requires palm oil concession holders to clear and develop all plantable land within their concession within six years. If this is not done, companies face sanctions, including fines and the revocation of their business licences, with the land being taken back into state control and potentially awarded to another developer.²⁵

The 2014 Plantation Act appears to be part of a coordinated assault mounted by various government ministers against the private sector's attempts to raise the environmental and social standards of palm oil production. Ministers have portrayed industry efforts to end deforestation, and specifically the actions of signatories of the Indonesia Palm Oil Pledge (IPOP), as operating against the national interest.²⁶

The plantation companies and palm oil traders behind IPOP have come under government pressure to abandon or delay the implementation of their 'No Deforestation' policies. Some IPOP signatories have reportedly been threatened by local administrations with the loss of their rights over forested areas within their concessions that they have set aside to protect. 'If you don't like it, no problem', an economics ministry spokeswoman is reported as saying. 'Another company will come to develop it.'²⁷



27 October 2015
Newly planted oil palm saplings in a recently burnt area near the Nyaru Menteng Orangutan Sanctuary and the Sebangau National Park in Central Kalimantan.
© Rante/Greenpeace



18 September 2015
Otan, a baby orangutan rescued from an oil palm concession in Kubu Raya.
© Nanda/Greenpeace

ARE CURRENT COMPANY 'NO DEFORESTATION' POLICIES ACTUALLY PROTECTING FOREST?

The true environmental, economic and social legacy associated with decades of deforestation and peatland devastation is only now becoming apparent. The fires and toxic smoke smothering Sumatra and Kalimantan in recent months and the emergence of a new fire frontier in Papua provide a clear warning of what the future holds if the underlying causes of the fires are not urgently addressed.

While the Indonesian government must bear a large share of the blame for fuelling the crisis in the country's forests, the situation would not have arisen without the commodity industries that drive so much of the destruction – in particular the large multinational corporations that dominate the pulp and paper and palm oil sectors, as well as their downstream customers, from traders to manufacturers and retailers.

The palm oil industry has been at the forefront of deforestation in recent years. Oil palm concessions were the largest single driver of deforestation in 2011–13, accounting for 20% of total gross deforestation during this period.²⁸ Almost three-quarters (74%, over half a million hectares²⁹) of deforestation on oil palm concessions in this period took place in Kalimantan.

While commodity traders with 'No Deforestation' policies like Wilmar International monitor risks around the mills in their supply chains, it is not until civil society organisations bring public exposure to problematic cases that real action seems to be taken to cut suppliers off.³⁰ This leaves traders, and their customers, exposed to deforestation and other social and environmental problems associated with palm oil production.

There is therefore little evidence that corporate 'No Deforestation' commitments are yet having any effect on the ground. In 2014 and 2015 (to 10 June) oil palm concessions accounted for about a fifth of FORMA deforestation alerts, similar to their share of 2011–13 deforestation.³¹ This figure only covers alerts within mapped concessions. In the absence of publicly available, official and complete maps, this analysis is unlikely to provide the full picture. In addition, unlicensed development for palm oil production is widespread and a major cause of illegal deforestation in some areas, with past evidence of palm fruit from illegal plantations ending up at major groups' mills.³²

At the heart of the current crisis is a lack of transparency that makes it difficult for traders to ensure suppliers are adhering to 'No Deforestation' policies. This culture of secrecy also hampers civil society efforts to hold the industry to account.

The government refuses to release to the public shapefile maps³³ of plantation concessions, despite a stated commitment to open government and promises to move forward with the One Map initiative.³⁴ Greenpeace is challenging this secrecy through action under the Freedom of Information Act.

In November 2013, the RSPO adopted a new resolution requiring all members to provide it with concession maps.³⁵

Two years later, few have complied, and the RSPO has stopped short of publishing such maps in the public domain. This secrecy was encouraged by a letter³⁶ sent by the Ministry of Agriculture (MoAg) to the Indonesian palm oil grower members of the RSPO, purporting to forbid companies from making such disclosures – even though the land registration regulation the MoAg cited as reason for demanding secrecy includes no such provisions.³⁷

As Greenpeace investigations reveal, some companies that supply the global market are still destroying forests, draining peatlands, threatening orang-utans and other endangered species, and creating the conditions for forest and peatland fires and the haze crisis that these cause.

- 1 1990: 12.5 million tonnes palm oil and palm kernel oil. 2014: 69.7 million tonnes. Source: USDA Foreign Agricultural Service online database (<http://www.fas.usda.gov/data>), accessed March 2015.
- 2 USDA Foreign Agricultural Service (2015)
- 3 FAO (2010), MoFor (2014d)
- 4 CIA (2015a)
- 5 Based on 2012 and 2013 data (most recent available). Margono et al (2014) and MoEF (2014) vs Brazil's official figures (source: INPE (2014)).
- 6 11.2m ha of 21.4m ha. Source: Greenpeace mapping analysis.
- 7 GFED (2015) and Harris et al (2015)
- 8 Nugroho (2015)
- 9 Otto (2015), Chan (2015)
- 10 Mapping analysis and on-the-ground investigations are by Greenpeace International unless otherwise stated.
- 11 Ministry of Environment and Forestry (2015a)
- 12 Mongabay Haze Beat (2015); see also Government of Indonesia (2015), MoEF (2015e)
- 13 Jacobson (2015)
- 14 Tempo.co (2015b)
- 15 Wiyanti (2015)
- 16 Saputri (2015)
- 17 Priatmojo and Angelia (2015)
- 18 Laoli (2015)
- 19 Government of Indonesia (2011)
- 20 MoEF (2015b)
- 21 MoEF (2015b)
- 22 Greenpeace mapping analysis, including pulpwood, oil palm and coal mining concessions
- 23 MoEF (2015a)
- 24 Greenpeace mapping analysis
- 25 Government of Indonesia (2014) p9
- 26 See for example Jong (2015).
- 27 Taylor (2015)
- 28 Greenpeace mapping analysis
- 29 542,782ha. Source: Greenpeace mapping analysis.
- 30 'With respect to issues relating to our suppliers but outside of our supply chain, for e.g. the case of PT ANJ, we will have to continue to rely on stakeholders like the civil society organisations and media to inform us so that we can take the necessary actions to address them, where relevant. If any stakeholder has any concerns regarding our Wilmar's operations or that of its suppliers, we welcome them to write in to us, or through our Grievance Procedure.' Source: Butler (2015).
- 31 Greenpeace mapping analysis. Covers alerts on land mapped as forest in 2013.
- 32 Gaveau and Salim (2013)
- 33 Shapefile format is the industry standard for geospatial analysis, and allows other data such as fire hotspots, forest cover and competing land uses to be overlaid to ensure companies and government can be held accountable to the public.
- 34 Koswaraputra (2015)
- 35 Sumatran Orangutan Society (2013)
- 36 Directorate General of Plantation, Ministry of Agriculture (2015)
- 37 Government of Indonesia (1997)

INDUSTRIAL PLANTATION DEVELOPMENT IS DRIVING THE FIRES CRISIS



Drone footage collects evidence of fires burning along plantation access roads as new industrial development replaces remaining peatland orang-utan habitat. The industrial development is in an area of West Kalimantan covered by the government moratorium on new permits for development on primary forest or peatland. In the absence of public land maps, it is impossible to tell who is responsible for the impacts of such development. © Greenpeace

Plantation companies continue to drive deforestation in Indonesia. Greenpeace mapping analysis shows that 1.8 million ha of forest loss – over half (54%) of gross deforestation during 2011–13 – took place in land covered by one or more concessions:¹

- **oil palm concessions: 20%**
- **pulpwood plantation concessions: 18%**
- **coal concessions: 12% (note, a significant share of this overlaps with other concession types)**
- **selective logging concessions: 9%**

While more recent government data on deforestation is unavailable, the Forest Monitoring for Action (FORMA) forest-loss alerts produced by the World Resources Institute² provide a useful marker. Although the number of FORMA alerts within pulpwood concessions has remained fairly stable, the number of alerts in oil palm concessions has risen in every year but one (2010) since 2006, from around 3,000 in that year to over 8,000 in 2014. FORMA alerts more than

doubled in areas outside identified concessions between 2010 and 2014, reaching a record high.³ Research by CIFOR following the 2013 fires indicates that a large share of the deforestation outside identified concessions may be due to oil palm plantations.⁴

There is a clear correlation between deforestation and the forest fires. About 20% of fire hotspots detected during 2015 (to 26 October) occurred within pulpwood plantation concessions and a further 16% within oil palm concessions.⁵ While these figures do not demonstrate that fires were actually lit by concession holders, they highlight that clearing forest and draining peatlands for industrial plantations sets the stage for uncontrollable fires during Indonesia's annual dry season.

(Endnotes)

- 1 Gross loss. Source: Greenpeace mapping analysis. Assigning observed forest loss to concession types is complicated by overlapping concessions of different types; eg the same area may be covered by concessions for selective logging, coal mining and a palm oil plantation. These overlaps mean that the total area in concessions is less than that of the different types added together.
- 2 Hammer et al (2015)
- 3 Greenpeace mapping analysis
- 4 Gaveau and Salim (2013)

FACING THE CHOP: FORESTS AT RISK FROM INDUSTRY EXPANSION

Indonesia's flagship moratorium offers no protection to land within existing licensed plantation or logging concessions, nor to secondary forest – ie all areas of remaining natural forest that are not classified by the government as untouched primary forest.¹ This leaves vast areas of forest in the hands of plantation companies and loggers, with tens of millions of hectares at risk of deforestation.

- **immediate threat:** ~10 million ha of existing forest in concessions licensed for clearing for oil palm or pulpwood plantations or for mining²
- **high threat:** ~15 million ha of existing forest in 'convertible production forest' (HPK) or 'other land uses/non-forest' (APL) areas liable to be cleared for conversion to agricultural plantations, such as oil palm, or for other land uses³ (this

includes some double counting from forest in existing licensed concessions).

- **medium threat:** ~20 million ha in selective logging (HPH) concessions or areas classed as 'permanent production forest' (HP) or 'limited production forest' (HPT) and located outside the moratorium area⁴ liable to be converted to new pulpwood plantations, cleared for mining or degraded as a result of bad logging practices
- **unquantifiable risk:** any forest or peatland within the moratorium area is at risk of clearance for oil or gas extraction, electricity generation or geothermal development, or licensed rice or sugarcane production⁵ (eg through the Merauke Integrated Food and Energy Estate project⁶).



21 September 2015
1°52'44.19"S, 110°7'33.36"E
A smouldering log on recently cleared
peatland near Ketapang, West Kalimantan.
© Infansasti/Greenpeace

(Endnotes)

- 1 Austin et al (2012)
- 2 Greenpeace mapping analysis
- 3 MoEF (2015a) p34
- 4 Greenpeace mapping analysis
- 5 Government of Indonesia (2011)
- 6 Anwar (2015)

THE RSPO – MORE NEEDED TO BREAK THE LINK BETWEEN PALM OIL AND FOREST DESTRUCTION



Greenpeace report 2012

The Roundtable on Sustainable Palm Oil was formed in 2004 to promote the use of sustainable palm oil through credible global standards and engagement of stakeholders. It is a voluntary association including palm oil producers, processors and traders, consumer goods manufacturers and some non-governmental organisations (NGOs), and is the largest ‘sustainability’ organisation in the palm oil sector.

However, despite having ‘sustainable’ as part of its name, this organisation has struggled to break the link between palm oil and forest destruction.

Critically, RSPO standards do not ban deforestation for plantations or clearance of carbon-rich peatland. As Greenpeace investigations continue to reveal, prominent RSPO members are involved in the destruction of orang-utan and tiger habitat, including conversion of peatland, and are implicated in the catastrophic fires that again raged across Indonesia this year. This report links RSPO members to violations of Indonesia’s forest moratorium, to deforestation and peatland destruction and to the fires.

RSPO members account for around 40% of global palm oil production; however, as of 2014, ten years after its inception, less than half of the palm oil these members produced (18% of global production) was RSPO-certified.¹

Of the four supply chain options the RSPO supports,² by far the most popular (accounting for two-thirds of RSPO-certified palm oil traded in 2013)³ is the inadequate GreenPalm ‘Book and Claim’ scheme, under which RSPO-certified producers receive certificates for each tonne of certified palm oil they produce and sell these certificates for a small premium to palm oil end users such as food manufacturers, who may then claim to be ‘supporting sustainable palm oil’.⁴ The actual palm oil in the end user’s products is bought on the open market, and may well be from plantations – RSPO-certified or otherwise – involved in forest destruction.

The next most popular option is known as ‘Mass Balance’. Here, the amount of certified palm oil passing through a particular supply chain route is tracked, but not the physical oil: eg a trader who has bought 100 tonnes of certified oil can mix that oil with other uncertified consignments and sell 100 tonnes of oil as ‘certified’, even though it is not the same oil. This again means that end users have no idea where the oil in

their products actually came from.

To buy actual certified palm oil, end users must trade through either the ‘Segregated’ supply chain, in which certified oil that may come from different sources is stored and transported separately from uncertified oil, or the ‘Identity Preserved’ route, in which each consignment is uniquely traceable to the plantation from which it originated. Sales by these routes are currently very small.⁵

Thus, even among the RSPO’s own members, ‘dirty’ palm oil remains the common currency. RSPO standards are not well implemented and the system is inadequate. The standards are poorly enforced and offer palm oil consumers no real guarantee that the oil they buy has been produced responsibly.

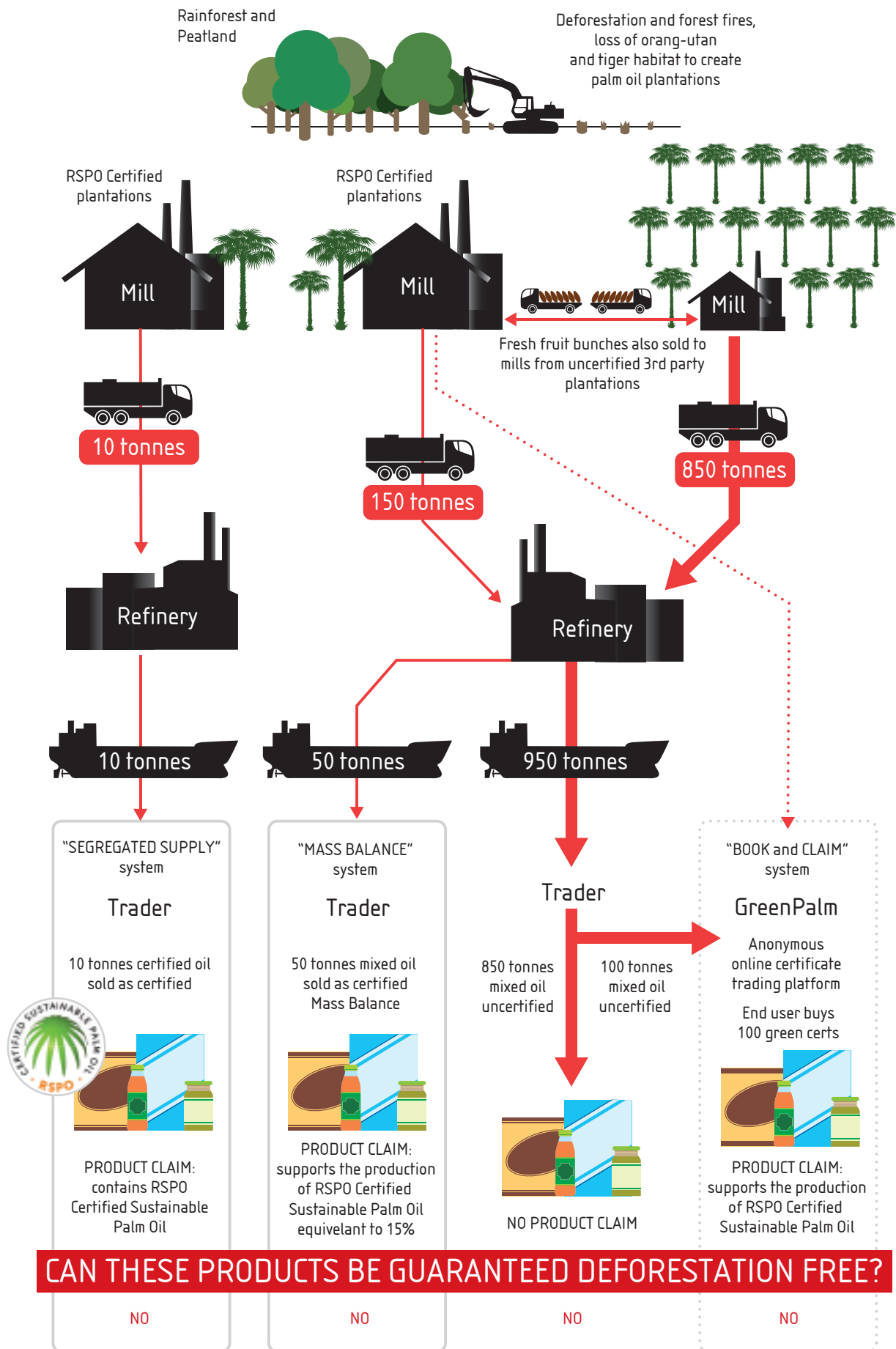
From late 2013 onwards, a number of palm oil producers, traders and end consumers began to adopt voluntary ‘No Deforestation’ standards that went beyond the RSPO Principles & Criteria (P&C). In turn, the RSPO has acknowledged that the current P&C do not prevent deforestation and has proposed a new set of indicators, known as RSPO Next.⁶ However, RSPO Next is voluntary and remains weak in comparison with other verification standards and methodologies, notably those of the Palm Oil Innovation Group (POIG)⁷ and the High Carbon Stock (HCS) Approach.⁸

Until the RSPO brings its standards in line with industry best practice, it will fail to protect forests and peatlands or to prevent fires in places like Indonesia. The RSPO should investigate the findings against its members that are set out below and take firm action where necessary. It must also publish its members’ concession maps, as required by the resolution adopted at the RSPO conference in 2013.⁹

(Endnotes)

- 1 RSPO (2015a)
- 2 RSPO (2011)
- 3 RSPO (2014) Table 1, p1. Sales of CSPO: Segregated + Mass Balance = 1,551,017t, Book and Claim 2,962,256t.
- 4 GreenPalm (2015)
- 5 The RSPO does not currently report separate figures for segregated or IP sales volumes. Personal communications from industry stakeholders to Greenpeace in 2013 reported the lack of segregated trade for many palm oil fractions or oleochemicals. Available segregated supplies mainly consist of crude palm oil.
- 6 RSPO (2015c)
- 7 See <http://poig.org/>
- 8 See <http://highcarbonstock.org/>
- 9 RSPO (2013b)

HOW RSPO CERTIFICATION WORKS



QUESTIONABLE REVISIONS TO THE MORATORIUM MAPS – THE CASE OF TANJUNG PUTING NATIONAL PARK

Central Kalimantan is Indonesia's REDD+ pilot province,¹ making it the showcase for Indonesia's efforts to reduce deforestation. More than 40% of the gross deforestation in Central Kalimantan during 2011–13 was in identified oil palm concessions.²

The province is also home to the internationally renowned Tanjung Puting National Park, which contains one of the largest remaining orang-utan populations.³

Despite its protected status, Tanjung Puting is highly threatened. Over a decade ago, the Environmental Investigation Agency (EIA) documented illegal logging and trade in protected ramin wood from the heart of the park.⁴ Current threats include

illegal mining and logging⁵ as well as oil palm concessions.⁶

The case of the post-moratorium allocation of an oil palm concession to Bumitama on peatland adjacent to Tanjung Puting National Park shows that even the most elementary requirement of the forest moratorium – a halt on the allocation of new permits in primary forests and peatlands – has been ignored or deliberately flouted by various levels of government.⁷

Revisions to the moratorium map published intermittently by the Ministry of Forestry⁸ have 'laundered' away these violations – that is, the map is revised to remove newly granted concessions from the area marked as covered by the moratorium.



◀ 31 October 2013
2°49'8.40"S, 111°46'44.40"E
Proboscis monkeys (*Nasalis larvatus*), also known as long-nosed monkeys, in Tanjung Puting National Park, Central Kalimantan. Proboscis monkeys are listed as Endangered on the IUCN Red List.
© Infansasti/Greenpeace

▼ 12 September 2013
Forest in Tanjung Puting National Park.
© Infansasti/Greenpeace





Company: Bumitama Agri Ltd (BAL)
Headquarters: Singapore
Stocklisted: Singapore 'SGX'
RSPO member: Yes, since 22 November 2013⁹
Group global market links: Yes
Company case study: PT Andalan Sukses Makmur (PT ASMR)
Concession location: Central Kalimantan
Concession area: 9,277ha

OVERVIEW

Bumitama Agri Ltd is a Singapore-based group with 153,000ha of planted area as of 2014, almost all in Kalimantan.¹⁰ The group is 31% owned by IOI, with which it has a joint venture plantation in West Kalimantan (PT BSS, see below), and 51% by the Lim family.¹¹

'NO DEFORESTATION' POLICY

On 13 August 2015, Bumitama launched its sustainability policy,¹² including commitments to no deforestation (based on the HCS Approach), no peatland development (of peat over 50cm depth) and respecting free, prior and informed consent of local communities.

TRANSPARENCY

Bumitama does not make public its third-party suppliers, nor does it publish its concession boundaries.

TRADE LINKS

As of 2015 Bumitama supplied Wilmar International and Golden Agri-Resources (GAR).¹³ In 2011, the latest period for which data are available, Bumitama sold 82% of its crude palm oil to these

two companies.¹⁴

For 2014, Bumitama reported that its two largest customers accounted for 86% of its annual revenues.¹⁵

QUESTIONABLE MORATORIUM REVISIONS: HOW IT IS DONE

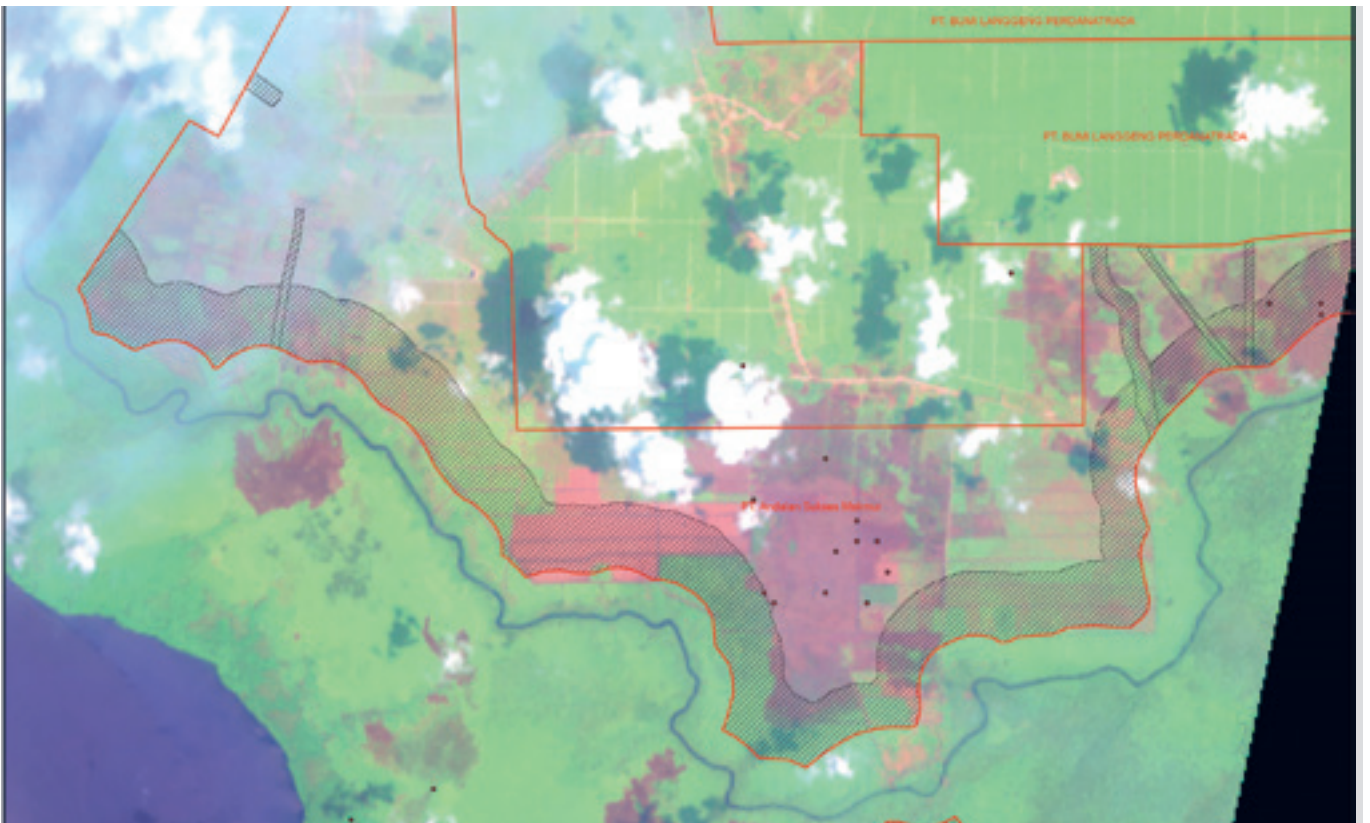
Following the signing of a Letter of Intent with Norway on 26 May 2010,¹⁶ then President Susilo Bambang Yudhoyono designated Central Kalimantan as Indonesia's REDD+ pilot province under the December 2010 REDD+ partnership agreement. The province was explicitly selected as a model location for implementing REDD+ in Indonesia largely because of threats to its forests and peatlands.¹⁷

On 20 May 2011, President Yudhoyono officially declared a two-year moratorium on the establishment of new concessions on peatland or primary forest.¹⁸ Just 11 days after the issuance of the Presidential Instruction on the moratorium, the Ministry of Forestry removed several areas from the Tanjung Puting National Park by decree,¹⁹ releasing them from the National Forest Zone (kawasan hutan) and thereby immediately undermining the moratorium.

In November 2012, Bumitama's PT ASMR concession was given initial approval,²⁰ in clear violation of the moratorium as the granted areas partially overlapped with the moratorium map at the time (revision III²¹). The concession covers 9,277ha spread across several blocks, some of which were excised from the National Park via the above-mentioned ministerial decree. The Ministry of Forestry's final step in the laundering operation was taken in the fifth revision of the moratorium map, released in November 2013.²² The new map eliminated all moratorium overlap with the concession.

This case raises questions about the justification for Ministry of Forestry revisions to the moratorium map, notably whether it

Landsat 8
17 August 2015 and 5 November 2015
November Landsat shows clearance of HCS and
land drainage adjacent to large burnt area.



is making cuts to suit business needs rather than enforcing the protection of forests and peatlands by putting such areas off limits for new expansion.

After international scandal, PT ASMR eventually expressed its willingness to return part of its concession area to the Tanjung Puting National Park.²³ However, this has not reversed the other questionable revisions to the moratorium maps that occurred when the concession was acquired or the subsequent development on peatlands.

During the course of 2013, Bumitama began to develop the concession, including clearing land and establishing a nursery and initial plantations in two locations.²⁴

PT ASMR's High Conservation Value report from May 2013 identified the concession as containing habitat for several protected or endangered species, including IUCN or CITES-listed mammals such as orang-utans, sun bears and proboscis monkeys and tree species such as ramin.²⁵ This was confirmed when investigations by Greenpeace in the second half of 2013 recorded much endangered and protected fauna and flora in the area, including ramin.

These field investigations and recent Greenpeace mapping analysis expose that forest and peatland clearance has taken place in the concession into the second half of 2015. The areas cleared overlap with areas proposed as buffer zones in the draft High Conservation Value (HCV) assessment presented for public consultation, but ignored by Bumitama in its final HCV map. They also overlap with the original map of the 2011 government moratorium on permits for new concessions on areas including peatlands.²⁶

On 13 August 2015, Bumitama launched its sustainability policy, banning the clearance of HCV and HCS forest and peatlands from its operations. On 14 August 2015, the RSPO closed a year-long review of NGO allegations that Bumitama was clearing HCV peatland forest.²⁷ Significant clearance in areas initially identified as holding HCVs and HCS took place after mid-August 2015.²⁸ According to Ministry of Agriculture maps, the cleared areas are on shallow peat (0.5–1 metre deep). Bumitama's new planting procedure submissions to the RSPO confirm the presence of peat forest in the concession, but fail to provide maps or figures of its extent, nor does it account for this in the final HCV map.²⁹ The company's Quarterly Progress Report for April–June 2015 maps the location as an HCS area, and confirmed that eight recent orang-utan nests had been counted in the vicinity, which indicates its continued value as habitat.³⁰

In September and October 2015, several fires raged in the central part of the concession, apparently destroying the last remains of forest in this area, including the site where the orang-utan nests had been spotted.

In mid-November 2015, Greenpeace informed the company of its findings in relation to PT ASMR. In a face-to-face meeting, the company confirmed the clearance of the HCS area, claiming it was in response to pressure by local communities. The company denied the clearance was on peatlands: it claimed a recent government-led peat survey had not identified any peatlands in the area, which led to the area's release from the presidential moratorium. The company failed, however, to share the results of this survey or to confirm whether it pre-dates the revisions to the moratorium maps. The company did offer verbal assurances that all areas that had been burnt by recent fires would be restored.

On 18 November 2015, Bumitama sent the following statement in response to the Greenpeace findings:

Bumitama commits to 'No deforestation, No Peat, and No Exploitation' in land development as stated in its Sustainability Policy launched on 13 August 2015.

Pertaining to Greenpeace's concerns on potential land clearance on peatland, High Conservation Value (HCV) and buffer areas with existence of protected or endangered species, we would like to reiterate our position above with clear evidence of non violation of the above.

Nevertheless, Bumitama thank Greenpeace for sharing areas for improvement and will look into enhancing transparency to its stakeholders.³¹

This case raises questions about what Bumitama needs to do to demonstrate that it is meeting its 'No Deforestation' policies. Further, it illustrates that companies cannot take supplier commitments at face value and must seek independent third-party verification. Plantation companies and traders must publish concession maps, including the results of HCV, HCS and peat assessments. Buyers must actively monitor their supply chains and take firm action against any suppliers that are destroying forests and peatlands.

(Endnotes)

- 1 UKP4 (2010)
- 2 **85,000ha. Source: Greenpeace mapping analysis.**
- 3 Ancrenaz et al (2008)
- 4 EIA/Telepak (1999)
- 5 UNESCO (2015)
- 6 InfiniteEARTH (2011)
- 7 According to PT ASMR (2013), the first permit for this concession (the location permit / izin lokasi) was granted in November 2012.
- 8 Ministry of Environment and Forestry (2015b)
- 9 Bumitama Agri Ltd (2013b)
- 10 Bumitama Agri Ltd (2015a) p10
- 11 Bumitama Agri Ltd (2015a) p152
- 12 Bumitama Agri Ltd (2015b)
- 13 GAR (2015) and Wilmar (2015)
- 14 Bumitama Agri Ltd (2012)
- 15 Bumitama Agri Ltd (2015a) p144
- 16 Government of Norway and Government of Indonesia (2010)
- 17 UKP4 (2010)
- 18 Government of Indonesia (2011)
- 19 Ministry of Forestry (2011a)
- 20 District Kotawaringin Barat (2012) and Bumitama Agri Ltd (2014b)
- 21 Ministry of Forestry (2012a)
- 22 Ministry of Forestry (2013e)
- 23 PT ASMR (2013). Copy of statement obtained by Greenpeace.
- 24 Sekonyer village and Teluk Pulai. Source: Greenpeace mapping analysis and field investigations.
- 25 Bumitama Agri Ltd (2013a)
- 26 Rondonuwu (2011)
- 27 RSPO (2015b)
- 28 Sonokeling (2013), Bumitama Gunajaya Agro (2015) and Greenpeace mapping analysis
- 29 Bumitama Agri Ltd (2014b)
- 30 The map identifies the location as 'BT', which is the HCS category 'old scrub'. Source: Bumitama Gunajaya Agro (2015)
- 31 Email from Bremen Yong, Bumitama, to Greenpeace, 18 November 2015.

WHY FOREST CLEARANCE AND DRAINAGE BY 'SUSTAINABLE' COMPANIES IS A BURNING ISSUE



7 March 2014
2°48'55.92"S, 111°00'10.20"E
A hornbill in PT BSS.
© Rante/Greenpeace

IOI: RSPO MEMBERSHIP DOES NOT STOP FIRES

PT BSS

Company: IOI Group (IOI Corporation Berhad)
Headquarters: Malaysia
Stocklisted: Malaysian Stock Exchange¹
RSPO member: Yes
Group global market links: Yes
Company case study: PT Bumi Sawit Sejahtera (PT BSS)
Concession locations: Ketapang Regency, West Kalimantan

OVERVIEW

IOI Group is a Malaysian conglomerate with diverse interests but a strong focus on its integrated palm oil business.²

PT Bumi Sawit Sejahtera (PT BSS) is a joint venture between IOI (67%) and Bumitama (28%).³ The oil palm concession covers 10,067ha.⁴

TRADE LINKS

Amongst the customers of IOI are food giants such as Mondelez,⁵ Mars,⁶ The Hershey Company⁷ and Unilever.⁸

'NO DEFORESTATION' POLICY

IOI has a policy for new developments that includes peatland protection.⁹ IOI's stated commitment includes undertaking both HCV and HCS assessment to ensure such areas are identified and protected.¹⁰

In August 2014, IOI informed Greenpeace that the company would not clear HCS forests and peatlands in its PT BSS concession.¹¹

IOI is a signatory to the January 2014 Sustainable Palm Oil Manifesto, which includes commitments to 'protection of peat areas regardless of depth' and 'no deforestation through the conservation of high carbon stock (HCS) forests'.¹²

IOI Group has failed to announce a public policy to protect forest and peatlands inside all concessions within its supply chain, including third-party suppliers and joint ventures.

TRANSPARENCY

The IOI Group does not make public its third-party raw material suppliers,¹³ nor does it publish its concession boundaries.

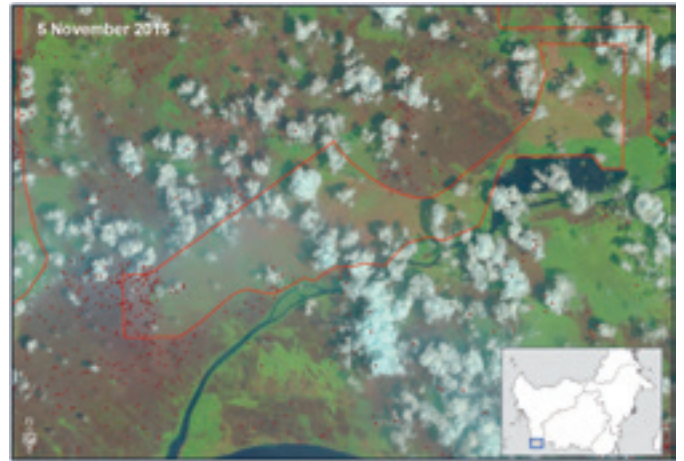
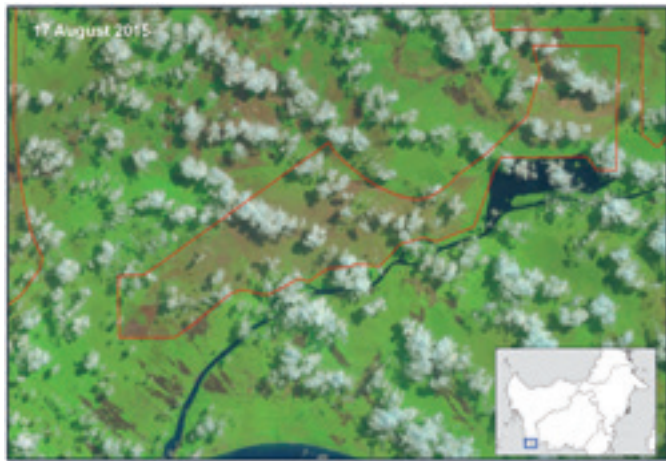
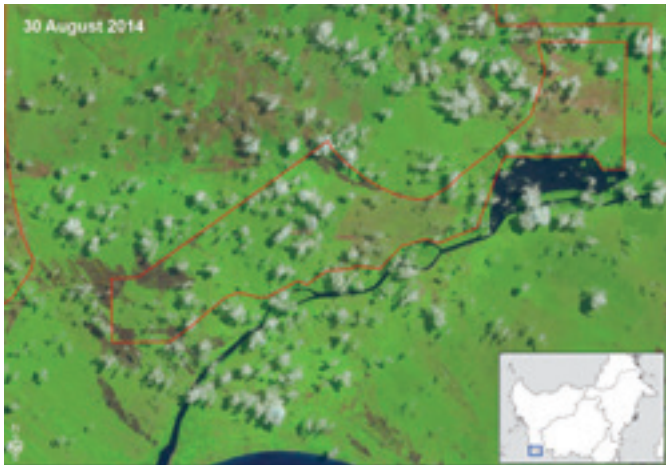
SUPPLY CHAIN ISSUES

Despite its public 'No Deforestation' policy, mapping analysis and field investigations in one IOI concession in West Kalimantan (PT BSS) revealed significant deforestation and peatland development. Large areas within the concession, as well as the surrounding peatland landscape, have repeatedly burned. In early 2014, Greenpeace first raised its concerns with the company. The case is now subject to an ongoing RSPO complaint filed by the Dutch NGO AidEnvironment in March 2015.¹⁴

According to the company's HCV report in 2014,¹⁵ over 90% of the concession area was covered by forest when surveyed, though much of this was degraded. The report found that these forests host endangered species including orang-utans,¹⁶ proboscis monkeys¹⁷ and Müller's Bornean gibbon.¹⁸ The concession also contains significant areas of peatland, including more than 700ha of peatland >3 metres deep.

Greenpeace investigations in early 2014 documented recent forest clearance and peatland development in the concession.¹⁹ Landsat images indicate extensive forest clearance and peatland development in 2013 and 2014.

These demonstrate that work began prior to completing



Clearing and burning of forest centred on the west of PT BSS between 20 August and 18 November 2014. Then between 17 August and 5 November 2015 the same area and that further west shows signs of fire.

22 February 2014
 2°48'55.92"S, 110°48'21.24"E
 Fire burns beside a canal extending outside the boundary of PT BSS.
 ©AidEnvironment



7 March 2014
2°50'32.40"S, 110°54'44.39"E
Recent forest clearance in an oil palm
plantation in PT BSS.
©Rante/Greenpeace



the RSPO's New Planting Procedures (27 February 2014).²⁰ Clearance in this concession continued despite IOI's early 2014 commitment to 'no deforestation' and 'protection of peat areas in new developments'²¹ and promise that 'no development should be carried out on areas that have been classified as High Carbon Stock ("HCS") forests, High Conservation Value ("HCV") areas and peat lands, regardless of depth by various assessments'.²²

The full development of this concession and continued peatland drainage led to the destruction of much of the identified HCV as well as HCS areas, either by clearance for plantation development or by fire.

2014: Clearance of an area later identified by IOI consultants as deep peat.²³

2015: Forest clearance in an area originally identified as HCS, but omitted from final HCV map. IOI's consultants for the HCV and HCS assessment mapped this cleared area as fragmented HCS area. In other parts of the concession, such fragments were included in the final map of protected areas. In the western part of the concession, however, most of these fragments were left off the map.²⁴

2014/2015: Extensive fires²⁵ burned much of the concession, including areas earmarked for protection by the company's own HCV/HCS assessment.

2015: PT BSS is amongst companies facing government sanctions for fires inside their concessions.²⁶

In mid-November 2015, Greenpeace informed the company of its findings in relation to PT BSS. The company made no substantial comments on Greenpeace's statements, besides claims to have restored the peat areas that were cleared 'accidentally'.

This case illustrates the need for producers to make comprehensive concession data available, and to be transparent about the methodologies they are using when drawing up HCS and HCV maps. Again, companies must obtain independent third-party verification. It also shows the lasting effects of deforestation and peatland drainage, which leaves land prone to fires even after all clearance has ceased. Restoration is therefore a critical part of companies' commitments to forest protection and fire prevention.

(Endnotes)

- 1 IOI Group (2015b)
- 2 IOI Group (2015a)
- 3 IOI Group (2013) p262, Bumitama Agri Ltd (2014a) p98
- 4 IOI Group (2014a)
- 5 IOI Group (2015e) p18
- 6 IOI Loders Croklaan (2015)
- 7 The Hershey Company (2014)
- 8 IOI Loders Croklaan (2014)
- 9 IOI Group (2014b)
- 10 IOI Group (2015c)
- 11 Company's own HCS definition based on above-ground biomass > 40tC/ha. Source: IOI (2014b).
- 12 See <http://www.carbonstockstudy.com/the-manifesto/about> and IOI Group (2015d).
- 13 IOI's subsidiary IOI Loders Croklaan provides a list of suppliers (<http://europe.ioiloders.com/customer/register>), but IOI as a group does not.
- 14 Wakker (2015)
- 15 IOI Group (2014a)
- 16 Singleton et al (2008) and Ancrenaz et al (2008)
- 17 Meijaard et al (2008)
- 18 Geissmann and Nijman (2008)
- 19 Greenpeace mapping analysis
- 20 Greenpeace mapping analysis
- 21 IOI Group (2015d)
- 22 IOI Group (2015c)
- 23 IOI (2014b), map accompanying letter
- 24 AidEnvironment (2015a)
- 25 NASA (2015)
- 26 Sarwanto (2015)

ALAS KUSUMA GROUP: CLEARANCE AND FIRES BY OIL PALM SUBSIDIARY COULD JEOPARDISE ITS FSC CERTIFICATION



Company: Alas Kusuma Group

Headquarters: Jakarta

Stocklisted: No

RSPO member: No, but companies within the Alas Kusuma Group hold Forest Stewardship Council (FSC) certificates, requiring the Group to comply with the FSC Policy for Association across its operations

Group global market links: Yes

Company case study: PT Kusuma Alam Sari (KAS)

Concession location: Kubu Raya, West Kalimantan

SUMMARY

Greenpeace analysis of satellite images and field investigation reveals that clearance started in 2011, resulting in a loss of 5,300ha¹ of forest in PT KAS by September 2015, much of it on deep peat. The area is mapped as orang-utan habitat.

Fires in July 2015 originating in the PT KAS concession burned over 1,000ha of recently cleared deep peatland.²

Greenpeace investigations in August and September 2015 documented excavators preparing land for plantation in the newly burned area.

TRANSPARENCY

The group does not provide readily accessible information on its group structure or operations.

OVERVIEW

The Alas Kusuma Group started in 1962 as a logging company and describes itself as 'one of the leading forestry industry groups

in Indonesia'.³ It holds selective logging (HPH),⁴ pulpwood (HTI)⁵ and oil palm concessions.

LOGGING CONCESSIONS:

By 2009, its holdings included 750,000ha in selective logging concessions (HPH) in Kalimantan.⁶ These include at least four Alas Kusuma companies holding FSC certificates:

- **PT Sari Bumi Kusuma (SBK)** in Central Kalimantan, which holds FSC Forest Management certification as well as Chain-of-Custody certification.⁷ According to WWF, as of 2009 PT SBK managed 208,300ha across two blocks.⁸
- **Suka Jaya Makmur (SJM)**⁹ in West Kalimantan, which holds FSC Forest Management certification (~170,000ha¹⁰) as well as Chain-of-Custody certification.¹¹
- **PT Wanasokan Hasilindo**, in West Kalimantan, which holds FSC Controlled Wood (CW) certification (49,000ha)¹²
- **PT Harjohn Timber**¹³ in Kubu Raya district, West Kalimantan, which holds FSC Chain-of-Custody certification.¹⁴

PULPWOOD PLANTATION CONCESSIONS:

Three pulpwood plantation (HTI) concessions in West Kalimantan have been identified with links to Alas Kusuma Group:

- **PT Mayawana Persada**, which covers 136,710ha¹⁵ (around half is located on peatland)
- **PT Wana Subur Lestari (PT WSL)**, which covers 40,040ha¹⁶ (mostly on peatland)
- **PT Mayangkara Tanaman Industri (PT MTI)**, which covers 74,870ha (mostly on peatland) and 29,755ha in two blocks.¹⁷ Both PT WSL and PT MTI are 50/50 joint ventures between Alas Kusuma (through SBK) and Sumitomo Forestry.¹⁸ While Alas Kusuma has been planning to develop its PT



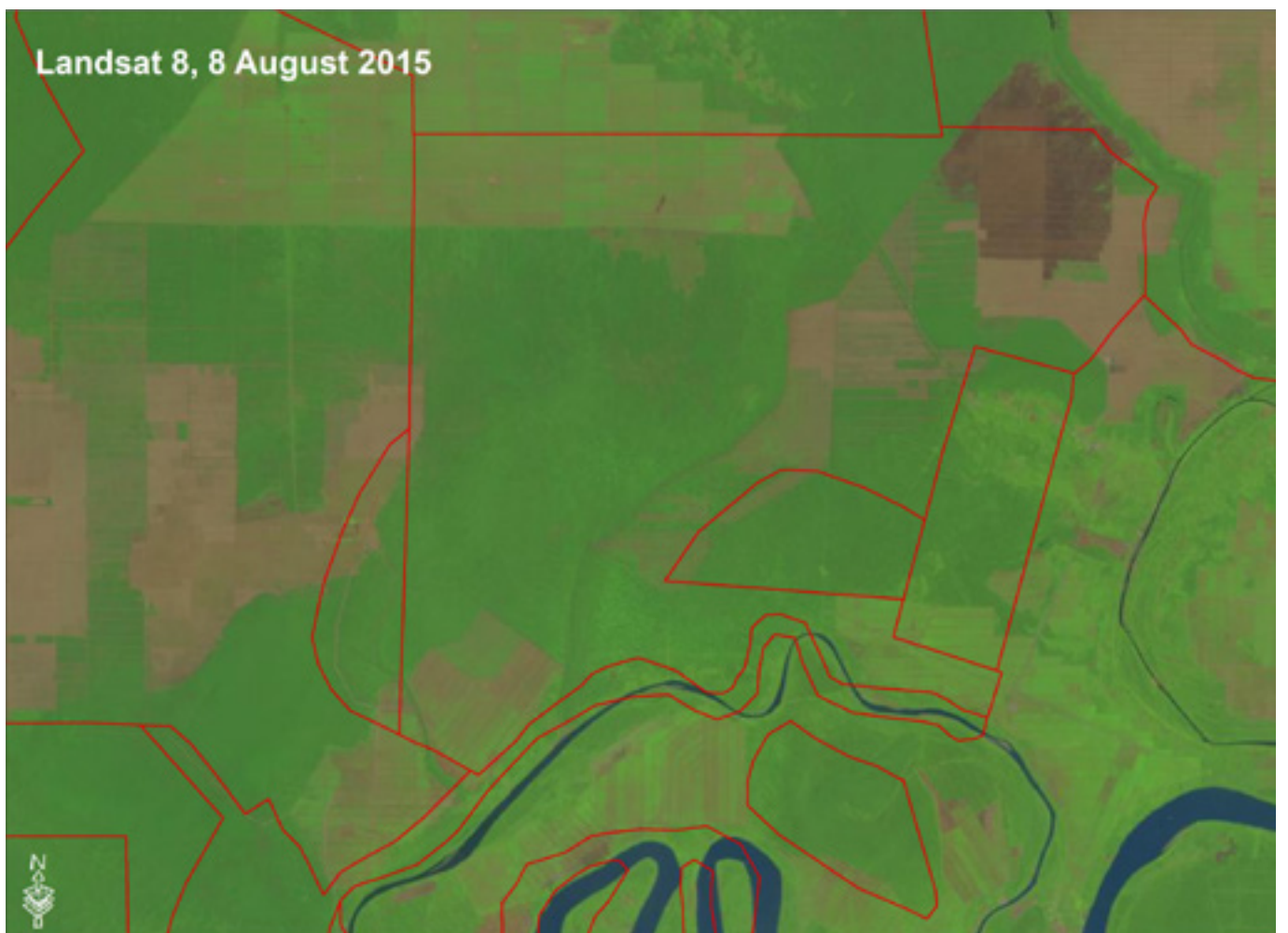
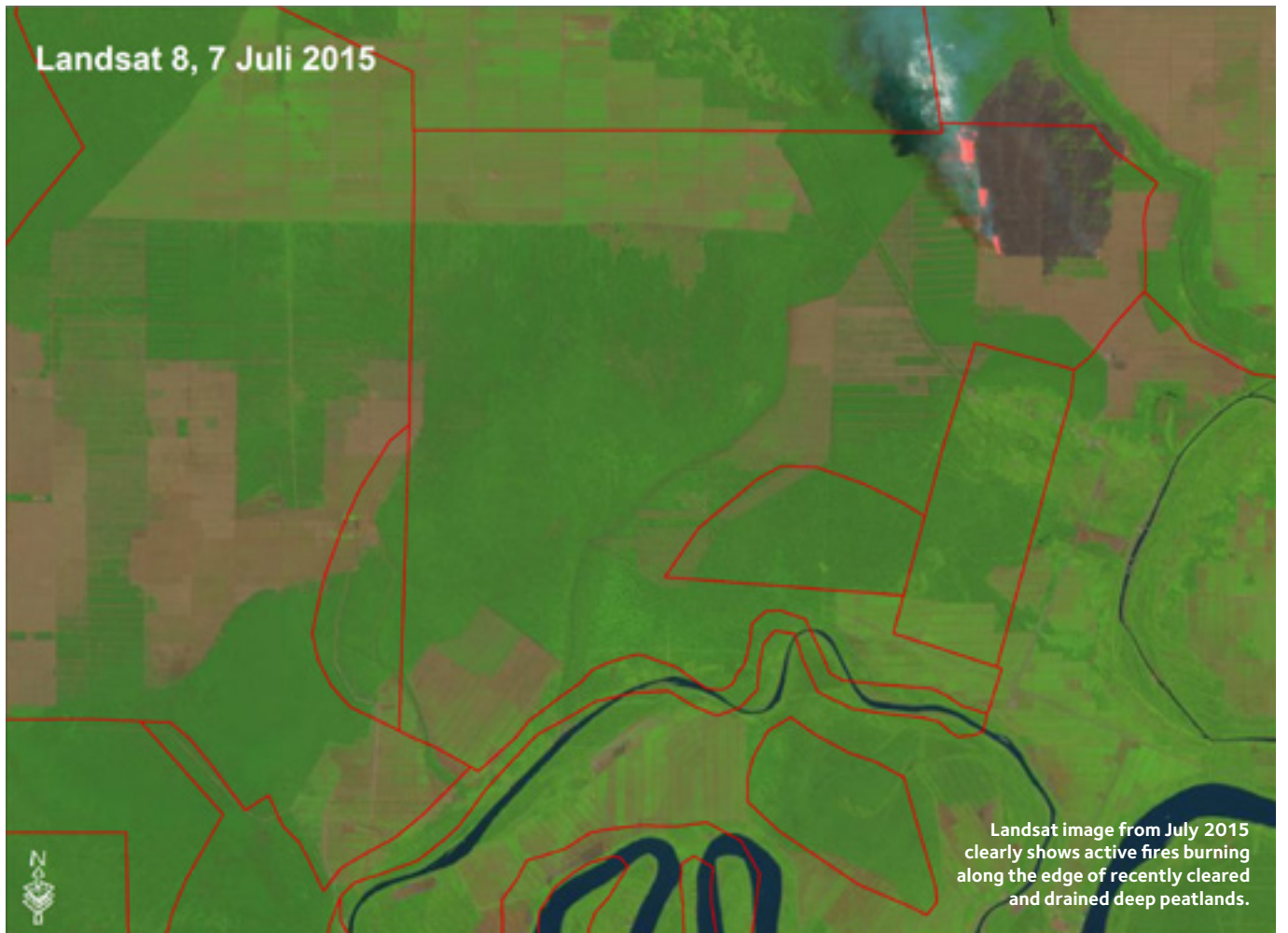
▲▲ 27 August 2015
 0°7'15.70"S, 109°51'28.41"E
 A Greenpeace investigation documents continued clearance of deep peatlands adjacent to recently burnt areas in PT KAS
 © Greenpeace

▶▶ 18 September 2015
 0°7'21.48"S, 109°52'20.68"E
 Excavator engaged in land preparation in a recently burnt area of very deep peat in PT KAS
 © Greenpeace

▲ 18 September 2015
 0°7'9.14"S, 109°52'20.38"E
 Sign marked 'pancang tanam' – sapling planting – in a recently burnt area of deep peatland in PT KAS
 © Greenpeace

▶ 18 September 2015
 0°8'27.84"S, 109°51'0.70"E
 Excavators pile newly felled logs for collection
 © Greenpeace





Mayawana Persada concession, following an HCV assessment conducted in 2014,¹⁹ as of 8 August 2015, the concession does not show any new development.

Following interventions by Greenpeace with the FSC and the World Bank's International Finance Corporation (IFC), in January 2014 Sumitomo decided to halt all forest clearance and peatland development in its joint venture operations with Alas Kusuma.²⁰

OIL PALM CONCESSIONS:

In terms of oil palm operations, two concessions in West Kalimantan with links to the Alas Kusuma group have been identified, both with significant areas on peatland:²¹

- **PT Kusuma Alam Sari (KAS)**, which covers 5,110ha²²
- **PT Sawit Jaya Makmur (SJM)**, which covers 10,275ha²³

'NO DEFORESTATION' POLICY

Alas Kusuma describes itself as 'one of Indonesia's most environmentally aware forestry operators [...] engaged in the reforestation of logged native forestlands.'²⁴

REPUTATIONAL ISSUES WITH THE FOREST STEWARDSHIP COUNCIL

The Forest Stewardship Council (FSC) seeks to protect its reputation through its Policy of Association, which defines forestry activities by its members and certificate holders that it considers unacceptable.²⁵ These include deforestation, illegal logging, destruction of high conservation values and violation of traditional and human rights.

A number of Alas Kusuma Group companies are currently FSC certificate holders. This certification includes both chain of custody and forest management, covering 257,000ha.²⁶

Under the current FSC Policy of Association,²⁷ clearance of more than 10,000ha of forest (or 10% of forest area) or any conversion of High Conservation Value Forest (HCVF; Indonesia's HCV Toolkit defines deep peat as an HCV) by any Alas Kusuma-related company²⁸ within the past five years could lead to the group losing all its FSC certificates, if a complaint is raised with the FSC.

The Policy of Association is currently in the final stages of being revised to strengthen definitions and restrictions on forest clearance by related companies.²⁹ However, the extensive clearance by PT KAS, including of deep peatland, is clearly in violation of the intent of the current Policy of Association.

Two Indonesian plantation groups that have previously been engaged in extensive deforestation, Asia Pulp & Paper (APP Group)³⁰ and Asia Pacific Resources International Ltd (APRIL Group),³¹ were disassociated by the FSC following complaints filed by Greenpeace and other NGOs. Both groups are now seeking to re-engage with the FSC through corrective actions in relation to their non-compliance with the Policy of Association; this includes addressing historic clearance. Remedial actions will include forest restoration.

TRADE LINKS

PT KAS staff informed Greenpeace investigators in 2015 that fresh fruit bunches (FFB) from the concession are supplied to PT

Surya Borneo Indah (PT SBI), another plantation company with several concessions to the east of PT KAS. PT SBI is a confirmed supplier to Wilmar.³²

In mid-November 2015, Greenpeace informed the company of its findings in relation to PT KAS. Personal communication from staff did not challenge any of the investigation findings. The company representatives promised to ensure a formal response, but none was received by the time of publication.

Under the FSC's Policy of Association, the documented clearance of deep peat and HCV forest in PT KAS ought to pose a serious threat to Alas Kusuma Group's FSC-certified operations. The FSC needs to thoroughly investigate this compliance issue and demand transparency from Alas Kusuma Group in relation to its corporate structure, concession maps and HCV/HCS surveys and operational structure. It reinforces the need for buyers to demand maps from their suppliers and use that information to monitor and enforce their policies.

(Endnotes)

- 1 About 430ha of this deforestation lies within an area that is apparently under the management of a neighbouring palm oil concession.
- 2 Greenpeace mapping analysis
- 3 Sumitomo (2009)
- 4 Sari Bumi Kusuma (2015)
- 5 HCVRN Technical Panel (2014)
- 6 Sumitomo (2009)
- 7 FSC (2012a, 2012b, 2013b)
- 8 S. Seruyan with 147,600ha and S. Delang with 60,700ha. Source: WWF-Indonesia (2009).
- 9 FAO (2002)
- 10 IDH (2011)
- 11 FSC (2010, 2011b)
- 12 <http://www.wanasokan.com>, FSC (2013a)
- 13 WWF-Indonesia (2009)
- 14 FSC (2012c)
- 15 HCVRN Technical Panel (2014)
- 16 PT Ayamaru Sertifikasi (2013b)
- 17 PT Ayamaru Sertifikasi (2013a)
- 18 Sumitomo (2009)
- 19 Hatfield Consultants (2014)
- 20 Personal communications with Sumitomo, December 2013–January 2014
- 21 Kusuma Alam Sari and Sawit Jaya Makmur, for example, share the same address with FSC-certified Alas Kusuma company Sari Bumi Kusuma (Jl. Adisucipto Km 5,3 Kubu Raya, Kalimantan Barat). Furthermore, 4 out of 5 commissioners and directors of PT KAS and PT SBK are identical (see eg PT Ayamaru Sertifikasi (2015) and PT Ayamaru Sertifikasi (2014)). PT Harjohn Timber, another FSC-certified Alas Kusuma group company, holds 49.75% of PT KAS shares (source: company deed number 310, 24 June 2011, obtained from the Company Register in Indonesia in August 2015).
- 22 Ministry of Agriculture (2014). While the plantation business license has been granted for 5,110ha, maps available from the National Land Agency for West Kalimantan show a much larger area (~16,000ha).
- 23 Ministry of Agriculture (2014)
- 24 Sumitomo (2009) p5
- 25 FSC (2011a)
- 26 Control Union (2014)
- 27 FSC (2011a)
- 28 Defined by the FSC PfA as 'Situations in which the associated organization or individual, with a minimum ownership or voting power of 51%, is involved as a parent or sister company, subsidiary, shareholder or Board of Directors to an organization directly involved in unacceptable activities.'
- 29 FSC (2015b)
- 30 FSC (2015a)
- 31 FSC (2013c)
- 32 PT Wilmar Cahaya Indonesia (2014) p25; see also Wilmar (2015)



▲ 24 October 2015
Children playing in the thick haze from the forest fires in Central Kalimantan. Pollution from these fires threatens the health of millions across the region.
© Rante/Greenpeace

▶ 27 November 2014
Indonesia's President Joko Widodo joins community members in damming a peatland drainage canal in Riau.
© Rante/Greenpeace





16 June 2010
Greenpeace, together with local NGOs Jikalahari and Community Forum to Protect Kampar Peninsula (FMPKS) and the local community, builds a nursery of indigenous plants and trees with which to restore the rich carbon peatland forest of Kampar Peninsula that is vulnerable to deforestation by forest clearance companies.
© Lembang/Greenpeace

TIME FOR ACTION

The fires that raged through Indonesia in the second half of 2015 are a wakeup call. Things cannot continue as they are. Governments and companies need to work together with civil society to find lasting solutions.

As world leaders gather in Paris to contemplate the future of the world's climate, President Jokowi has an opportunity to lead with a new vision for forest protection. The 2015 Paris Climate Conference, COP 21, is also a critical opportunity for multinational brands to address industrial agriculture's continuing destruction of forests to supply global markets.

If properly enforced, President Jokowi's policy to end further development on peatlands could start to turn the tide on deforestation and end Indonesia's chronic haze problem. However, more needs to be done to correct the destructive consequences of plantation expansion in Indonesia. An urgent priority should be extending the new policy against peatland expansion to cover all forested areas, and ensuring the policy has the force of law. The president must also deliver on his 'One Map' initiative and his mandate to broaden development opportunities for communities beyond those relying on forest clearance.

Any efforts to reduce the risk of forest fires or mitigate the impact of deforestation and peatland destruction cannot succeed without the support of the private sector and the international community. Deforestation and forest fires are now endemic issues that can only be solved through concerted corporate action. Traders and consumers of Indonesian commodities must take meaningful steps to monitor their suppliers, and exclude from the market any companies that continue to destroy forests and peatlands. Thinking longer term, companies need to work together on a common vision for forest restoration and best practice in peatland management, and on special measures to support smallholders and create incentives for forest conservation.

FIVE STEPS TO TACKLING THE UNDERLYING CAUSES OF DEFORESTATION

Companies and government need to work together to implement President Jokowi's recent initiatives and build upon them to ensure the long-term health and protection of Indonesia's forests. This starts with five simple steps:

- **Stop the destruction:**
Ban all forest destruction and peatland development in Indonesia and work with other stakeholders to enforce this ban.
- **Ensure transparency and accountability:**
Land-tenure and forest-cover maps must be published in support of the 'One Map' initiative. Companies and government must ensure that producers are properly monitored through independent third-party verification.
- **Clean up the trade:**
Companies that continue to create the conditions for fires and haze by draining peatlands and destroying forest must face sanctions and be locked out of the market.
- **Clean up the mess:**
Any forest lost to the fires must be restored. Further restoration efforts must concentrate on the vulnerable forest and peatland areas that have borne the brunt of the fires.
- **Start the solution:**
Incentives and benefits must be provided for communities to develop livelihoods that support forest conservation. These include recognition of customary land rights, legal mechanisms for forest conservation, a scheme for Payment for Ecosystem Services (PES), improved yields within existing plantation areas and support for the establishment of cooperative schemes.



4 May 2013
 0°12'01.76"S, 101°55'22.20"E
 A river runs through rainforest in Tesso Nilo National Park. The park is being devastated by illegal forest clearance and expansion of oil palm plantations inside its borders.
 © Jufri/Greenpeace

REFERENCES

ACRONYMS

- APL** – Areal Penggunaan Lain (other land uses/non-forest land)
APRIL – Asia-Pacific Resources International Limited
APP – Asia Pulp & Paper
BAPPENAS – Badan Perencanaan Pembangunan Nasional / Ministry of National Development Planning
bn – billion
C – carbon
CIFOR – Center for International Forestry Research
CO₂ – carbon dioxide. For calculation purposes, 1 tonne of carbon (C) converts to 3.67 tonnes carbon dioxide (CO₂).
CPO – crude palm oil
EU – European Union
FHS – fire hotspot
FORMA – Forest Monitoring for Action
FREL – Forest Reference Emission Level
GAR – Golden Agri-Resources
GHG – greenhouse gas
Gt – gigatonne
ha – hectare
HCS – High Carbon Stock
HCV – High Conservation Value
HP – Hutan Produksi Tetap (permanent production forest)
HPH – Hak Pengusahaan Hutan (selective logging concession)
HPK – Hutan Produksi Konversi (convertible production forest)
HPT – Hutan Produksi Terbatas (limited production forest)
HTI – Hutan Tanaman Industri (pulpwood plantation concession)
INDC – Intended Nationally Determined Contribution
IPOP – Indonesia Palm Oil Pledge
IUCN – International Union for Conservation of Nature

m – million

MoAg – Ministry of Agriculture, Indonesia

MoEF – Ministry of Environment and Forestry, Indonesia / Kementerian Lingkungan Hidup dan Kehutanan

MoFor – Ministry of Forestry, Indonesia

Mt – megatonne

MtCO_{2e} – megatonnes carbon dioxide emissions equivalent

NGO – non-governmental organisation

REDD+ – Reducing emissions from deforestation and forest degradation

RSPO – Roundtable on Sustainable Palm Oil

t – tonne

µg/m³ – micrograms per metre cubed

UN – United Nations

UNFCCC – United Nations Framework Convention on Climate Control

METHODOLOGY

Mapping analysis and on-the-ground investigations are by Greenpeace International unless otherwise stated.

DEFORESTATION:

Deforestation figures presented in Greenpeace mapping analyses relate to gross deforestation of primary and secondary forests as identified on Ministry of Environment and Forestry (previously Ministry of Forestry) maps (see mapping sources).

Net deforestation – quoted in some sources – represents absolute change in forest cover. This figure is the sum of forest loss and forest gains; ie, it balances the area of cleared forests in a given period with the area of regrowth of forests in the same period. This figure obscures the true total loss of primary or secondary natural forest. The regrown forests are usually of lesser ecological value, and may either stagnate due to reduction in soil fertility or take centuries to come to resemble primary

forests in terms of biodiversity.

Gross deforestation represents absolute loss of natural forest. This figure describes the area of natural forest cleared in a given period of time. It is NOT equivalent to forest cover change (see net deforestation).

CONCESSIONS:

Overlaps between different concession types cover a total of 7.2m ha. Of this, 70% is due to overlap of mining concessions with other types of concessions and a further 22% to overlap between oil palm and pulpwood (HTI) or selective logging (HPH) concessions. Overlap between selective logging and pulpwood concessions is minimal, possibly because both permits are issued by same ministry (meaning coordination is better). For analysis purposes, overlap areas are counted once in calculations of total area but are included in the sector totals for each concession type; eg an area covered by oil palm, pulpwood and mining concessions will be included in each of the three sector totals but only counted once for 'all concessions' figures.

The available maps of agricultural plantations (mainly palm oil, but also covering rubber and coconut) are not up to date and therefore likely to be inaccurate or incomplete. Current ultimate ownership data are incomplete for all sectors. In the text, 'identified' concessions indicates concessions which appear on the maps used.

The maps include some pulpwood concessions that had not been awarded at the time of mapping. These areas have been excluded from figures showing historical deforestation in concessions but included in figures showing forest area at risk in concessions.

Coal concession data cover Kalimantan and Sumatra only.

Data on concession holders and group ownership/affiliation are based on Greenpeace research. These data are by no means complete, so these figures should be treated as minimums. 'Affiliated' indicates companies that are part of a group, including part-owned subsidiaries.

PROVINCES:

Provinces are based on current boundaries to provide area consistency over time. References to Sumatra include the eight mainland provinces only.

PEAT:

The Wetlands International peat maps used for this report, showing around 21.4m ha of peat, are different from the map used for the government moratorium, which shows a smaller area. A discussion of the relative merits of these maps, demonstrating the greater accuracy of the Wetlands International map and the need for improved peat mapping, can be found in BAPPENAS et al (2013).

FIRE HOTSPOTS:

Fire hotspot data have been obtained from the NASA Fire Information for Resource Management System (FIRMS) and cover the period between 1 January and 26 October 2015.

FORMA ALERTS:

FORMA data indicate the number of areas with a greater than 50% probability of recent tree cover loss. The alerts are not a measure of deforestation by area. Sensitivity of detection is affected by factors including persistent cloud cover and flooding. For a full explanation of the nature of the data see http://data.globalforestwatch.org/datasets/550bd7fc2c5d45418e5e515ce170da22_3.

To eliminate false positives from the FORMA data sets (apparent deforestation in non-forest areas) we limited the original data set to that part overlapping with 2013 forest cover according to Ministry of Forestry maps (Ministry of Forestry (2014a)). 2015 figures are an estimate based on data for 1 January to 10 June.

BIBLIOGRAPHY

MAPPING SOURCES USED:

PEATLANDS:

Wahyunto et al (2003, 2004, 2006)

LANDCOVER/FOREST:

Landcover 2013: Ministry of Forestry (2014a)

Landcover 2011: Ministry of Forestry (2013c)

Moratorium: IMM8: Ministry of Environment and Forestry (2015b)

CONCESSIONS:

Selective logging (HPH) and pulpwood plantation (HTI) concessions 2014: Ministry of Forestry (2014e)

Coal concessions 2009: APBI-ICMA (2009)

Oil palm concessions 2015: Greenpeace mapping analysis based on agriculture plantation maps provided by the Planning Department of the Ministry of Forestry, Indonesia, downloaded 29 July 2010 (appgis.dephut.go.id/appgis/kml.aspx), supplemented and updated by Greenpeace in Riau and Kalimantan with data gathered from provincial planning agencies (BAPEDA) and various plantation companies

Fire hotspots: NASA (2015)

FORMA alerts: Hammer et al (2013)

HABITAT:

Orangutan habitat: Wich et al (2008)

Tiger habitat: WWF and SaveSumatra.org (undated)

OTHER SOURCES:

AidEnvironment (2015a) Response to the IOI Group-Aksenta

- verification of AidEnvironment's RSPO complaint, 25 June 2015 <http://bit.ly/1lrj89j>
- AidEnvironment (2015b) Take responsibility: IOI Corp's role in the Southeast Asian haze disaster.
- Ancrenaz M, Marshall A, Goossens B, et al (2008) Pongo pygmaeus. The IUCN Red List of Threatened Species 2008. <http://www.iucnredlist.org/details/17975/0>
- Anwar A (2015) Jokowi Tetapkan Merauke Lumbung Padi Nasional. *Bisnis.com*. <http://kabar24.bisnis.com/read/20150511/15/431870/jokowi-tetapkan-merauke-lumbung-padi-nasional>
- APBI-ICMA (2009) Coal map Kalimantan and Sumatra, June 2009
- Austin K, Stolle F, Sheppard S (2012) Indonesia's moratorium on new forest concessions: Key findings and next steps. World Resources Institute, Washington, DC. <http://www.wri.org/publication/indonesias-moratorium-new-forest-concessions>
- BAPPENAS, Ditjen Sumber Daya Air (Directorate of Water Resources), Partners for Water Programme (2013) Quick Assessment and Nationwide Screening (QANS) of peat and lowland resources and action planning for the implementation of a national lowland strategy. Peatland maps for Indonesia, Report on QANS Component 4, February 2013. <https://www.deltares.nl/app/uploads/2015/03/QANS-Peat-mapping-report-final-with-cover.pdf>
- Bimantara JG (2015) Pemerintah kumpulkan ahli internasional bahas gambut. <http://print.kompas.com/baca/2015/11/14/Pemerintah-Kumpulkan-Ahli-Internasional-Bahas-Gambut>
- Bumitama Agri Ltd (2012) Prospectus dated 3 April 2012. <http://ir.bumitama-agri.com/annuals.cfm>
- Bumitama Agri Ltd (2013a) Summary report of EIA, SIA and HCV assessments - PT Andalan Sukses Makmur. RSPO. <http://www.rspo.org/file/Summary%20Report%20of%20EIA%20and%20HCV%20Assessments%20PT%20ASMR.pdf>
- Bumitama Agri Ltd (2013b) PT Andalan Sukses Makmur (PT ASMR) clarifies on Greenpeace report on 22 November 2013. <http://bit.ly/1MMIGry>
- Bumitama Agri Ltd (2014a) 2013 annual report. <http://ir.bumitama-agri.com/annuals.cfm>
- Bumitama Agri Ltd (2014b) RSPO notification of proposed new planting: PT ASMR. http://www.rspo.org/file/ASMR_RSPO%20NOTIFICATION%20OF%20PROPOSED%20NEW%20PLANTING%20%2820%20JAN%202014%29.pdf
- Bumitama Agri Ltd (2015a) 2014 annual report. <http://ir.bumitama-agri.com/annuals.cfm>
- Bumitama Agri Ltd (2015b) Sustainability policy 13 August 2015. <http://bit.ly/1lrj89j>
- Bumitama Gunajaya Agro (2015) Progress report PT ASMR, April-June 2015. <http://www.rspo.org/members/complaints/status-of-complaints/view/40>
- Butler R (2015) New Guinea rainforest being leveled for palm oil, revealing gaps in zero deforestation pacts. *Mongabay Environmental News*. <http://news.mongabay.com/2015/02/new-guinea-rainforest-being-leveled-for-palm-oil-revealing-gaps-in-zero-deforestation-pacts/>
- Chan F (2015) \$47bn? Indonesia counts costs of haze. *The Straits Times*. <http://www.straitstimes.com/asia/47b-indonesia-counts-costs-of-haze>
- CIA (2015a) Country comparison: Area. US Central Intelligence Agency World Factbook. <https://www.cia.gov/library/publications/the-world-factbook/rankorder/2147rank.html>
- Control Union (2014) Surveillance report 2014, PT Suka Jaya Makmur
- Directorate General of Plantation, Ministry of Agriculture (2015) Letter No. 120/HM.230/02/2015 to the Indonesian Growers Caucus of the RSPO on provision of Indonesian plantation maps to the RSPO and NGOs
- District Kotawaringin Barat (2012) Location permit for oil palm development ("izin lokasi") to PT Andalan Sukses Makmur, 590/105/Pem-XI/2012, District Head of Kotawaringin Barat, dated 19 November 2012
- EIA/Telepak (1999) The final cut: Illegal logging in Indonesia's orangutan parks. <http://www.telapak.org/wp-content/uploads/2013/09/The-Final-Cut.pdf>
- FAO (2002) Implementing reduced impact logging in the Alas Kusuma Group - Nana Suparna, Harimawan and Gusti Hardiansyah. <http://www.fao.org/docrep/005/ac805e/ac805e0q.htm>
- FAO (2010) Global Forest Resources Assessment 2010. Food and Agriculture Organization of the United Nations. <http://www.fao.org/forestry/fra/fra2010/en/>
- FSC (2010) Forest Stewardship Council Certificate - PT Suka Jaya Makmur. <http://info.fsc.org/details/php?id=a0240000005vtjMAAQ&type=certificate&return=certificate.php>
- FSC (2011a) Policy for the association of organizations with FSC. Forest Stewardship Council. <https://ic.fsc.org/preview.fsc-pol-01-004-v2-0-policy-for-the-association-of-organizations-with-fsc.a-1127.pdf>
- FSC (2011b) Forest Stewardship Council Certificate - PT Suka Jaya Makmur. <http://info.fsc.org/details>

- php?id=a024000006w3BCAAY
&type=certificate&return=certificate.php
- FSC (2012a) Forest Stewardship Council Certificate - PT Sari Bumi Kusuma. <http://info.fsc.org/details.php?id=a0240000005sVxLAAU&type=certificate&return=certificate.php#result>
- FSC (2012b) Forest Stewardship Council Certificate - PT Sari Bumi Kusuma. <http://info.fsc.org/details.php?id=a0240000005sQm9AAE&type=certificate&return=certificate.php#result>
- FSC (2012c) Forest Stewardship Council Certificate - PT Harjohn Timber. <http://info.fsc.org/details.php?id=a0240000005sV7wAAE&type=certificate&return=certificate.php>
- FSC (2013a) Forest Stewardship Council Certificate - PT Wanasokan Hasilindo. <http://info.fsc.org/details.php?id=a024000000BR5ChAAL&type=certificate&return=certificate.php>
- FSC (2013b) Forest Stewardship Council Certificate - PT Sari Bumi Kusuma. <http://info.fsc.org/details.php?id=a024000000DXK0CAAX&type=certificate&return=certificate.php#result>
- FSC (2013c) FSC ends association with the APRIL Group. Forest Stewardship Council. <https://ic.fsc.org:443/newsroom.9.454.htm>
- FSC (2015a) Status of the FSC disassociation from APP. Forest Stewardship Council. <https://ic.fsc.org:443/asia-pulp-paper-group-app.745.htm>
- FSC (2015b) FSC policy for association revision: Meeting no. 3 summary and next steps. Forest Stewardship Council. <https://ic.fsc.org/preview.fsc-policy-for-association-revision-meeting-no-3-summary-and-next-steps.a-5145.pdf>
- Gaveau D, Salim MA (2013) Research: Nearly a quarter of June fires in Indonesia occurred in industrial plantations. CIFOR Forests News Blog. <http://blog.cifor.org/18218/research-nearly-a-quarter-of-june-fires-in-indonesia-occurred-in-industrial-plantations?fnl=en>
- Geissmann T, Nijman V (2008) *Hylobates muelleri*. The IUCN Red List of Threatened Species 2008. <http://www.iucnredlist.org/details/10551/0>
- GFED (2015) Updates. Global Fire Emissions Database. <http://www.globalfiredata.org/updates.html>
- Golden Agri-Resources (2015) GAR Sustainability Dashboard http://www.goldenagri.com.sg/sustainable_dashboard.php (login required)
- Government of Indonesia (1997) Peraturan Pemerintah nomor 24 tahun 1997 tentang pendaftaran tanah / Government Regulation no 24 of 1997 on land registration
- Government of Indonesia (2011) Instruction of the President of the Republic of Indonesia No. 10 of 2011 about suspension of granting of new licenses and improvement of governance of natural primary forest and peat land. English translation available on the Forest Climate Center website. <http://bit.ly/1Nmr4iD>
- Government of Indonesia (2014) Law of the Republic of Indonesia No. 39 of 2014 on Plantations / Undang-undang Republik Indonesia nomor 39 tahun 2014 tentang perkebunan. <http://www.indolaw.org/UU/Law%20No.%2039%20of%202014%20on%20Plantations.pdf>
- Government of Indonesia (2015) Instruksi Presiden Republik Indonesia nomor 11 tahun 2015 tentang peningkatan pengendalian kebakaran hutan dan lahan / Instruction of the President of the Republic of Indonesia No. 11 of 2015 about improvement of land and forest fire control
- Government of Norway, Government of Indonesia (2010) Letter of intent between the Government of the Kingdom of Norway and the Government of the Republic of Indonesia on "Cooperation on reducing greenhouse gas emissions from deforestation and forest degradation." https://www.regjeringen.no/globalassets/upload/smk/vedlegg/2010/indonesia_avtale.pdf
- GreenPalm (2015) The Book and Claim supply chain model. <http://greenpalm.org/about-greenpalm/why-greenpalm-makes-a-difference/book-and-claim-supply-chain-model>
- Greenpeace International (2015) Greenpeace calls on Indonesia's plantation industry to adopt Fire Action Plan. Greenpeace International. <http://www.greenpeace.org/international/en/press/releases/Greenpeace-calls-on-Indonesias-plantation-industry-to-adopt-Fire-Action-Plan/>
- Hammer D, Kraft R, Wheeler D (2015) FORMA alerts. World Resources Institute and Center for Global Development. http://data.globalforestwatch.org/datasets/550bd7fc2c5d45418e5e515ce170da22_3
- Harris N, Minnemeyer S, Stolle F, Payne OA (2015) Indonesia's fire outbreaks producing more daily emissions than entire US economy. World Resources Institute. <http://www.wri.org/blog/2015/10/indonesia%E2%80%99s-fire-outbreaks-producing-more-daily-emissions-entire-us-economy>
- Hatfield Consultants (2014) Hatfield conducting High Conservation Value (HCV) assessments within a forest plantation area of PT Mayawana Persada, in West Kalimantan, Indonesia. <http://www.hatfieldgroup.com/news/news-releases/hatfield-conducting-high-conservation-value-hcv-assessments-within-a-forest-plantation-area-of-pt-mayawana-persada-in-west-kalimantan-indonesia/>
- HCVRN Technical Panel (2014) TP peer review: HCV assessment of PT. Mayawana Persada, September 2014. <https://www>

- hcvnetwork.org/resources/peer-review-pt-mayawana-persada-sept-2014
- IDH (2011) A big leap for responsible forest management in Borneo. <http://www.idhsustainabletrade.com/news/a-big-leap-for-responsible-forest-management-in-borneo>
- InfiniteEARTH (2011) The Rimba Raya biodiversity reserve project - REDD: Avoided (planned) deforestation in Central Kalimantan (Borneo) Indonesia project design document (PDD). https://s3.amazonaws.com/CCBA/Projects/Rimba_Raya_Project/CCBA_PDD_2011_05.15_Final%5B1%5D.pdf
- INPE (2014) INPE-EM: Land cover changes greenhouse gases (GHG) emission estimate. National Institute for Space Research (INPE). http://inpe-em.ccst.inpe.br/conteudo_en/index.html
- Intertek (2015) Independent verification / assessment report on complaints against IOI Corporation Berhad on the oil palm plantation operations at PT Bumi Sawit Sejahtera, Kendawangan District, Ketapang Regency, West Kalimantan, Indonesia. http://www.ioigroup.com/content/NEWS/PDF/IOI_Ketapang_PT_BSS_Verification_report_July2015.pdf
- IOI (2014a) Letter of Dato' Lee Yeow Chor, CEO of IOI Corporation Berhad, to Bustar Maita, Greenpeace Southeast Asia, 7 May 2014: IOI Corporation Berhad (IOI) 's response to Greenpeace report. Copy held by Greenpeace
- IOI (2014b) Letter of Dato' Lee Yeow Chor, CEO of IOI Corporation Berhad, to Bustar Maita, Greenpeace Southeast Asia, 26 August 2014. Copy held by Greenpeace
- IOI Group (2013) Expanding our reach: Annual report 2013. http://www.ioigroup.com/Content/IR/PDF/AnnualReport/Corp/2013_AR.pdf
- IOI Group (2014a) RSPO summary report of SEIA and HCV assessments - PT Bumi Sawit Sejahtera. http://www.rspo.org/file/RSPO-Summary%20Report%20of%20HCV-SIA%20Assessments_PT%20BSS.pdf
- IOI Group (2014b) Sustainability policy statement. <http://www.ioigroup.com/Content/S/PDF/IOI%20Sustainability%20Policy%20Statement.pdf>
- IOI Group (2015a) About us. http://www.ioigroup.com/Content/CI/Corp_About
- IOI Group (2015b) Group structure. http://www.ioigroup.com/Content/CI/Corp_Structure
- IOI Group (2015c) Sustainable agricultural practices. http://www.ioigroup.com/Content/S/S_Agricultural
- IOI Group (2015d) Sustainable Palm Oil Manifesto. http://www.ioigroup.com/content/S/S_PalmOil
- IOI Group (2015e) Berita IOI Issue 65, Jan-Mar 2015. <http://www.ioigroup.com/Content/NEWS/PDF/BeritaIOI/Issue65.pdf>
- IOI Loders Croklaan (2014) Global partnership for IOI Loders Croklaan and Unilever. <http://europe.ioiloders.com/news/global-partnership-for-ioi-loders-croklaan-and-unilever>
- IOI Loders Croklaan (2015) IOI Loders Croklaan North America staff Mark Weyland (Product Manager) to Greenpeace staff Ivy Schlegel and Rolf Skar, private conversation, San Francisco, January 2015
- Jacobson P (2015) Jokowi turning over a new leaf for Indonesia on haze but details still foggy. Mongabay Environmental News. <http://news.mongabay.com/2015/11/jokowi-turning-over-a-new-leaf-for-indonesia-on-haze-but-details-still-foggy/>
- Jong HN (2015) Govt opposes zero-deforestation pledge by palm oil firms. The Jakarta Post. <http://www.thejakartapost.com/news/2015/08/29/govt-opposes-zero-deforestation-pledge-palm-oil-firms.html>
- Koswaraputra D (2015) Jokowi calls for peatland moratorium after 10 killed by haze. <http://www.thejakartapost.com/news/2015/10/23/jokowi-calls-peatland-moratorium-after-10-killed-haze.html>
- Laoli N (2015) Kemtan: Lahan gambut terbakar untuk pertanian. Kontan.co.id. <http://industri.kontan.co.id/news/kemtan-lahan-gambut-terbakar-untuk-pertanian>
- Margono BA, Potapov PV, Turubanova S, et al (2014) Primary forest cover loss in Indonesia over 2000-2012. Nature Climate Change. doi: 10.1038/nclimate2277
- Meijaard E, Nijman V, Supriatna J (2008) Nasalis larvatus. The IUCN Red List of Threatened Species 2008. <http://www.iucnredlist.org/details/14352/0>
- Ministry of Agriculture (2011) Peta lahan gambut Indonesia edisi Desember 2011 / Map of Indonesia's peatland, December 2011 edition. http://bbsdlp.litbang.pertanian.go.id/index.php?option=com_phocadownload&view=category&id=32:peta-lahan-gambut-indonesia&Itemid=18
- Ministry of Agriculture (2014) Daftar perusahaan perkebunan penerima izin usaha perkebunan (IUP-B, IUP-P, dan IUP), provinsi Kalimantan Barat / Business license (IUP) list for plantation companies in West Kalimantan. Accessed 7 September 2015. <http://ditjenbun.pertanian.go.id/pascapanen/tinymcepuk/gambar/file/Kalbar.pdf>
- Ministry of Environment and Forestry (2014) Deforestasi Indonesia tahun 2012-2013 / Deforestation in Indonesia in 2012-2013
- Ministry of Environment and Forestry (2015a) S.661/Menlhk-Setjen/Rokum/2015, Instructions for peat management
- Ministry of Environment and Forestry (2015b) Peta indikatif

- penundaan pemberian izin baru revisi VIII / Moratorium map on new concessions, 8th revision. <http://webgis.dephut.go.id:8080/kemenhut/index.php/id/peta/pippib>
- Ministry of Forestry (2011a) Ministerial Decree no. SK.292/Menhut-II/2011 31 May 2011. http://www.dephut.go.id/uploads/files/Kalimantan%20Tengah_SK%20292%20Thn%202011.pdf
- Ministry of Forestry (2012a) Menhut menetapkan hasil revisi III atas peta indikatif penundaan pemberian izin baru. Online news release. <http://www.forda-mof.org/index.php/berita/post/1175>
- Ministry of Forestry (2013a) Buku basis data spasial kehutanan 2013 / Forest spatial database book 2013. <http://bit.ly/20GQLnH>
- Ministry of Forestry (2013b) Ministerial Decree no. SK.24/IV-SET/2013
- Ministry of Forestry (2013c) Peta penutupan lahan Indonesia tahun 2011 / Landcover map 2011. Direktorat Jenderal Planologi Kehutanan / Directorate General of Forest Planning. Provided by the Ministry to Greenpeace Southeast Asia in April 2013. <http://appgis.dephut.go.id/appgis/petapl2011.html>
- Ministry of Forestry (2013d) Ministerial Decree no. SK.2796/Menhut-VII/IPSDH/2013. http://appgis.dephut.go.id/appgis/moratorium_rev4/SK%202796_Menhut_VII_IPSDH_2013.pdf
- Ministry of Forestry (2013e) Menteri Kehutanan menetapkan hasil revisi V atas peta indikatif penundaan izin baru. Online news release. <http://www.dephut.net/index.php/news/details/9406>
- Ministry of Forestry (2014a) Penutupan lahan 2013 / Landcover 2013. WebGIS service, accessed September 2015. http://webgis.dephut.go.id/ArcGIS/rest/services/Penutupan_Lahan_2013/MapServer
- Ministry of Forestry (2014b) Statistik kehutanan Indonesia tahun 2012 / Forestry statistics Indonesia 2012. <http://www.dephut.go.id/index.php/news/details/9545>
- Ministry of Forestry (2014c) Statistik Kementerian Kehutanan tahun 2013 / Ministry of Forestry statistics 2013
- Ministry of Forestry (2014d) Rekalkulasi penutupan lahan Indonesia tahun 2013 / Recalculation of landcover Indonesia 2013
- Ministry of Forestry (2014e) Peta indikatif arahan pemanfaatan hutan pada kawasan hutan produksi yang tidak dibebani Izin untuk usaha pemanfaatan hasil hutan kayu / Industrial forestry concession map, indicating areas for future development, 2014. Badan Penelitian, Pengembangan dan Inovasi / Research, Development and Innovation Agency. <http://www.forda-mof.org/index.php/berita/post/1913>
- Mongabay Haze Beat (2015) Jokowi pledges Indonesia peatland "revitalization" to stop the burning. Mongabay Environmental News. <http://news.mongabay.com/2015/10/jokowi-pledges-greater-indonesia-peatland-revitalization-no-legal-breakthrough-yet/>
- NASA (2015) Fire Information for Resource Management System (FIRMS). <https://earthdata.nasa.gov/earth-observation-data/near-real-time/firms>
- Nugroho SP (2015) 10 tewas, 503 ribu jiwa ISPA, dan 43 juta jiwa terpapar asap. Badan Nasional Penanggulangan Bencana. <http://www.bnpb.go.id/berita/2678/10-tewas-503-ribu-jiwa-ispa-dan-43-juta-jiwa-terpapar-asap>
- Otto B (2015) Smoky haze costing Southeast Asia billions of dollars. The Wall Street Journal. <http://www.wsj.com/articles/smoky-haze-envelops-southeast-asia-1444389741>
- Pemerintah Kabupaten Kotawaringin Barat (2013) Notulen rapat 26 November 2013.
- Priatmojo D, Angelia M (2015) Pemerintah akan bentuk Badan Restorasi Gambut. VIVA.co.id. <http://nasional.news.viva.co.id/news/read/698912-pemerintah-akan-bentuk-badan-restorasi-gambut>
- PT ASMR (2013) Surat pernyataan 28 November 2013
- PT Ayamaru Sertifikasi (2013a) PT Mayangkara Tanaman Industri - Pengumuman hasil pelaksanaan verifikasi legalitas kayu / Announcement of the results of timber legality verification. <https://ayamarucertification.wordpress.com/pengumuman/3hasil-pelaksanaan-audit-lapangan/hasil-vlk/pt-mayangkara-tanaman-industri/>
- PT Ayamaru Sertifikasi (2013b) PT Wana Subur Lestari - Pengumuman hasil pelaksanaan audit verifikasi legalitas kayu / Announcement of the results of the audit of timber legality verification. <https://ayamarucertification.wordpress.com/pengumuman/3hasil-pelaksanaan-audit-lapangan/hasil-vlk/pt-wana-subur-lestari/>
- PT Ayamaru Sertifikasi (2014) PT Sari Bumi Kusuma - Pengumuman hasil pelaksanaan audit verifikasi legalitas kayu / Announcement of the results of the audit of timber legality verification. http://www.ayamarusertifikasi.co.id/downloads/files/1.%20PENGUMUMAN%20HASIL%20PHPL%20PT.%20SARI%20BUMI%20KUSUMA_KALBAR.pdf
- PT Ayamaru Sertifikasi (2015) PT Kusuma Alam Sari - Pengumuman hasil pelaksanaan audit verifikasi legalitas kayu / Announcement of the results of the audit of timber legality verification. http://www.ayamarusertifikasi.co.id/downloads/files/dua%20ribu%20lima%20belas_/Februari/HASIL%20AUDIT%20VLK%20IPK%20PT.%20KUSUMA%20LAMA%20SARI.pdf
- PT Wilmar Cahaya Indonesia (2014) Catatan atas laporan keuangan untuk periode enam bulan yang berakhir pada tanggal 30 juni 2014. http://www.idx.co.id/Portals/0/StaticData/NewsAndAnnouncement/ANNOUNCEMENTSTOCK/From_EREP/201408/c85302d1c0_25a877d9d1.pdf

- Rondonuwu O (2011) Indonesia finally signs forest clearing moratorium. Reuters. <http://www.reuters.com/article/2011/05/19/indonesia-environment-moratorium-idUSJKB00452920110519>
- RSPO (2011) RSPO supply chain systems overview. http://www.rspo.org/files/docs/rspo_fact_sheets_systems.pdf
- RSPO (2013a) Letter of Ravin Krishnan, RSPO Secretariat Complaints Coordinator, to Michael Raben, Bumitama Agri Ltd, 10 October 2013. http://www.rspo.org/file/Letter_PT_Andalan_Sukses_Makmur.pdf
- RSPO (2013b) News Release: Strengthening of commitments to sustainable palm oil by stakeholders at close of world's largest palm oil meeting 14 November 2013 http://www.rspo.org/file/Final_Press_Release-RT11GA10_Closing-14_Nov_2013.pdf
- RSPO (2014) RSPO trademark introduction - August market performance. http://www.rspo.org/file/RSPO_MarketPerformance-August14.pdf
- RSPO (2015a) How RSPO certification works. Roundtable on Sustainable Palm Oil - Certification. Viewed 16 November 2015. <http://www.rspo.org/certification/how-rspo-certification-works>
- RSPO (2015b) Letter of Amalia Falah Alam, RSPO Indonesia Complaint Coordinator, to Sian Choo Lim, PT BGA, 14 August 2014
- RSPO (2015c) RSPO Next: Taking the Principles & Criteria to the next level. Roundtable on Sustainable Palm Oil News & Events. <http://www.rspo.org/news-and-events/news/rspo-next-taking-the-principles-and-criteria-to-the-next-level>
- RSPO INA-NIWG (2008) National interpretation of RSPO principles and criteria for sustainable palm oil production: Republic of Indonesia, May 2008. http://www.rspo.org/sites/default/files/NI_INANIWG_Final_English_May2008_ver01.pdf
- Saputri DS (2015) Atasi kebakaran hutan, pemerintah bentuk Badan Restorasi Gambut. Republika Online. <http://nasional.republika.co.id/berita/nasional/umum/15/11/13/nxqo5q354-atasi-kebakaran-hutan-pemerintah-bentuk-badan-restorasi-gambut>
- Sari Bumi Kusuma (2015) 'Sustainable Forest Management' <http://www.saribumikusuma.net/>
- Sarwanto A (2015) Pemerintah cabut dua izin perusahaan terkait kebakaran hutan. CNN Indonesia. <http://www.cnnindonesia.com/nasional/20151019170657-20-85862/pemerintah-cabut-dua-izin-perusahaan-terkait-kebakaran-hutan/>
- Saturi S (2015) Nekat beri Izin dan buka lahan gambut bakal Kena sanksi. Mongabay. <http://www.mongabay.co.id/2015/11/12/nekat-beri-izin-dan-buka-lahan-gambut-bakal-kena-sanksi/>
- Singleton I, Wich SA, Griffiths S (2008) Pongo abelii. The IUCN Red List of Threatened Species 2008. <http://www.iucnredlist.org/details/39780/0>
- Sumatran Orangutan Society (2013) Resolution 6g: Transparency in plantation concession boundaries. RSPO.org. <http://www.rspo.org/file/resolutions/GA10-Resolution6g.pdf>
- Sumitomo (2009) Large-scale commercial forest plantation project slated in Indonesia - Joint-venture formed with work to start on 40,000 ha tract and eventually expand to 280,000 ha. Sumitomo Forestry Co Ltd. <http://sfc.jp/english/pdf/20091029.pdf>
- Taylor M (2015) Big palm oil's pledge to preserve forests vexes Indonesia. Reuters. <http://www.reuters.com/article/2015/10/07/us-indonesia-forests-insight-idUSKCN0S02SX20151007>
- Tempo.co (2015a) Peatland restoration prevents forest fires, says Jusuf Kalla. <http://en.tempo.co/read/news/2015/11/01/055714941/Peatland-Restoration-Prevents-Forest-Fires-says-Jusuf-Kalla>
- Tempo.co (2015b) VP Kalla: Restore Indonesia's peatlands in 5 years. <http://en.tempo.co/read/news/2015/11/13/055718499/VP-Kalla-Restore-Indonesias-Peatlands-in-5-Years>
- The Hershey Company (2014) Palm oil sourcing. http://mms.businesswire.com/media/20150421006186/en/463809/5/2218457_Palm_Oil_Traceability_-_042115.jpg?download=1
- UKP4 (2010) Indonesia selects Central Kalimantan as REDD+ pilot province. <http://www.orangutan.org.uk/current-news/news-archive/243-indonesia-selects-central-kalimantan-as-redd-pilot-province>
- UNESCO (2015) Tanjung Puting. UNESCO Ecological Sciences for Sustainable Development. <http://www.unesco.org/new/en/natural-sciences/environment/ecological-sciences/biosphere-reserves/asia-and-the-pacific/indonesia/tanjung-puting/>
- USDA Foreign Agricultural Service (2015) Table 11: Palm oil: World supply and distribution. <http://apps.fas.usda.gov/psdonline/psdReport>.



10 September 2013
2°49'46.23"S, 111°48'05.42"E
A spider in Tanjung Puting National Park,
Central Kalimantan.
© Infansasti/Greenpeace

GREENPEACE

November 2015

Published by Greenpeace International
Ottho Heldringstraat 5
1066 AZ Amsterdam
The Netherlands

enquiries@greenpeace.org
www.greenpeace.org/underfire

