

Media briefing on Greenpeace International's investigation of how P&G's palm oil suppliers are pushing Sumatran tigers and orang-utans closer to extinction

February 2014

Procter & Gamble buys palm oil from some of the world's largest palm oil processors. As a result of rainforest destruction by Procter & Gamble's suppliers, household brands containing palm oil, such as Head & Shoulders shampoo and Gillette shaving gel, are contributing to climate change, key tropical biodiversity loss and social deprivation.

Greenpeace International investigations show how – through the trade in palm oil – Procter & Gamble and a host of other companies are aiding and abetting the clearance of the Bornean orang-utan's rainforest habitat and that of the even scarcer, critically endangered Sumatran tiger. They have also been complicit in peatland destruction and depriving communities of their land and livelihoods.

Procter & Gamble and other household brands must recognise the true costs of irresponsible palm oil production. They need to ensure that their palm oil supply makes a genuine contribution to Indonesia's development, rather than destroying the future for its people, its wildlife and the global climate on which we all depend.

Procter & Gamble should join other leading industry players in making an immediate commitment to implement a No Deforestation Policy.

# Palm Oil Sector Overview



A remote camera captures a Sumatran tiger hunting. ©Winter/National Geographic/Getty Images

# Profile: Indonesia's palm oil sector and international trade

#### Palm oil: a key global commodity

Palm oil is the world's most important vegetable oil, accounting for almost 40% of global vegetable oil production in 2012–13.<sup>1</sup> As well as being important as a cooking oil, palm oil is a key ingredient in many processed foods. Chemicals derived from palm oil and palm kernel oil (derived from the kernel of the same fruit) are used extensively in cosmetics and products such as soap, shampoo and laundry detergents. Increasingly, palm oil is also being refined into biodiesel, accounting for about 10% of global use 2013.<sup>2</sup> Indonesia is the world's largest producer of crude palm oil, accounting for almost half of global output in 2012.<sup>3</sup>

#### Palm oil: a driver of deforestation in Indonesia

Palm oil has many uses and many benefits, and Greenpeace recognises this; but palm oil production can also have unjustifiable costs.

The palm oil sector is currently the greatest single driver of deforestation in Indonesia, accounting for about a quarter of all forest loss – some 150,000ha every year.<sup>4</sup> The costs of this irresponsible, unregulated palm oil production include the destruction of the rainforests and carbon-rich peatlands that are the lifeblood of endangered species such as the Sumatran tiger and Bornean and Sumatran orang-utan.

Today, Sumatran tigers are classed as 'critically endangered' by the IUCN.<sup>5</sup> As few as 400 tigers are thought to remain in the rainforests of Sumatra,<sup>6</sup> which are vanishing at a staggering rate – a quarter of a million hectares every year.<sup>7</sup> Expansion of oil palm and pulpwood plantations was responsible for nearly two-thirds of the destruction of tiger habitat between mid-2009 and mid-2011.<sup>8</sup>

Both species of orang-utan are endangered.<sup>9</sup> Five years ago there were estimated to be only around 6,500 Sumatran orang-utans and 55,000 Bornean orang-utans in the wild, 40,000 of them in Kalimantan, the Indonesian portion of the island of Borneo.<sup>10</sup> The International Union for Conservation of Nature (IUCN) recognises habitat loss and fragmentation, of which oil palm plantation expansion is a key cause, as a major threat to their survival.<sup>11</sup> In Kalimantan, 141,000ha of forested orang-utan habitat were

cleared between mid-2009 and mid-2011, the most recent period for which official Indonesian government data are available; over a third of this clearance was for oil palm plantations.<sup>12</sup>

# A sector on the brink of transformation: responsible production, trade and use

Industry leaders in the palm oil sector are realising the need to move beyond Roundtable on Sustainable Palm Oil (RSPO) standards to remove deforestation, peatland destruction and social conflict from their supply chains.

Following commitments by Golden Agri-Resources (GAR) in 2011, the launch of the Palm Oil Innovation Group (POIG)<sup>13</sup> in November 2013 and the success of the Dosan smallholder community scheme in Riau,<sup>14</sup> momentum for transformation really started to build in December 2013 when international agribusiness group Wilmar, accounting for more than one-third of global palm oil trade, made a public commitment to implement a No Deforestation Policy. Responsible consumer companies have been keen to support this shift, with No Deforestation commitments coming from L'Oréal, Unilever,<sup>15</sup> Ferrero<sup>16</sup> and Nestlé<sup>17</sup> and recent announcements being made by US-based food manufacturer Kellogg and Belgian-based Delhaize. These and other responsible users support responsible producers and are putting in place mechanisms to trace the origins of the oil that goes into their products.

These are all strong indicators that something is changing in the palm oil industry, and that finally the industry can move away from a bad reputation fuelled by decades of forest destruction.

However, the reaction from the rest of the industry to those instigating change is a cause for concern. Indonesian producers have met the progress shown by GAR and Wilmar with stony silence. By contrast, the Malaysian industry is actively pushing back in the press. It claims that Wilmar's new commitment will undermine the industry. Leading palm oil producers like Sime Darby, Musim Mas and IOI need to nail their colours to the mast and make public commitments to implement No Deforestation Policies.

#### Time to transform the palm oil sector

Rather than destroying the future for Indonesia's people, its wildlife and the climate on which we all depend, Procter & Gamble, other consumer companies and their suppliers must use their positions as leading global corporations and significant palm oil users or traders to make a genuine contribution to Indonesia's development. The first step is an immediate commitment to sourcing only traceable, responsibly produced palm oil that is free from deforestation.

Specifically, Greenpeace demands that global corporations including Procter & Gamble free their brands from dirty palm oil from companies implicated in the unfolding disaster befalling Indonesia's tigers and orang-utans. We challenge producers and traders alike to follow the lead that Wilmar has taken and end the trade of dirty palm oil into global markets.

#### Demands

All stakeholders in the Indonesian palm oil industry need to take action now to stop the industry destroying vital rainforest, jeopardising the future of critically endangered wildlife, dispossessing local communities and fuelling climate change. Greenpeace's investigations provide numerous case studies of impacts that the industry must put behind it. Other stakeholders, from governments to end users, must show that they will no longer tolerate such destruction. As the world's leading producer, Indonesia must seize the opportunity to play a leading role in turning the sector around. Greenpeace calls upon stakeholders in the global palm oil, pulp and other commodity industries to take the following urgent steps to end deforestation and improve governance and transparency:

# 1. Plantation sectors: stop destroying Indonesian rainforest, including wildlife habitat.

- Implement an immediate moratorium on plantation development in all concessions in which you have interests until forests and peatlands are identified and protected through a Forest Conservation Policy, which includes respect for the rights of local communities.<sup>18</sup>
- Support landscape-level measures to protect and enhance ecologically important sites, including habitat for tigers, orang-utans and other endangered species.

# 2. Traders: don't deal with dirty producers; support progressive companies and responsible production by smallholders.

- Suspend trade with any producer involved in deforestation, peatland clearance or human rights violations.
- Support producers with clear no-deforestation policies like those adopted by the members of the Palm Oil Innovation Group (POIG).<sup>19</sup>

# 3. Corporate consumers: make sure your supply chains are tiger and orang-utan friendly.

- Commit to ensuring that your supply of commodities including palm oil, paper and packaging are deforestation-free.
- Start by ensuring full traceability in your supply chains and supporting companies that commit to clear no-deforestation policies such as those adopted by the members of POIG.
- 4. Financial sector: don't bankroll deforestation.
- Refuse to provide financial support or services to palm oil and other commodity companies with links to deforestation.
- 5. Indonesian government: give habitat protection some teeth.
- Ensure strong governance, prioritising forest protection and rewarding industry leadership.
- Enforce the moratorium and ensure that new oil palm, pulp and other plantations are developed on low-carbon land.
- Enact additional laws and policies to guarantee the full protection of all forests and peatlands, including those within concession boundaries.
- Review existing concession permits. Crack down on illegality, including failure to follow due process in licensing and failure to respect peatland regulations or prohibition of burning. Revoke the concessions of persistent offenders as well as those obtained in violation of legislation.
- Develop and implement a government plan for protection and rehabilitation of forest and peatland landscapes and wildlife corridors.

- Create a national public register of all concession types including palm oil, pulp and coal and publish the One Map.<sup>20</sup> Develop an independent national deforestation monitoring system to bring greater transparency to the process, ensure effective monitoring and enforcement, and empower local communities and other stakeholders. This would enable stakeholders to monitor the impact of operations, expose and make accountable those responsible for environmental destruction such as fires, and improve governance by enhancing enforcement efforts against those responsible for violations.
- Develop a database of degraded lands<sup>21</sup> to allow for an effective land swap process, enabling legal concessions in forest and peatland areas to be exchanged for concessions in low carbon value areas unencumbered with social, environmental or economic concerns.
- Reward industry leadership. Incentivise improved productivity on existing plantations (for example, through tax incentives).

### Profile Corporate Consumer: Procter & Gamble

Base: USA Membership: CGF, RSPO



#### Summary

Greenpeace investigations link Procter & Gamble (P&G) to companies involved in deforestation, including clearance of tiger and orang-utan habitat, peatland destruction, fires and social conflict. Its suppliers have bases in high-risk regions of Indonesia including Riau, West and Central Kalimantan, and Papua, as well as Sarawak in Malaysia. Increasingly, their operations are expanding to other high-risk regions, including Papua New Guinea (PNG) and Africa.

#### Overview

Procter & Gamble is one of the world's biggest producers of cosmetics, personal care products and household detergents. Procter & Gamble products are available in more than 180 countries, and the company claims to serve 4.8 billion customers worldwide.<sup>22</sup>

India and China are increasingly important markets for P&G. In 2012 it was reported to be building its largest manufacturing plant in India at Mahbubnagar, Hyderabad, due to come on line in 2014 to produce laundry, personal and baby care products.<sup>23</sup>

According to a company response to a 2010 BBC questionnaire, 'derivatives and byproducts of palm oil are found in a variety of our beauty and household care products such as detergents, shampoos, hand and body cleansers, bar soaps and colour cosmetic products'.<sup>24</sup>

#### Palm oil use

Palm oil consumption: Procter & Gamble used a total of 462,000t of palm oil products in 2012–13 (352,000t of palm kernel oil [PKO], 20,000t of crude palm oil [CPO] and 90,000t of other palm oil derivatives), of which less than 10% (38,000t) was sourced via Mass Balance or Book and Claim (GreenPalm).<sup>25</sup>

Products using palm oil: Procter & Gamble products known to contain palm oil derivatives in Europe and North America include Pampers products; detergents such as Ariel, Dash, Lenor, Ace, Tide, Dawn and Gain; Wella and Head & Shoulders hair products; and Gillette and Mach 3 shaving gels.

#### Environmental position (strengths and weaknesses)

According to its 2012 sustainability report, Procter & Gamble has committed to the Consumer Goods Forum's pledge to achieve zero net deforestation within its business by 2020. To help achieve this, it has a 2015 target to source all palm oil 'from responsible and sustainable sources' (as recommended by the RSPO).<sup>20</sup>

The document does not specify what sources of supply are deemed to fulfil these criteria.

The company's submissions to the RSPO – including its 2012 RSPO Annual Communication of Progress (ACOP) report – are minimally informative and add little specific to understanding of its commitments and targets, save that the ACOP report mentions an interim target 'to source 60Kt of certified palm derivatives by June 2013' and an intention to continue pressing its suppliers for certified oleochemicals and to buy more Book and Claim (GreenPalm) certificates in 2012–13.<sup>27</sup> The company failed to reach this objective, buying no certified CPO and only 38,000t of certified PKO – less than 10% of its overall consumption – in the 2012–13 reporting period.<sup>28</sup>

#### Problematic supply chain

#### Issues to which company is linked

Procter & Gamble is known to source palm oil and palm oil products from a number of major suppliers linked directly or through third-party suppliers to forest clearance, tiger or orang-utan habitat destruction, development on peatland or use of fire to clear land, and social conflict.

#### Links to high-risk regions

Procter & Gamble's suppliers have bases in high-risk regions of Indonesia including Riau, West and Central Kalimantan, and Papua. Increasingly their operations are expanding to other high-risk regions, including PNG and Africa.

#### Upstream and downstream trade links to other dirty suppliers

Problematic producers and traders in Procter & Gamble's supply chain include, among others, BW Plantations,<sup>29</sup> Kuala Lumpur Kepong Berhad (KLK)<sup>30</sup> and Musim Mas.<sup>31</sup> Greenpeace investigations identify deforestation or other problematic issues linked to these suppliers either directly or through third-party suppliers.



# The Dirty Palm Oil Producers Overview



## Profile Company 1: BW Plantation

Company: PT BW Plantation Tbk Headquarters: Indonesia Stocklisted: Indonesia Stock Exchange RSPO member: Yes

#### Summary

Greenpeace investigations link BW Plantation to recent clearance of orang-utan habitat. One of its operations is also linked to a police investigation of the death and burial of numerous orang-utans next to the Tanjung Puting National Park, Central Kalimantan.

#### Overview

Jakarta-based PT BW Plantation Tbk was established in  $2000.^{32}$  BW Plantation is controlled by the Widodo family, which holds nearly 40% of its shares, with the remainder held by institutional and private investors.<sup>33</sup> It has been a member of the RSPO since 2008.<sup>34</sup>

According to its ACOP 2013 Progress Report, BW Plantation operates in West, Central and East Kalimantan. It has eight plantation subsidiaries and operates three mills. Its landbank covers 83,410ha, of which 59,677ha are planted and 26,570ha mature, with an additional 6,726ha of Plasma scheme smallholder plantations.<sup>35</sup>

#### Sectors/PO output

#### Plantation operation and milling of fresh fruit bunches (FFB).<sup>36</sup>

According to the company's ACOP 2013 Progress Report, its total annual production in 2012 was 125,196 tonnes of CPO and 21,645 tonnes of palm kernels: The ACOP 2013 Progress Reports give no information on how much CPO/PKO was certified, though BW claims to sell RSPO-certified products via Book and Claim.<sup>37</sup> 110,711 tonnes of CPO were produced in 2011–12, none of which was certified.<sup>38</sup>

June 2013

1°9'57.46"N 100°49'33.19"E

Open flames on dry tree branches in an area of recently deforested peatland in the PT Rokan Adiraya Plantation oil palm concession in Riau. ©lfansasti/Greenpeace

#### Environmental position (strengths and weaknesses)

According to BW Plantation's entry on the RSPO website, it 'would like to be recognized as a producer of sustainable palm oil' and 'has been implementing best practices and environmental responsibility that will enhance nature and biodiversity', including a 'Zero burn policy'.<sup>39</sup> Beyond confirming the existence of the no-burn policy and a policy to minimise pesticide use,<sup>40</sup> the company's most recent annual report offers no specific information about environmental policies relating to the company's plantation activities. BW Plantation proposed to develop and implement a high conservation value (HCV) management plan during the course of 2012–13 for one of its concessions.<sup>41</sup>

#### Progress toward ensuring palm oil is tiger and forest friendly (indicators)

#### **Forest protection**

According to its ACOP 2013 Progress Report, BW Plantation aims to 'establish regular monitoring to HCV area',<sup>42</sup> though no concessions are yet certified, nor has the company made its HCV assessment publicly available. It appears to have no policies with regard to deforestation or peatland clearance.

#### **Traceable supply**

None, as no estates yet certified.

#### Timelines

According to its ACOP 2013 Progress Report, BW Plantation aims to have its first plantation and mill RSPO-certified in 2014 and to achieve certification of all estates and mills by 2018. It aims to achieve 100% RSPO certification of associated smallholders and outgrowers, and independently sourced FFB, by 2020.<sup>43</sup>

#### Transparency

BW Plantation submitted its last two RSPO ACOP reports, but some key information is apparently lacking, eg on third-party FFB supplies (see below).

Maps of its concessions do not appear to have been made publicly available.

#### Problematic supply chain

#### Issues to which company is linked

Since March 2013, the remains of several orang-utans have been documented by Orangutan Foundation International (OFI) and Friends of National Parks Foundation (FNPF) in different locations along the border between Tanjung Puting National Park in Central Kalimantan and an oil palm concession owned by BW Plantation, as well as another owned by a Bumitama Group company.<sup>44</sup> In August 2013, a Greenpeace International investigation with FNPF documented an orang-utan skull that had been buried in a shallow grave just a few metres away from the edge of the BW concession and inside an area allocated to Bumitama.<sup>45</sup> Further remains have been found within BW Plantation's land as recently as November 2013.<sup>46</sup>

The incidents are still under investigation by the provincial police, and no firm conclusions can be drawn as to who was responsible until the authorities make their conclusions known. Nevertheless, it is disturbing that BW Plantation has made no public statement of concern. Greenpeace wrote to BW Plantation in October 2013 with the then-available evidence, requesting clarification, but the company has not yet responded.

#### Links to high-risk regions

The group operates in Central Kalimantan.

#### Upstream and downstream trade links to other dirty suppliers

Although BW Plantation states in its 2013 ACOP Progress Report that it aims to have 100% of its independently sourced FFB (ie not from associated smallholders or outgrowers) RSPO-certified by 2020, elsewhere in the report (question 7) it does not admit to purchasing any such third-party FFB at all.<sup>47</sup>

BW Plantation supplies Asian Agri, part of the RGE group, through PT Asian Agro Agung Jaya<sup>48</sup> (its second-largest customer) and Wilmar.<sup>49</sup> The RGE group is itself a supplier to Cargill.<sup>50</sup> Wilmar accounted for over 30% of BW Plantation's net sales in the first half of 2013.<sup>51</sup> Through these connections, BW Plantation is an indirect supplier of Procter & Gamble.

#### **Financiers**

JPMorgan Chase Bank NA Re Non-Treaty Clients has a 5.57% holding in BW Plantation.  $^{\mbox{\tiny 52}}$ 

## Case Study 1: Adhyaksa Dharma Satya

Concession location: Central Kalimantan Concession area: 5,466ha RSPO membership: Yes





#### Summary

PT Adhyaksa Dharma Satya (PT ADS) is linked to substantial deforestation of orang-utan habitat.

#### Impact assessment

#### **HCV** assessment

None available.

#### Mapping analysis

Almost the entire PT ADS concession is mapped as orang-utan habitat. However, since BW Plantation obtained the area in 2007, substantial areas (4,330ha, mostly orang-utan habitat) have been cleared. Mapping analysis reveals that further clearance of more than 40ha of orang-utan habitat took place between June and November 2013, though due to cloud cover the actual extent is hard to determine.

Today, less than 200ha of forest remain.

#### Field investigations: orang-utan habitat at risk

A Greenpeace investigation in June 2013 documented large-scale recent clearings in this concession, adjacent to areas the company cleared subsequently at some point between June and November 2013. According to staff, in one of the few isolated areas of forest remaining (the Sabira watershed), orang-utans could often be seen.

#### Links to sister case studies

Greenpeace investigations into BW Plantation have also documented cases at PT Bumi Langgeng Perdanatrada and PT Wana Catur Jaya Utama (both in Central Kalimantan).



January 2014

1°35 25.4 S 112°48 46.3 E

A large tree in BW Plantation's oil palm concession PT ADS at the border between recent plantation clearance and remaining forest. ©Greenpeace

> Procter & Gamb Dirty Secret

> > 12

# Case Study 2: Pt Bumi Langgeng Perdanatrada

Concession location: Central Kalimantan Concession area: 8,877ha RSPO membership: Yes, via BW Plantation







#### Summary

PT Bumi Langgeng Perdanatrada (PT BLP) is linked to an orang-utan 'graveyard',  $^{55}$  with remains of several orang-utans found on the edge of its oil palm plantation as recently as November 2013.  $^{56}$ 

#### Impact assessment

#### **HCV** assessment

None available.

#### Field investigations: Orang-utan habitat destruction and deaths

In August 2013, a Greenpeace International investigation with the Friends of National Parks Foundation exposed a crime scene inside an area adjacent to PT BLP and in an area allocated to Bumitama subsidiary PT Andalan Sukses Makmur. Here – within sight of the Tanjung Puting National Park boundary – investigators documented an orangutan skull that had been buried in a shallow grave.<sup>57</sup>

Since March 2013, the remains of several orang-utans have been documented by Orangutan Foundation International (OFI) and FNPF in different locations along the border between the two oil palm concessions. In a letter to government authorities requesting urgent intervention, the organisations describe the area as an orang-utan 'graveyard'.<sup>58</sup>

August 2013

Recovery of orang-utan remains by the BKSDA / Indonesian Nature Conservation Agency beside BW Plantation PT BLP near Tanjung Puting National Park in Central Kalimantan. ©Basuki / Friends of the National Park Foundation (FNPF)



In August 2013, the Balai Konservasi Sumber Daya Alam (BKSDA – the Nature Conservation Agency, part of Indonesia's Ministry of Forestry) recovered some orang-utan remains and delivered them to the police to investigate.<sup>59</sup> In late October, Greenpeace returned to the area and uncovered further remains.

Police investigations are now in process, and it is up to them to determine how these orang-utans died and who is responsible. However, the local NGOs that originally exposed the existence of this graveyard cite local community witness reports that the orang-utans buried here were 'murdered'.<sup>60</sup>

While no firm conclusions can be drawn until the authorities reach their judgment, it is nonetheless disturbing that such horrific incidents have been revealed to have taken place within or adjacent to the concessions of two RSPO members – BW Plantation and Bumitama – without those companies making public statements of concern. Recent requests by Greenpeace and journalists for information about the status of the police investigation have failed to obtain a satisfactory answer from officials.<sup>61</sup>

Greenpeace wrote to BW Plantation in October 2013 with the then-available evidence, requesting clarification. The company has not yet responded.

#### Links to sister case studies



24 June 2013

02°46'28.8"S 111°50'30.7"E

A Greenpeace investigation with FNPI documents an orang-utan skull beside an oil palm p,lantation owned by PT Bumi Langgeng Perdanatrada, a subsidiary of BW Plantation Group, near Tanjung Puting National Park in Central Kalimantan. ©Greenpeace

# Case Study 3: Wana Catur Jaya Utama

Concession location: Central Kalimantan Concession area: 9,490ha RSPO membership: Yes, via BW Plantation







#### Summary

PT Wana Catur Jaya Utama (PT WCJU) is linked to substantial deforestation of orang-utan habitat.

#### Impact assessment

#### **HCV** assessment

None available.

#### Mapping analysis

The heavily forested PT WCJU concession is almost entirely mapped as orang-utan habitat. However, since BW Plantation obtained the area (2007 or before<sup>63</sup>), substantial areas have been cleared. Mapping analysis reveals clearance since 2011, with a total of around 1,400ha of forest having been cleared by September 2013. The bulk of this seems to have been cleared in 2013, though due to cloud cover timelines and the precise extent are hard to determine.

Today, around 5,900ha of forest remain, primarily orang-utan habitat.

#### Field investigations: Orang-utan habitat at risk

A Greenpeace investigation in February 2014 documented ongoing forest clearance in this concession.

#### Links to sister case studies

Greenpeace investigations into BW Plantation have also documented cases at PT ADS and PT BLP.



February 2014

01°11'12.87''S 114°11'18.56''E

Recently cleared and planted land in the BW Plantation oil palm concession PT WCJU. ©Greenpeace



# Profile Company 2: Kuala Lumpur Kepong Berhad

#### Group: Kuala Lumpur Kepong Berhad Base: Malaysia RSPO member: Yes

#### Summary

Greenpeace investigations have linked KLK to deforestation, trade from high-risk regions including Riau, Kalimantan and Papua, and expansion in PNG and Africa.

#### Overview

**Malaysia's third-largest listed plantation company**,<sup>64</sup> **KLK** 'Started as a plantation company more than 100 years ago, **[and]** plantations (oil palm and rubber) still lead as KLK's core business activity. Through various strategic acquisitions and sound management, the Group's plantation land bank now stands close to 250,000 hectares spread across Malaysia (Peninsular and Sabah) and Indonesia (Belitung Island, Sumatra, Central and East Kalimantan). The Group has also made inroads into Papua New Guinea and Liberia with plans to develop oil palm plantations.<sup>765</sup>

According to the company's 2013 Annual Report, over 50% of KLK's total plantation area of nearly 200,000ha is in Indonesia.

Figures given in the company's RSPO ACOP 2013 Progress Report show a total licensed landbank of 251,326ha, of which 216,141ha are for oil palm cultivation and 10,114ha for conservation. Of this area, 197,310ha are said to be planted and 160,559ha mature.<sup>66</sup>

KLK also has an RSPO-certified oleochemicals subsidiary, KLK Oleo.<sup>67</sup> According to the company website, KLK operates two refineries that process CPO into refined, bleached and deodorised (RBD) palm oil, olein and stearin, and palm fatty acid distillate (PFAD).<sup>68</sup>

#### Sectors/PO output

Plantation, manufacturing (including oleochemicals and personal care products), retail and property development.<sup>69</sup>

According to the ACOP 2013 Progress Report, KLK's 2012–13 CPO output was 933,463 tonnes, of which 437,600 tonnes were RSPO-certified<sup>70</sup> – up from 690,233 tonnes and 271,445 tonnes respectively in 2011–12. <sup>71</sup> Output of palm kernel was 203,193 tonnes (70,173 tonnes certified) and PKO output was 91,436 tonnes (31,577 tonnes certified).<sup>72</sup>

KLK's subsidiary KL Kepong Oleomas of Malaysia is a regular supplier of oleochemicals to Procter & Gamble US.  $^{\rm 73}$ 

#### Environmental position (strengths and weaknesses)

Other than the stated intention of reducing the carbon footprint of its mills, KLK appears to have no palm oil–related environmental commitments beyond working toward RSPO certification.<sup>74</sup>

#### Progress toward ensuring palm oil is tiger and forest friendly (indicators)

#### **Forest protection**

No information.

#### **Traceable supply**

According to the company's RSPO ACOP 2013 Progress Report, 86,513ha out of a total planted area of 197,310ha have been RSPO-certified, as have 37 out of 72 management units, 9 out of 22 CPO mills and one of the two PKO crushing plants.<sup>75</sup> The business units certified are presumably mostly in Malaysia, as according to the company website 'KLK's entire operations in Malaysia have been certified in 2013'.<sup>76</sup>



Barely 10% of the large quantity of FFB purchased from third-party sources (ie not including Plasma scheme smallholders or outgrowers) in 2012–13 was certified: 100,395 out of 920,732 tonnes.<sup>77</sup> According to the 2013 ACOP report somewhat less than half of the company's 2012–13 CPO output (437,600 out of 933,463 tonnes) was certified, along with rather lower proportions of palm kernel and PKO (see above);<sup>78</sup> however, the company website claims the full certification of its Malaysian operations in 2013 as 'making available close to 575,000 mt of certified sustainable palm oil in the market'<sup>79</sup> – perhaps this is a projection for the following year.

According to its ACOP report, KLK uses all four RSPO supply chain options,<sup>80</sup> but in the absence of information on relative proportions it is not possible to say how much of its output is traceable.

#### Timelines

KLK aims to achieve certification of all mills, estates and third-party suppliers by 2015.<sup>81</sup> The 2013 ACOP report gives no timeline for the certification of third-party suppliers.

#### Transparency

KLK has submitted RSPO ACOP reports for a number of years, supplying a fair proportion of the information requested. However, the company's general view of transparency is rather discouraging: 'Unsolicited disclosure could be misconstrued by self-righteous parties to reprimand us of well intended deed instead of compliment.'<sup>82</sup>

The company does not make its concession boundaries publicly available, except for two concessions assessed under the RSPO criteria.  $^{\mbox{\tiny S3}}$ 

#### Problematic supply chain

#### Issues to which company is linked

In July 2013, Indonesian national police named KLK's PT Adei amongst several other concessions suspected of deliberately lighting forest fires.<sup>84</sup> In December 2013, Riau police detained a 'high ranking official at PT Adei Plantation'.<sup>85</sup> According to Tempo, a criminal case against PT Adei Plantation is with the Riau Regional Police and the Pekanbaru District Court and a civil case is with the Ministry of Environmental Affairs.<sup>86</sup>

Greenpeace mapping analysis of KLK concessions in East and Central Kalimantan indicate deforestation in 2013, including deforestation of orang-utan habitat.

In PNG KLK is involved in serious community conflicts that are the subject of a formal RSPO complaint,<sup>87</sup> and there is also an ongoing community dispute concerning plantations in Liberia in which KLK has recently acquired a controlling interest.<sup>88</sup>

#### Links to high-risk regions

The group trades palm oil from Riau. It also has operations in East and Central Kalimantan. Through third-party suppliers, it is linked to expansion into Papua. It is expanding in PNG and Africa.

#### Upstream and downstream trade links to other dirty suppliers

KLK supplies Procter & Gamble and other consumer companies both directly and indirectly.  $^{\mbox{\tiny 89}}$ 

#### Joint ventures

According to KLK's website, its 'operations have expanded through joint-ventures and acquisitions in Malaysia, the People's Republic of China and Europe, allowing the oleochemical division (ie KLK OLEO) to venture further downstream into products like methyl ester sulfonate, amines, biodiesel, fine chemicals and surfactants'.<sup>90</sup>

KLK is also developing an oil palm plantation joint venture (JV) in Liberia.91

#### Bank/shareholder/JV links

Principal bankers to KLK are Malayan Banking Berhad, HSBC Bank Malaysia Berhad, CIMB Bank Berhad and OCBC Bank (Malaysia) Berhad. $^{92}$ 

Norway's sovereign wealth fund sold investments in 23 palm producers, including KLK, in the first quarter of 2012, citing concerns over deforestation. $^{93}$ 

# Case Study 4: Karya Makur Abadi Estate li

Concession location: Central Kalimantan Concession area: 13,127ha RSPO membership: Yes, via KLK

# PT. Karya Makmur Abadi II





#### Summary

PT Karya Makur Abadi II (PT KMA II) is linked to deforestation

#### Impact assessment

#### **HCV** assessment

None available.

#### Mapping analysis

PT KMA II cleared up to 21ha in 2013. Due to cloud cover, the actual extent is hard to determine; at this point, only 45ha of forest remained in the concession. Nearly 1000ha were cleared in the two previous years.

#### **Field observations**

A Greenpeace investigation of PT KMA II in January 2014 documented active forest clearance in the immediate vicinity of mapped orang-utan habitat.



February 2014

1°59'29.62"S 112°28'23.91"E

Active clearance and oil palm plantation preparation in the KLK oil palm plantation PT KMA II in Central Kalimantan. ©Greenpeace

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### Case Study 5: Pt Jabontara Eka Karsa

Concession location: Central Kalimantan Concession area: 14,086ha RSPO membership: Yes, via KLK



#### Summary

Greenpeace investigations link PT Jabontara Eka Karsa (PT JEK) to deforestation.

#### Impact assessment

#### **HCV** assessment

None available.

#### **Mapping analysis**

PT JEK cleared up to 246ha in 2013. Due to cloud cover, the actual extent is hard to determine. Only ~3,500ha of forest remain in the concession. Nearly 8,500ha were cleared in the two previous years.

Some of the cleared areas, including orang-utan habitat, are outside the mapped boundaries for the concession; however, they are clearly part of the same industrial development. KLK has obtained all the necessary permits to develop a new 3,700ha concession, PT Anugrah Surya Mandiri (PT ASM), which borders PT JEK to the south.<sup>96</sup> Almost the entire concession area of PT ASM has been classified as forested in the 2011 Ministry of Forestry landcover map, with part of it being mapped as orang-utan habitat.

#### **Field observations**

A Greenpeace field investigation of PT JEK in February 2014 documented recent forest clearance.



Source: PT ASM (2011) 'Summary Report of SEIA and HCV Assessments of PT Anugrah Surya Mandiri', report to the RSPO



January 2014

1°14′58.65″N 118°13′29.79E

Recent clearance of mapped orang-utan habitat inside KLK's PT JEK oil palm development in East Kalimantan. ©Greenpeace

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# Profile Company 3: Musim Mas

Companies: PT Musim Mas / PT Agrowiratama / PT Intibenua Perkasatama / PT Wira Inno Mas / PT Indokarya Internusa / PT Megasurya Mas Group: Musim Mas Group Base: Indonesia RSPO member: Yes, individually

#### Summary

Greenpeace investigations link Musim Mas to deforestation, including destruction of orang-utan habitat, operations in and trade from high-risk regions including Riau and Kalimantan, and expansion into Papua.

#### Overview

Musim Mas is an integrated palm oil corporation and claims to own the world's largest palm oil refinery, as well as being among the biggest vegetable oil refiners and soap manufacturers in Indonesia.<sup>97</sup> Through PT Musim Mas, the group has been an RSPO member since 2004.<sup>98</sup>

According to its ACOP 2013 Progress Reports for its two plantation companies, PT Musim Mas and PT Agrowiratama, the group has a total landbank of 134,433ha in Sumatra and Kalimantan, of which 68,187ha is designated for oil palm cultivation and 13,319ha for conservation.

#### Sectors / PO output

Musim Mas's core business is palm oil cultivation and processing: it aims to be a fully integrated palm oil business and owns plantations, mills and crushing plants, refineries, and soap, margarine and oleochemical factories, as well as storage facilities and a land and sea transport fleet.<sup>99</sup>

According to the company's ACOP 2013 Progress Reports, the group's annual CPO production in 2012–13 was 618,750 tonnes, of which 404,381 tonnes were said to be RSPO-certified. The corresponding figures for palm kernel oil were 61,560 tonnes (49,846 tonnes certified) and FFB output was 2.25 million tonnes.<sup>100</sup>

The group's refineries  $^{\rm 101}$  processed a total of 1.44 million tonnes of crude palm oil and an additional 290,000 tonnes of palm kernel oil.  $^{\rm 102}$ 

#### Environmental position (strengths and weaknesses)

In a document dated 2007, Musim Mas claims to employ a 'zero burning technique' of land preparation, minimal use of pesticides, and treatment of effluent.<sup>103</sup> The company introduced a policy in 2010 to end development on peatland.<sup>104</sup>

#### Progress toward ensuring palm oil is tiger and forest friendly (indicators)

#### **Forest protection**

Musim Mas claims to have contributed to the WWF-led Tesso Nilo Elephant Flying Squad, which patrols settlements in the area of the Tesso Nilo National Park in Sumatra, and the Zoological Society of London Tiger Conservation Project.<sup>105</sup>

#### **Traceable supply**

According to the company's ACOP 2013 Progress Report, all of PT Musim Mas's planted concession area (including Plasma scheme plantations), both its CPO mills and its single palm kernel crushing plant are RSPO-certified.<sup>106</sup> Well over half of the CPO and PKO output declared by Musim Mas group in its ACOP 2013 Progress Report was also said to be certified (see above); but since the company uses all four RSPO supply chain options,<sup>107</sup> and no information is available as to the relative proportions of the four options, it is impossible to say how much of its certified CPO or PKO is currently traceable.

#### Timelines

All Musim Mas plantation estates are certified.

#### Problematic supply chain

#### Issues to which company is linked

Deforestation of orang-utan habitat.

#### Links to high-risk regions

Musim Mas is known to have obtained permits for two concessions in the north of Papua province<sup>108</sup> and to be in the process of obtaining permits for two more nearby in the Sarmi regency.<sup>109</sup> The combined area covers over 100,000ha. All concession areas are heavily forested, predominantly with primary forest.

#### Upstream and downstream trade links to other dirty suppliers

Musim Mas supplies Procter & Gamble directly.

## Case Study 6: GAP II

Concession location: Central Kalimantan Concession area: 10,770ha RSPO membership: Yes, via Musim Mas



#### Summary

PT Globalindo Alam Perkasa Estate II (PT GAP II) is linked to orang-utan habitat destruction.

#### Impact assessment

#### **HCV** assessment

None available for this concession.

#### Mapping analysis

Landsat analysis indicates that PT GAP II cleared up to 83ha in 2013; due to cloud cover, the actual extent is hard to determine. Nearly 2,600ha of forest appear to have been cleared in the two previous years, with as little as around 500ha remaining in December 2013.

#### **Field observations**

A Greenpeace investigation of PT GAP II in January 2014 documented recent clearance.

#### Links to sister case studies

Greenpeace investigations into Musim Mas have also documented cases at PT Multipersada Gatramegah in Central Kalimantan and other operations in North Papua.



January 2014

2°37'22.82"S 112°43'45.50"E

Recent clearance and oil palm plantation development in Musim Mas oil palm concession PT GAP II in Central Kalimantan. ©Greenpeace

# Case Study 7: PT Multipersada Gatramegah

Concession location: Central Kalimantan Concession area: 9,278ha RSPO membership: Yes, via Musim Mas

# PT. Multipersada Gatramegah



#### Summary

PT Multipersada Gatramegah (PT MPG) is linked to orang-utan habitat destruction.

#### Impact assessment

#### **HCV** assessment

HCV assessment for PT MPG found 'the presence of endangered species suck [sic] as: Sunda Pangolin (Manis javanica), Mullers Gibbon (Hylobates muelleri), Orangutan (Pongo pygmaeus)' and important wildlife corridors. The total identified HCV area covered 1,240ha, nearly 15% of the total licensed area (HGU) for the concession.<sup>111</sup>

#### Mapping analysis

Landsat analysis indicates that PT MPG cleared at least 62ha of forest in 2013,<sup>112</sup> including orang-utan habitat. Part of an identified HCV area also appears to have been cleared in this period. Due to cloud cover, the actual extent of deforestation in 2013 is hard to determine; at this point, about 2,870ha of forest remain in the concession. Nearly 700ha appear to have been cleared in the two previous years, including riparian HCV areas mapped in early 2012. The necessity of improvement of riparian HCV management had also been flagged by the concession's RSPO report submitted in late 2012.<sup>113</sup>

#### **Field observations**

A Greenpeace investigation of PT MPG in February 2014 documented ongoing forest clearance activities.

#### Links to sister case studies

Greenpeace investigations into Musim Mas have also documented cases at PT GAP II in Central Kalimantan and other operations in Papua.



February 2014

00°45′45.42°S 114°41′23.93°E

Active clearance and road development inside Musim Mas oil palm concession PT MPG in Central Kalimantan. ©Greenpeace

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## Case Study 8:

### Papua

#### Concession locations: Papua regencies of Sarmi and Kaureh Concession area: total of 106,000ha RSPO membership: Yes, via Musim Mas

#### Summary

Musim Mas is expanding into heavily forested areas of Papua.

It has received location permits for two concessions in the regency of Sarmi: PT Musim Mas (33,409ha) and PT Daya Indah Nusantara (29,910ha). In Kaureh regency, it has obtained all necessary permits for two concessions: PT Siringo Ringo (PT SR, 29,278ha) and PT Megasurya Mas (PT MSM, 13,389ha).

#### Impact assessment

#### Transparency (HCV assessment and other documents available)

RSPO assessment reports reveal the locations for PT MSM and PT SR, the two Kaureh concessions.

The locations of the concessions in Sarmi are not readily available.

#### **HCV** assessment

PT MSM and PT SR border the Mamberamo Foja wildlife conservation area. The HCV surveys of PT MSM and PT SR found the critically endangered golden-mantled tree kangaroo (Dendrolagus pulcherrimus), the endangered Cantor's giant softshell turtle (Pelochelys cantorii) and a palm cockatoo (Probosciger aterrimus), which is a CITES Appendix 1 species. Other vulnerable species included other tree kangaroos, the Northern Cassowary, Papuan Eagle, Victoria Crowned Pigeon and Pesquet's Parrot.<sup>114</sup> The surveys also identified peatland within the concessions, in keeping with the findings on Wetlands International maps.

No HCV assessment or other information is available for the two Sarmi concessions.

#### Mapping analysis

Mapping analysis based on Ministry of Forestry 2011 landcover maps shows that PT MSM and PT SR are heavily forested, with extensive overlap with primary forest.

The concession boundaries for the two Sarmi concessions are not available publicly. However, the regency is almost completely forested – much of it is primary forest.

A presidential moratorium, in place since 2011, bans the allocation of new concessions on primary forests. RSPO standards ban members from developing primary forest.

#### Links to sister case studies

Greenpeace investigations into Musim Mas have also documented cases at PT GAP II and PT MPG in Central Kalimantan.

# Profile Region 1: Riau

#### Summary

Riau holds 40% of Indonesia's peatland carbon, and about one-fifth of remaining forested Sumatran tiger habitat.<sup>115</sup> It is the largest palm oil producing province in Indonesia. Ongoing expansion of oil palm plantations is leading to massive environmental destruction and carbon emissions. Over 40% of Indonesia's palm oil is traded through Riau's port of Dumai.<sup>116</sup>

Few if any producers or traders operating in the province enforce strict No Deforestation policies across their entire supply chain, including third-party suppliers; only one trader – Wilmar – has made any commitment to ensure full traceability of its palm oil supply chain, which should mean traceability to plantation level.

Hence, companies purchasing untraceable palm oil through the port of Dumai are supporting producers whose operations are driving climate change and environmental devastation.



#### What's at stake: forest, peatland and tiger habitat

As of 2009, Riau had 2.4m ha of forest,<sup>117</sup> including 1.9m ha of forested Sumatran tiger habitat – about one-fifth of the total remaining.<sup>118</sup> The Sumatran tiger is critically endangered,<sup>119</sup> with as few as 400 thought to remain in the wild.<sup>120</sup>

Peatlands are one of the world's richest carbon stores. Riau is estimated to hold 40% of Indonesia's peatland carbon stores,<sup>121</sup> equivalent to more than a year's worth of global greenhouse gas emissions,<sup>122</sup> with peat reaching depths of 14 metres or more in some locations.<sup>123</sup>



#### Role of PO sector

Riau is the largest palm oil producing province in Indonesia, accounting for about onefifth of national oil palm plantation area<sup>124</sup> and two-fifths of exports in 2012.<sup>125</sup> The Riau port of Dumai is Indonesia's major hub for the international palm oil trade.

As of 2011, more than half of Riau's surviving forested tiger habitat was in convertible and production forest zones,<sup>126</sup> which are available for palm oil and pulp plantations: much of this has already been allocated.

Peatlands under plantation are drained to provide suitable conditions for palm (or acacia) trees. This causes significant carbon emissions – either slowly through decomposition or rapidly, as the dry peat becomes susceptible to deliberate or accidental fire. 85% of Indonesia's greenhouse gas emissions come from land-use activities, around half of this peat-related.<sup>127</sup>

#### Impact assessment

#### Mapping analysis

According to official Ministry of Forestry maps, Riau lost 230,000ha of forest in the period from mid-2009 to mid-2011.<sup>128</sup> Just over a fifth of this deforestation took place on mapped palm oil concessions;<sup>129</sup> this figure does not include extensive clearance by independent small-scale growers, who account for 40% of the country's oil palm plantation area.<sup>130</sup>

In the same two-year period, 10% of forested tiger habitat in Riau was destroyed. Habitat within palm oil concessions suffered particularly; nearly 90% of all forest cleared in oil palm concessions in Riau between 2009 and 2011 was tiger habitat.<sup>131</sup>

Much deforestation was on peatland; by 2011, only one-third of Riau's 4 million ha of peatland was forested.<sup>132</sup>

#### **Fires**

The widespread fires in Riau in June 2013, which led to blankets of haze reaching as far as Thailand, have been the most dramatic and visible sign of the carbon emissions from the destruction of Indonesia's peatlands.

Riau accounted for three-quarters of Indonesia's recorded fire 'hotspots' in the first half of 2013,<sup>133</sup> 90% of them on peatlands.

Riau

Dumai is the largest port of export for palm oil in Indonesia, accounting for about 40% of trade. @Aslund/Greenpeace CIFOR analysis of the June 2013 fires indicated that 80% of fires took place on small and medium-sized plantation holdings.<sup>134</sup>

Smallholders control 40% of oil palm plantation area in Indonesia,<sup>135</sup> and specifically in Riau.<sup>136</sup> They are important suppliers to international traders via agents, independent palm oil mills and mills attached to large industrial plantations. The sector must address the challenge of ensuring that independent supply comes from legal and responsibly managed plantations.

#### Dumai

The port of Dumai in Riau is the major hub for the international palm oil trade. In 2012, Dumai exported 9.6m tonnes of crude palm oil and its products,  $^{137}$  over 40% of Indonesia's total exports.  $^{138}$ 

While most of Dumai's palm oil exports are grown in Sumatra, the port also trans-ships some palm oil from Kalimantan and other regions, as many ports there cannot handle large international bulk carriers.<sup>139</sup>

#### Traders linked to operations in the region

Many traders operate from the main port of Dumai. These include Asian Agri,<sup>140</sup> Cargill, GAR, KLK and Musim Mas. Wilmar operates from its own port facility at Dumai-Pelintung.<sup>141</sup>

All of these traders are known to supply Procter & Gamble, directly or indirectly. Procter & Gamble is also known to have direct shipments of palm oil from Dumai through agents Kalmart Systems and Tradewich International.





#### June 2013

Trucks loaded with FFB drive through the haze in Rokan Hilir Regency. ©Ifansasti/Greenpeace

June 2013

1°9'57.42"N 100°51'13.14"E

Burnt oil palm trees in PT Rokan Adiraya Plantation. ©Ifansasti/Greenpeace

# Case Study 9: PT Rokan Adi Raya

Concession location: Riau Concession area: 10,500ha RSPO membership: No







#### Summary

PT Rokan Adi Raya (PT RAR)'s concession includes forested deep peat and tiger habitat, but has seen large-scale forest clearance and uncontrolled fires in 2013. There are also long-standing conflicts between the company and another operator as well as the local community.

Environmental position (strengths and weaknesses)

#### Progress toward ensuring palm oil is tiger and forest friendly (indicators)

#### **HCV** assessment

None is available.

#### Transparency (HCV assessment and other documents available)

Neither company ownership information nor final (HGU) concession boundaries are publicly available.

#### Impact assessment

#### Mapping analysis

The PT RAR concession sits within a tiger conservation landscape (TCL) – an identified ecosystem area of international importance that should provide high-value tiger habitat.<sup>142</sup> The concession contains extensive forested tiger habitat on peatland. Planting on peat over 3 metres deep is illegal, but maps indicate that in places the peat may reach depths of up to 4 metres.<sup>143</sup> Over half of the 4,400ha of forested tiger habitat within the concession in 2009 had been cleared by 2011.<sup>144</sup> Landsat mapping analysis shows that 1,825ha were cleared in 2013, and by the end of December 2013 just 419ha remained.

#### Fires

In June 2013, 151 fire hotspots were recorded within the concession.<sup>145</sup>

CIFOR satellite analysis<sup>146</sup> shows extensive burn scars covering much of the area that remained forested in the PT RAR concession as of 2011; FORMA data show that most of the burned areas were cleared of forest during 2011–2013, and CIFOR analysis links these areas to industrial development.

Greenpeace field investigations in June 2013 documented an excavator continuing construction of a drainage canal through the peatland within the concession even as fires raged around it.

#### **Problematic supply chain**

Plantation of oil palms on this concession only began within the last few years. Greenpeace has not identified any trade from this concession to CPO mills. The concession is indicative of the problems facing the sector, including traders operating out of Dumai that are heavily reliant on third-party supplies that may include harvests from operations like this.



June 2013

1°10'8.4"N 100°50'54.83"E

Smoke from smouldering fires obscures an excavator digging a peatland drainage canal in the PT Rokan Adiraya oil palm plantation near Sontang village in Rokan Hulu. ©lfansasti/ Greenpeace

# Case Study 10: Tesso Nilo

#### Summary

Encroachment by palm oil plantations into tiger conservation landscapes and protected areas continues, severely endangering the long-term health of the forest. With very limited exception, encroachment is illegal – yet the harvest from these plantations has been making its way into the international palm oil trade.

Tesso Nilo shows the risks posed to international palm oil buyers who fail to insist on full supply chain traceability to plantation level. It reveals that even RSPO-certified mills have been accepting third-party supplies of FFB that originate ultimately from highly destructive operations – in this case, the illegal clearance of a national park and critical tiger habitat.



#### Overview

The Tesso Nilo tiger conservation landscape is a long-term priority TCL<sup>147</sup> covering around 233,000ha.<sup>148</sup> At the core of this TCL is the Tesso Nilo forest complex,<sup>149</sup> which consists of Tesso Nilo National Park and two selective logging concessions, together covering about 170,000ha. The Indonesian Ministry of Forestry established the Tesso Nilo National Park in 2004 and expanded it in 2009 because of its biodiversity value.<sup>150</sup> The forest complex<sup>151</sup> has one of the world's highest recorded diversities of plants<sup>152</sup> and supports key populations of critically endangered Sumatran elephants and tigers.

Most of the natural forest around the Tesso Nilo TCL has already been replaced by industrial pulp and palm oil plantations, and the TCL itself is in dire condition.<sup>153</sup> Since 2011, the forest complex has lost almost half of its remaining forest cover;<sup>154</sup> in June 2013, only 39,000ha of natural forest remained – a mere quarter of the area of the forest complex.

In June 2013, 446 fire hotspots were recorded within the forest complex, primarily in areas that had been cleared over the 2011–2013 period. Landsat analysis from August 2013 shows 7,600ha covered by fire scars, ranging in size from a few hectares to several hundred hectares, with most of the larger scars inside the national park itself. The images show a pattern of fire scars on recently cleared land surrounding shrinking oases of forest.<sup>155</sup>
Such rapid forest loss will have a devastating impact on tigers and other wildlife. Tesso Nilo has an estimated 1.2 tigers per 100km<sup>2</sup> (10,000ha).<sup>156</sup> The two largest remaining forest patches in the Tesso Nilo forest complex cover 23,000ha and 5,000ha,<sup>157</sup> meaning they are now marginal for supporting tigers at all.<sup>158</sup> The small number of tigers that may survive here in the long term does not represent a sustainable breeding population:<sup>159</sup> they would rely on long-distance migration to other areas of forested tiger habitat to maintain the population. Habitat corridors allowing tigers to reach other areas are themselves under threat. Human encroachment in Tesso Nilo is likely to be accompanied by poaching of tigers and hunting of tiger prey species such as deer and wild pigs, further challenging tiger survival in the area.

According to a World Wildlife Fund (WWF) field survey of more than 50,000ha of encroachment areas inside the Tesso Nilo forest complex in 2011, 70% (~36,000ha) of that land had been converted to oil palm plantations.<sup>160</sup>

Development of oil palm plantations inside the Tesso Nilo forest complex is considered illegal. All land inside the complex is categorised as 'Forest Estate' under national law, which does not allow development for agricultural commodities such as oil palm plantations. Transactions of palm fresh fruit bunches originating from the Tesso Nilo forest complex must be considered illegal, with a special exception for 'adat' (customary land tenure) forest. However, WWF investigations found that the average plantation size per individual was 50 hectares,<sup>161</sup> far above the typical size for a smallholder,<sup>162</sup> suggesting availability of significant capital. Field surveys found that more than 95% of the encroachers settling inside the park had come from outside the area, with the majority from outside Riau,<sup>163</sup> meaning 'adat' customary rights would not apply.

The head of Indonesia's Presidential Unit for Development Supervision and Control, Kuntoro Mangkusubroto, visited Tesso Nilo in September 2013 and viewed the destruction. In an interview with Tempo magazine he commented, 'I think the root of the problem is our inability to protect the area from major looting, our inability to prevent poachers from destroying the land [...] How is it possible for a national park to be protected by only a few ill-equipped people? The Tesso Nilo National Park has only one operational vehicle and only two outposts. And even those are normally unmanned. The government seems to lack seriousness in protecting the forests.<sup>1164</sup>

A number of crude palm oil mills operate around the Tesso Nilo forest complex, many of which accept FFB from third parties as well as processing their own FFB. Some of the mills do not have their own plantations and are wholly reliant on FFB from independent plantations.

WWF's 2011–2012 investigation<sup>165</sup> exposed how two international palm oil traders – Asian Agri and Wilmar – were involved in the trade of palm oil from the illegal destruction of the Tesso Nilo forest complex. Several of these companies' mills, including an Asian Agri mill certified by the RSPO in 2011,<sup>166</sup> bought FFB grown illegally inside the forest complex.<sup>167</sup> Additionally, some of the producer groups were funded by RSPO member Asian Agri.<sup>168</sup>

CPO from these mills is traded to Dumai Port,<sup>169</sup> Riau's export hub for palm oil, and from there to 130 countries around the world, with The Netherlands, China and India the largest importers.<sup>170</sup>

Kuntoro Mangkusubroto, then Chairman of the National REDD+ Task Force, said that Indonesia 'should also not close our eyes to companies, like Wilmar, which open their processing plants to palm kernels harvested illegally from the Tesso Nilo park [...] Why should a big company like Wilmar be willing to take in palm kernels from unknown sources?<sup>171</sup>

The Roundtable on Sustainable Palm Oil responded to WWF's revelations by emphasising a rule that says oil mills must 'record the origins of all third-party sourced Fresh Fruit Bunches... [The revised RSPO Principles and Criteria 2013] allows for a thorough and complete transparent control right from the field to the factory."<sup>72</sup>

The RSPO said that the companies were cooperating and would stop buying FFB from illegally cleared land. Assuming continued cooperation on the matter, the organisation said, no official complaint against these companies would be lodged for the time being.<sup>173</sup>

In July 2013, Wilmar informed Greenpeace that it has 'committed to not buying fresh fruit bunches (FFB) derived from forest encroachment areas with unclear land status; and as a follow-up to that commitment, we have since stopped buying fruits from the Tesso Nilo complex and its surrounding area'.<sup>174</sup>

In September–October 2013, however, Greenpeace documented the continued trade of FFB from within the national park into Indonesia's palm oil supply chain; tracking destinations was impaired by the shipping of FFBs from the area at night.

In October 2013, Greenpeace informed the companies of these findings. Wilmar responded by stating that it 'cannot unequivocally guarantee that there is no possibility of mixing of crop or contamination from these contentious sources by our suppliers<sup>175</sup> and affirming that it is making efforts to establish a fully traceable system through a reduction in the volume of supply it receives through agents.

Wilmar's move is important, given that the investigation reveals the extent to which major mills rely upon FFB supplied by agents and CPO supplied by other mills. It is also clear that traders have had little knowledge of the suppliers to these mills that are at high risk of sourcing FFB from controversial or illegal sources. This demonstrates that the existing systems and management oversight of companies' FFB supply chains – both to their own mills and to the third-party mills that make up the vast majority of traders' CPO supply – remains inadequate.



September 2013

0°15'02.4"S 101°47'52.9"E

Greenpeace investigation documents FFB loaded onto a truck inside the Tesso Nilo National Park prior to its departure for processing. ©Greenpeace

## Appendices



### Appendix 1: The RSPO – failing to break the link between p alm oil and forest destruction

The Roundtable on Sustainable Palm Oil (RSPO) was formed in 2004 to promote the use of sustainable palm oil through credible global standards and engagement of stakeholders.<sup>176</sup> It is a voluntary association including palm oil producers, processors and traders, consumer goods manufacturers and some nongovernmental organisations (NGOs), and is the largest 'sustainability' organisation in the palm oil sector.

However, despite having 'sustainability' as part of its name, this organisation fails to break the link between palm oil and forest destruction. Consumer companies that rely on RSPO certification to meet their sustainability commitments are deceiving themselves and their customers; in fact – unless they can trace all their palm oil back to responsible producers – their palm oil use may be contributing to the destruction of Indonesia's rainforests and the country's disproportionate contribution<sup>177</sup> to climate change.

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 were implicated in the catastrophic Sumatran fires of June 2013.<sup>178</sup>

RSPO members account for around 40% of global palm oil production;<sup>179</sup> however, as of late 2012, eight years after its inception, less than half of the palm oil these members actually produced (15% of global production) was RSPO-certified.<sup>180</sup>

Of the four supply chain options the RSPO supports, by far the most popular (accounting for 72% of RSPO-certified palm oil traded in 2012<sup>181</sup>) 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'.<sup>182</sup> The actual palm oil in the end user's products is bought on the open market, and may perfectly 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

October 2013

0°10'58.20"S 101°58'9.01"E

A Greenpeace investigator measures the footprint of a Sumatran tiger inside the Tesso Nilo National Park. ©Rante/Greenpeace 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.<sup>183</sup>

Thus, even among the RSPO's own members, dirty palm oil remains the common currency. RSPO standards are inadequate, are poorly enforced and offer palm oil consumers no real guarantee that the oil they buy has been produced responsibly.



### Appendix 2: The Consumer Goods Forum – failing to act with urgency

### The Consumer Goods Forum needs to change its policy

The Consumer Goods Forum (CGF) is a global industry network including over 400 retailers, manufacturers and other companies.<sup>184</sup> In 2010, the CGF passed a resolution pledging to work for zero deforestation by 2020 in its members' commodity supply chains, including for palm oil.<sup>185</sup> The pledge has several failings; these include:

The 2020 timeline lacks due urgency – at current deforestation rates, Indonesia alone stands to lose some 4 million ha over the next six years to 2020, with conversion for palm oil the single largest cause of forest loss.<sup>186</sup> Other forests, notably the rainforests of Central and West Africa, are also under threat from palm oil or other plantations.

At present, the CGF relies upon the RSPO to fulfil this commitment.<sup>187</sup>

The CGF had made a commitment to NET deforestation, which means that forest clearance can continue.

Greenpeace has contacted over 250 palm oil consumer companies – many of them CGF members – asking how they intend to ensure that their supply chains are not linked to deforestation. Very few respondent companies have time-bound commitments for establishing traceability or removing deforestation from their supply chains. The majority rely on RSPO certification to meet their sustainability commitments – the failure of the RSPO standards to ban deforestation and peatland conversion is outlined above.

The palm oil suppliers Greenpeace has investigated, virtually all of whom are RSPO members, are key palm oil suppliers to many CGF members, including Colgate Palmolive,<sup>188</sup> Mondel z International (formerly Kraft Foods Inc),<sup>189</sup> Procter & Gamble<sup>190</sup> and Reckitt Benckiser.<sup>191</sup>

Clearly, CGF, its members and other major palm oil users need to go beyond current RSPO standards to end deforestation and ensure that their operations are not supporting the destruction of the remaining habitat for endangered species such as the Sumatran tiger and Bornean and Sumatran orang-utan.

In addition to the CGF companies, several other major palm oil users trade with these companies. These include Neste Oil,<sup>192</sup> one of the world's largest producers of biodiesel, and major companies in China and India – the world's largest markets for palm oil – including Guangzhou Liby<sup>193</sup> and Zhejiang Nice<sup>194</sup> in China and Godrej<sup>195</sup> in India.

While some CGF companies are showing initiative to address deforestation in their supply chains and leadership by announcing commitments that go beyond the principles and criteria of the RSPO (see above), it is imperative for other companies to take similar steps to ensure that the palm oil they use is deforestation-free. This is important not only for their customers, who want to ensure that the products they use are tiger friendly, but also more globally to support the transition of the palm oil sector in Indonesia.

## **Endnotes**

1 US Department of Agriculture 'PSD online'. The estimated figures were 53.8 million tonnes of palm oil and 6.2 million tonnes of palm kernel oil. Soya oil was in second place with 27% (43.2 million tonnes).

- 2 Pashley (2013), Mielke (2013)
- 3 Mielke (2013)

4 300,000ha (~25%) over the mid-2009-mid-2011 period (Greenpeace analysis of Ministry of Forestry landcover maps).

5 Linkie et al (2008)

6 Estimating tiger populations in dense forest and inaccessible landscapes is extremely difficult. The figure of 400 is based on Linkie et al (2008), citing Gol (2007). It is possible that initial tiger numbers are higher than this, but the population decline resulting from habitat loss and other issues outlined in this report is acute.

7 Greenpeace mapping analysis.

233,000ha (61%): 15% (58,000ha) palm 8 oil concessions, 46% (175,000ha) pulp and paper. Source: Greenpeace mapping analysis This analysis is likely to be incomplete: there is no central registry for palm oil concessions. Lack of transparency makes it difficult to establish precise concession boundaries and group-level ownership of concessions: the area covered by palm oil concessions is likely to be underestimated since it includes only known concessions and some concession information may be out of date. This means the true impact of the plantation sectors on tiger habitat is likely to be even larger. One of the two large pulp and paper plantation groups operating in Indonesia, consisting of companies associated with Asia Pulp & Paper (APP) and Sinarmas Forestry (SMF), introduced a forest conservation policy in February 2013 that included an immediate end to the clearance of rainforests throughout its supply chain in Indonesia, meaning the threat from this sector should have receded since 2011 (see APP website 'Sustainability'). However, the nextlargest pulp and paper group, APRIL, stands out as a key threat.

9 Ancrenaz et al (2008), Singleton et al (2008)

10 Based on Indonesian populations only. Source: Wich et al (2008).

11 Ancrenaz et al (2008), Singleton et al (2008)

12 Greenpeace analysis of Ministry of Forestry landcover maps.

13 The final POIG charter was launched in November 2013 (see POIG (2013)). The POIG charter covers protection of local community land, sets limits on greenhouse gas emissions and bans development on peatlands. Members include Agropalma, New Britain Palm Oil Ltd and DAABON, and it is supported by Golden Agri-Resources. This initiative by progressive palm oil companies together with NGOs hopes to build upon the foundations laid by the RSPO by setting additional requirements for the industry. POIG aims to stop deforestation through the conservation of not only high conservation value (HCV) lands but also high carbon stock (HCS) forests, including secondary forest.

14 Smallholder community schemes are also a critical part of ensuring that palm oil benefits local people. The Dosan cooperative scheme in Riau has become a model for integrating a thriving local economy with environmentally sound plantation

management. See Greenpeace International website 'Good oil: A solution to destructive industrial-scale oil palm plantations'.

- 15 Unilever (2013)
- 16 Ferrero website 'Ferrero Palm Oil Charter'
- 17 Nestlé (2012)

18 Such a policy would ensure forest and peatland protection in company and supplier concession areas. It would include the following elements: assessment and protection of high conservation value and high carbon stock lands; free, prior and informed consent of all affected local communities for all new development; development and implementation of conservation plans that take account of the surrounding landscape; responsible plantation management; and transparent reporting of the policy's implementation. Both Golden Agri-Resources and Asia Pulp & Paper are working toward the implementation of such policies.

19 See POIG (2013).

20 One Map is a mapping system that standardises disparate accounts of forest cover, land use and administrative boundaries used by various ministries and local governments – see Anderson (2013).

21 An appropriate HCS approach that is additional to a robust HCV assessment can be used as a proxy for identifying degraded land that was previously forest. Criteria for identifying degraded lands should include the identification and exclusion of HCS forests and peatland. HCS forest is above the level between naturally regenerating secondary forest and degraded lands that have the vegetation of young scrub or grassland. The HCS approach effectively combines both biodiversity and carbon conservation through the goal of conserving ecologically viable areas of natural forest. See Golden Agri-Resources website 'High carbon stock forest conservation' and Greenpeace International (2013a).

- 22 P&G fact sheet 'Where we operate'
- 23 Amirapu & Malviya (2012)
- 24 P&G (2010)
- 25 P&G (2013b)
- 26 P&G (2013a): 30
- 27 RSPO (2012b): 275
- 28 P&G (2013b)
- 29 As a supplier to Wilmar and Asian Agri; see PT BW Plantation Tbk (2013b)
- 30 US customs data
- 31 US customs data

 Under the name of PT Bumi Perdana Prima International. See PT BW Plantation Tbk (2013a):
36.

- 33 PT BW Plantation Tbk (2013a): 11
- 34 RSPO website 'PT BW Plantation Tbk'
- 35 PT BW Plantation Tbk (2013c): 1, 3-4
- 36 PT BW Plantation Tbk (2013c): 2

- 37 PT BW Plantation Tbk (2013c): 5
- 38 RSPO (2012c): 170
- 39 RSPO website 'PT BW Plantation Tbk'
- 40 PT BW Plantation Tbk (2013a): 115
- 41 RSPO (2012c): 171
- 42 PT BW Plantation Tbk (2013c): 6
- 43 PT BW Plantation Tbk (2013c): 5-6
- 44 FNPF (2013)
- 45 Coordinates 02°46'28.8"S 11°50'30.7"E
- 46 Greenpeace investigations
- 47 PT BW Plantation Tbk (2013c): 4, 6

48 See eg http://ckazab.blogspot.de/2011/07/ lowongan-pt-asianagro-agungjaya-asian.html for a link to Asian Agri. Other sources link this company with APICAL, another (recently set up) entity of the RGE group

- 49 PT BW Plantation Tbk (2013b)
- 50 US customs data
- 51 PT BW Plantation Tbk (2013b)
- 52 PT BW Plantation Tbk (2013a): 12
- 53 PT BW Plantation Tbk (2013a): 38
- 54 PT BW Plantations Tbk (2013a)
- 55 FNPF (2013)
- 56 Greenpeace investigations
- 57 Coordinates 02°46'28.8"S 11°50'30.7"E
- 58 FNPF (2013)

59 Personal communication with staff of BKSDA Central Kalimantan in August 2013

60 FNPF (2013)

61 Information sought 12 September 2012 from both the BKSDA and the police involved

62 PT BW Plantation Tbk (2013a)

63 PT BW Plantation Tbk (2013b). The report gives no exact details on when this concession became part of the group, but it is mentioned as a subsidiary since 2007.

- 64 Reuters (2013)
- 65 KLK (2014): 1
- 66 KLK (2013b): 2
- 67 RSPO (2012a)
- 68 KLK website 'Sector Overview Plantations'

69 RSPO website 'Kuala Lumpur Kepong Berhad'

- 70 KLK (2013b)
- 71 RSPO (2012c): 77
- 72 KLK (2013b): 4

- 73 US customs data for 2013, via Trade Mining
- 74 KLK website 'Sector Overview Plantations'
- 75 KLK (2013b): 2, 4
- 76 KLK website 'Sector Overview Plantations'
- 77 KLK (2013b): 3
- 78 KLK (2013b): 4
- 79 KLK website 'Sector Overview Plantations'
- 80 KLK (2013b): 4
- 81 RSPO (2012c): 78
- 82 KLK (2013b): 6
- 83 PT ADEI Plantation & PT Anugrah Surya Mandiri; see www.rspo.org.
- 84 Perdani & Harahap (2013)
- 85 Antara News (2013)
- 86 Tempo (2014): 42
- 87 RSPO (2013b)
- 88 See eg Global Witness (2013)
- 89 US customs data
- 90 KLK website 'Company Profile'
- 91 KLK (2013c,d)
- 92 KLK website 'Corporate Information'
- 93 Yun et al (2013)
- 94 PT Mutuagung Lestari (2012)
- 95 KLK (2013a)
- 96 PT Anugrah Surya Mandiri (2011)
- 97 RSPO website 'PT Musim Mas'
- 98 RSPO website 'PT Musim Mas'
- 99 RSPO website 'PT Musim Mas'

100 PT Agrowiratama (2013): 4, PT Musim Mas (2013a): 4

101 PT Wira Inno Mas, PT Megasurya Mas, PT Intibenua Perkasatama and PT Interkarya Internusa

102 See 2012/2103 ACOPs to the RSPO submitted by each subsidiary individually.

- 103 PT Musim Mas (2007): 5, 6, 9
- 104 PT Agrowiratama (2011)
- 105 PT Musim Mas (2013a): 5
- 106 PT Musim Mas (2013a): 2-4
- 107 PT Musim Mas (2013a): 4

108 http://www.rspo.org/blog/topic/137/ pt\_megasurya\_mas; http://www.rspo.org/blog/ topic/132/pt\_siringo\_ringo

- 109 Disbun (2013)
- 110 PT Musim Mas (2012)

111 PT Musim Mas (2012): 19-20

112 Period analysed covers April to December 2013.

- 113 PT Musim Mas (2012): 22
- 114 PT Musim Mas (2013b,c)
- 115 Greenpeace mapping analysis
- 116 Ministry of Agriculture (2013b)
- 117 Greenpeace mapping analysis

118 1.9m ha of 10.5m ha. Source: Greenpeace mapping analysis.

119 Linkie et al (2008)

120 Estimating tiger populations in dense forest and inaccessible landscapes is extremely difficult. The figure of 400 is based on Linkie et al (2008), citing Gol (2007). It is possible that initial tiger numbers are higher than this, but the population decline resulting from habitat loss and other issues outlined in this report is acute.

121 14.6Gt of carbon. Source: Wahyunto & Subagjo (2003): 34.

122 World Resources Institute CAIT 2.0, total emissions for 2010

- 123 Delft Hydraulics (2008): 18
- 124 Ministry of Agriculture (2013a)
- 125 Ministry of Agriculture (2013b)

126 730,000ha in production forest and 176,000ha in convertible production forest. Source: Greenpeace mapping analysis.

127 National Council on Climate Change (2010b): 5

128 Greenpeace mapping analysis.

129 49,000ha. Source: Greenpeace mapping analysis.

130 Ministry of Agriculture (2009)

131 43,000ha of 49,000ha. Source: Greenpeace mapping analysis.

132 Greenpeace mapping analysis shows 1.36 million ha of forested peatland in 2011. See also Wahyunto & Subagjo (2003): 34.

133 2,040 of 2,738. Source: Greenpeace mapping analysis.

134 Gaveau & Salim (2013a)

135 Ministry of Agriculture (2009)

136 Data compiled by WWF Indonesia (2013): 6. Data sources: Statistics of Riau Plantation Service 2009 and June 2011, Plantation Service and Environment Agency of Kampar District, Rokan Hulu District, Pelalawan District, Indragiri Hulu District, Kuantan Singingi District, Bengkalis District, Rokan Hilir District, Dumai City, Siak District, Indragiri Hilir District and Pekanbaru City 2011. As WWF Indonesia notes in footnote 14, of the 1.56 million ha of private concessions identified by the Riau Forestry Service (2006), the Ministry of Forestry (2010) only mapped 1.18 million ha as holding definitive licenses (HGU and IUP), ie having been granted all necessary permits to operate.

- 137 Yulisman (2013)
- 138 Ministry of Agriculture (2013b)
- 139 USDA FAS (2012)
- 140 PT Data Consult (2011)
- 141 PT Data Consult (2011)
- 142 Global Tiger Initiative (2010): 1

143 Presidential Decree Keppres no. 32/1990 (Gol (1990)) and Indonesian Government Regulation no. 26/2008 (Gol (2008))

144 2,800ha. Source: Greenpeace mapping analysis. Link to mapping refs

- 145 Sizer et al (2013)
- 146 Gaveau & Salim (2013b)

147 Wibisono & Pusparini (2010). A Class 3 TCL is a landscape of long-term priority with 'questionable persistence of tiger populations over the long term' (source: Panthera website, 'Priority tiger conservation landscapes').

- 148 Dinerstein et al (2006)
- 149 WWF Indonesia (2013)
- 150 WWF Indonesia (2013): 4

151 The Tesso Nilo forest complex consists of Tesso Nilo National Park and the PT Hutani Sola Lestari and PT Siak Timber Raya logging concessions.

152 WWF Indonesia (2013): 4 citing Gillison (2001)

153 Within the TCL as a whole, less than 80,000ha of forest remained in 2011.

154 32,000ha. Source: Greenpeace mapping analysis.

- 155 Greenpeace mapping analysis
- 156 Sunarto et al (2013)
- 157 Greenpeace mapping analysis
- 158 Griffith (1994)

159 A minimum of 25 breeding females, according to Global Tiger Initiative (2012).

- 160 WWF Indonesia (2013): 3
- 161 WWF Indonesia (2013): 3

162 The average smallholding is 2ha, according to Ministry of Agriculture (2013a). Legally, smallholders are defined as plantations with less than 25ha (source: Ministry of Agriculture (1996)).

- 163 WWF Indonesia (2013): 8
- 164 Tempo (2013): 68

165 WWF Indonesia (2013)

166 RSPO website, 'PT Inti Indosawit Subur Ukui'

167 For instance, WWF documents three mills owned by PT Citra Riau Sarana (Wilmar Group) near the Tesso Nilo forest complex receiving FFB grown illegally inside the forest complex, including within the park itself; from there the CPO was traded to Wilmar's Nabati Indonesia facility in Dumai. Source: WWF Indonesia (2013): 16-20. These Wilmar Group mills were scheduled to be certified by the RSPO in 2013 (source: RSPO (2013d): 9-10) but it is not known whether this has gone ahead.

- 168 WWF Indonesia (2013): 10
- 169 WWF Indonesia (2013)
- 170 Pusdatin (2013)
- 171 Tempo (2013): 68
- 172 RSPO (2013c)
- 173 RSPO (2013c)
- 174 Wilmar (2013a)
- 175 Wilmar (2013b)
- 176 RSPO website 'Who is RSPO'

177 Indonesia has been and likely remains one of the world's top five emitters. According to countries' own declarations:

No 1: USA 6.2GtCO<sub>2</sub>e in 2005. Source: EPA (2010): 14.

No 2: China 5.6GtCO<sub>2</sub>e in 2004. Source: Government of China (2007). No 3: Brazil 2.2GtCO<sub>2</sub>e in 2005: Source: Brazilian Ministry of Science and Technology (2009): 19. No 4: Indonesia 2.06GtCO<sub>2</sub>e in 2005. Source: National Council on Climate Change (2010b): 4. No 5: Russia 2.0 GtCO<sub>2</sub>e in 2005. Source: UNFCCC (2009): 1.

No 6: India 1.6GtCO, e. Source: Ministry of Environment and Forests (2009): 53. Data compiled by the World Resources Institute show similar rankings. 2005 is the most recent year for which figures including emissions from land-use change are available. According to Indonesia's National Council on Climate Change (DNPI), land use change is responsible for 85% of the country's extraordinarily high greenhouse gas (GHG) emissions. The land use emissions are said to be almost entirely from deforestation and degradation (1,006MtCO<sub>2</sub> gross, 760MtCO<sub>2</sub> net) and peatland degradation and fire (850MtCO\_). Source: National Council on Climate Change (2010b).

178 See also Greenpeace International (2013b,c).

179 RSPO website 'Why RSPO certification'

180 RSPO website 'RSPO Worldwide Impact'

181 RSPO (2013a): 2. Sales of CSPO: Segregated + Mass Balance = 984,138t, Book and Claim = 2,495,277t.

#### 182 GreenPalm (2013)

183 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.

184 See eg CGF (2013)

#### 185 CGF (2010)

186 Greenpeace mapping analysis based on Ministry of Forestry data for 2009 and 2011 shows deforestation is equivalent to 620,000ha per year.

- 187 See CGF website 'Palm Oil'
- 188 Martin (2013)

189 Several non-US Wilmar subsidiaries or palm oil customers claim to supply Kraft (see eg http:// www.golden-sea.cn/yihai/en/main.html, http:// www.rspo.org/en/member/876, http://www. deltawilmar.com/events); confidential information, copy held by Greenpeace.

190 Wilmar is reported to supply Procter & Gamble globally with soap noodles, and as of November 2012 Adani Wilmar was setting up a plant to supply them to Procter & Gamble (and Unilever) within India (source: Anand (2012)). Greenpeace has identified a number of specific instances of RBD palm stearin being supplied to Procter & Gamble US via the port of San Francisco in 2012–13 by Wilmar's Indonesian subsidiary PT Multi Nabati Sulawesi (source: US customs data, via Trade Mining, accessed 25 February 2013).

191 Confidential information, copy held by Greenpeace

- 192 Neste Oil (2013)
- 193 Oleoline.com (2012), Wilmar (2012)
- 194 Wilmar (2012), NBD (2012)
- 195 Godrej Industries (2013)

# **Bibliography**

#### Acronyms

Annual Communication of Progress (ACOP) Asia Pulp & Paper (APP) Balai Konservasi Sumber Daya Alam (BKSDA) carbon dioxide (CO<sub>2</sub>) Center for International Forestr y Research (CIFOR) Consumer Goods Forum (CGF)Convention on International Trade in Endangered Species (CITES) crude palm oil (CPO) Forest Monitoring for Action (FORMA) fresh fruit bunches (FFB) Friends of National Parks Foundation (FNPF) gigatonne (Gt) Golden Agri-Resources (GAR) greenhouse gas (GHG) hectare (ha) high carbon stock (HCS) high conservation value (HCV) International Union for Conservation of Nature (IUCN) joint venture (JV) kilotonne (Kt) Kuala Lumpur Kepong Berhad (KLK) megatonne (Mt) million (m) non-governmental organisation (NGO) Orangutan Foundation International (OFI) palm fatty acid distillate (PFAD) palm kernel oil (PKO) Palm Oil Innovation Group (POIG) Papua New Guinea (PNG) Procter & Gamble (P&G) PT Adhyaksa Dharma Satya (PT ADS) PT Anugrah Surya Mandiri (PT ASM) PT Bumi Langgeng Perdanatrada (PT BLP) PT Globalindo Alam Perkasa Estate II (PT GAP II) PT Jabontara Eka Karsa (PT JEK) PT Karva Makur Abadi II (PT KMA II) PT Megasurva Mas (PT MSM) PT Multipersada Gatramegah (PT MPG) PT Rokan Adi Raya (PT RAR) PT Siringo Ringo (PT SR) PT Wana Catur Jaya Utama (PT WCJU) Roundtable on Sustainable Palm Oil (RSPO) Sinarmas Forestry (SMF) tiger conservation landscape (TCL) tonne (t) World Wildlife Fund (WWF)

## Data used in Greenpeace mapping analysis

Forest cover: Ministry of Forestry (2013a) Ministry of Forestry (2013b) Ministry of Forestry (2009) Ministry of Forestry (2005) Land-use planning maps: Ministry of Forestry (2013c) Wahyunto & Subagjo (2003)

2013 fires: NASA (2013)

HTI concessions: Ministry of Forestry (2010a)

Palm oil concessions: Ministry of Forestry (2010a)

*Tiger habitat:* WWF (2008)

*Tiger conservation landscapes:* Dinerstein et al (2006)

Orang-utan habitat: Wich et al (2008)

#### References

Amirapu D & Malviya S (2012) 'P&G to build largest Indian plant in Hyderabad' The Economic Times 20 April 2012 http://articles.economictimes.indiatimes. com/2012-04-20/news/31374066\_1\_p-g-indiaprocter-gamble-health-unlisted-arm

Anand N (2012) 'Adani to bring Wilmar products to India' Daily News & Analysis 23 November 2012 http:// www.dnaindia.com/money/report\_adani-tobring-wilmar-products-to-india\_1768311-all

Ancrenaz M, Marshall A, Goossens B, van Schaik C, Sugardjito J, Gumal M & Wich S (2008) 'Pongo pygmaeus' in IUCN (2013) http://www.iucnredlist. org/details/17975/0 viewed 24 September 2013

Anderson J (2013) 'A Conversation With Nirarta "Koni" Samadhi On Indonesia's Forests' WRI Insights 7 May 2013 http://insights.wri.org/news/2013/05/ conversation-nirarta-koni-samadhi-indonesiasforests#sthash.dh95bKFM.dpuf

Antara News (2013) 'Police detain Malaysian for starting forest fire in Indonesia's Riau' 14 December 2013 http://www.antaranews.com/en/ news/91785/police-detain-malaysian-for-startingforest-fire-in-indonesias-riau

Asia Pulp & Paper (APP) website 'Sustainability' http://www.asiapulppaper.com/sustainability/ vision-2020/targets-and-components viewed 5 September 2013

Brazilian Ministry of Science and Technology (2009) 'Inventário Brasileiro das emissões e remoções antrópicas de gases de efeito estufa, Informações gerais e valores preliminares (30 novembro de 2009)' 30 November 2009 www.mct. gov.br/upd\_blob/0207/207624.pdf

Consumer Goods Forum (CGF) (2010) 'Board resolutions on deforestation and refrigeration'

http://sustainability.mycgforum.com/images/ sustainability-pic/board\_resolutions\_on\_ deforestation\_and\_refrigeration.pdf

CGF (2013) 'The Consumer Goods Forum Launches New Corporate Website' 14 January 2014 http://www.theconsumergoodsforum. com/PDF/PressReleases/2013-01-14-NewCorporateWebsite.pdf

CGF website 'Palm Oil' http://sustainability. mycgforum.com/deforestation/palm-oil.html

Delft Hydraulics (2008) 'Kampar Peninsula Science Based Management Support Project Summary Interim Report, April-December 2007 Introduction to the SBMS Project and preliminary results to date' Hooijer A (ed) April 2008

Dinerstein E, Loucks C, Heydlauff A, Wikramanayake E, Bryja G, Forrest J, Ginsberg J, Klenzendorf S, Leimgruber P, O'Brien T, Sanderson E, Seidensticker J & Songer M (2006) 'Setting priorities for the conservation and recovery of wild tigers: 2005–2015. A user's guide.' WWF, WCS, Smithsonian and NFWF-STF http:// www.panthera.org/node/1406

Disbun (2013) 'Perusahaan Perkebunan Besar Berminat Berinvestasi di Kabupaten Sarmi', Dinas Perkebunan, Kabupaten Sarmi, 26 March 2013

US Environmental Protection Agency (EPA) (2010) 'Inventory of U.S. Greenhouse Emissions and Sinks: 1990–2008', U.S. EPA # 430-R-10-006, April 2010 http://www.epa.gov/climatechange/ ghgemissions/usinventoryreport/archive.html

Ferrero website 'Ferrero Palm Oil Charter' http:// www.ferrero.com/group-news/Ferrero-Palm-Oil-Charter

Friends of National Parks Foundation (FNPF) (2013) Letter to the BKSDA Kalteng ref 001/FNPF/ HQ/Bali/IV/13 1 April 2013

Gaveau D & Salim MA (2013a) 'Nearly a quarter of June fires in Indonesia occurred in industrial plantations' Centre for International Forestry Research (CIFOR), 30 July 2013 http://blog. cifor.org/18218/research-nearly-a-quarter-ofjune-fires-in-indonesia-occurred-in-industrialplantations/#.UfkEC2TVyaE

Gaveau D & Salim MA (2013b) 'Area affected by fire in Riau: CIFOR Analysis' interactive map, CIFOR http://www.cifor.org/map/fire/ viewed 24 September 2013 Gillison AN (2001) 'Vegetation survey and habitat assessment of the Tesso Nilo Forest Complex' report prepared for WWF-US http://www. savesumatra.org/app/webroot/upload/report/ TessoNiloBiodiversity1.pdf

Global Tiger Initiative (2010) 'Global Tiger Recovery Program' http://www. globaltigerinitiative.org/download/St\_Petersburg/ GTRP\_latest.pdf

Global Tiger Initiative (2012) 'Managing tiger conservation landscapes and habitat connectivity: Threats and possible solutions' World Bank, Washington DC, October 2012 http://globaltigerinitiative2013.org/site/wpcontent/uploads/2013/05/GTI\_Habitat\_Report\_ Layout\_1015.pdf

Global Witness (2013) 'UK's Equatorial Palm Oil accused of human rights abuses in Liberia' 20 December 2013 http://www.globalwitness.org/ Liberia/EPO

Godrej Industries (2013) Annual Report 2012–2013 http://www.godrej.com/godrej/GodrejIndustries/ pdf/Godrej\_Ind\_AR\_2013.pdf

Golden Agri-Resources website 'High carbon stock forest conservation' http://www.goldenagri. com.sg/sustainable\_hcs.php viewed 26 September 2013

Government of China (2007) 'Press conference on climate change program', Government of China's official web portal http://english.gov.cn/2007-06/04/content\_636052.htm

Government of Indonesia (Gol) (1990) Presidential Decree No. 32/1990 on 'Management of Protected Areas', 25 July 1990

Gol (2007) 'Conservation strategy and action plan for the Sumatran tiger (Panthera Tigris Sumatrae) Indonesia 2007 – 2017' http://globaltigerinitiative. org/site/wp-content/uploads/2013/04/Indonesia. pdf

Gol (2008) Government Regulation No. 26/2008 regarding National Territorial Layout Plan, established 10 March 2008 and last updated 12 September 2012 http://www.bkprn.org/v2/ peraturan/file/PP\_26\_Tahun\_2008.pdf (text in English available at http://faolex.fao.org/docs/pdf/ ins87048.pdf)

GreenPalm (2013) 'GreenPalm means claiming support – not sustainable palm oil content' 28 March 2013 http://greenpalm.org/en/blog-press/ blog/greenpalm-means-claiming-support-notsustainable-palm-oil-content

Greenpeace International (2013a) 'Identifying High Carbon Stock (HCS) forest for protection' March 2013 http://www.greenpeace.org/international/ Global/international/briefings/forests/2013/HCS-Briefing-2013.pdf

Greenpeace International (2013b) 'Certifying Destruction: Why consumer companies need to go beyond the RSPO to stop forest destruction' 3 September 2013 http://www.greenpeace.org/ international/en/publications/Campaign-reports/ Forests-Reports/Certifying-Destruction/

Greenpeace International (2013c) 'Licence to Kill: How deforestation for palm oil is driving Sumatran tigers toward extinction' 22 October 2013 http://www.greenpeace.org/international/ en/publications/Licence-to-kill/

Greenpeace International website 'Good oil: A solution to destructive industrial-scale oil palm plantations' http://www.greenpeace.org/ usa/Global/international/code/2012/Forest\_ Solutions\_2/goodoil.html

Griffith M (1994) 'Population density of the Sumatran tigers in GLNP', in Tilson RL, Soemarna K, Ramono WS, Lusli S, Traylor-Holzer K & Seal US (1994) Sumatran Tiger Populations and Habitat Viability Analysis, Indonesian Directorate General of Forest Protection and Nature Conservation and IUCN/ SSC Conservation Breeding Specialist Group, pp. 93–102

Kuala Lumpur Kepong Berhad (KLK) (2013a) 'Annual Report 2012' http://www.klk.com.my/ar/ klk\_ar2012.pdf

KLK (2013b) 'ACOP 2013 Progress Report' http:// www.rspo.org/file/acop2013/submissions/ KUALA%20LUMPUR%20KEPONG%20BERHAD. pdf, viewed 12 February 2014

KLK (2013c) 'Kuala Lumpur Kepong Berhad ("KLK" or "THE COMPANY") Proposed Acquisition of Shares in Liberian Palm Developments Ltd ("LPD") and Equatorial Palm Oil PLC ("EPO")' Announcement to the Bursa Malaysia, 7 November 2013 http:// announcements.bursamalaysia.com/ EDMS%5Cedmswebh.nsf/LsvAllByID/3FD4A7415 607B0C848257C33005D8142?OpenDocument

KLK (2013d) 'Mandatory Cash Offer by KL-Kepong International Limited ("KLKI") for the entire issued ordinary share capital of Equatorial Palm Oil plc' 29 November 2013 http://www.klk.com.my/ wp-content/uploads/2013/11/Offer-Doc-29.11.13final1.pdf

KLK (2014) 'Annual Report 2013' January 2014 http://www.klk.com.my/ar/klk\_ar2013.pdf

KLK website 'Company Profile' http://www.klk. com.my/corporate-information/corporate-profile/, viewed 12 February 2014

KLK website 'Corporate Information' http://www.

klk.com.my/corporate-information/, viewed 12 February 2014

KLK website 'Sector Overview - Plantations' http://www.klk.com.my/business/plantations/ sector-overview/, viewed 12 February 2014

Linkie M, Wibisono HT, Martyr DJ & Sunarto S (2008) 'Panthera tigris ssp. sumatrae' in IUCN (2013) http://www.iucnredlist.org/details/15966/0 viewed 20 September 2013

Martin R (2013) E-mail from Ron Martin, VP Global Sustainability & Social Responsibility, Colgate-Palmolive, to Greenpeace International, 22 June 2013

Mielke (2013) ISTA Mielke GmbH, 'Oil World Statistics Update June 2013' http://www.oilworld. biz

Ministry of Agriculture (1996) Keputusan Menteri Pertanian / Decree of the Minister of Agriculture NOMOR.786/Kpts/KB.120/10/96

Ministry of Agriculture (2009) 'Statistik Perkebunan 2008-2010 / Tree Crop Estate Statistics 2008–2010' Direktorat Jenderal Perkebunan, Ministry of Agriculture, Jakarta, Indonesia

Ministry of Agriculture (2013a) 'Buku Statistik Perkebunan Tahun / Plantation Statistic Year Book 2008–2012' Direktorat Jenderal Perkebunan / Directorate General of Estate Crops, Ministry of Agriculture Indonesia http://www.deptan.go.id/ infoeksekutif/bun/BUN-asem2012/Produksi-KelapaSawit.pdf

Ministry of Agriculture (2013b) Export data 2012, Data and Information Center, http://pusdatin. deptan.go.id accessed 23 August 2013

Ministry of Environment and Forests (2009)

Ministry of Forestry (2005) 'Landcover Indonesia 2003' Forestry Planning Agency of the Ministry of Forestry, 2005

Ministry of Forestry (2009) 'Landcover Indonesia 2006' Forestry Planning Agency of the Ministry of Forestry, 2009

Ministry of Forestry (2010a) HTI concession maps, provided by the Planning Department of the Ministry of Forestry, Indonesia (Direktorat Jenderal Planologi Kehutanan Kementerian Kehutanan Republik Indonesia) http://appgis. dephut.go.id/appgis/kml.aspx downloaded September 2010. Updated using 1) Ministry of Forestry (2010b) Pemanfaatan Hutan, Data dan Informasi, Tahun 2010, Ministry of Forestry Indonesia, November 2010 http://www.dephut. go.id/files/Buku\_pemanfaatan\_2010.pdf and 2) Ministry of Forestry (2011), online WebGis Kehutanan, online interactive map http://webgis. dephut.go.id/ditplanjs/index.html accessed 12 May 2011

Ministry of Forestry (2013a) 'Peta Penutupan Lahan / Landcover map 2009' Direktorat Jenderal Planologi Kehutanan-Kementerian Kehutanan Republik Indonesia/Directorate General of Forest Planning, Ministry of Forestry, 2013. Provided by the Ministry to Greenpeace Southeast Asia in May 2013.

Ministry of Forestry (2013b) 'Peta Penutupan Lahan / Landcover map 2011' Direktorat Jenderal Planologi Kehutanan-Kementerian Kehutanan Republik Indonesia/Directorate General of Forest Planning, Ministry of Forestry, 2013. Provided by the Ministry to Greenpeace Southeast Asia in April 2013.

Ministry of Forestry (2013c) Landuse Planning Map, Directorate General of Forest Planning, Ministry of Forestry; downloaded from http:// appgis.dephut.go.id/appgis/kml.aspx September 2013

NASA (2013) 'Fire Information for Resource Management System' (FIRMS), NASA https:// earthdata.nasa.gov/data/near-real-time-data/ firms

National Council on Climate Change (2010a) 'Indonesia's greenhouse gas abatement cost curve' 15 August 2010 http://forestclimatecenter. org/files/2010-08%20Indonesia-s%20 Greenhouse%20Gas%20Abatement%20 Cost%20Curve.pdf

National Council on Climate Change (2010b) 'Setting a course for Indonesia's green growth' Press conference presentation 6 September 2010 http://forestclimatecenter. org/files/2010-09-06%20Setting%20a%20 Course%20for%20Indonesia-s%20Green%20 Growth%20-%20DNPI%20Press%20 Conference%20Presentation.pdf

NBD (2012) 'Kerry extends its business to personal hygiene products by trial production of liquid detergents' 5 December 2012 http://www.nbd. com.cn/articles/2012-12-05/698877.html

Neste Oil (2013) Presentation by Simo Honkanen, Senior Vice President of Sustainability at Neste Oil, at their annual general meeting in Helsinki, Finland, 4 April 2013

Nestlé (2012) 'Responsible Sourcing Guidelines: Framework for Forest-based Materials' 29 October 2012 http://www.nestle.com/assetlibrary/Documents/Media/Statements/2012-October/Nestl%C3%A9%20Responsible%20 Sourcing%20Guidelines%20for%20Forestbased%20Materials%20October%202012.pdf Oleoline.com (2012) 'Survey of Fatty Acid (DFA) Plants in China' December 2012 http://www. oleoline.com/wp-content/uploads/products/ reports/DFA\_China\_Dec2012\_339661.pdf

Palm Oil Innovation Group (POIG) (2013) 'Palm Oil Innovations Group Charter' 13 November 2013 http://www.greenpeace.org/international/ Global/international/photos/forests/2013/ Indonesia%20Forests/POIG%20Charter%20 13%20November%202013.pdf

Panthera website 'Priority tiger conservation landscapes' http://www.panthera.org/node/1406 viewed 19 September 2013

Pashley A (2013) 'Biodiesel Output Seen by Oil World Rising to 24.7 Million Tons' Bloomberg 3 September 2013 http://www.bloomberg.com/ news/2013-09-03/biodiesel-output-seen-by-oilworld-rising-to-24-7-million-tons.html

Perdani Y & Harahap R (2013) 'Malaysian firm named suspect in Riau forest fires' The Jakarta Post, 12 July 2013 http://www.thejakartapost. com/news/2013/07/12/malaysian-firm-namedsuspect-riau-forest-fires.html

Procter & Gamble (P&G) (2010) P&G response to BBC questionnaire, 22 February 2010 http://news. bbc.co.uk/nol/shared/bsp/hi/pdfs/panorama\_ pringles.pdf

P&G (2013a) '2012 Sustainability Report' http:// www.pg.com/en\_US/downloads/sustainability/ reports/PG\_2012\_Sustainability\_Report.pdf

P&G (2013b) Annual Communication on Progress (ACOP) to the RSPO (2012/2013) http://www.rspo. org/file/acop2013/submissions/P&G.pdf

P&G fact sheet 'Where we operate' https://www. pg.com/en\_US/downloads/media/Fact\_Sheets\_ Operate.pdf

PT Agrowiratama (2011) 'RSPO New Planting Procedures Assessment Report' January 2011 http://www.rspo.org/sites/default/files/4.3\_ PTAgrowiratam\_RSPO\_NPP\_public\_summary\_ Jan\_2011%5B2%5D.pdf

PT Agrowiratama (2013) 'ACOP 2013 Progress Report' http://www.rspo.org/file/acop2013/ submissions/PT%20AGROWIRATAMA.pdf, viewed 11 February 2014

PT Anugrah Surya Mandiri (2011) 'Summary Report of SEIA and HCV Assessments of PT Anugrah Surya Mandiri', report to the RSPO http:// www.rspo.org/file/Summary%20Report%20 of%20SEIA%20&%20HCV%20Assessment.pdf

PT BW Plantation Tbk (2013a) 'Annual Report 2012' http://www.bwplantation.com/images/ BW%20Plantation\_AR%202012\_web.pdf PT BW Plantation Tbk (2013b) 'PT BW Plantation Tbk and Its Subsidiaries, Notes to Consolidated Financial Statements, as of June 30, 2013 and December 31, 2012, and for the Six Month Periods Ended June 30, 2013 and 2012'

PT BW Plantation Tbk (2013c) 'ACOP 2013 Progress Report' http://www.rspo.org/file/ acop2013/submissions/PT\_BW\_PLANTATION\_ TBK.pdf, viewed 11 February 2014

PT Data Consult (2011) 'Indonesian Commercial Newsletter – Monthly Report' 1 July 2011 http:// www.datacon.co.id/PalmOil-2011List.html

PT Musim Mas (2007) 'Musim Mas Best Management Practices (BMPs) in Oil Palm Cultivation & Processing' 23 July 2007 www. musimmas.com/images/PDF/Musim\_Mas\_Best\_ Management\_Practices\_(BMPs)23rdJuly2007.pdf

PT Musim Mas (2012) 'Summary Report of SEIA and HCV Assessments PT Multipersada Gatramegah', report to the RSPO, http://www. rspo.org/file/Summary%20Report%20of%20 SEIA%20and%20HCV%20Assessments%20 PT%20MPG.pdf

PT Musim Mas (2013a) 'ACOP 2013 Progress Report' http://www.rspo.org/file/acop2013/ submissions/PT%20MUSIM%20MAS.pdf, viewed 11 February 2014

PT Musim Mas (2013b) 'Summary Report of SEIA and HCV Assessments PT Siringo Ringo', report to the RSPO, http://www.rspo.org/file/Summary%20 Report%20of%20SEIA%20and%20HCV%20 Assessments%20PTSRR.pdf

PT Musim Mas (2013c) 'Summary Report of SEIA and HCV Assessments PT Megasurya Mas', report to the RSPO, http://www.rspo.org/ file/Summary%20Report%20of%20SEIA%20 and%20HCV%20Assessments%20PT%20 Megasurya%20Mas(1).pdf

PT Mutuagung Lestari (2012) 'RSPO Assessment Report: PT ADEI Plantation' 15 October 2012 http://www.rspo.org/sites/default/files/PT\_ Adei\_Plantation\_RSPO\_Assessment\_Report\_\_ Final2\_-8.pdf

Pusdatin (2013) 'Palm oil exports, 2012' Pusat Data dan Sistem Informasi Pertanian' downloaded August 2013

Roundtable on Sustainable Palm Oil (RSPO) (2012a) 'Certificate SGS-RSPO/SC-00869, Kuala Lumpur Kepong Berhad / KLK Oleo' 2 February 2012 http://www.rspo.org/sites/default/files/ KLK\_Oleo\_certificate\_RSPO\_SC\_00869\_-53.pdf, accessed 12 February 2014

RSPO (2012b) 'A Compilation: 2011/2012 Annual Communications of Progress Reports by Sector: Consumer Goods Manufacturers' 22 October 2012 http://www.rspo.org/file/ACOP2012-OM\_ CGM%20Submitters\_final\_30thMay2013.pdf

RSPO (2012c) 'A Compilation: 2011/2012 Annual Communications of Progress Reports by Sector: Growers' 22 October 2012 http:// www.rspo.org/file/ACOP2012-OM\_GRW%20 Submitters%288%29.pdf

RSPO (2013a) 'CSPO Uptake & Production Feb 2013' http://www.rspo.org/file/FEB%20 Market%20Performance.pdf

RSPO (2013b) 'Complaint on Collingwood Plantation Private Ltd / Kuala Lumpur Kepong Bhd' 24 April 2013 http://www.rspo.org/en/status\_ of\_complaint&cpid=33

RSPO (2013c) 'Statement from the RSPO on the importance of transparent and responsible sourcing of fresh fruit bunches' 31 July 2013 http:// www.rspo.org/news\_details.php?nid=181

RSPO (2013d) 'Annual Surveillance Audit: PT Mustika Sembuluh' http://www.rspo.org/sites/ default/files/Mustika\_Sembuluh1stASA\_report\_ TUVR\_23052012doc-82.pdf

RSPO website 'Kuala Lumpur Kepong Berhad' http://www.rspo.org/en/member/13/kualalumpur-kepong-berhad, viewed 12 February 2014

RSPO website 'PT BW Plantation Tbk' http:// ww.rspo.org/en/member/225/pt-bw-plantationtbk, viewed 12 February 2014

RSPO website 'PT Inti Indosawit Subur Ukui' http://www.rspo.org/backup/ca/2778 viewed 12 February 2014

RSPO website 'PT Musim Mas' http://www.rspo. org/en/member/78/pt-musim-mas, viewed 12 February 2014

RSPO website 'RSPO Worldwide Impact' http:// www.rspo.org/en/RSPO\_Worldwide\_Impact viewed 18 July 2013

RSPO website 'Who is RSPO' http://www.rspo. org/en/who\_is\_rspo viewed 18 July 2013

RSPO website 'Why RSPO certification' http:// www.rspo.org/en/why\_rspo\_certification viewed 18 July 2013 Reuters (2013) 'Malaysia's KL Kepong acquires Liberian palm oil operations' 7 November 2013 http://www.reuters.com/article/2013/11/07/klkafrica-idUSL3N0IS3P520131107

Singleton I, Wich SA & Griffiths M (2008) 'Pongo abelii' in IUCN (2013) http://www.iucnredlist.org/ details/39780/0 viewed 24 September 2013

Sizer N, Stolle F & Minnemeyer S (2013) 'Peering through the haze: What data can tell us about the fires in Indonesia' WRI Insights blog 21 June 2013 http://insights.wri.org/news/2013/06/peeringthrough-haze-what-data-can-tell-us-about-firesindonesia viewed 17 August 2013

Sunarto, Kelly MJ, Klenzendorf S, Vaughan MR, Zulfahmi, M B Hutajulu & Parakkasi K (2013) 'Threatened predator on the equator: multi-point abundance estimates of the tiger Panthera tigris in central Sumatra' Oryx 47(2): 211–220

Tempo (2013) 'Interview: Kuntoro Mangkusubroto' English Ed 1356, 16-22 September 2013

Tempo (2014) English Ed 1374, 20-26 January 2014

UNFCCC (2009) 'Summary of GHG Emissions for Russian Federation', GHG emissions (with Land Use Land Use Change and Forestry, LULUCF) http://unfccc.int/files/ghg\_emissions\_data/ application/pdf/rus\_ghg\_profile.pdf

Unilever (2013) 'Sustainable Palm Oil Sourcing Policy' November 2013 http://www.unilever. com/images/Unilever\_Sustainable\_Palm\_Oil\_ Sourcing\_Policy\_Nov\_2013\_tcm13-376435.pdf

US Department of Agriculture 'PSD online' http:// apps.fas.usda.gov/psdonline/psdquery.aspx accessed 14 March 2013

US Dept. of Agriculture Foreign Agricultural Service (USDA FAS) (2012) 'GAIN Report: Indonesia oilseeds and products update' 28 February 2012 http://www.thefarmsite.com/ reports/contents/indonoilmarch12.pdf

Wahyunto SR & Subagjo H (2003) 'Peta luas sebaran lahan gambut dan kandungan karbon di pulau Sumatera / Maps of area of peatland distribution and carbon content in Sumatera, 1990 – 2002' Wetlands International – Indonesia Programme & Wildlife Habitat Canada (WHC) http://www.wetlands.or.id/PDF/buku/Atlas%20 Sebaran%20Gambut%20Sumatera.pdf Wibisono HT & Pusparini W (2010) 'Sumatran tiger (Panthera tigris sumatrae): A review of conservation status' Integrative Zoology 5(4): 313-23

Wich SA et al (2008) 'Distribution and conservation status of the orang-utan (Pongo spp.) on Borneo and Sumatra: How many remain?' 2008 Fauna & Flora International, Oryx 42(3), 329–339 doi:10.1017/ S003060530800197X, with updates by Wich, Singleton and Utami

Wilmar (2012) Promotional video http://v.dayoo. com/afterMediaFileAction.do?method=getPlayM edia&fileId=59326

Wilmar (2013a) 'Wilmar International fact sheet' http://www.wilmar-international.com/wp-content/ uploads/2013/08/Wilmar-Fact-Sheet-30-Jun-2013.pdf

Wilmar (2013b) Letter to Bustar Maitar, Greenpeace, from Khoon Hong Kuok, 10 October 2013

World Resources Institute CAIT 2.0 http://cait2.wri. org/wri viewed 19 September 2013

WWF (2008) Tiger habitat map http://www. savesumatra.org/index.php/newspublications/ map/0/Species%20Distribution%20Map downloaded May 2010

WWF Indonesia (2013) 'Palming off a national park: Tracking illegal oil palm fruit in Riau, Sumatra' http://wwf.panda.org/?209261/ REPORT-Palming-off-a-National-Park-Tracking-Illegal-Palm-Oil-Fruit-in-Riau-Sumatra

Yulisman L (2013) 'Palm oil producers want more ports to solve inefficiency' The Jakarta Post, 11 July 2013 http://www. thejakartapost.com/news/2013/07/11/palm-oilproducers-want-more-ports-solve-inefficiency.html

Yun M, Pakiam R & Listiyorini E (2013) 'Wilmar to Cut Off Palm Suppliers Caught Burning in Indonesia (1)' Bloomberg News, 30 June 2013, http://www.businessweek.com/news/2013-06-30/wilmar-to-cut-off-palm-oil-suppliers-caughtburning-in-indonesia



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