Chain Reaction Research is a coalition of:
Climate Advisers
Profundo

1320 19th Street NW, Suite 400
Washington, DC 20036
United States

Website: www.chainreactionresearch.com
Email: info@chainreactionresearch.com

Primary contacts:
Tim Steinweg, Aidenvironment
Gerard Rijk, Profundo
Gabriel Thoumi, CFA, FRM Climate Advisers

TH Plantations and PT Synergy Oil Nusantara: Leakage Risks At Plantation and Refinery

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Lembaga Tabung Haji is a Malaysian Islamic financial institution, with over USD 16 billion in assets under management. TH Plantations (THP) is Lembaga Tabung Haji's publicly traded palm oil arm, with 32 palm oil plantations in Malaysia and Indonesia. It has a total landbank of 102,000 ha, of which 61,104 ha is planted. The company is also a joint venture partner in PT Synergy Oil Nusantara (PT SON), a large palm oil refinery at the port of Batam, Riau, Indonesia. This facility has a capacity of 1 million tons per year. It is one of the largest 'leakage' refineries in SE Asia.

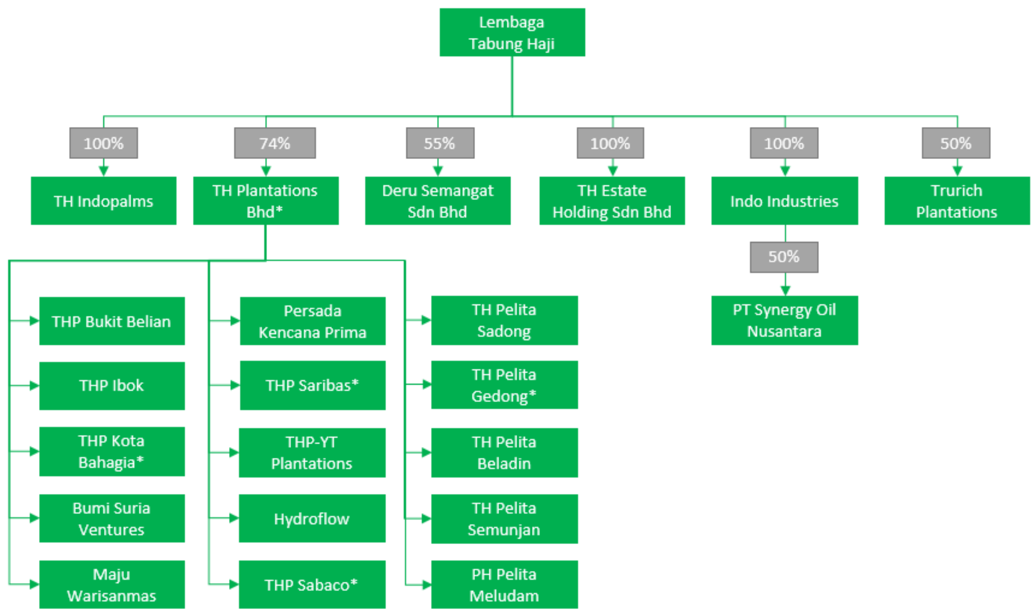
Key Findings

- **THP actively cleared peatland and forests at its PT Persada Kencana Prima (PKP) and Hydroflow plantations in 2017.** At PT PKP, it cleared 488 ha in 2017, with 6,420 ha remaining peat and forests. A moratorium on new land clearings has been in place at PT PKP since June 2017. It also cleared 171 ha of peatland at Hydroflow Sdn Bhd in 2017, with 770 ha of forest remaining.
- **THP's clearings constitute violations of the No Deforestation, No Peat, No Exploitation (NDPE) policies of some of its buyers, which has already led to suspension by IOI and engagement by Wilmar.** IOI accounted for the purchase of nine percent of THP's 2016 CPO production. Wilmar's engagement has successfully halted new clearings at PT PKP. No new deforestation has taken place since the issuance of this moratorium. THP also features on the supplier lists of AAK, ADM, Musim Mas, Olam, Nestlé and Unilever and its stranded land equals 7,190 ha.
- **Lembaga Tabung Haji is also active in midstream operations through its joint venture refinery PT Synergy Oil Nusantara (PT SON)**. PT SON has faced public criticism for being a replacement buyer for both Sawit Sumbermas Sarana (SSMS) and Austindo Nusantara Jaya (ANJ) after both companies were suspended by other traders for NDPE violations. Felda Global Ventures, its PT SON joint venture partner who has an NDPE policy, faces the most apparent reputational risks.
- **The sustainability-related value-at-risk could be equal to 43 percent of THP's equity value due to loss of customers and loss of Indonesian concessions.** Circa 20% of THP revenues are generated by NDPE customers, resulting in a value-at-risk equal to 28 percent of market capitalization. The regulatory risks related to the Indonesian Peat Moratorium ranges between USD 4.4 to 31 million, or 2-14 percent of equity value.
- **Future compliance with NDPE standards, would lead to value losses that equal 19 percent of THP's market cap.** These losses mainly consist of stranded assets because of the Indonesian Peat Moratorium, and the costs to restore already developed peatland.
- **In the five years' period 2013-2018, THP share price has underperformed all benchmarks by more than 50%.** Any further deforestation, potential stranded assets and regulatory risks might lead to major risks for all financiers.

Figure 1: Lembaga Tabung Haji's corporate structure (right)
Figure 2: Companies and Locations (below)

Plantation company	Estate	Location
TH Plantations	Bukit Lawiang	Johor
	Ulu Chukai	Terengganu
	Gunung Sumalayang	Johor
THP Bukit Belian	Bukit Belian	Sabah
THP Ibok	Sungai Ibok	Terengganu
THP Kota Bahagia	Kota Bahagia	Pahang
	Sungai Mengah	Pahang
	Sungai Buan	Pahang
	Sungai Merchong	Pahang
Bumi Suria Ventures	Sungai Arip	Sarawak
	Sungai Karangan	Sarawak
THP Saribas	Kenyalang	Sarawak
	Raja Udang	Sarawak
	Enggang	Sarawak
	Merbok	Sarawak
	NCR Saribas	Sarawak
THP-YT Plantations	Bukit Bidong	Terengganu
Hydroflow	Sungai Kerian	Sarawak
THP Sabaco	Mamahat	Sabah
	Sungai Tenegang	Sabah
	Bukit Gold	Sabah
	Sungai Koyah	Sabah
TH Pelita Sadong	Sadong	Sarawak
	Lupar	Sarawak
TH Pelita Gedong	Gedong	Sarawak
	Sematan	Sarawak
TH Pelita Beladin	NCR	Sarawak
TH Pelita Semunjan	Kepayang	Sarawak
	Semalatong	Sarawak
TH Pelita Meludam	Tanjung Lilin	Sarawak
	Semarang	Sarawak
Persada Kencana Prima	Persada Kencana Prima	Sungai Koyah

Lembaga Tabung Haji is a Malaysian Islamic financial institution, managing over USD 16 billion in assets under management. The firm was established under the government of Tunku Abdul Rahman, the first Prime Minister after Malaysia gained independence in 1958. Lembaga Tabung Haji facilitates savings for the pilgrimage to Mecca, Saudi Arabia. Its investments range from palm oil plantations to banking, information technology, hospitality, property development and oil and gas.



Lembaga Tabung Haji is active in the palm oil sector through its 73.84 percent ownership of THP and its other ownership in TH Estates, TH Indo Industries and TH Indopalms, the joint venture Trurich Resources and Deru Semangat. **In total, Lembaga Tabung Haji controls 160,000 ha of oil palm plantations in Malaysia and Indonesia.**

TH Plantations

THP is Lembaga Tabung Haji's publicly traded palm oil arm. It has been listed on the Main Board of Bursa Malaysia Securities Berhad since 2006, with a free float of 19 percent. Lembaga Tabung Haji controls 74 percent of TH Plantations, with the remaining 7 percent held by the Employees Provident Fund. THP operates 32 oil palm estates through fifteen subsidiaries with a total landbank of 102,000 ha, of which 61,104 ha is planted. Apart from PT Persada Kencana Prima in Indonesia, all estates are located in Malaysia. THP also operates six palm oil mills with a combined processing capacity of 240 MT per hour.

Between 2012 and 2015, TH Plantations undertook aggressive expansion, as it set the objective to increase its landbank to 300,000 ha by 2020. Among other things, THP acquired Hydroflow Sdn Bhd and PT Persana Kencana Prima (PT PKP) during this period. According to its CEO, the company is now consolidating and reducing its debt levels. In 2016, the company had to increase its external FFB input due to low productivity at its own plantations.

Figure 3: Facilities and Locations

Mill facilities	Location
Bukit Lawiang	Johor
Kota Bahagia	Pahang
Raja Udang	Sarawak
Gedong	Sabah
Mamahat	
Sungai Tenegang	
Refinery facility	**Location**
PT Synergy Oil Nusantara	Riau

Sustainability Risks

Subpar Sustainability Commitment

THP has no NDPE policy in place and stopped being a Roundtable for Sustainable Palm Oil (RSPO) member in 2012. THP is a founding members of RSPO, but it has not maintained its RSPO membership. THP's commitment to No Deforestation states: "The lands that we develop are secondary and logged-over area and thus we do not play any part in deforestation." It does not explicitly commit to conserving High Conservation Value (HCV), High Carbon Stock (HCS) or peatland.

NGO Criticism and Company Response

In September 2016, THP was included as one of the case studies in a Greenpeace report on IOI's supply chain. The report discussed deforestation and peatland development at its PT PKP estate, and argued that this constituted a violation of IOI's sustainability policy. THP did not respond to requests for information from the authors of the report.

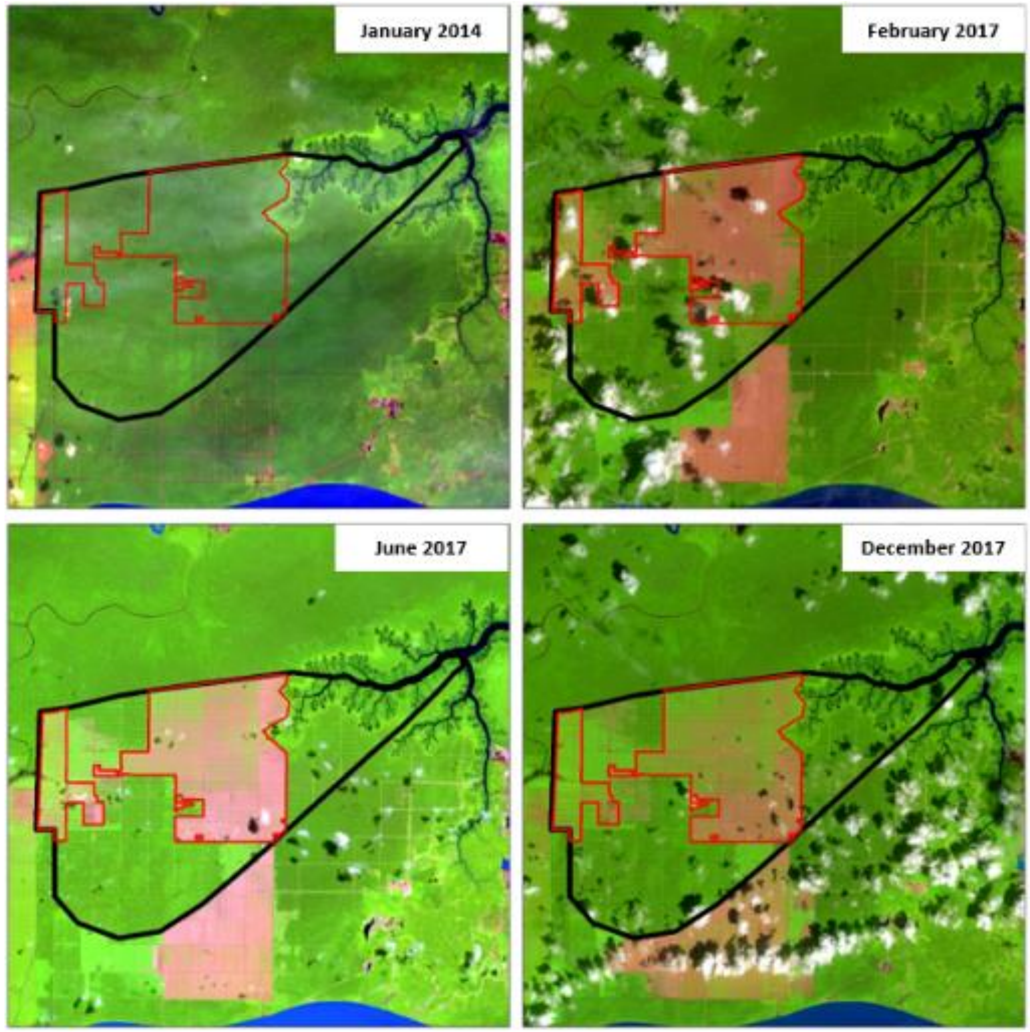
In a press release issued shortly after the release of Greenpeace's report, THP categorically denied all allegations, and spoke of '*threats […] based on the agenda of certain parties in the EU who continue to smear and discredit the palm oil industry in Malaysia and Indonesia as part of their "Anti-Palm Oil" campaign.'* It furthermore stated it had received all necessary government permits and that the concession was excluded from the moratorium on peatland development.

Deforestation and Peat Clearing in PT Persada Kencana Prima (PT PKP)

Development at the 9,817 ha PT Persada Kencana Prima (PT PKP) concession has been ongoing since November 2014. Contrary to THP's claims that it plays no part in deforestation, satellite imagery shows that a block in the east of the concession in North Kalimantan was fully covered in forest, peat and peat forest. **As shown in Figure 1 (below), from January 2015 to February 2017, a total of 2,787 ha of peat and peat forest was developed into oil palm. From January to September 2017 an additional 488 ha of peat and peat forest was developed, and another 3,913 ha peat and peat forest has been prepared for future deforestation.** In total, 6,420 peatland, peat forest and forests remain.

As reported in Wilmar's grievance list, THP management agreed to a moratorium of further land clearing in June 2017. Satellite footage confirms that no further development has taken place since that date.

Figure 4: PT PKP block east showing stacking lines in forest and development into plantations.



Peat Development in Hydroflow

As shown in Figure 2 (below), between March and October 2017, THP cleared approximately 170 ha of peatland at its Hydroflow Sdn Bhd plantation in the Sedilu-Gedong district of Sarawak in Malaysia. THP had acquired a 70 percent stake in Hydroflow Sdn Bhd in 2012. At that time, 693 ha of the total landbank of 5,602 ha was already planted. Based on the partial maps available to Chain Reaction Research, at least 2,143 had been cleared by June 2015. **At least 770 ha of undeveloped peatland and peat forest remain.**

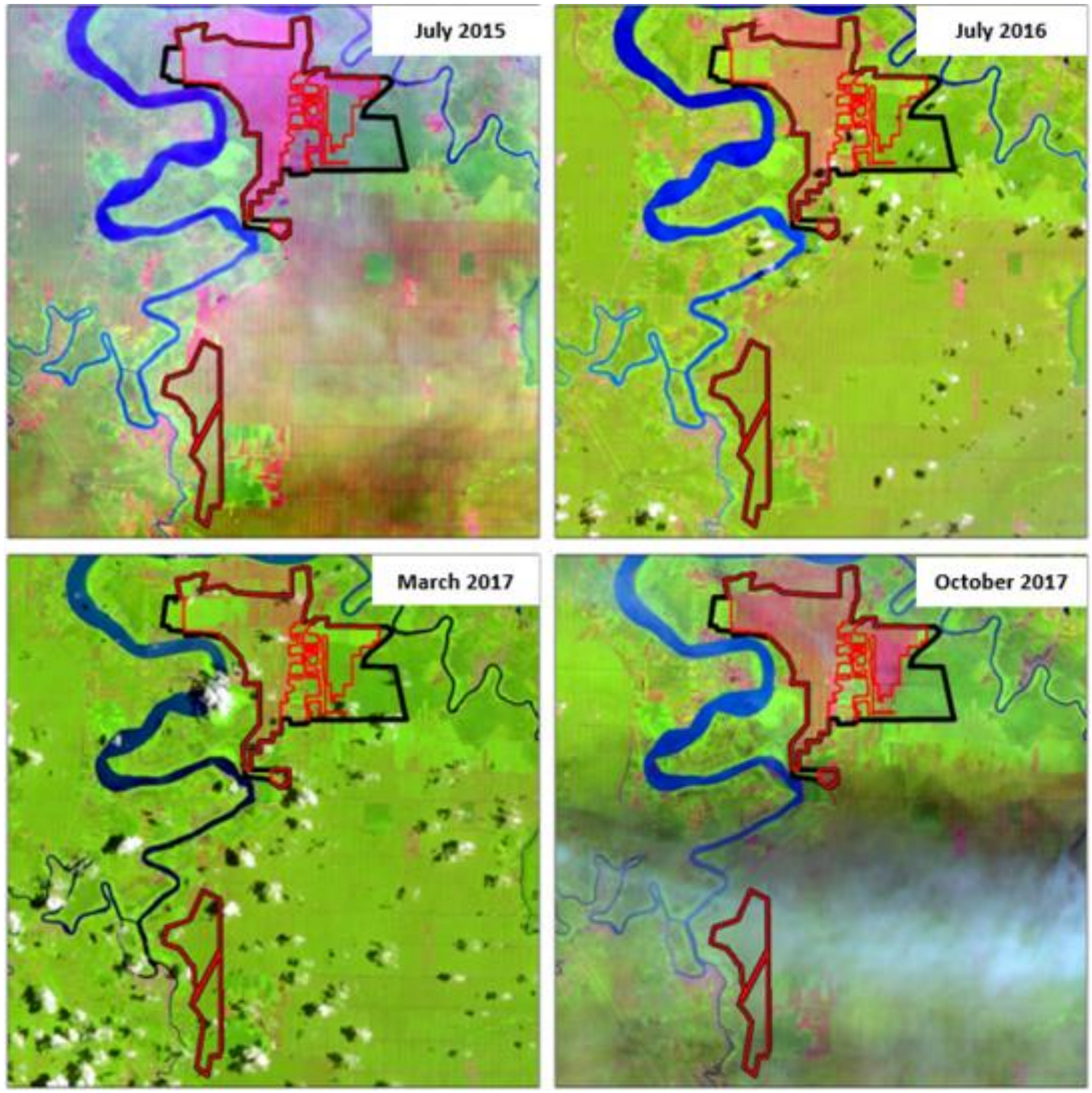


Figure 5: Land Development at Hydroflow Bhd Snd (July 2015 – October 2017). Source: Aidenvironment.

Business Risks

Market Access Risks

The instances of peatland development and clearing of forests and peat forests constitute violations of the NDPE policies of some of THP's buyers. In response to the issues raised in the 2016 Greenpeace report, IOI issued a lengthy statement explaining that it sources directly from some of THP's Malaysian plantations. **After THP did not respond positively to IOI's request for on-site mill and supply base verification, IOI decided to phase out THP from its supply chain.** IOI reported that it had purchased 15,850 MT from THP in 2015. This corresponds to nine percent of THP's 2016 CPO production of 173,358 MT.

THP continues to feature on the most recent supplier lists of a number of other traders/refiners with NDPE policies. These include AAK, ADM, Musim Mas, Olam and Wilmar. Recently published supplier lists of Nestlé and Unilever also feature THP as an indirect supplier.

Wilmar reports on its engagement with THP on the PT PKP concession in its latest grievance list. **It reports that a moratorium on further land clearing is in place, and that Wilmar is continuing to engage with THP to improve its sustainability practices**.

Stranded Land Risk

The moratorium for further land clearing at PT PKP has stranded 6,420 ha of land for TH Plantations. This is land that cannot be viably developed without the risk of losing access to NDPE clients. The public response that TH Plantations issued to the Greenpeace report in 2016 suggests that the company did not recognize that parts of its undeveloped concessions might be stranded. Wilmar's engagement on PT PKP illustrates that further development might jeopardize THP's client relations, and has forced THP to issue a temporary moratorium on further clearing. The temporary moratorium might become permanent. Furthermore, the remaining 770 ha of peat and peat forest at Hydroflow could also be considered stranded if NDPE clients initiate engagement on this issue.

Legal Risks

In December 2016, Indonesia's president Jokowi issued a peat moratorium. The peatland development that has taken place at PT PKP since that date might expose THP to administrative sanctions from the Indonesian government and could result in fines or the revoking of THP's permit.

PT Synergy Oil Nusantara (PT SON)

PT Synergy Oil Nusantara (PT SON) is the joint venture refinery of FELDA IFFCO (50 percent) and Lembaga Tabung Haji (50 percent). Lembaga Tabung Haji controls its share through its subsidiary Indo Industries. FELDA IFFCO is in turn a joint venture between Felda Global Ventures (50 percent) and IFFCO (50 percent). The refinery is located in Batam, Indonesia and has a refining capacity of 1 million ton/year.

Sustainability Risks

Weak Policy with No Clear Requirements

In June 2017, PT SON published a policy on sustainable palm oil, but with standards lower than NDPE policies adopted by many other traders/refiners. The policy states that the company will 'endeavor' to work with relevant stakeholders to ensure NDPE compliant oil palm products, without formulating clear supplier requirements. Furthermore, the policy does not make clear commitments on traceability, does not determine a scope and does not elaborate on sanctions. PT SON's only hard commitment states: "*[W]e shall not procure raw materials from illegal sources*".

One of the joint venture partners in PT SON, Felda Global Ventures, has an NDPE policy, in place since August 2016 and updated in August 2017. However, PT SON is not bound by this policy, as the scope is limited to "FGV's subsidiaries and FGV's listed subsidiaries worldwide, in which FGV holds a controlling interest and have management control." FGV's Vice President and Head of Sustainability and Environment reiterated this stance, stating that "*PT SON is not our subsidiary and we don't have management control (over it). Therefore it is not bound by FGV's Group Sustainability Policy*."

Leakage Supplier Base

The lower standards of PT SON's sustainability policy translate into its business relations. **PT SON has continued business relations with several producer companies that have been suspended by other company groups with refining capacity**.

- Sawit Sumbermas Sarana was suspended by three of its major clients – Wilmar, Apical and Golden Agri-Resources, for violations of their NDPE policies in 2014 to 2015. PT SON was among the replacement clients of SSMS. In 2016, SSMS reported total sales of USD 6.9 million to PT SON, representing 14 percent of SSMS' total revenue. A May 2017 Chain Reaction Research report documented ongoing deforestation at SSMS' affiliate PT SML.
- Austindo Nusantara Jaya (ANJT) failed to meet its buyers' NDPE requirements due to HCS forest clearings in West Papua. As a result, ANJT lost Golden Agri-Resources, Musim Mas and Wilmar as its clients in 2015. PT SON became a replacement client for ANJT from Q4 2015 onwards. According to ANJT's most recent filings, PT SON accounts for USD 136 million in 2016 sales, and between 47 and 53 percent of quarterly revenues in Q1 to Q3 2017.

An older PT SON supplier list includes a number of other companies associated with NDPE non-compliance.

- Bintang Harapan Desa (Sepanjang Group) is linked to PT PSM (West Kalimantan), a concession disposed of by Genting Plantations in January 2017, after it became evident it could not be developed sustainably. Of the 15,000 ha concession, around 10,000 ha is HCS forest and potential orangutan habitat. Soon after the purchase, the company started clearing forest. From early June until end of July 2017, the company cleared around 60 ha of forest.
- Indofood Agri Resources has a total landbank of 549,287 ha, of which 42 percent is contested. It is also the subject of an ongoing RSPO complaint for the use of child labor and poor labor practices. In 2015, around 6,000 ha of peatlands were burnt on its Kedang Makmur and Isuy Makmur estates in East Kalimantan. Through complex ownership structures, Indofood Agri is linked to the private plantations of Anthoni Salim that are subject to lower sustainability commitments.

Business Risks

Market Access Risk

PT SON is among the minority of palm oil refineries that does not place NDPE requirements on its suppliers. As of November 2017, this 'leakage' segment constitutes 26 percent of the refinery market and is expected to shrink further. Refineries without NDPE policies might be prevented from accessing some large and profitable end user markets, such as the EU.

PT SON's policy on sustainable palm oil is too broadly formulated to ensure that no deforestation takes place in its supplier base, and exposes the refinery and its owners to market access risk for clients with an NDPE policy. Such clients themselves could incur reputational risks from the purchases from 'leakage' refineries. Recent advances in supply chain transparency, have increased this risk.

Reputational risks

PT SON's position as part of the shrinking leakage market poses significant reputational risks for its corporate owners. The company has seen public criticism in September 2017, when a Foresthints article discussed controversies at PT SON's suppliers and pointed to the lack of a publicly available supplier list.

Arguably, the reputational risks are most apparent for Felda Global Ventures, the only joint venture partner with a sustainability policy. Whereas FGV does not have managerial control over the joint venture, its participation in a refinery that operates below FGV's group-level policies might incur significant reputational damage. FGV's external stakeholders might not agree with its management position that PT SON falls outside the scope of FGV's sustainability policy and might publicly pressure the company to take action.

Financial Risk Analysis

A. In this financial risk analysis, we focus on the publicly-listed THP only due to the transparency of financial information and the lack of info on Lembaga Tabung Haji and PT SON. THP's financial risks from its deforestation are modeled below using different scenarios. These scenarios include modeling value-at-risk of investments (debt, equity) by NDPE and RSPO non-compliance..
B. The costs for THP in adapting its activities to become compliant to NDPE standards.

In paradigm A, the following impacts are calculated:
1. The revenues at risk at THP if NDPE customers would act on any further deforestation.
2. The costs of the fines from the Indonesian government and the value at risk if the THP's permits will be revoked for a certain period.
3. Cost of capital, i.e. who is financing THP's debt and equity and how will its NDPE non-compliance impact their investments and possible engagement?

In paradigm B, the following calculations are crucial:
4. The size of the potentially stranded assets.

Restoration costs of peat land and peat forest.

Recent Results: Weak EBITDA Growth and Negative Free Cash Flow Generation

From 2012 to 2017, THP's revenue grew by 31.7 percent to USD 160 million (+5.7 percent per year). In 2017, its 18 percent revenue growth was due to higher volumes and due to price/mix effect. Of THP's sales in 2017, 74 percent came from CPO, 16 percent from palm kernel and 10 percent from FFB. Its 2017 annual report is not available yet, but analysis below assumed that all the revenues are generated in Malaysia like in 2016. Of the non-current assets of 2016, only 2.5 percent are based in Indonesia. Of all assets, 6 percent is invested in forestry with no revenue generation.

From 2012 to 2017, THP's net profit declined 83 percent to USD 8.5 million, also due to extraordinary items. Both 2012 and 2016 showed relatively high profits versus other years, i.e. 'surplus over fair value of net assets acquired' and 'gains on disposals'. Excluding these extraordinaries, EBITDA showed an annual increase by 4.6 percent and a total increase of 25 percent to USD 51.8 million. In 2017, its EBITDA excluding extraordinary items showed a strong improvement versus 2016, mainly due to higher volumes.

As shown in Figure 3 (below), from 2012 to 2017, higher interest charges, related to an increase in net debt (from USD 249 million in 2012 to USD 369 million in 2017), negatively affected its net profit. The net-debt increase was related to a negative free cash flow (after capital expenditures) generation, which amounted to a negative USD 168 million (in cumulative total) in 2012-2017. Although 2017 showed a positive free cash flow, dividend payments still led to a rise in net debt.

Figure 6: Key financials TH Plantations; Source: Bloomberg.

USD millions	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2012/17 CAGR**
Net revenues	121.7	149.2	149.4	117.2	135.8	160.4	5.7%
Gross profit (including DA)	36.7	36.9	27.4	9.8	18.9	36.8	0.1%
EBITDA excl. extraordinary	41.4	53.0	42.8	31.8	38.8	51.8	4.6%
Gain on disposal/other	32.8	0.0	4.3	0.3	27.1	1.0	-50.2%
EBITDA	74.2	53.0	47.1	32.1	65.9	52.8	-6.6%
Financial income/costs	-5.6	-16.4	-8.2	-5.8	-12.4	-13.6	19.4%
Net profit	48.8	20.0	14.8	16.0	35.6	8.5	-29.5%
EPS (USD)	0.06	0.02	0.01	0.02	0.04	0.01	-30.1%
EPS (sen)	21.49	7.17	5.47	7.03	16.64	4.16	-28.0%
FCF after capex	-53.2	-45.4	51.1	-109.8	-25.1	14.8	-177.4%
Net debt + other	248.6	383.6	325.2	351.7	329.0	369.5	8.2%
Ratios:							**Average**
Gross margin	30.2%	24.7%	18.3%	8.4%	13.9%	22.9%	19.7%
EBITDA margin	61.0%	35.5%	31.5%	27.4%	48.5%	32.9%	39.5%
EBITDA margin excl. gain	34.0%	35.5%	28.6%	27.1%	28.6%	32.3%	31.0%
Net debt/EBITDA (x)	3.4	7.2	6.9	11.0	5.0	7.0	6.7

As mentioned above, EBITDA 2016 was positively affected by gains on divestments. In 2016, these gains were USD 27 million. THP divested THP Gemas Sdn Bhd in December 2016, for a total consideration of USD 35 million for 2,819 ha and an oil mill. This divestment proceed calculates to USD 12,400 per ha, which is at the low end of recent transactions which are in the range of USD 18,000 to USD 20,500 per ha. THP Gemas was divested to a small company, Dupont & Leosk Enterprises Sdn Bhd.

Excluding the gains on disposals/revaluations, the EBITDA margin of THP is still relatively high (see table above). From 2012-2017 the EBITDA margin averaged 31 percent, well ahead of a 35-peer group which had an average EBITDA margin of 13.2 percent in 2016 (2017 not yet available).

The current net-debt position of THP is a bit more stretched than that of the industry. **THP's net-debt/EBITDA is relatively high and is on average close to 7X in the period 2012-2017, while the industry has a net-debt/EBITDA range of 2-5X (2.2X in 2016 versus 5.0X for THP).**

While THP's profitability was much better than the average of the sector, the net-debt at THP increased due to a continuing negative free cash flow after capital expenditures and after capitalized (cash) development costs. This discrepancy has accumulated to a negative MYR 555 million or USD 133 million in the 2012-2016 period. Further contributing to the increasing debt was the discrepancy between the financial costs in the P&L and in the cash flow statement. This gap accumulates to USD 25m in 2012-2016 and the costs were capitalized in plantation development expenditures and booked as fixed assets on the balance sheet. These high cash investments and capitalized costs occurred in a context of stable hectares in 2014-2016 and stable production.

In this financial context of weak free cash flow generation and rising net-debt, we estimate the potential value of the various sustainability risks.

Financial Risk 1: THP's Revenue-at-Risk

In their quarterly reports, THP does not refer to material clients. The annual report 2016 showed two material clients, which each contributed 12.7 percent to TH Plantations revenues:

- Bintulu Edible Oils, which had 2016 revenues of USD 532 million; Bintulu Edible Oils is a refinery of Wilmar's and it has NDPE policies. Traditionally Bintulu has been a major customer: in 2014, sales to Bintulu amounted to 23.7 percent of TH Plantations sales, in 2015 16.7 percent, and in 2016 12.7 percent (or USD 17 million). Bloomberg shows info that of THP revenues 16.7 percent is generated from Wilmar as a whole, which points to more than USD 22 million.

SOP Edible Oils, which had net revenues of USD 1,085 million in 2016; the revenues from TH Plantations to SOP amounted to USD 17 million, or 1.6 percent of SOP's annual sales; SOP Edible Oils is a refinery in Bintulu in Sarawak. It is owned by Sarawak Oil Palms Berhad, an independent refiner without NDPE policies.
As previously indicated, THP shows up in direct and indirect supplier lists of several buyers with an NDPE policy, including AAK, ADM, Musim Mas, Olam, Wilmar, Nestlé and Unilever. However, we do not know the total size of these deliveries.

Bintulu (Wilmar), an NDPE customer, represents USD 17 - 22 million of THP's revenue. Including the other buyers with NDPE policies, the total revenue-at-risk might approach USD 30 million, equal to 20% of 2017's revenues. Assuming a 29 percent margin, this would translate in a negative USD 8.7 million on EBITDA. The present value of this USD 8.7 million is **circa USD 61 million. This is equal to 28 percent of the share price on 13 March 2018. This value will only be lost if the revenues are not redirected to new 'leakage' customers.**

In the financial accounts there is no proof that the refining joint venture of Lembaga Tabung Haji and Felda IFFCO (PT SON) is a customer of THP.

Financial Risk 2: Regulatory Risk and Revoking of Indonesian Permits

The regulatory risks that THP is facing mainly concerns PT PKP, as, since December 2016 (introduction of the Indonesian Peat Moratorium) THP might be exposed to administrative sanctions from the Indonesian government, which could result in fines or the revoking of THP's permit. After the 2016 peat moratorium, ca 803 ha of peat land has been developed (and 3,913 stacked).

It is possible that the permits on these concessions could be (temporarily) suspended while THP resolves the conflicts pertaining to this land. If this suspension would be applicable for the whole developed territory of PT PKP, and if THP does not change its practices in the long term, this would mean a strong impact on future free cash flow generation. THP would not be able to generate any profits from the developed part (we assume 5,000 ha's). Using the assumptions of 4.5 CPO tons per ha at USD 650/ton and a EBITDA margin of 30 percent, **this permit freeze could cost THP circa USD 4.4 million in free cash flows, which calculates to USD 31 million in discounted cash flow terms, which is equals to 14 percent of its equity value.**

If the freeze of the license would last less than one year, the negative impact would be USD 4.4 million, equal to 2 percent of THP's equity value.

Financial Risk 3: Higher Cost and Limited Capital

THP risks losing shareholders or debt providers that apply deforestation policies in their activities. As a consequence, the cost of capital might increase. In Figure 4 (below), it is shown how THP is currently financed through debt and equity (market value).

Figure 7: Enterprise value division 13 March 2018; Source: Bloomberg.

USD million	2012	2013	2014	2015	2016	2017	2018E
Enterprise value (EV)	723.4	888.1	754.3	589.9	545.6	619.8	584.8
Market capitalization	474.8	504.5	429.1	238.2	216.7	250.0	215.3
Gross debt	160.7	307.0	313.9	287.0	287.2	306.3	306.3
Pref and other	128.9	120.9	115.3	82.3	78.3	88.4	88.4
Cash	41.0	44.3	104.0	17.6	36.5	25.2	25.2
Market cap as % of EV	66%	57%	57%	40%	40%	40%	37%

The debt of THP is mainly held by Lembaga Tabung Haji, the 73.84 percent shareholder of the plantation company. This government-linked Lembaga Tabung Haji does not have a policy on deforestation.

In total, 7.5 percent of the shares are controlled by shareholders which only have a very limited policy on deforestation. THP is controlled by Lembaga Tabung Haji. The Employees Provident Fund (EPF) holds another 7 percent of the shares. This is a social security institution formed according to the Laws of Malaysia Employees Provident Fund Act 1991 (Act 452). The EPF provides retirement benefits for members through management of their savings. Its members are Private and Non-Pensionable Public Sector employees and the contribution is mandatory. In the Forest 500, its forest policy has a very low score of 1 out of 5, although completely due to palm oil. Another shareholder, KWAP, is relatively active and its policies refer directly to ESG expectations for its investees. The asset managers Dimensional and Manulife have small positions, as shown in Figure 5 (below). In the Forest 500, these investors have scores of respectively zero and 1 (out of 5) in 2017 and have no policies on palm oil.

Adding up, this means that less than 7.5 percent of the shares are controlled by shareholders which have a meagre policy on deforestation.

Figure 8: Shareholders of TH Plantations (13 March); Source: Bloomberg

Shareholders (13 Nov 2017)	**%**
Lembaga Tabung Haji	73.8%
Employees Provident Fund Board (EPF)	6.9%
Kassim Yayasan Pok D	1.4%
Public Islamic Select Trea	1.3%
Kumpulan Wang Persaraan (KWAP)	1.2%
Dimensional Fund Advisors LP	0.5%
Manulife Financial Corp	0.02%

The analysis of debt and equity holders shows that these are not likely to exert pressure on THP to change its deforestation and peat practices. To put the effectiveness of engagement in perspective, it should be noted that THP's debt and equity are mainly financed by Lembaga Tabung Haji. Divestment by other investors will only have a very small impact on the cost of capital.

Financial Risk 4 and 5: Value of Stranded Assets and the Costs of Restoration

In an environment in which THP would comply with NDPE standards, THP could still incur costs, including the writing off of stranded land and the costs of restoration.

As mentioned above in the sustainability analysis, there still remains 6,420 ha of peat, peat forest and forest at PT PKP in preparation for further development. Under the moratorium, this should not occur, and this land should be seen as 'stranded'. If we apply a 4.5 metric metric ton CPO per ha and USD 600/ton revenue and apply a EBITDA margin of 30 percent, **then we calculate a loss of annual EBITDA of USD 5.2 million, leading to a discounted cash flow value of USD 36 million.**

At PT Hydroflow, the remaining unplanted peatland totals 770 ha. NDPE policies would prevent the development of this land. According to the same methodology above, the discounted cash flow value of the land-proceeds that will not be reaped could be calculated at **USD 4 million. Overall, in total USD 40 million potential discounted cash flow, related to 'stranded' land, could probably not be reaped. This is equal to 19 percent of the current equity value.**

The development of peatland into palm oil land on 488 ha by PT PKP since January 2017 could lead to sanctions related to the Indonesian Peat Development Moratorium. If restoration is required to restore trading relations with NDPE buyers, the costs can be calculated as follows: the RSPO implements a Remediation and Compensation Procedure (RCP) and the restoration cost per hectare might amount to USD 2,500-3,000. If we would apply the mid, USD 2,750 per ha, **the total costs would amount to USD 1.3 million, or 0.6 percent of the market capitalization of THP.**

Summary of Value Impacts

Figure 6 (below) shows that, in a paradigm of **further deforestation, THP faces a potential substantial value loss of USD 65 to 92 million. This is equal to 30 to 43 percent of the equity value of THP.** The loss of EBITDA in A could be a total of USD 13.1 million (8.7 + 4.4), which would hurt total EBITDA severely (ca 25 percent). As debt is mainly controlled by the mother company Lembaga Tabung Haji), there will not be a major risk of pressure from (bank) lenders to improve solvency. However, structural better cash flows are needed to protect the investments of all financiers.

Paradigm B, which adds up the potential costs if THP would become compliant to NDPE, **could lead to a value loss of circa USD 41 million, which is equal to 19 percent of the current equity value.**

Figure 9: Summary of value impacts Scenarios A and B

Value of impacts (USD million)	Reason	Value USD m
Paradigm A		
Financial Risk 1: Bintulu and other NDPE buyers	Loss of NDPE customer	61
Financial Risk 2: Regulatory risk	Temporary/permanent loss of permit	4.4 - 31
Financial Risk 3: Cost of Capital	Financiers become critical	Limited
Total Scenario A		65.4-92
Paradigm B		
Financial Risk 4: Stranded Land	Peat and forest PT Hydroflow	40
Financial Risk 5: Restoration	Peat Moratorium Indonesia	1
Total Scenario B		41

THP Underperforms Its Peers

In 2013-2018, THP's share price has declined by 64 percent in US Dollar terms. This strong decline occurred in particular since the second half of 2014. **The share price**

development was much weaker than the Bursa Malaysia Plantation Index, the general Malaysia Stock Market Index and the Jakarta Stock Exchange Agricultural Index, see Figure 7 (below). Next to majority shareholder Lembaga Tabung Haji, both EPF and Dimensional have lost value as they have been holding the shares during this period.

Figure 10: Shareholders' return comparison 5-year period 2013-2018 (3 April); Source: Bloomberg

in USD	Price change	Total return
TH Plantations	-64%	-60%
Bursa Malaysia Plantation Index	-20%	-8%
FTSE Bursa Malaysia EMAS Index	-11%	4%
Jakarta Stock Exchange Agricultural Index	-39%	-32%

As shown in Figure 8 (below), the reason for the strong underperformance of the share price versus peers is partly embedded in the relatively weak key financial numbers, with a relatively weak net profit growth of THP over the period 2012-2017 and the high net-debt/EBITDA ratio on average. One of the factors for the high net-debt is that THP continues to have a negative free cash flow. In addition, the declining role of Wilmar as a reliable NDPE buyer might also have had a negative impact.

Figure 11: 2012-2016 Development of TH Plantations versus the sector/peer group; Source: Bloomberg

2012-2017	Sector	THP
Net sales (% CAGR)	1.7%	5.7%
EBITDA (% CAGR)	-6.9%	-6.6%
Net profit (% CAGR)	-18.9%	-29.5%
Net-debt (% CAGR)	16.6%	8.2%
Net-debt/EBITDA (x)	1.4	6.7

As shown in Figure 9 (below), the current valuation shows a P/E 2018 ratio which is below and an EV/EBITDA 2018 ratio which is ahead of the peer group. Because of THP's relatively high debt, the EV/EBITDA valuation multiple is more relevant. The above-mentioned financial risks in paradigms A as well as B are both substantial and will probably not help to recover the relative share price development of THP. **For investors, the historical share price development and the potential financial risk assessment form a warning that underperforming management, governance and ESG violations do have high financial risks.**

3 April 2018	P/E 18F (x)	EV/EBITDA 18 (x)		P/E 19F (x)	EV/EBITDA 19 (x)
THP (share price MYR 0.86)	16.9	11.1		14.3	10.4
Peer group Malaysia (Bloomberg)	19.4	11.6		16.8	10.7

Figure 12: TH Plantations valuation versus peer groups; Source: Bloomberg

3 April 2018	P/E 18F (x)	EV/EBITDA 18 (x)		P/E 19F (x)	EV/EBITDA 19 (x)
Peer group Malaysia (Chain Reaction Research), excluding high/low	17.2	9.6		13.9	8.3
Average	18.3	10.6		15.4	9.5
Premium/discount (%) THP vs peers	-7.7%	+4.7%		-7.1%	+9.5%

The stock is covered by 5 brokers/banks and 3 of them have a HOLD rating, 1 Sell and 2 not rated. Target price on average is 1.03.