



No Deforestation, No Peat (NDP) Risk Management Framework

Report

Last updated: 20 September 2021



About NDPE

Musim Mas developed an No Deforestation, No Peat and No Exploitation (NDPE) policy in 2014, updated in 2020, which applies to its own operations and suppliers.

Third-party mills which supply palm oil products to our refineries are obliged to fully adhere to our NDPE requirements by no later than 2025, as spelled out in our NDPE Roadmap and subject to individual action plans.

Nevertheless, some risks remain and this framework defines our approach to managing these risks.



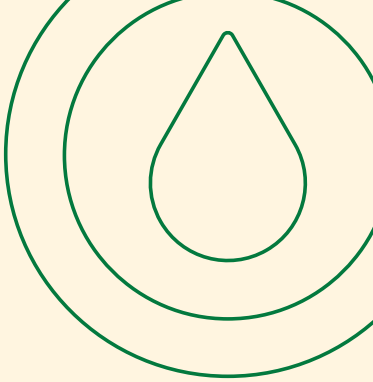
Definition of Risk

Musim Mas defines risk as any production or procurement of CPO and PK which may contravene our NDPE policy.

We consider Palm Oil Innovation Group verified plantation companies fully NDPE compliant for the operations within the scope of the independent POIG verification. Additionally, the RSPO certification status of operations or suppliers, according to the P&C 2018, is considered a proxy for mitigating NDP risks for some of our NDPE requirements. We consider RSPO IP certified operations, and associated smallholder schemes low risk for key environmental and traceability requirements. RSPO MB-certified mills are considered to have potentially elevated risks of NDP non-compliance given the inputs from uncertified and unknown sources. Therefore, Musim Mas will include these mills and their supply bases in the risk assessment procedures described below. This procedure will also be utilized for RSPO certified mills subject to grievances.

Musim Mas mills that rely fully on fresh-fruit bunches (FFB) from own concession areas and scheme smallholders are fully NDPE compliant through POIG and/or RSPO assurance procedures and adherence to HCSA requirements, as described above. However, the Musim Mas group also operates several independent mills, which are supplied by uncertified independent smallholders and/or outgrowers.

In addition, many of our suppliers are unable or unwilling to certify their operations or supply base. This is why Musim Mas has a strong commitment to achieving independently verified NDPE compliance for all suppliers, including those with no certification. This framework will be used in the pre-verification phase to assess the risk of non compliance with No Deforestation and No peatland requirements. It is designed to inform, not replace, programs for the independent verification of compliance with all NDPE requirements.



NDP Risk Assessment Framework



Risk Assessment and Mitigation



Risk Containment



Risk Monitoring



Risk Reporting

Framework Scope

The scope of this framework includes our operations (all mills and plantations), as well as all third-party suppliers of crude palm oil (CPO) and palm kernel (PK)¹ to our mills and refineries. It includes mills, concessions, defined as plantations directly owned or linked to mills, as well as smallholders and outgrowers. The latter are defined as oil palm plantings exceeding 25 ha, not owned or managed by a mill.

This risk framework addresses the risks of deforestation and peat development solely on existing concession areas of our operations and those of our suppliers. Reason being that we cannot systematically assess encroachment by third parties on concessions or smallholdings throughout or supply chain, nor do we know land banks of third-party suppliers that may undergo development in the future.

Although Exploitation is a crucial element of NDPE, we currently have no tool available to address exploitation throughout our supply chain systematically. However, as part of our due diligence, we carry out public searches on suppliers regarding land conflicts or other exploitation-related grievances. We envision expanding the scope of this framework to assess the risk of the exploitation of Indigenous Peoples, local communities and workers affected by our operations and supply chains. We are monitoring new approaches to assess better exploitation risk in alignment with international human rights norms. Musim Mas is committed to developing a human rights risk assessment, due diligence, and independent verification framework and will participate in multi-stakeholder initiatives that support such development.

¹ Palm Kernel Oil (PKO) and Coconut Oil (CNO) will be included at a later stage.





Risk Assessment and Mitigation

Assessing deforestation and peat risks is highly reliant on knowing the exact FFB supply sheds of both independent mills owned by Musim Mas and those of our suppliers. We define supply sheds by using traceability to the source of production (or traceability to plantation, TTP). Based on that information we allocate a risk rating to all mills in our supply chain (low, medium, or high risk, respectively).

For **our independent mill operations** we have 100% traceability to fully mapped plantation and smallholder oil palm plots. Our independent mills refers to our mills that do not have accompanying plantations. By overlaying maps of the extent of conservation areas and peat (treated in greater detail below) with locations of independent smallholdings², we are able to define risk based on the extent of overlap. High-risk areas, supplying smallholder supply sheds or villages are further investigated via field verification programs and ground truthing. We also commit to obtaining RSPO-SCC certification for all our independent mills (one already has been independently verified by POIG).

We work to assist independent smallholders in achieving NDPE compliance. However, smallholders who are found to harvest fresh fruit bunches from inside conservation areas, or from palms that were planted after the cutoff date in peat and forest moratorium areas are excluded from our supply chain until such a time when they have committed to end encroachment into conservation or peat areas and a mechanism is set up to allow a return to compliance with our NDPE policy.

For **third-party suppliers** we obtain the concession data and corresponding shapefiles of nucleus plantations, and if available, smallholders and outgrowers to ensure that concession boundaries at a corporate group level do not overlap with designated conservation and peat areas. Where they do, we monitor the operations to identify and respond to any deforestation or peatland development (see below). Third-party suppliers and/or their FFB suppliers that are found to harvest or process fresh fruit

bunches from inside conservation areas, or from palms planted after cutoff dates in peat and forest moratorium areas are subject to immediate suspension or exclusion from our supply chain. Third party suppliers and/ or their FFB suppliers that agree to stop clearing HCV areas, HCS forests or development on disputed community lands may be allowed to re-enter our supply chain according to our grievance procedure or Controlled Purchase Protocol.

To assess supplier risks by smallholders and outgrowers supplying our third-party mills we currently use three approaches, depending upon the availability of TTP data and mapping of oil palm-planted areas.

- 1) The basis of our traceability analyses is the assignment of FFB origin to a particular village. With this information we applied the *village-based risk-traceability* approach as standard practice. Village boundaries are overlaid with the conservation area and peat moratorium maps. Villages that have overlapping boundaries are considered high risk. High-risk villages are subject to more detailed mapping, ideally down to the geolocation of the smallholder or outgrower plot. If mapping indicates that FFB is produced within no-go areas, the supplier must exclude these sources of FFB from the supply chain. We are currently implementing an improved



version method described below as method 2.), which is more accurate.

- 2.) The *Augmented village-based risk traceability* approach is based on village boundary data, which is overlaid with previous data sources on peat and conservation areas, augmented with maps of palm-planted areas derived from official or open access sources, as well as federal forest cover maps of MoEF. If the palm-planted area in a given village overlaps with any no-go areas by more than 10% it will be classified as high risk³ and triggers further investigations (see above)⁴.

This approach is very precise, but requires the development of dedicated maps of planted palm. Such maps are not readily available in formats suitable for our analysis. Although we are aiming to obtain full coverage of our sourcing areas, gaps remain for the time being.

In addition, as landscape or jurisdictional integrated HCV/HCS assessments will become available, we will integrate recognized HCV/HCS maps into our risk screening methodologies described above.

- 3.) If we cannot apply either approach 1.) or 2.), we utilize a fixed radius approach. We map overlap between conservation and

peat areas within a 50-km radius of the mill. Depending upon the extent of overlaps, mills are classified as low, medium or high risk⁵. This approach is very coarse and only serves as a proxy for potential risk. Once we obtain TTP data, we re-classify risks based on the other methodologies mentioned above.

Beyond the Traceability data, we also obtain supplementary information from mills, which we utilize for initial due diligence and risk assessments.

We will extend these approaches to our suppliers outside Indonesia in line with our NDPE Roadmap. We are currently developing the databases required for the TTP analyses in respective countries.

Targets for 2021:

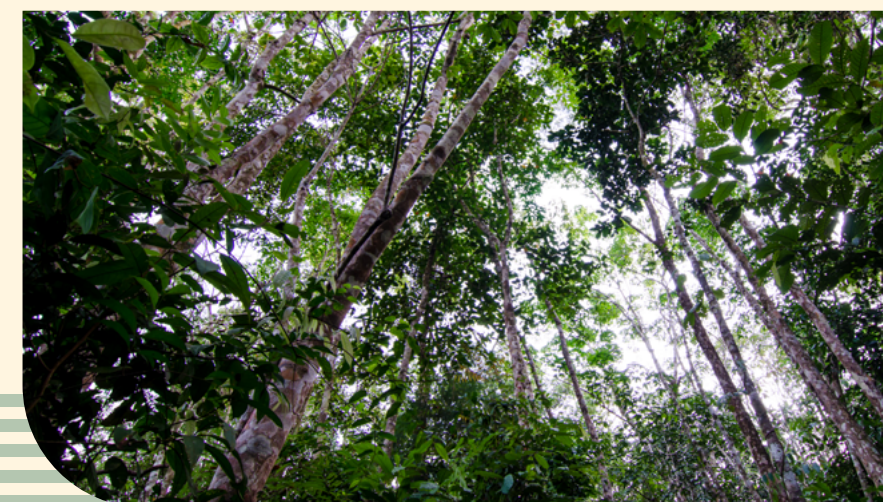
Full TTP data for 60% of supplier mills, mapped with either methods 1.) or 2.), remainder with method 3.) (Fixed-radius approach).

Targets for 2022:

Full TTP data for 75% of supplier mills, mapped with either methods 1.) or 2.), remainder with methods 3.).

Target for 2025:

Full traceability coverage of all third-party mills with method 2.) (Augmented village-based risk traceability methodology).



² Note: Our independent mills are supplied entirely by independent smallholders, which have been fully mapped (to the individual smallholder farm) and some of which are certified through the RSPO ISH standard.

³ Risk thresholds for low, medium and high risk are based on the percentage spatial overlap with no-go areas, and amount to ≤ 2% (low), >2 to ≤ 10% (medium) and >10% (high). Medium-risk villages will be mapped in detail as a second priority, analogous to high-risk ones. Low risk villages are not scrutinized further.

⁴ Musim Mas is currently participating in a multi-stakeholder effort to develop an HCV/HCS assessment for Aceh Tamiang and Aceh Timur.

⁵ Risk thresholds are based on incidences of overlap with indicators (e.g. conservation area, peat). Overlaps with two indicators within the radius are classified as high risk, whereas one instance is classified as medium-risk or none is low risk.



Risk Containment

In addition to the risk assessment efforts described above, we attempt to limit NDPE risks through written NDPE commitments from suppliers and due diligence self-assessment tools. Nevertheless, additional assurance measures are necessary.

Based on our experience and procedures with grievance cases, we will develop collaborative time-bound action plans with high-risk mills to mitigate risk in the near term and plan for medium-risk mills in the future. Mutually agreed activities include detailed mapping on identified risk areas, and exclusion of smallholders, outgrowers and agents, which are non-compliant with NDPE requirements.

Supplysheds tend to be dynamic, with sub-agents or smallholders supplying to various mills, or new sources of FFB becoming available on the market. Supplysheds refer to the concessions managed by the mills, and their third-party suppliers, including smallholders. We expect suppliers to review and update their TTP data annually. We will independently verify TTP data and re-assess risk levels based on these annual updates, prioritizing previously medium and high-risk

mills (low-risk mills will be re-assessed every three years, even if there has been no change in their TTP data). We will also prioritize mills or outgrowers subject to grievances, or shown in our internal processes to be non-compliant in their operations or sourcing from non-compliant plantations, outgrowers or smallholders.

Since it is better to address risks proactively, we carry out NDPE workshops with all our suppliers to familiarize them with potential deforestation and peat risks in their supplysheds. Through the establishment of smallholder hubs at the jurisdictional level, we are equipping provincial or district extension officers with training skills and materials for outreach to independent smallholders even outside our current sourcing areas. An NDPE training module and a dedicated NDPE handbook have been developed for this purpose. (For our mills, NDPE compliance is ensured through dedicated procedures and internal control systems.). We will continue to require all suppliers to adhere to the High Carbon Stock Approach for all new developments to ensure compliance with our NDPE policy. We will also support applying the simplified HCSA approach for smallholders and outgrowers in our supply chains, including at a landscape level.

Targets for 2021:

Action plans developed for 20% of mills classified as high-risk (including all own mills assessed as high risk).

Targets for 2022:

Action plans developed for 50% mills classified as high risk.

Target for 2023:

Action plans developed for 75% of the mills classified as high risk.

Target 2024:

Action plans developed for 100% of the mills classified as high risk.

Target for 2025:

Action plans developed for all mills, irrespective of risk level.



Risk Monitoring

Previously we have verified the traceability information and supply shed data from mills that were involved in grievances through our internal verification team carrying out ground checks. We plan to expand these verifications to high-risk mills, starting with our supplying mills based in Aceh.

However, as ground checking is time and labour-intensive, we plan to pilot test other approaches to independently corroborate the traceability information that we obtain from mills or agents. Such plausibility checks will be tested in Aceh supply sheds during 2021 and 2022 as part of our Aceh NDPE strategy.

In parallel we are utilizing other collaborations to monitor deforestation and encroachment on peat. We consider monitoring a parallel, but a separate approach to risk mapping, as it focuses on non-conformance with NDPE requirements in high-risk contexts. Mapped supplier concessions are continuously monitored by Earthqualizer, recognizing that deforestation alerts are often after the fact. Nevertheless, the fact that satellite monitoring exists can serve as a deterrent.

To address deforestation by smallholder and outgrowers, we have formed a [partnership](#) with other palm oil traders and consumer goods manufacturers to deploy a radar-based deforestation system (RADD): Plans to roll out field verification pilots in two districts of Aceh and one in Riau were hampered by the Covid pandemic. But we expect the system to be operational by the end of 2021.

Targets for 2021:

Plausibility checks for TTP data validation developed and tested. RADD operational in two districts of Aceh.

Targets for 2022:

TTP methodology and implementation to be verified by independent party.





Risk Reporting

Our primary objective for NDPE requirements is and has been sector transformation rather than exclusion. This requires weighing genuine continuous improvement efforts of third-party suppliers against full transparency. We commit to publicly reporting risk levels (high, medium and low) annually in a consolidated fashion for our primary sourcing areas by 2022. In addition, we publicly report the names and locations of mills that violate our NDPE requirements on our Grievance webpage.

We are currently developing a consolidated reporting system for our primary sourcing areas, which we expect to finalize by the end of 2021. In parallel, we are exploring how we can integrate the Risk reporting system with the Implementation Reporting [Framework](#) (NDPE-IRF).

Targets for 2021:

By the end of 2021 we will have finalized and implemented a reporting system, that provides semi-annual updates of risk-classification within our supplier portfolio by landscapes. We will report risk ratings of own mills by the end of 2021.

Targets for 2022 and thereafter:

Consolidated risks are reported on website or Sustainability reports for own and supplier mills, differentiated into sourcing area and high, medium and low risk mills.



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