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Our History





Started the first palm oil refinery in Indonesia

1970



Started oleochemicals plant

2003



1932 Started the Nam Cheong Soap Factory



1988
Started plantation in Rantau Prapat, North Sumatra



2012
Fully integrated palm oil corporation across 13 countries



About Musim Mas

Musim Mas at a Glance



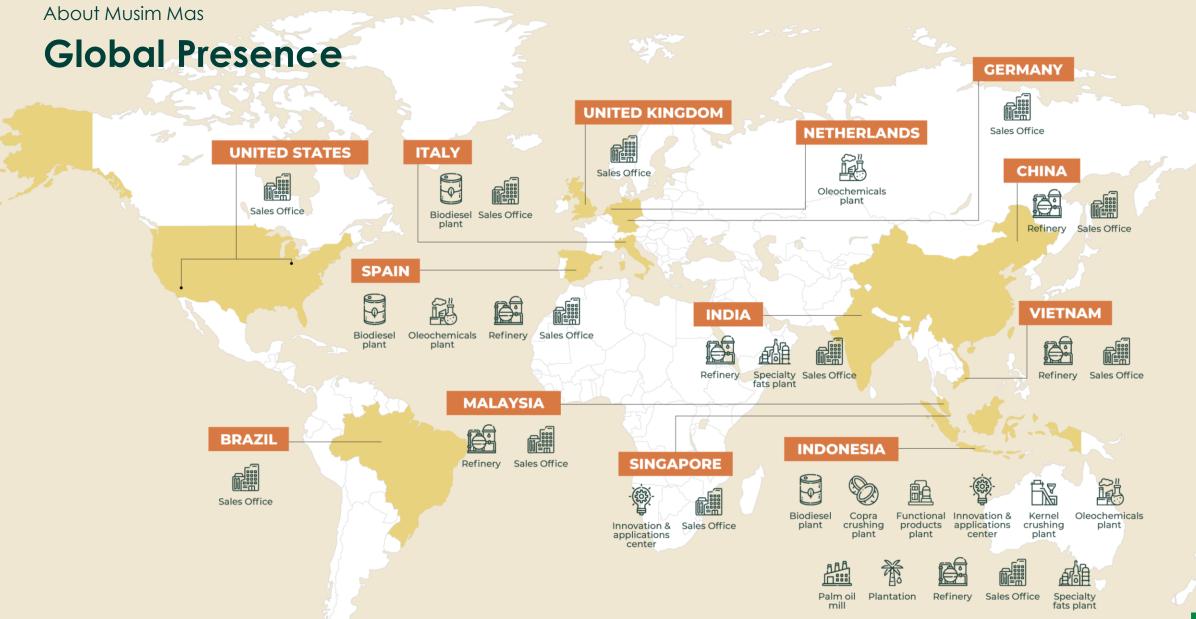




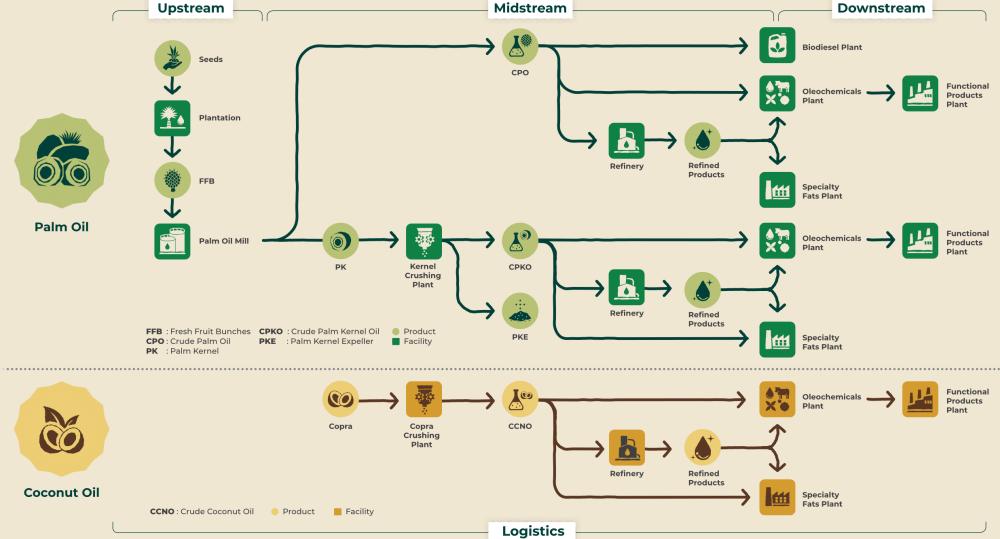








Integrated Business



Product Applications





Animal Nutrition



Biofuels



Commodities



Consumer Products



Food & Beverage



Healthy & Dietary Supplements



Home Care, Personal Care & Cosmetics



Industrial



Pharmaceutical



Polymers & Plastics



About Musim Mas

Group Oil Yield per Hectare

* In tonnes per Ha

Musim Mas CPO yield vs. global average 2019 - 2023

(MT CPO/ha)







Sustainability Milestones & Highlights

Our Sustainability Milestones



First in Indonesia to join RSPO¹



First smallholder scheme in Indonesia to attain RSPO¹ certification



Published comprehensive sustainability policy extended to third-party suppliers



- Updated Sustainability Policy
- Integrated independent smallholders into the sustainable palm oil supply chain



Signed Agricultural Sector Roadmap to 1.5°C at COP27 to reduce emissions from land use change



 Committed to netzero GHG emissions by 2050 through SBTi⁴ in January, and targets validated in October





First plantation in Indonesia to attain RSPO¹ certification



First plantation in Indonesia to attain ISPO certification



- First Southeast Asian palm oil major to be POIG³-verified
- First palm oil mill in the world to be certified against RSPO¹ Principles and Criteria 2018



- Launched Social Impact Report
- Achieved 100% RSPO¹ Certification for integrated mills



- 100% of PTs ISPO-certified
- Launched Sustainable Sourcing Strategy for coconut operations

¹ Roundtable on Sustainable Palm Oil

² Indonesian Sustainable Palm Oil

³ Palm Oil Innovation Group

⁴Science Based Targets initiative

Achieving Higher Standards Across our Operations



RSPO Certification

- 100% of integrated mills
- 83% of total mills
- 85% of our plantations
- 100% of facilities that process
 CPO, PK, CPKO and derivatives



Produced:

- > 700,000 MT CSPO*
- > 172,000 MT CSPK**

*Crude Sustainable Palm Oil
** Crude Sustainable Palm Kernel



PT. Multipersada Gatramegah: first mill in the world to be audited against RSPO Principles & Criteria 2018 standards



First POIG^-verified palm oil major in Southeast Asia

^Palm Oil Innovation Group



NDPE# IRF## profiles for all plants which source CPO, PK and its derivatives

NDPE: www.ndpe-irf.net/

**No Deforestation, No Peat, No Exploitation
**Implementation Reporting Framework



100% PTs are ISPO-certified as of August 2023





Musim Mas Sustainability Pillars



Pillar 1



Improve the Lives of Smallholders, Workers, and Communities

Pillar 2



Positive
Environmental
Impacts

Pillar 3



Maintain Responsible and Enduring Relationships with Suppliers, Customers, and Stakeholders

Pillar 4



Drive Innovation in Sustainable Practices

2023 Sustainability Report

- Musim Mas publishes annual Sustainability Reports.
- Affirms the Group's commitment towards sustainable palm oil.
- The current one for calendar year 2023 can be found on our website.







Who Are the Smallholder Farmers?

Smallholders are small-scale farmers who own **up to 20 hectares of planted oil palm**. There are broadly two types in Indonesia.

In Indonesia, oil palm smallholders are classified into **two groups**:

<u>Scheme</u> and <u>Independent Smallholders</u>.



Scheme smallholders operate under a government-initiated program with support from plantation companies. Independent smallholders are selffinanced, self-managed, self-equipped, and not bound to any one mill.

Why Smallholders are Key to Sustainable Palm Oil

Smallholders manage 41% of planted palm, this represents **6.4 million hectares** in Indonesia.

Independent ones particularly face great challenges including:



Limited Expertise



Limited Access to Financing



Lack of Market Access



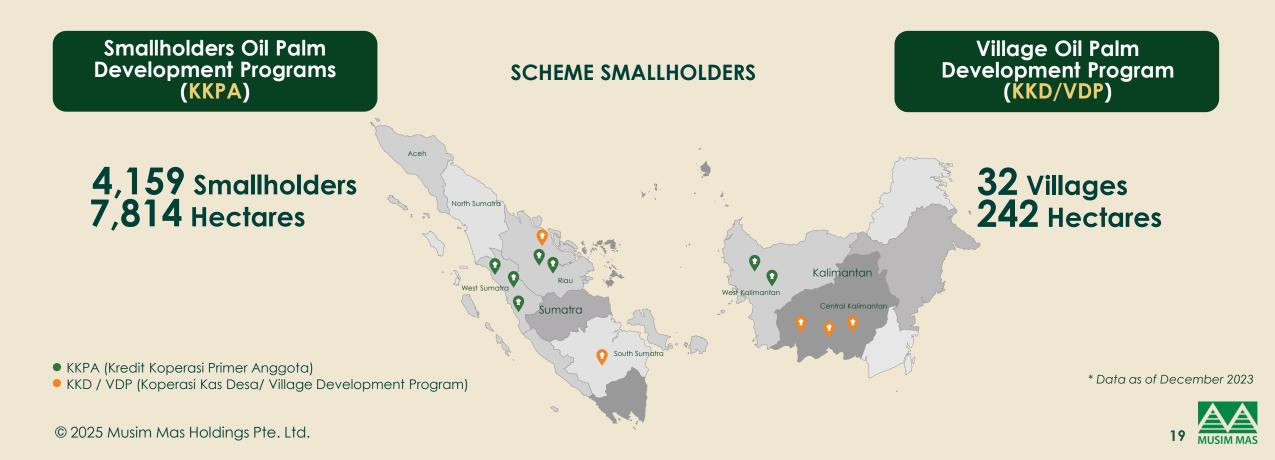
Poor Yields

As a result, smallholders require support to discourage deforestation and slash-and-burn agriculture.

Scheme Smallholder Initiatives

In 1996, Musim Mas initiated a primary cooperative credit scheme (KKPA) to assist smallholders. This program became mandatory in Indonesia only in 2007.

In 2000, Musim Mas launched a second initiative - the Village Development Program (VDP).



Indonesia's Largest Independent Smallholders Program











more than
37,100 Under Training for Smallholders

7,300 Under Training for Trainers



100 Hectares covered



RSPO-certified Smallholders

1,900

ISPO-certified Smallholders



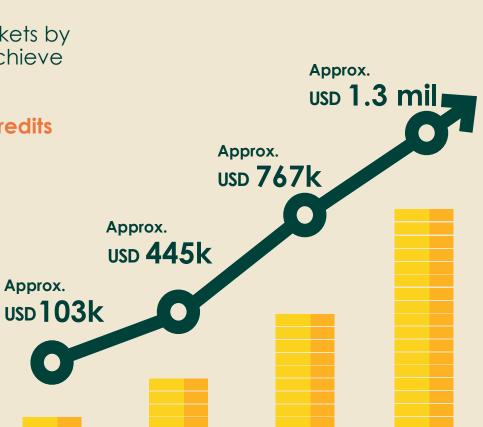
MUSIM MAS

Helping Smallholders Gain Market Access

As a vertically integrated company, Musim Mas has been helping smallholders gain access to the international sustainable palm markets by working with companies using palm oil and helping smallholders achieve sustainability through the RSPO Credits scheme.

Musim Mas has helped independent smallholders achieve RSPO Credits a combined total of more than USD 2.6 million.





2020

2021

2022

2023



Landscape Projects and Collaborations

Our Collaborations

We believe in collaborating with governments, NGOs, academia, developmental funds and downstream players such as consumer goods companies to achieve palm oil sustainability.

Academia and developmental funds









Downstream Collaborations













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Landscape Projects and Collaborations

Collaborations for Livelihoods: General Mills

Collaboration is the key to achieve oil palm sustainability. Not just with governments and NGOs, but with downstream players like General Mills which we began collaborating with in 2020.

Highlights of General Mills' support:

- Three years of funding
- Experienced in Regenerative Agriculture Experience
- Sustainable sourcing innovations
- Partnership **renewed** in 2023





75 VEOs Trained



* Data as of June 2024



Addressing Deforestation: Nestle and AAK







Aceh is a priority landscape as 87% of the Leuser Ecosystem lies within the province. Since 2021, Musim Mas **leads a five-year program to train village extension officers (VEOs)** on sustainability.

- 5-year project on VEO training
- First 2 years of funding from Nestlé and AAK
- Nestlé and AAK to buy RSPO Smallholder Credits
- To engage approximately 1,000 smallholders
- Partnership renewed in 2024 with Nestlé and AAK

Improving Smallholders' Market Access: Unilever, PepsiCo, Nestle









To help smallholders gain international market access through RSPO credits, in 2021, Musim Mas launched a partnership with downstream consumer goods companies.

- Deals for smallholders worth USD 445,000 were made in 2021
- Benefited smallholders across four farmers' associations





Supply Chain Sustainability: ETHZ

ETH zürich

Launched in 2021, this collaboration aims to investigate the conditions under which supply chain sustainability initiatives can lead to reduced deforestation, while maintaining livelihoods.

- An unprecedented 5-year longitudinal study
- ETH Zurich will measure how Musim Mas'
 Smallholders Hubs approach can contribute to sustainability goals
- Up to 1,600 non-industrial palm producers will be surveyed over a 5-year timeframe





Biodiverse & Inclusive Palm Oil Supply Chain (BIPOSC): Livelihoods Funds, SNV, ICRAF, Danone, L'Oréal, Mars, Incorporated







DANONE L'ORÉAL MARS

To improve smallholder livelihoods and explore innovations such as regenerative agriculture, Musim Mas in 2021 launched a collaboration with Livelihoods Funds, SNV, ICRAF and downstream players.

- A 10-year in-depth project to improve smallholders yield and livelihoods
- First major agroforestry/intercropping project in Indonesia
- Over 8,000 hectares of degraded land to be regenerated
- 2,500 smallholder farmers to benefit
- The findings will benefit the industry at large



Improving Biodiversity: SEARRP



In 2021, we partnered with a research facility SEARRP and University of Oxford scientists, to determine the effectiveness of our conservation efforts.

- A study on up to 12 years' worth of HCV monitoring data
- SEARRP assessed the effectiveness of Musim Mas' conservation efforts
- SEARRP provided recommendations that will support in the improvement of our conservation practices
- We shared our findings with the RSPO





Landscape Projects and Collaborations

Aceh Leuser Landscape

Aceh is a priority landscape as 87% of the Leuser Ecosystem lies in the Aceh province.

The Leuser Ecosystem is **one of the largest rainforests** in the worldrenowned for its high biodiversity.

Despite only making up 5-10% of our supply base, we contribute our NDPE expertise to the local mills and smallholders.

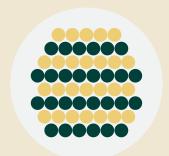
Since 2019, we began publishing our **annual Aceh Progress Report** to communicate our progress in the Aceh Province.

- Landscape-based approach across different stakeholders including government, NGOs and smallholders. **Established supply chain** for sustainable sourcing through collaborations
- In September 2024, **launched a second landscape strategy** to encompass all remaining key landscapes in our target (Riau, South Sumatra, and West Kalimantan), along with two additional landscapes (North Sumatra and Central Kalimantan)





Zero-Waste Mills: Our Sustainable Production



Solid

- Press cake fiber, empty fruit bunch fiber and kernel shells used as fuel
- Decanter solid from Palm
 Oil Mill Effluent (POME) used
 as fertilizer



Liquid

- POME undergoes anaerobic digestion to produce methane gas
- Treated POME use as organic fertilizer in plantation



Gaseous

- Methane gas produced by anaerobic digestion of POME is captured as biogas to power the palm oil mill and housing complex
- Boiler chimney discharge to the atmosphere is smoke-free

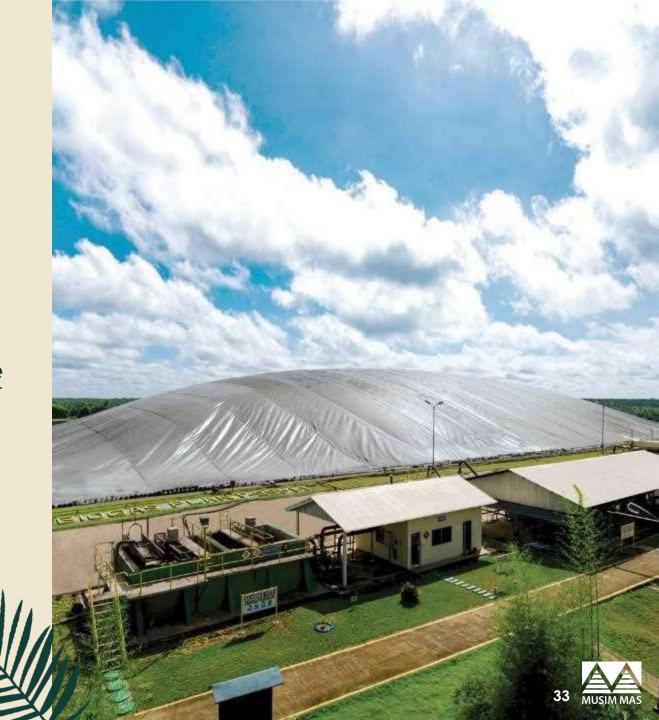
These features are not commonly found in the industry

Environmental Efforts

Zero-Waste Mills: Methane Capture Projects

Musim Mas equipped 17 of its mills with methane capture facilities

- Effluent account for 99% of mill operation's emission.
- Methane capture can reduce significantly the total emission of Estate and Mill operations but requires substantial capital expenditure.
- Musim Mas has invested USD 60 million to equip its mills with methane capture facilities.



Carbon Projects



Science Based Target initiative (SBTi)

- Covering Musim Mas' global operations from upstream to downstream
- Develop decarbonization roadmap and SBTi targets submission
- In January 2024, committed to net-zero GHG emissions by 2050 through SBTi, and in October 2024, targets were validated.





Lite Cycle Assessment (LCA) of SLS

- Covering all processes related to Sodium Lauryl Sulfate (SLS) products (upstream to downstream)
- Identify potential environmental impact and hotspot(s) along the life cycle of a product
- Workshops on LCA models are conducted to develop in house capabilities
- In 2024, completed the LCA with the scope of cradle to gate, following the ISO14040 and ISO 14044 frameworks



Reduction of Greenhouse Gas Emissions





Plantation

- No development on primary forest, HCV and HCS forest
- No new development on peatland
- Zero burning



Mill

- Use biomass as energy feedstock
- Capture methane gas and produce electricity
- Net positive energy balance



Refinery

Use biomass as energy feedstock



Processing Plant

- Use biomass as energy feedstock
- Some of the processing plants are 100% powered by biomass

| | Category | Near-Term 2030 Targets | Net Zero 2050 Targets | |
|--|------------------------|--|--|--|
| | Energy and Industry | Reduce absolute scope 1, 2 and 3 GHG emissions by 42% by 2030 | Reduce absolute scope 1, 2 and 3 GHG emissions by 90% by 2050 | |
| | FLAG | Reduce absolute scope 1 and 3 FLAG GHG emissions by 30.3% by 2030 | Reduce absolute scope 1 and 3 FLAG GHG emissions by 72% by 2050 | |

Leading Supplier Engagement

As over 80% of Musim Mas CPO supplies comes from external suppliers, we factor in and engage suppliers on sustainability



Extension Services Program for smallholders from 3rd party mills



99% suppliers submitted NDPE commitments



98% Traceability to Plantation for supply chain



Deforestation monitoring: Satellite-based with Earthqualizer



Deforestation monitoring: 'Integration Deforestation Alert' (IDA) by Global Forest Watch

Supply Chain Transformation





Traceable to mills since 2015



Traceable to plantation



Suppliers committed to **NDPE** principles



Suppliers have attended NDPE workshops



Supplying Mills have completed **Self-Assessment Tools**



Suppliers monitored for deforestation and peat (Mills with Concessions)

>10.36

Million Ha

Being monitored across Indonesia, Malaysia and **Thailand**



Commitment to transparency



Received 11 Green awards, and 9 Blue awards (2024)



PT. Musim Mas – Gold Medal (2023)



91.8%, ranked 7th (2023) out of 100 palm oil companies



Score 87.7 (2024)



Forests 2023 (A)
Climate change 2023 (B)
Water security 2023 (A)



8.7 of 10, ranked 2nd (2023) In the Agricultural Products industry

07

CSR Efforts

Providing free Primary Education



Free education for children of plantations workers.

11 primary schools and 3 secondary schools have been established with a total of more than 6,300 students.











Support for Tertiary Education





Tanri Abeng University (TAU) South Jakarta



Auditorium

Bogor Agricultural University, Bogor, West Java Province



Multi-purpose building

Faculty of Economics, University of North Sumatra, Medan, North Sumatra



Musim Mas Professorship in Sustainability Program

National University of Singapore, Singapore



CSR Efforts

Donations

Musim Mas operates a long-standing outreach initiative through The Anwar Karim Foundation, or Yayasan Anwar Karim (YAK), which runs programs that address needs like economic development, community facilities, education, and infrastructure.

In 2023, our CSR contributions through the Foundation amounted to IDR 32,958 million, of which 58% was allocated to our YAK schools.



IDR 32,958 million*

2023 CSR Contributions

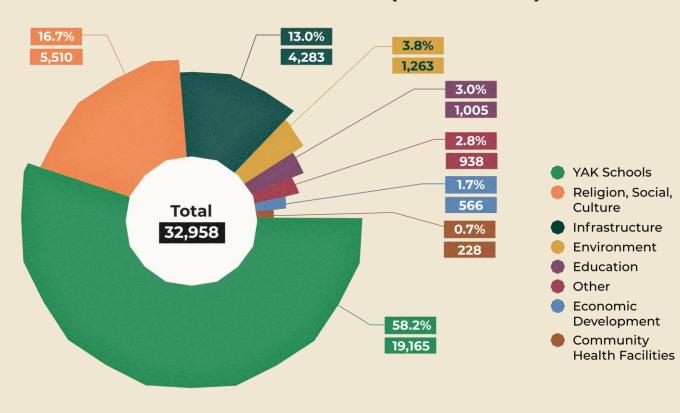
*Approx. USD 2.1 million



58% Allocated to YAK schools

Note: Musim Mas operates 11 primary schools and 3 secondary schools

CSR Contributions 2023 (%, Million IDR)

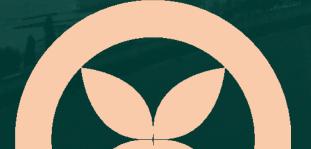


Conclusion

Musim Mas will continue to engage stakeholders to incorporate their feedback into the sustainability strategy.

Musim Mas firmly believes that palm oil industry should keep moving ahead, balancing the needs of social development and environment protection.

Musim Mas will continue its sustainability journey to produce palm oil in an environmentally friendly, socially acceptable and economically viable manner.







Thank You!

January 2025

