



Corporate Presentation

January 2023

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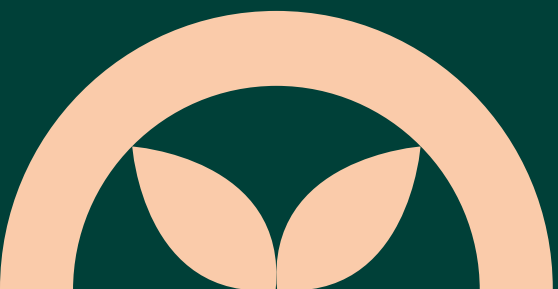
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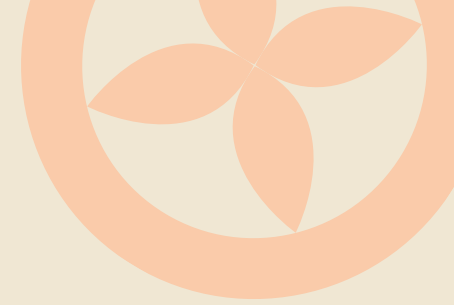


01

About Us



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

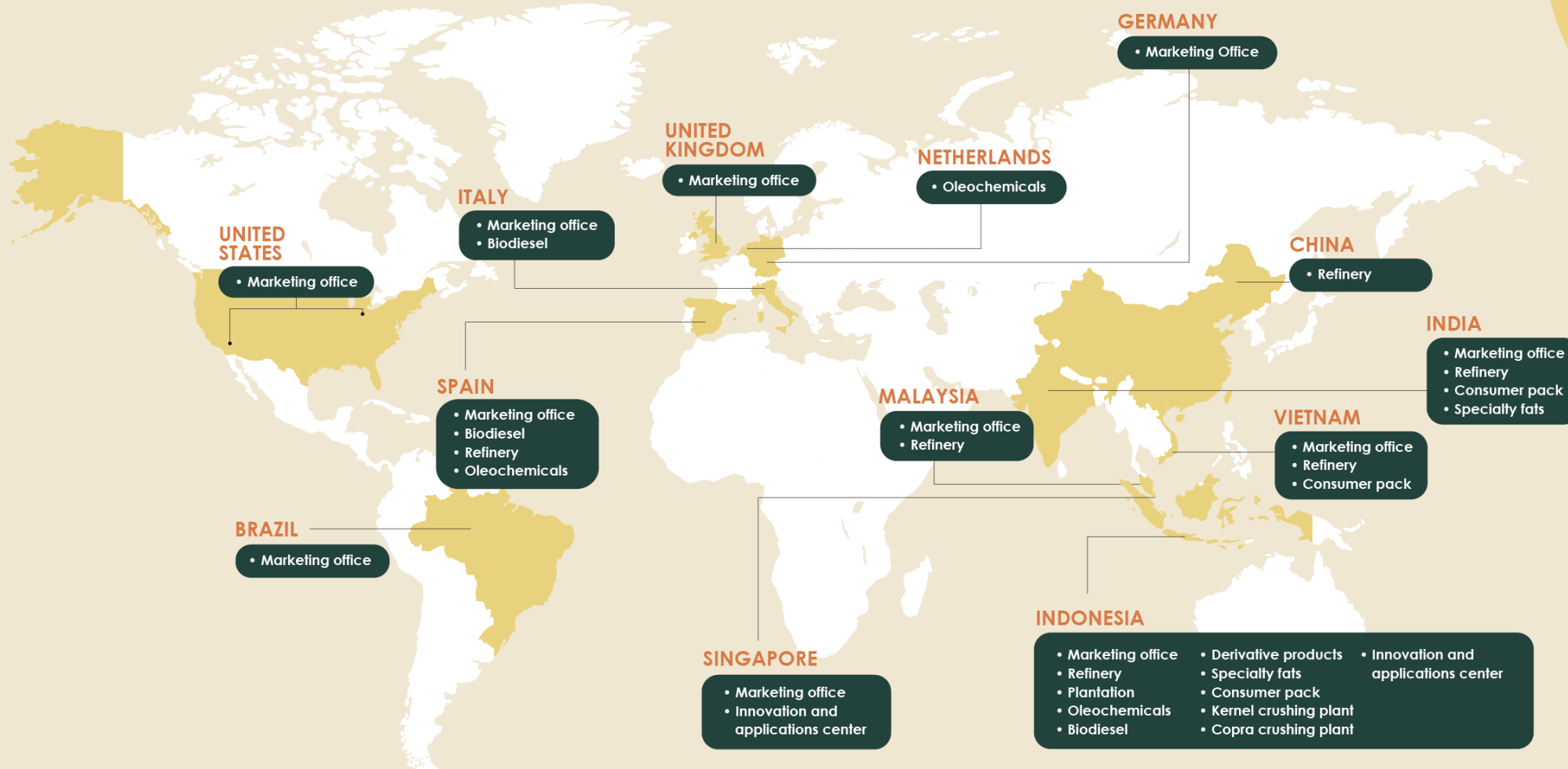
Fully integrated palm oil corporation across 13 countries

About Musim Mas

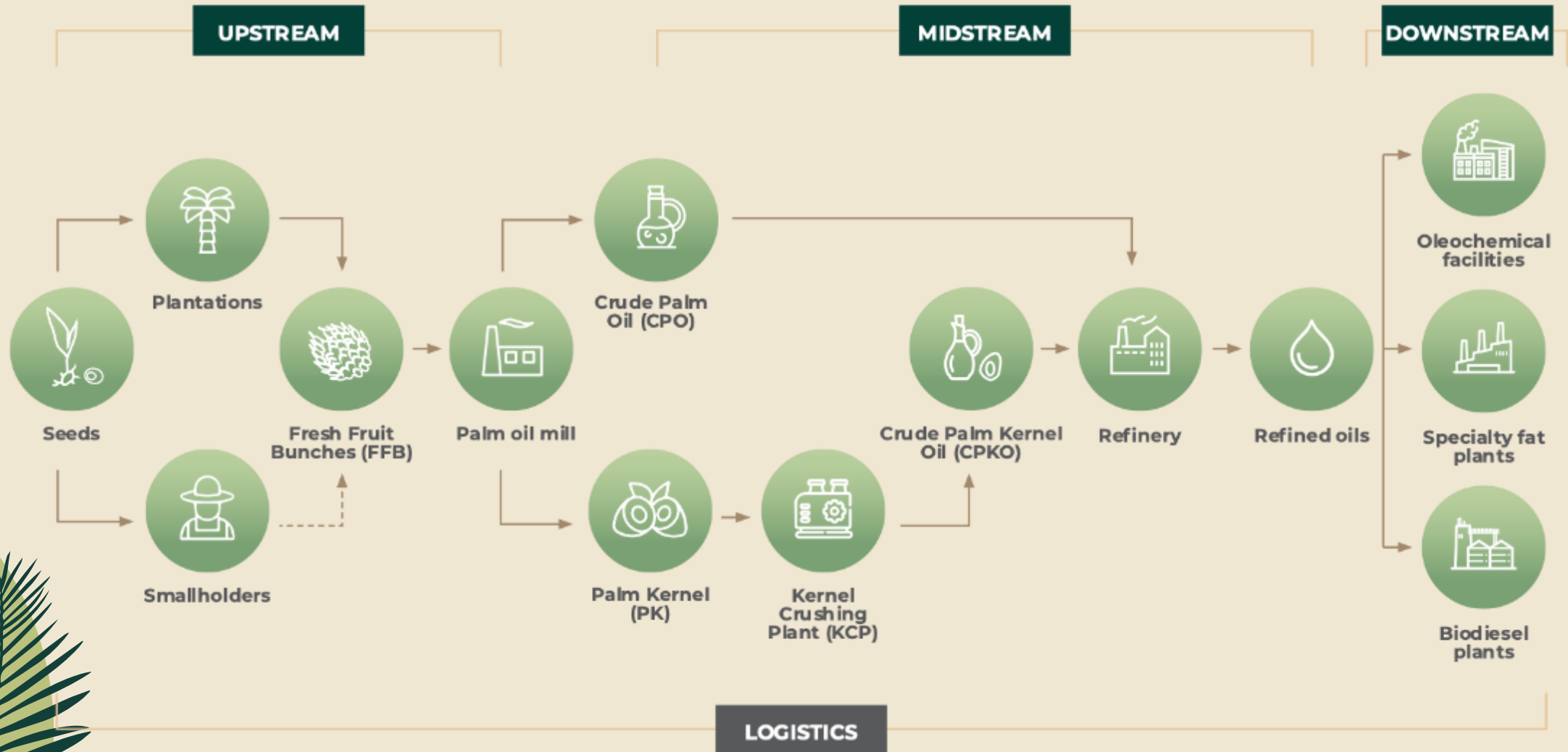
Musim Mas at a Glance



Global Presence

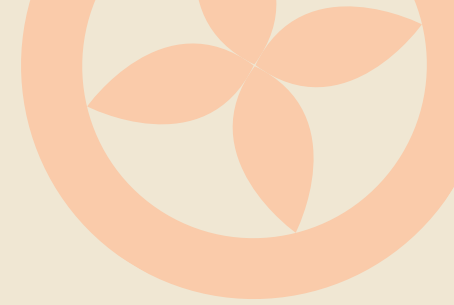


Integrated Business



About Musim Mas

Product Applications



Animal Nutrition



Biofuels



Commodities



Consumer Products



Food & Beverage



**Healthy & Dietary
Supplements**



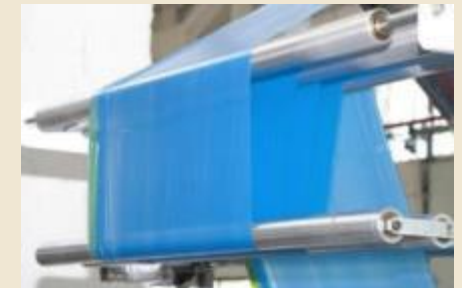
**Home Care, Personal
Care & Cosmetics**



Industrial



Pharmaceutical



Polymers & Plastics

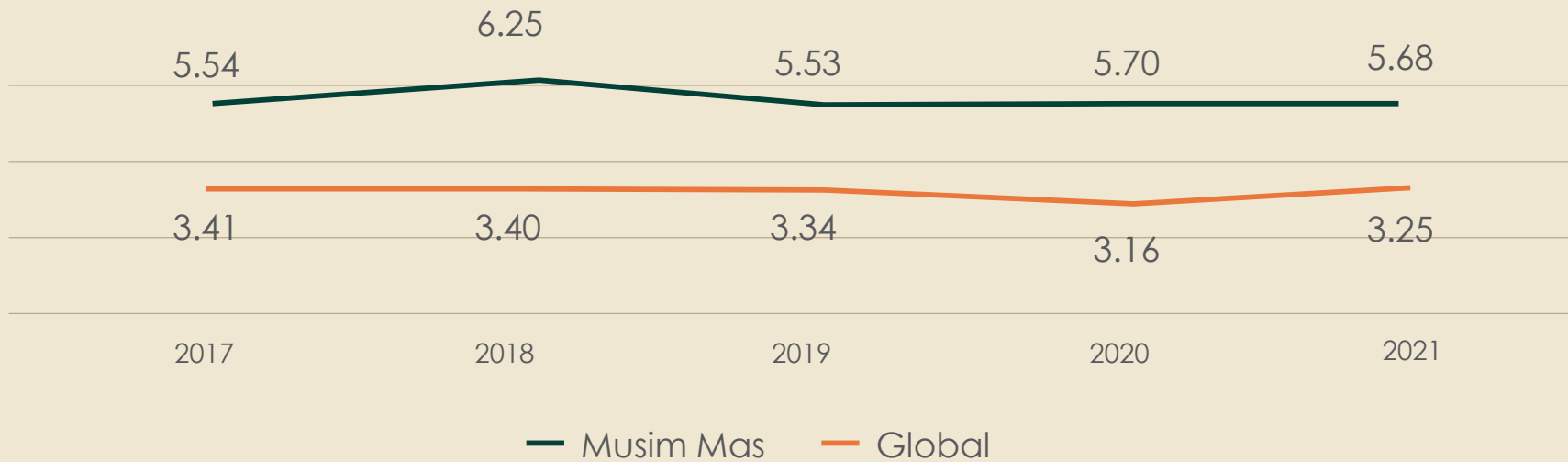
About Musim Mas

Group Oil Yield per Hectare

* In tonnes per Ha

Musim Mas CPO yield vs. global average 2017-2021

(MT CPO/ha)



02

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



- 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

2004

2009

2010

2012

2014

2018

2019

2020

2021



First plantation in Indonesia to attain RSPO¹ certification



First plantation in Indonesia to attain ISPO certification



Launched first Sustainability Report



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

¹ Roundtable on Sustainable Palm Oil

² Indonesian Sustainable Palm Oil

³ Palm Oil Innovation Group

Achieving Higher Standards Across our Operations



100% RSPO Certified

All mills with plantations
All Kernel Crushers, Refineries,
Oleochemical plants and
Specialty Fat plants in Indonesia



More than **608,000**
MT CSPO and
144,000 MT CSPK



PT. Multipersada
Gatramegah: **first mill**
in the world to be
audited against RSPO
P&C 2018



First **POIG-verified**
palm oil major in
Southeast Asia



NDPE IRF profiles
for 20 facilities, covering
Refineries and Kernel Crushers
NDPE: www.ndpe-irf.net/



Indonesian
Sustainable
Palm Oil

11 out of 17 PTs are
ISPO-certified

03

Musim Mas Sustainability Policy

2021 Sustainability Report

- Musim Mas publishes annual Sustainability Reports.
- Affirms the Group's commitment towards sustainable palm oil.
- The current one for calendar year 2021 can be found on our website.



The 2020 Sustainability Policy

Continuity:

- NDPE supply chain
- Improving livelihoods
- Policy applicable to our suppliers and contractors

Expanding our scope:

- Extended to copra and coconut oil
- Paper and cardboard packaging
- Transference of innovation

Musim Mas Sustainability Pillars



Pillar 1



Improve
the Lives of
**Smallholders,
Workers, and
Communities**

Pillar 2



Deliver
**Positive
Environmental
Impacts**

Pillar 3



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

Pillar 4



Drive **Innovation**
in **Sustainable
Practices**

04

Smallholder Initiatives



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**: **Scheme** and **Independent Smallholders**.



Scheme Smallholders

Scheme smallholders operate under a government-initiated program with support from plantation companies.



Independent Smallholders

Independent smallholders are self-financed, 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 its KKPA program to assist scheme smallholders. This program became mandatory in Indonesia only in 2007.

**Smallholders Oil Palm
Development Programs
(KKPA)**

**Village Oil Palm
Development Program
(KKD/VDP)**

SCHEME SMALLHOLDERS

4,044 Smallholders
6,445 Hectares

29 Villages
210 Hectares



- KKPA (Kredit Koperasi Primer Anggota)
- KKD / VDP (Koperasi Kas Desa/ Village Development Program)

* Data as of December 2021

Training for Smallholders

Indonesia's Largest Independent Smallholders Program



Training on Good Agricultural Practices



Improving Farm Productivity



Preventing Deforestation



Gaining Market Access Through Certification



more than
36,000

Smallholders trained by Musim Mas



more than
77,200

Hectares covered



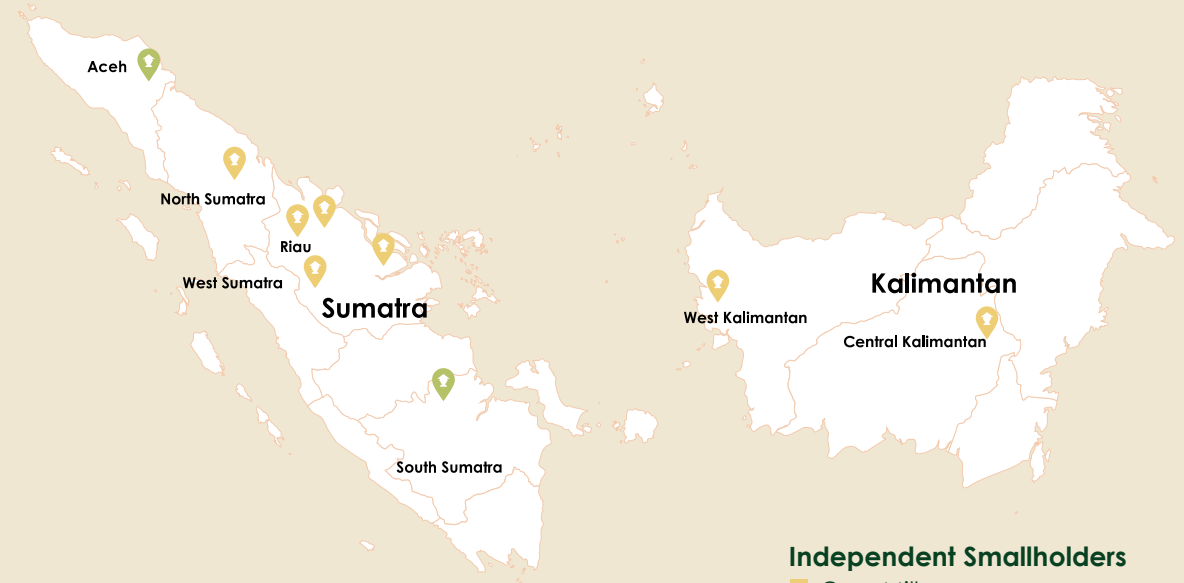
more than
3,500

Smallholders RSPO certified



approximately
USD 1.3 mil

Worth of RSPO Credits for Smallholders



Independent Smallholders

- Own Mills
- Third-party Supplier Mills

* Data as of November 2022

Training for Trainers



Musim Mas trains Village Extension officers (VEOs) who will train even more smallholders.



We support the government with capacity building and create a common platform for all to work with smallholders.



7

Smallholder Hubs established



more than

370

VEOs trained by Musim Mas



more than

4,500

Smallholders Trained by VEOs



more than

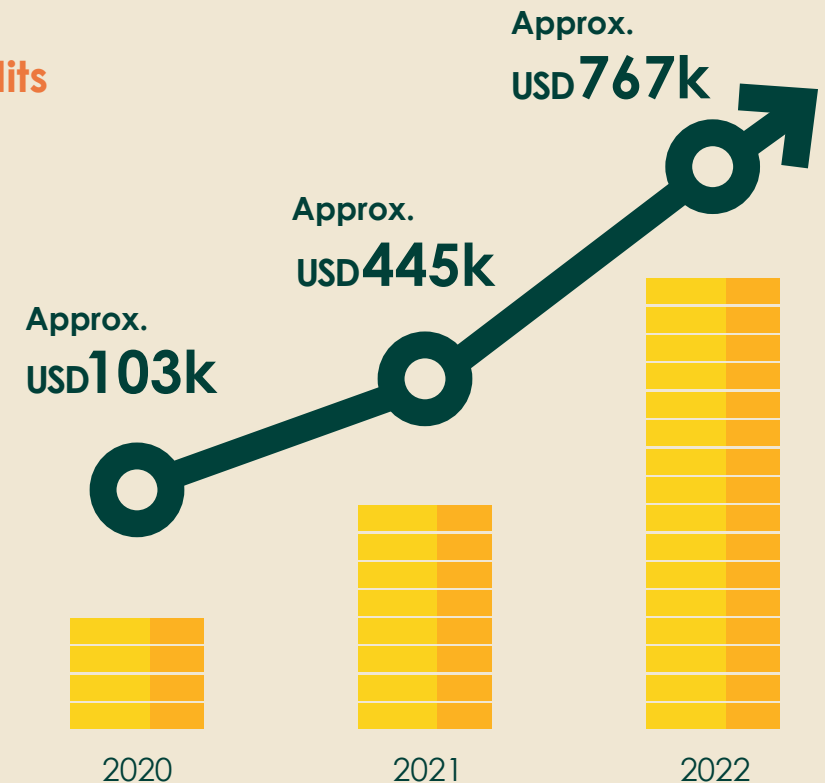
7,300

Hectares

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 approximately USD1.3 million.



05

Landscape Projects & 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



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:

- **Two years** of funding
- **First Smallholders hub** initiative
- Experienced in **Regenerative Agriculture Experience**
- **Sustainable** sourcing innovations

 **764** Smallholders
Trained

 **75** VEOs Trained
Approximately



Addressing Deforestation: Nestle and AAK



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

Highlights:

- **5-year project** on VEO training
- **2 years** of funding from Nestle and AAK
- Nestle and AAK to **buy RSPO Smallholder Credits**
- To engage **approximately 1,000** smallholders

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.

Highlights:

- 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.

Highlights:

- An unprecedented **5-year longitudinal study**
- ETHZ 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



Supply Chain Sustainability: Livelihoods Funds, SNV, Danone, L'Oréal, Mars, Incorporated



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

Highlights:

- 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



To study the effectiveness of our conservation efforts, we began working in 2021 with SEARRP, a research facility who facilitates world-class scientific research.

Highlights:

- A study on **up to 14 years'** worth of HCV monitoring data
- SEARRP assessed the **effectiveness** of Musim Mas' conservation efforts
- Based on the findings, SEARRP **will support the recalibration** of our conservation efforts



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 world-renowned for its high biodiversity.

Despite only making up 5 to 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.

Highlights:

- **Landscape-based approach** across different stakeholders including government, NGOs and smallholders
- **Established supply chain** for sustainable sourcing through collaborations

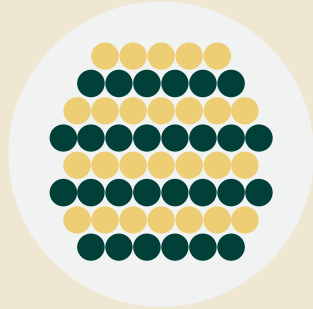


06

Environmental Efforts

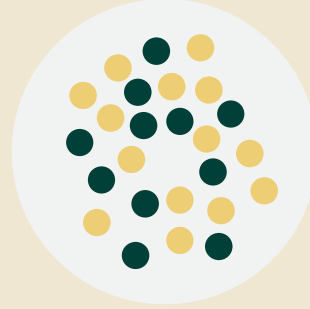


Zero-Waste Mills: Our Sustainable Production



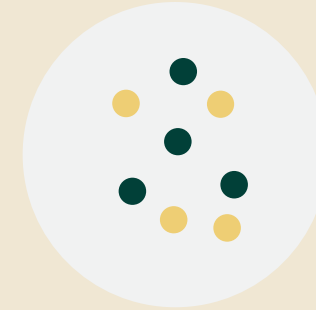
Solid

- 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

Reduction of Emissions



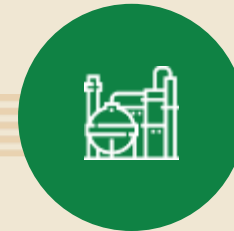
Plantation

- 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

Targets

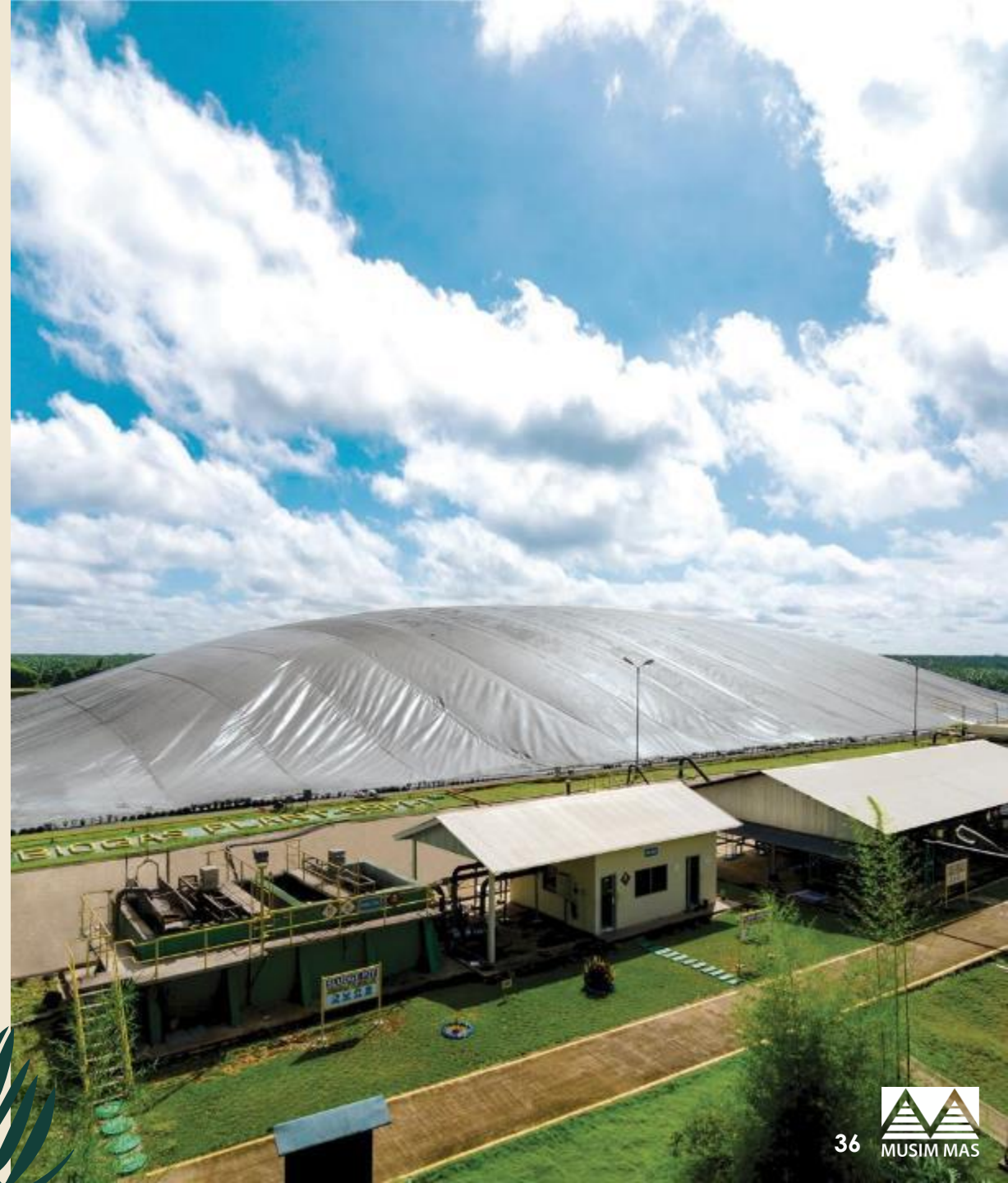
55% reduction (by 2025, 2006 baseline)

*Life-Cycle Assessment (LCA) & Product Carbon Footprint (2023)
Science Based Targets Initiatives (SBTi) targets (2023)*

Zero-Waste Mills: Methane Capture Projects

Musim Mas is the first major plantation group to install the facility for all its mills

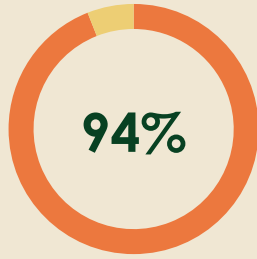
- Effluent account for **99% of mill operation's emission.**
- Methane capture can **reduce significantly the total emission** of Estate and Mill operation but requires substantial capital expenditure.
- Musim Mas has invested **USD 55 million** to equip all its mills with methane capture system.



Supply Chain Transformation



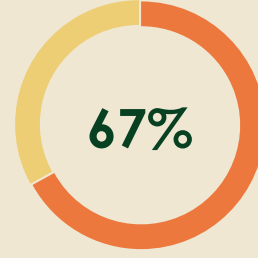
Traceable to mills since 2015



Traceable to Plantation (2021)



Suppliers have attended NDPE workshops



Supplying Mills have completed Self-Assessment Tools



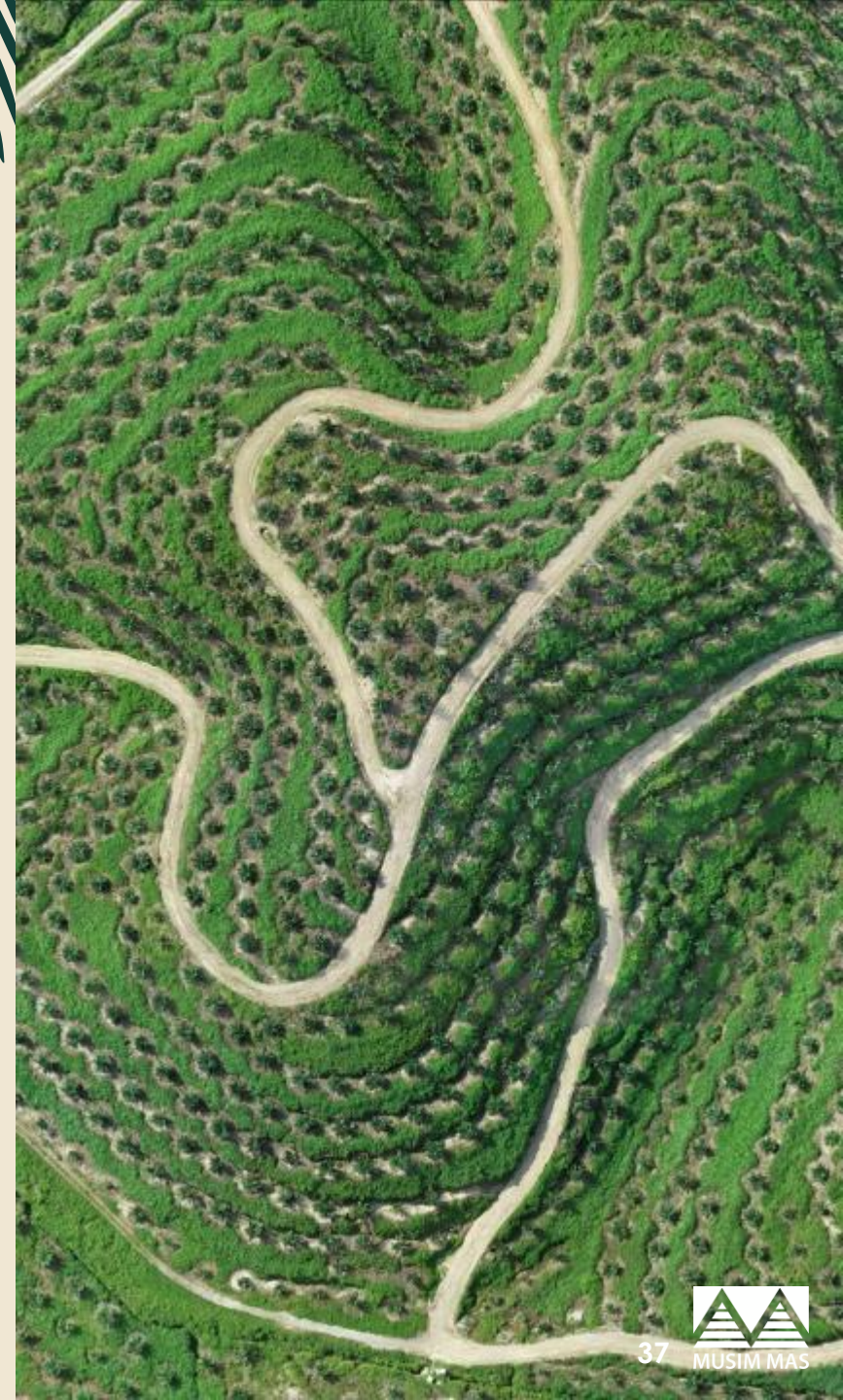
Suppliers monitored for deforestation and peat (Mills with Concessions)

>9.2 Million Ha

Being monitored across Indonesia, Malaysia and Thailand



Suppliers committed to NDPE principles



Leading Supplier Engagement

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



**Extension Services Program
for Smallholders from 3rd Party Mills**



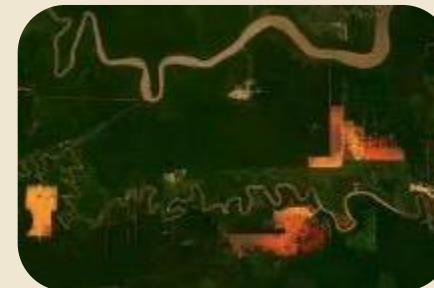
**93% Suppliers Submitted
NDPE Commitments**



**94% Traceability to Plantation
for Supply Chain**



**Deforestation monitoring:
Satellite-based with Earthqualizer**



**Deforestation monitoring:
Radar-based with RADD**

Commitment to transparency



Received 11 Green awards



90.7%, ranked 6th
out of 100 palm oil companies



ASD
ACTION FOR SUSTAINABLE DERIVATIVES

Score >80 (2021)



Score of 79, ranked 3rd
out of 23 palm oil companies



Gold Medal
(2022)



Forests 2022 (A-)
Climate change 2022 (B)
Water security 2022 (B)

07

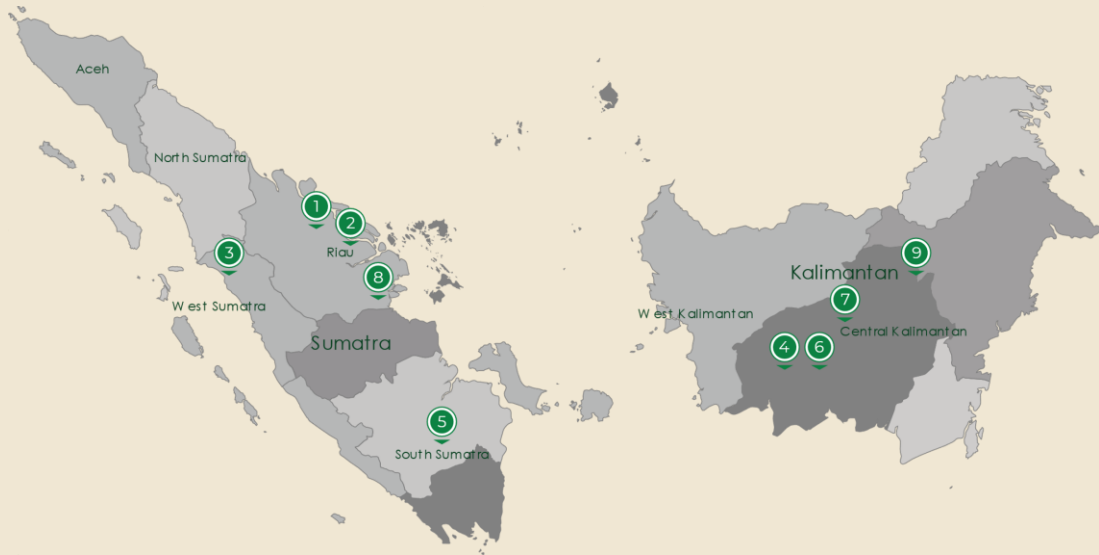
CSR Efforts

Providing free Primary Education



Free education for children of plantations workers.

9 primary schools and **3 secondary schools** have been established.



Support for Tertiary Education



Library

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



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 2021, our CSR contributions through the Foundation amounted to IDR 21,329 million, of which 62% was allocated to our YAK schools.



IDR 21,329 million

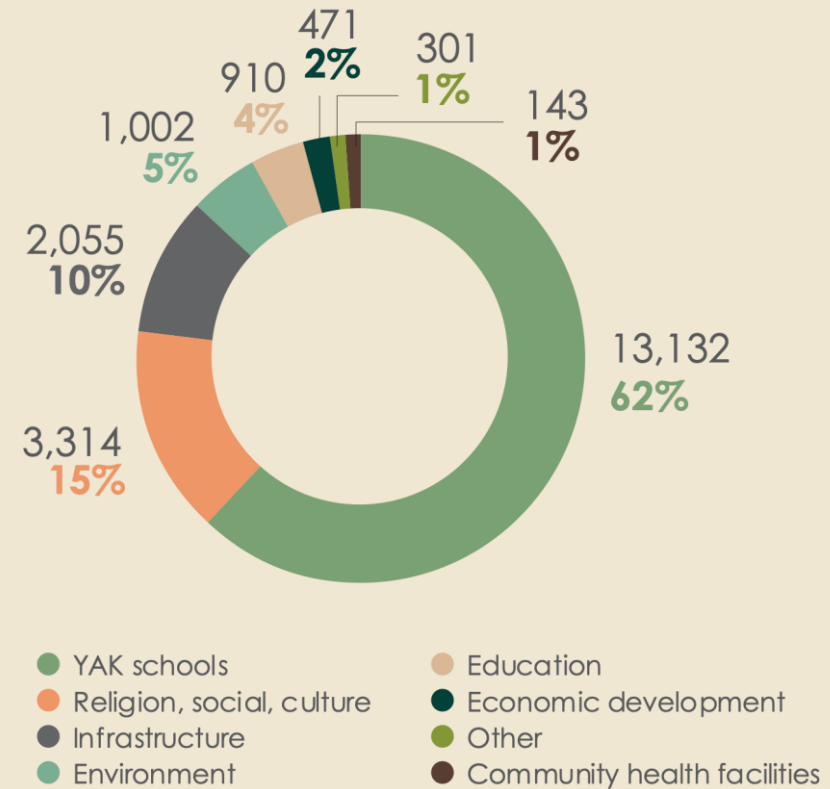
2021 CSR Contributions



62% Allocated to YAK schools

CSR contributions 2021 (IDR million)

Total: 21,329 million



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 2023