



Corporate Presentation

October 2024

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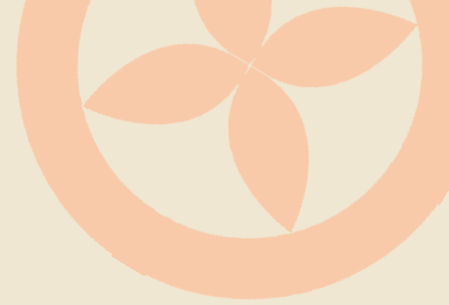
01

About Us



About Musim Mas

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



Singapore
Headquarters



>42,000
Worldwide Employees



13 Countries
Operational presence



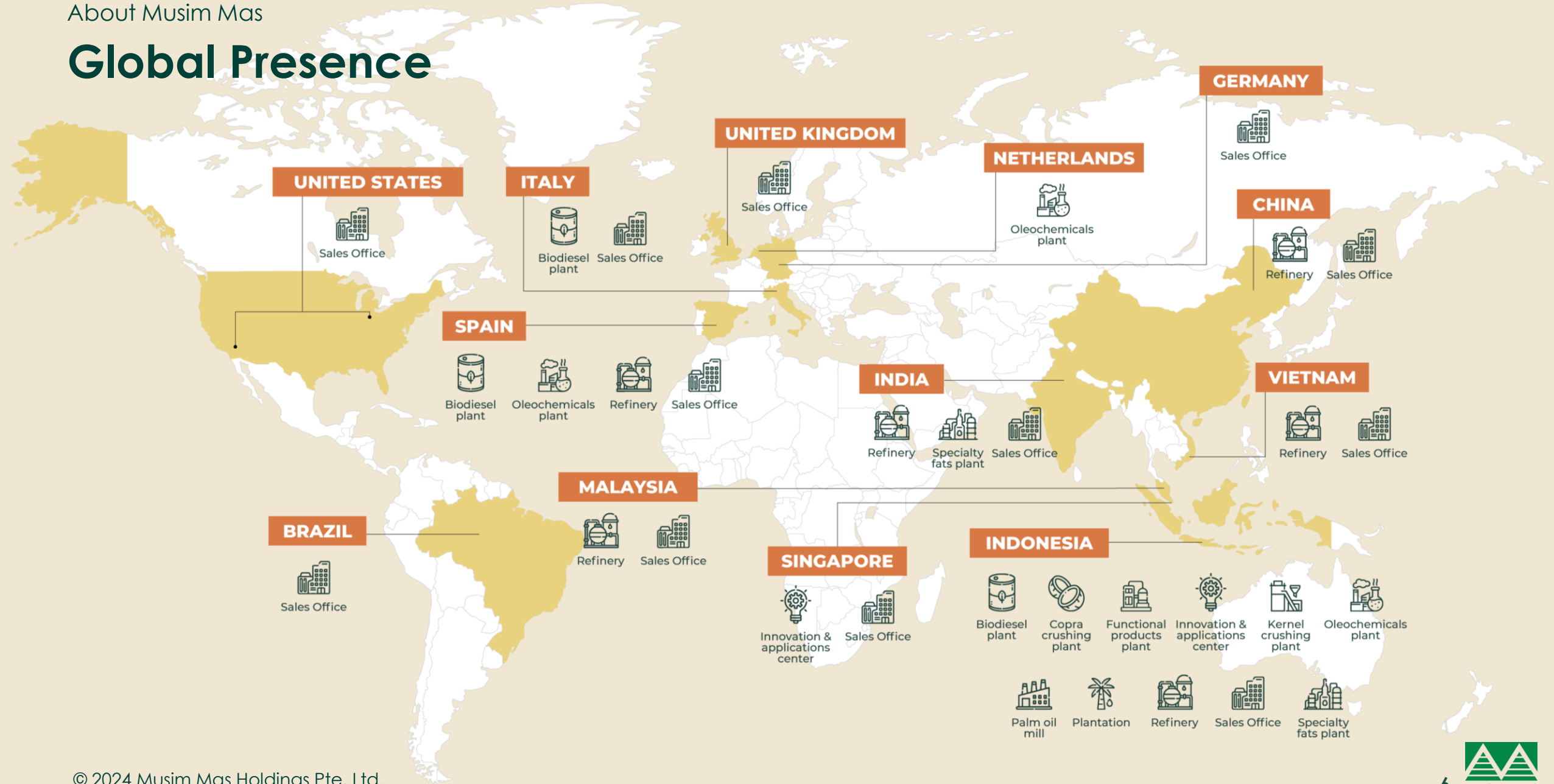
Products sold globally



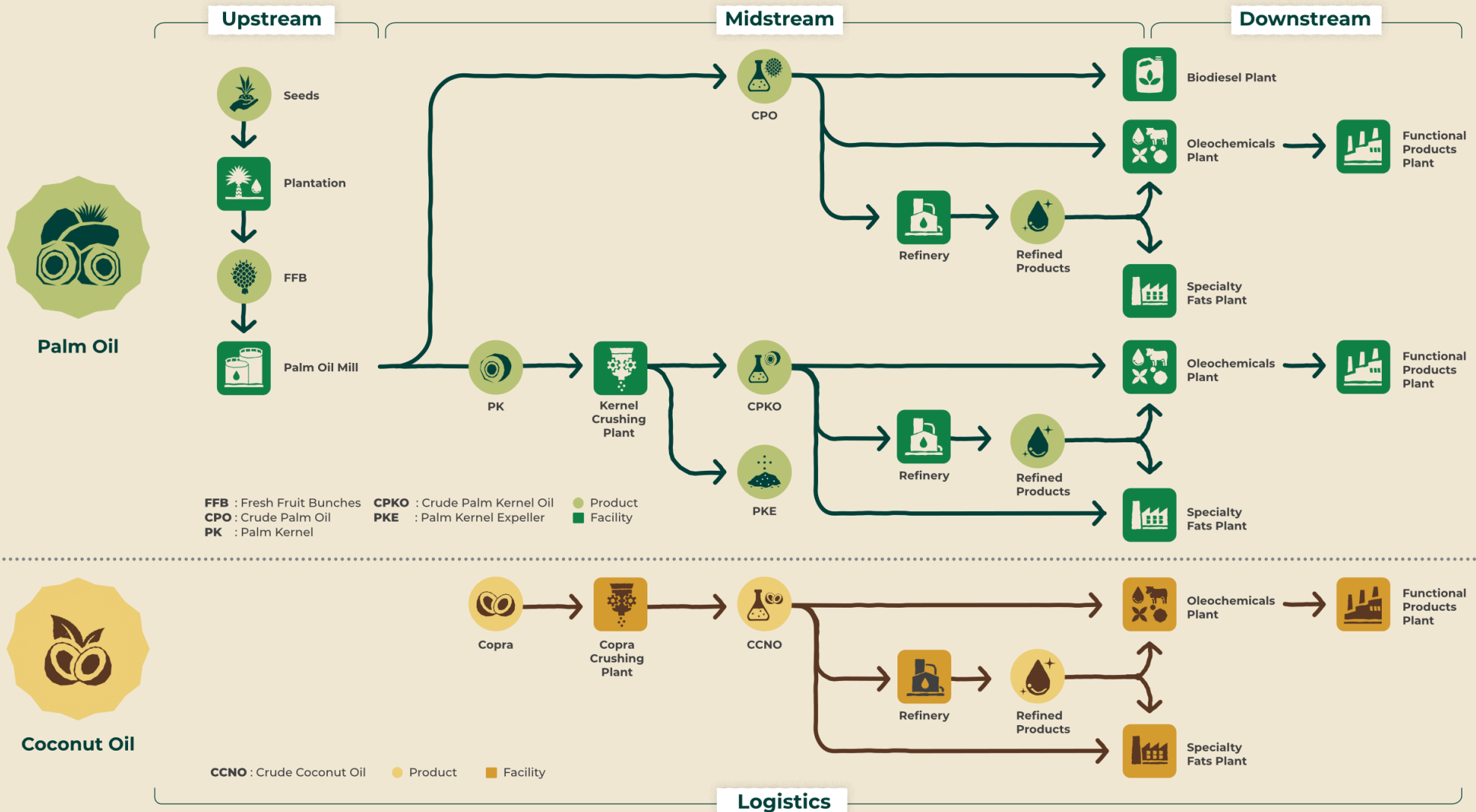
USD 8.9 billion
Total sales (FY2023)



Global Presence

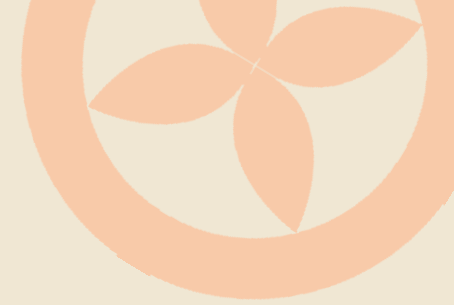


Integrated Business



About Musim Mas

Product Applications



Animal Nutrition



Biofuels



Commodities



Consumer Products



Food & Beverage



**Healthy & Dietary
Supplements**



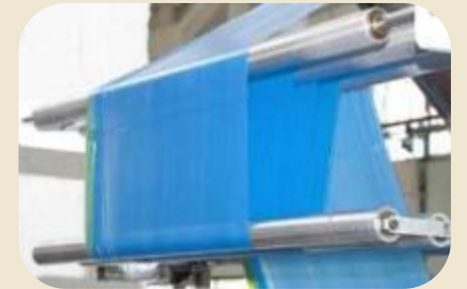
**Home Care, Personal
Care & Cosmetics**



Industrial



Pharmaceutical



Polymers & Plastics

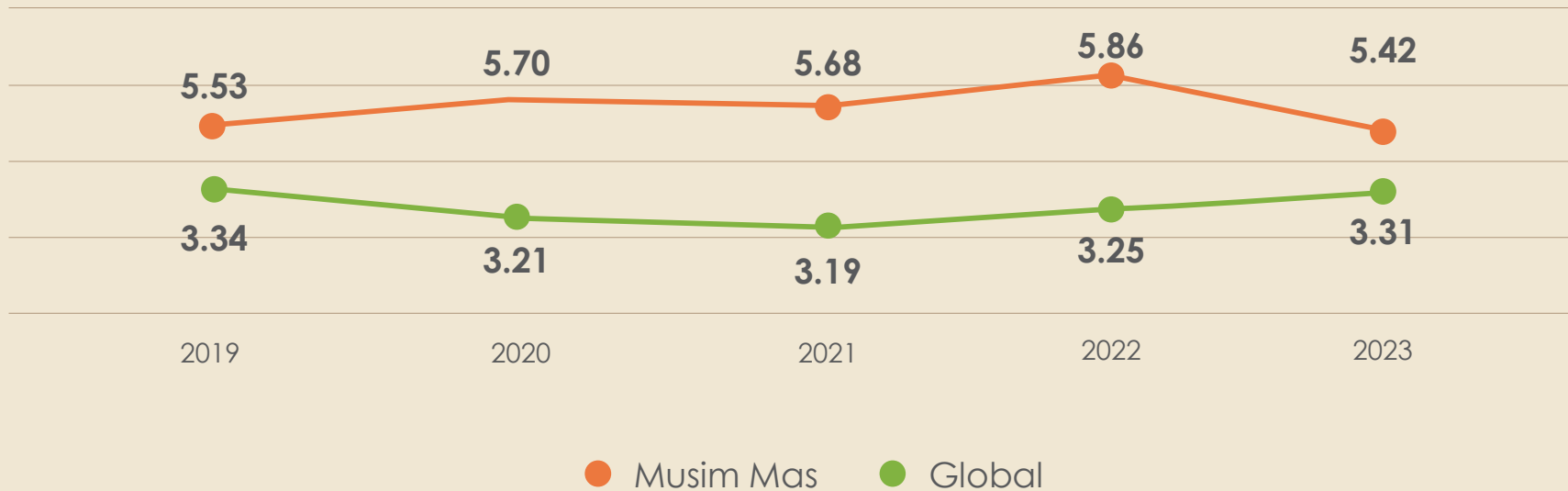
About Musim Mas

Group Oil Yield per Hectare

* In tonnes per Ha

Musim Mas CPO yield vs. global average 2018-2023

(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



- 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 net-zero GHG emissions by 2050 through SBTi⁴ in January, and targets validated in October

2004

2009

2010

2012

2014

2019

2020

2021

2022

2023

2024



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

⁴ Science 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



Indonesian Sustainable Palm Oil

100% PTs are ISPO-certified as of August 2023

03

Musim Mas Sustainability Policy

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**

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.



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

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 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).

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

**4,159 Smallholders
7,814 Hectares**

SCHEME SMALLHOLDERS

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

**32 Villages
242 Hectares**



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

* Data as of December 2023

Indonesia's Largest Independent Smallholders Program



Training on Good Agricultural Practices



Preventing Deforestation



Improving Farm Productivity



Gaining Market Access Through Certification



more than
44,000
Smallholders trained by Musim Mas

more than
37,100 Under Training for Smallholders
more than
7,300 Under Training for Trainers



more than
89,000 Hectares covered



more than
4,500 RSPO-certified Smallholders



more than
1,900 ISPO-certified Smallholders



Independent Smallholders

■ Training for Smallholders

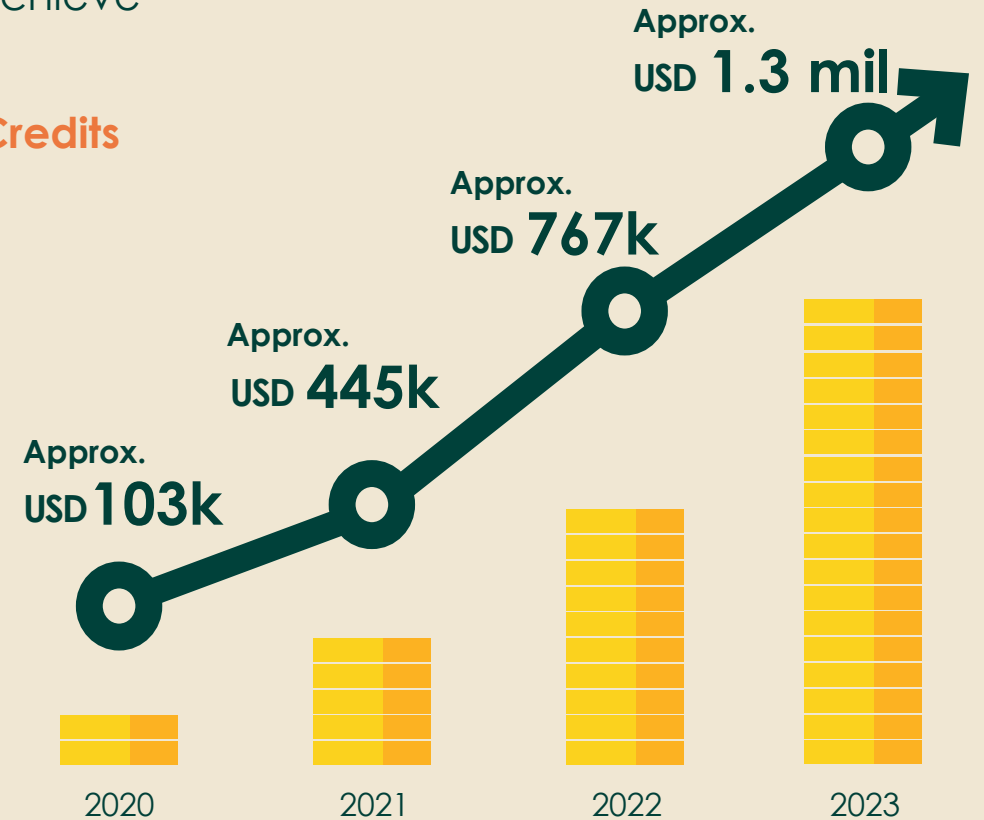
■ Training for Trainers: Smallholders Hub

* Data as of June 2024

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.



* Data as of December 2023

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:

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

 **more than**
2,200 **Smallholders**
Trained

 **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.

Highlights:

- **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.

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**
- 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



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.

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



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

Highlights:

- 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**



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 5-10% 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
- 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)

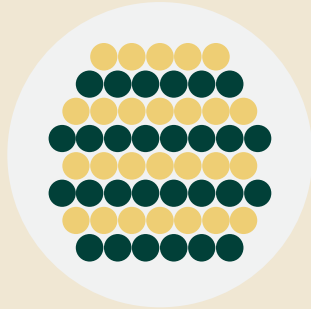


06

Environmental Efforts



Zero-Waste Mills: Our Sustainable Production



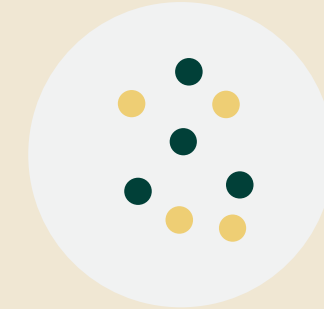
Solid

- 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

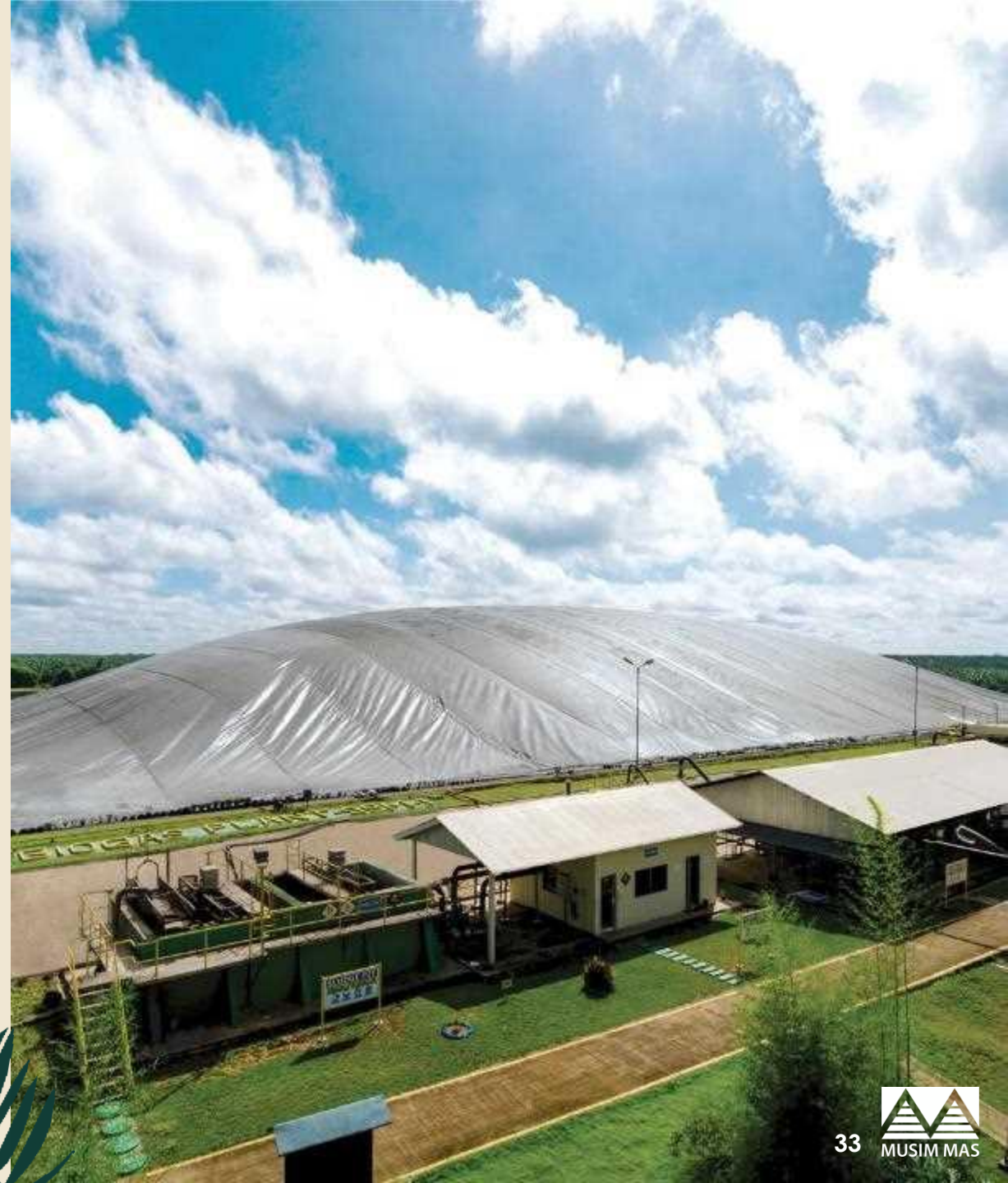
- Methane gas produced by anaerobic digestion of POME is captured as biogas to power the palm oil mill and housing complex
- Boiler chimney discharge to the atmosphere is smoke-free

These features are not commonly found in the industry

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.

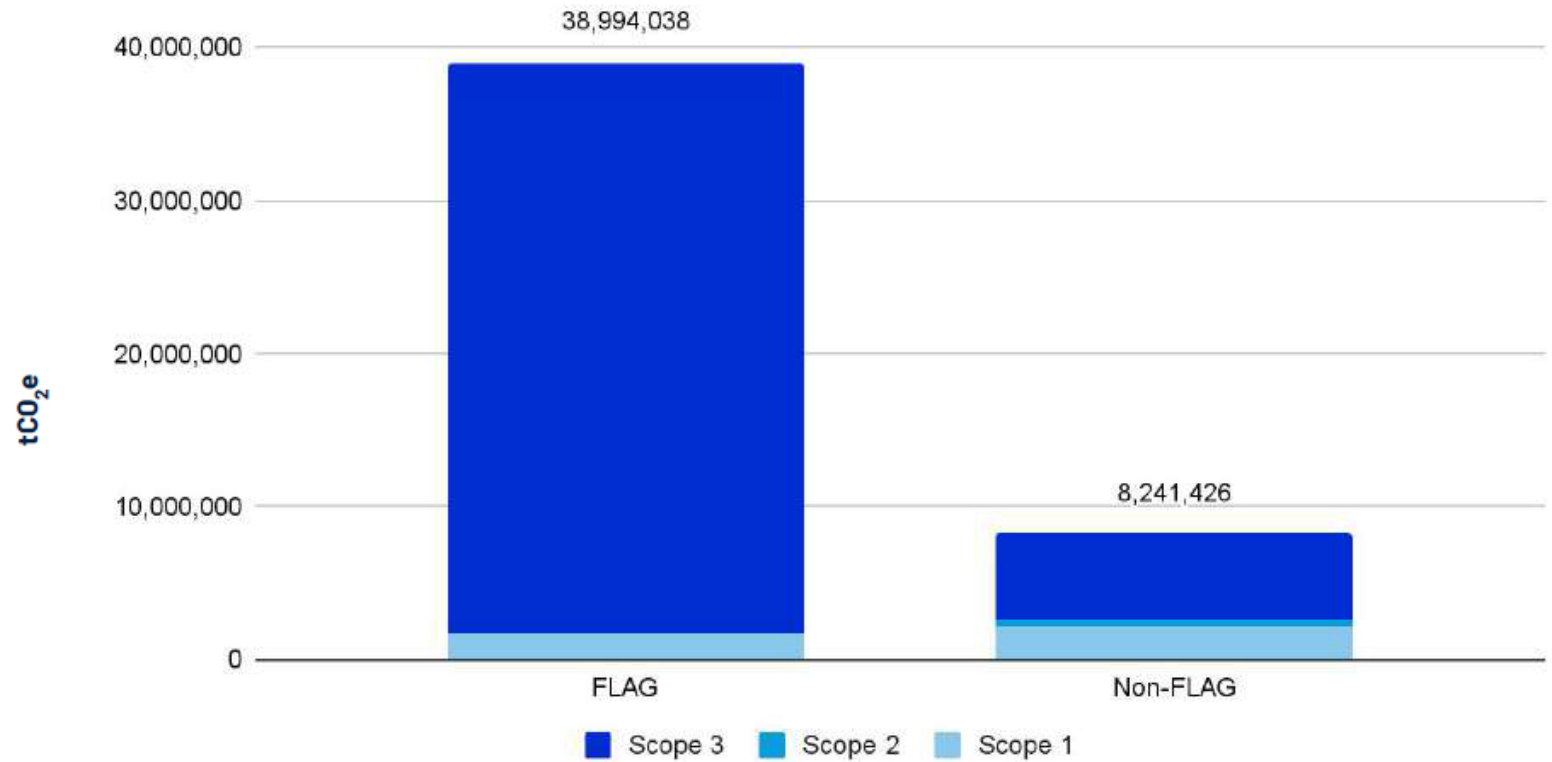


Overview of Musim Mas emissions

Musim Mas' total emissions is **47,235,464 tCO₂e**

83% of Musim Mas' total emissions are from FLAG-related emissions and **91%** of total emissions is from Scope 3.

About **96%** of FLAG emissions are either due to palm oil production or sourcing activities.



Scope (tCO ₂ e)	FLAG	Non-FLAG	Total
Scope 1	1,658,354	2,156,472	3,814,826
Scope 2 (market-based)	0	370,759	370,759
Scope 3	37,335,684	5,714,195	43,049,879
Total	38,994,038	8,241,426	47,235,464

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.



Life 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



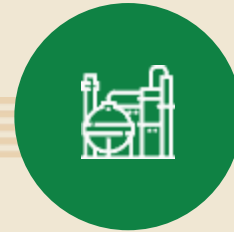
Plantation

- 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

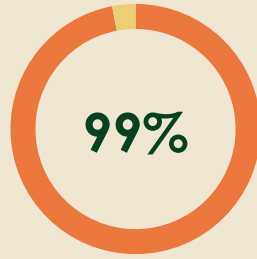
Supply Chain Transformation



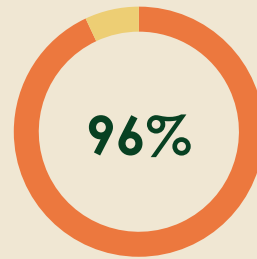
Traceable to mills since 2015



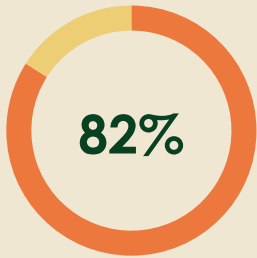
Traceable to plantation



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)**



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



**ASD
ACTION FOR SUSTAINABLE DERIVATIVES**

Score 87.7 (2024)



**PT. Musim Mas – Gold Medal
(2023)**



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



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

07

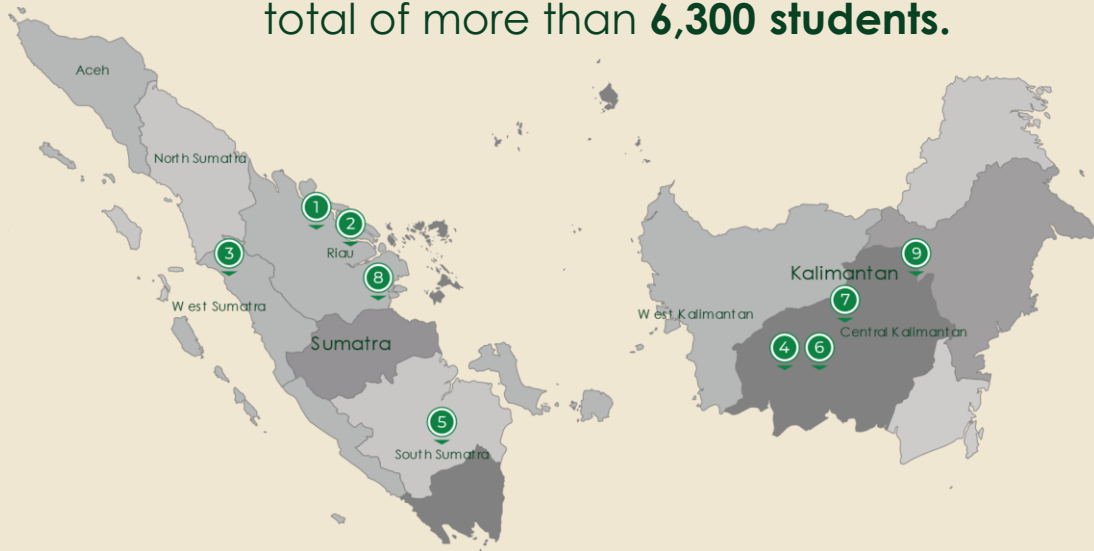
CSR Efforts

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



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 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

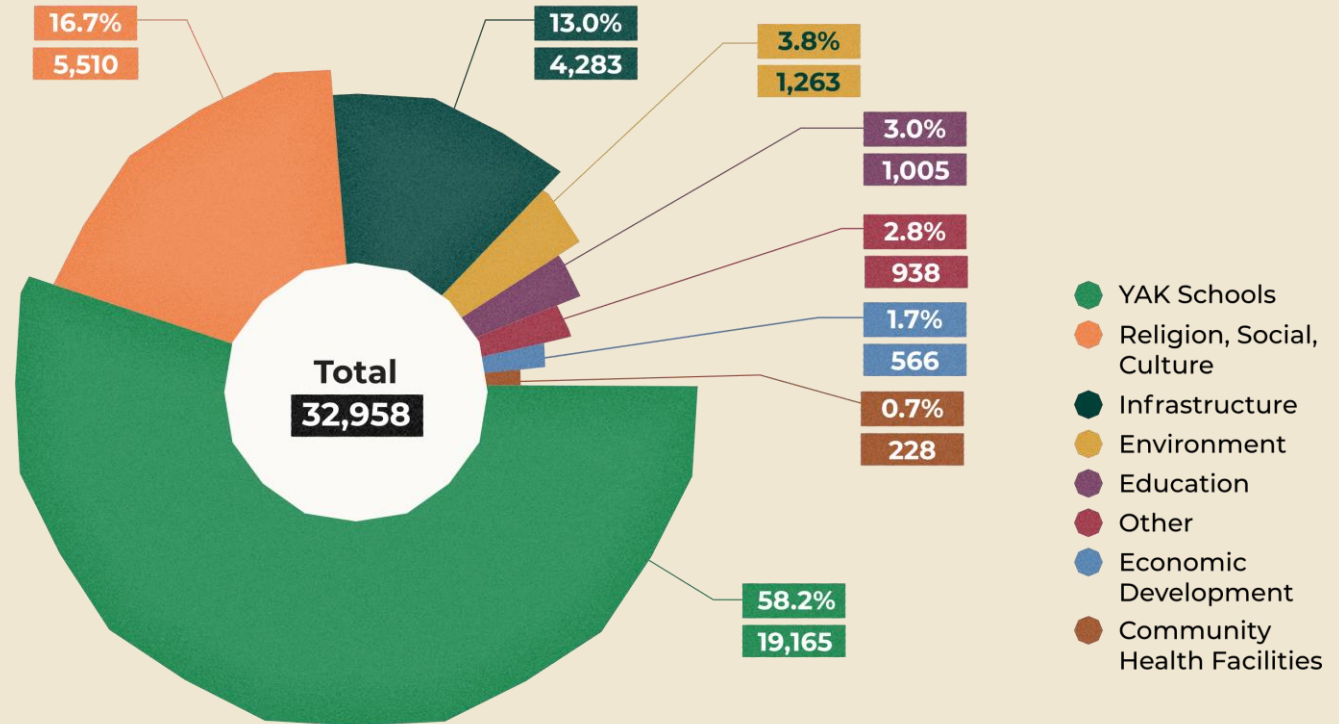
**Approx. USD 2.1 million*



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!

October 2024