



Sustainability Report 2022



Strengthening Our Operations
for a Better Sustainable Future

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ABOUT THIS REPORT

Our Commitment to Transparency Through Sustainability Reporting

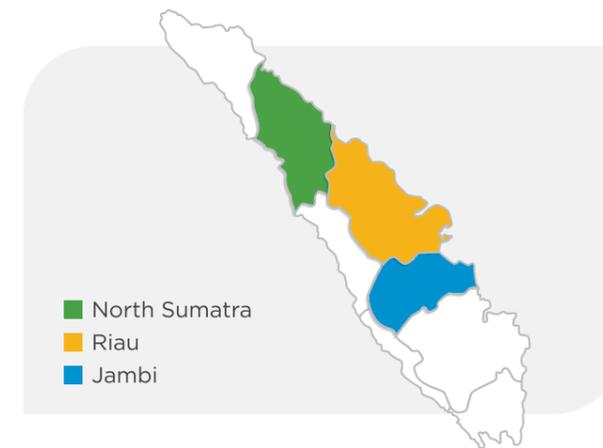
As a major player in the palm oil industry, Asian Agri recognises the importance of maintaining the highest standards of sustainable palm oil production. We continuously strive to set a high standard globally across the industry and present ourselves as a reliable, responsible, and sustainable company to our stakeholders.

As a nation rich in natural resources, we believe that palm oil can encourage sustainability and inclusive development in Indonesia. At Asian Agri, we aim to unlock this potential by continuously investing and improving our ESG performance, ensuring ESG transparency and accountability. Starting from the operating year of 2013 we have used our Sustainability Report to communicate our sustainability commitments, programs, and performance.

Boundary and Scope of This Report

GRI 2-2, 2-3

This report is our sixth Sustainability Report. It covers Asian Agri's activities and performance between the reporting period of 1st January and 31st December 2022 of 13 companies under Asian Agri Group. The 13 companies will be introduced later in the section of Our Subsidiary Companies. In regards to operational scope, our companies manage the following assets in 3 geographic areas:



22 mills



11 kernel crushing plants (KCPs)



10 biogas plants



30 of our own estates

Asian Agri is a private company, hence, due to confidentiality constraints, financial data including total assets, net sales, and total capitalization are excluded from this report.

Reporting Framework

The report was prepared in accordance with the Global Reporting Initiative (GRI) Standards, covering GRI 1: Foundation 2021, GRI 2: General Disclosures 2021, GRI 3: Material Topics 2021, GRI 13: Agriculture, Aquaculture and Fishing Sectors 2022, and the latest GRI Topic Standards. The GRI Standards set out the principles and disclosure frameworks that organizations can use to report their ESG performance. In our report, we have applied the GRI principles of report content and report quality to ensure the comprehensiveness of our sustainability reporting.

For a full list of disclosures referenced in this report, please refer to the GRI Content Index on pages 134-140.

External Assurance

GRI 2-5

To ensure the credibility of the data and information compiled and reported, we have been engaging with an independent third-party assessor, PT SGS Indonesia. Our senior executives in the Management Committee is well informed on the assessor selection and assurance process since our first Sustainability Report.

Our data in this report was assured against the GRI Universal Standards 2021, the latest updates to the GRI Topic Standards and the AA1000 Accountability Principles Standards (2018). Through this engagement, we aim to provide stakeholder confidence in the accuracy and reliability of our reporting.

Please refer to the pages 131-133 for the assurance statement and scope of data assured.

Point of Contact

GRI 2-3

At Asian Agri, we value your opinion as part of our continuous effort to improve and meet stakeholder expectations. Contact us [here](https://www.asianagri.com/en/contact-us/)¹ to provide your comments and feedback on any aspect of our approach to sustainability and overall data reporting.

¹ <https://www.asianagri.com/en/contact-us/>



MESSAGE FROM OUR MANAGING DIRECTOR

Dear Stakeholders of Asian Agri, With the growing impact of climate change, Asian Agri acknowledges our responsibility of ensuring the transparency of our business. Therefore, I am delighted to present Asian Agri's 2022 Sustainability Report, our sixth since we started our reporting journey in 2013 and our third since we have committed to publishing our sustainability reports annually.

Throughout our history, apart from focusing our attention on environmental aspects, we have always placed social and economic development at the heart of our business. We are committed to performing the sustainable transformation of our industry, providing opportunities for our people and surrounding communities.

This year, we have made great strides in cementing our role as a key player in the palm oil industry. It is our commitment to deliver positive impacts beyond compliance. We believe that is our contribution to shaping sustainability in the market and society, transcending the impacts as we do not merely focus on our company. This report will highlight our progress in realizing our Asian Agri 2030 (AA2030) commitments, and our contribution to the achievement of the United Nations Sustainable Development Goals (UN SDGs).

Our Take on the Increasing Interest in Sustainability

In line with the Paris Agreement² and the host nation's Nationally Determined Contributions (NDCs)³, there is an urgency for industries relying on natural capital to

integrate sustainability and climate considerations into their overall business strategy. As countries ramped up their climate pledges, there is expectations on the private sector to support and follow suit. For instance, Indonesia has identified the land use, land use change, and forestry (LULUCF) sectors as key focus areas in achieving this target.

Furthermore, understanding that palm oil is a major commodity in Indonesia, we recognize increasingly stringent government regulations on the sector. Consequently, our key stakeholders are placing greater scrutiny on Asian Agri's sustainability and climate strategy, targets, and performance.

As a company that has long embraced sustainability, we see this growing interest as an opportunity to drive innovation within our operations. We believe that AA2030 is able to contribute to addressing the challenges in securing sustainable development.

Embarking on AA2030 Journey

We proudly launched AA2030 in early 2022. They consist of our commitments and targets to positively contribute to our local community, country, global climate, smallholders and to our company.

AA2030 was developed with careful consideration in the hope that we can continue to make positive contributions when conducting our business. We believe that holistic and balanced endeavors in both environmental and social aspects are key to achieving a successful contribution.

2022 is our first year in delivering greater progress and embarking on our AA2030 journey. We strive to make our way in moving forward with sixteen targets that are classified under four pillars that we set in AA2030.

- Under the **Smallholder Partnership** pillar, we are intensifying replanting program for smallholders and aiming to double the smallholders' income through the replanting program. Besides replanting, we focus on supporting smallholders to get certification towards sustainability standards such as ISPO for scheme smallholders and RSPO for independent smallholders.
- For the **Inclusive Growth** Pillar, we are working closely with the local government to make programs in eradicating poverty surrounding our operational area by empowering SMEs, and providing vocational trainings and educational scholarships. As part of our commitment to our consumers, we also separate food and non-food grade oil to ensure food safety of our products.
- Following the success of the One-to-One Partnership program, we are making progress in our One-to-One Restoration program in **Climate Positive** Pillar. The program is our own initiative to contribute positively to the global climate. We also put our efforts in achieving Net Zero Emissions from our operations, aligning our company to contribute in the global agenda. One among our initiatives is to increase our use of renewable energy to 100% in 2030.
- We also aspire to enhance our operational excellence under the **Responsible and Sustainable Production** Pillar, by reducing our pesticides uses in our plantations and promoting environmentally friendly measures in controlling pests and diseases. Asian Agri also strives to enhance our long-standing commitment to intensify our productivity without opening up new land and to implement circular economy best practices.

Integrating Climate Science into Our Business

In line with our commitment to transform Asian Agri into a Climate Positive business, we strengthened the foundations of our climate journey this year by conducting a carbon footprint assessment. The assessment was done for our Scope 1 and 2 emissions in accordance with ISO 14064-1 and the Greenhouse Gas (GHG) Protocol, covering 30 of our own estates, 22 mills, and 4 offices. The findings helped us understand the trends of our emissions within our operations, where we were able to develop a roadmap of reduction and mitigation initiatives to help us reach our net zero emissions from the land-use target by 2030.

Strengthening Our Operational Management

We understand that we need to have gradual and transformational changes in our operation to succeed in our purpose of improving lives by developing resources sustainably. On the plantation side, the replanting program is one of the key changes we focus on these years. Besides, we are also adapting digital transformation using emerging technologies available today such as GPS-enabled tablets to gain real time production and Fresh Fruit Bunches (FFB) transport monitoring, Unmanned Aerial Vehicles (UAV) like drones, and Remote Sensing to extend our reach and analysis effectivity. Alongside this, we increase the capability of our people to adapt to the use of information technology to better manage our operation areas.

On the mill side, we have equipped our mills with waste and residue oil recovery facilities to segregate our food-grade oil and non-food-grade oil for biodiesel and biofuel. This strategy is part of our commitment to consumer health and safety. In addition, we invested a lot in terms of retrofitting and modernizing our mill, including constructing and operating a biogas facility. In our case, the biogas facility is not only to capture methane emissions but also to replace biomass utilization for energy production through biogas combustion. In this case, we increase our efficiency in utilizing biomass and contribute to carbon reduction by selling the biomass to the open market as a fossil fuel substitution. In the future, we aim to build a biogas facility in each of our mills. These efforts are part of our take on circular economy practices.

On the Research and Development (R&D) side as our key enabler, apart from continuing the optimization of traditional plant breeding, now we are also focusing on producing superior ramets through tissue culture techniques to speed up plant breeding and yield enhancement. We are proud to be among the few companies that can adopt this breakthrough in the palm oil industry.

Paving the Ground Ahead

Moving forward, Asian Agri will accelerate our work in integrating sustainability into our business and operational strategy, striving to live our vision to generate value for the Community, Country, Climate, Customer, and Company. We recognize that there will be challenges to overcome as we continue to realize our AA2030 targets and commitments, but we are confident in translating them into opportunities to grow our business sustainably.

At Asian Agri, we are excited about this prospect, and we look forward to continuing working with our dedicated teams, business leaders, and partners to improve the livelihoods of our people and local communities toward a low-carbon future.

Kelvin Tio
Managing Director

² The Paris Agreement is a legally binding international treaty on climate change adopted at COP21 in Paris, France, 2015. The goal of the Agreement is to limit global warming below 1.5°C

³ Nationally Determined Contributions (NDCs) are non-binding plans by countries around the world, by which they communicate their work toward climate-related targets for emission reductions and other measures that were set out in the Paris Agreement.

OUR YEAR IN SUMMARY



1 new Kernel Crushing Plant (KCP)



3,300 hectares of our plantations replanted



Achieved **100%** certified RSPO for own plantations



16 targets set under 4 Pillars of Asian Agri 2030 launched



100% FFB traceability to plantation and mills maintained



24% of smallholders' plantations replanted



36% FFB/ha yield increased for replanted smallholders



19 Cooperatives (KUD) audited by ISPO



390 independent smallholders certified by RSPO



98% of our electricity is generated from renewable fuels



100% of operational estates, mills, and offices, covered in our GHG emission calculation in accordance with GHG Protocol



0 fire incident occurred



350 Million IDR rewarded to villages for successful prevention of fire incident in their area



17 surrounding villages supported with SME programmes



4 full-press machines added as part of our upgrade for more efficient recovery of waste oil.



0 fatality incident maintained



226 students received scholarships from Yayasan Sayap Garuda



No new land-use change maintained



100% sustainability certification maintained



90% reduction of methane emissions in our 10 biogas plants



90% of Biogas yield is used for power generation which is around 40% of total power generated



ABOUT ASIAN AGRI

Asian Agri at a Glance

GRI 2-1

Asian Agri has become one of Asia's largest palm oil producers, with an annual capacity of more than one million tons of crude palm oil (CPO). Asian Agri Group is a group of private limited liability companies engaging in the palm oil cultivation and processing business, as a part of Royal Golden Eagle (RGE) Group. Asian Agri Group was established in 1979 in North Sumatra and is represented by its holding company, PT Inti Indosawit Subur (PT IIS). With a long history of over 40 years in operation, we now own and operate 30 of our own estates along with 22 mills and 11 kernel-crushing plants (KCPs).

Headquartered in Medan, North Sumatra, we have emerged to become one of the leading national private companies that produce certified sustainable palm oil. We are operating across three provinces: North Sumatra, Riau, and Jambi, and established a representative office in Jakarta. Our business operations include seedling nursery, planting, and processing of FFB to be CPO, Palm Kernel (PK) and Crude Palm Kernel Oil (CPKO). Our CPO, PK and CPKO are bought by our customers to cater to the domestic market and is being exported mainly to Asian and European markets. There were no further changes in terms of size, structure, or ownership in our business in 2022.

Our Subsidiary Companies

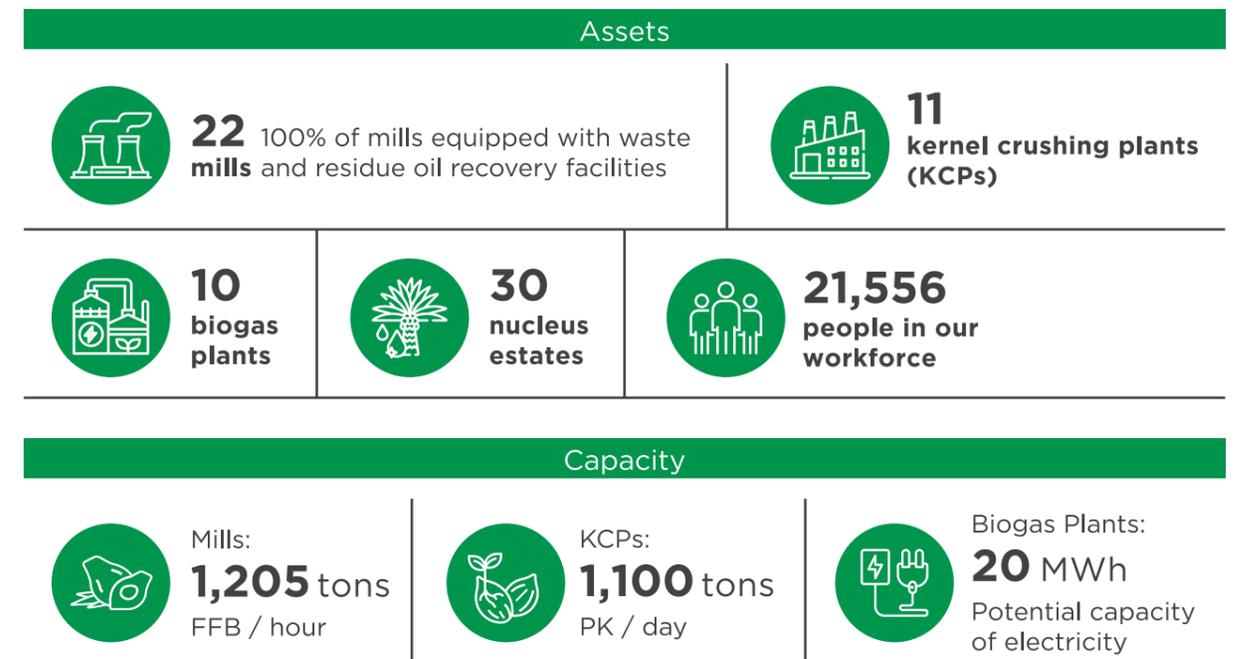
GRI 2-2

The holding company of Asian Agri Group is PT Inti Indosawit Subur (IIS). PT IIS and its 12 subsidiary companies are as below:

| No | Company Name | Business Location |
|-----------------------------|-----------------------------------|-------------------|
| Holding Company | | |
| | PT Inti Indosawit Subur (IIS) | Riau, Jambi |
| Subsidiary Companies | | |
| 1 | PT Nusa Pusaka Kencana (NPK) | North Sumatra |
| 2 | PT Supra Matra Abadi (SMA) | North Sumatra |
| 3 | PT Indo Sepadan Jaya (ISJ) | North Sumatra |
| 4 | PT Rantau Sinar Jaya (RSK) | North Sumatra |
| 5 | PT Andalas Intiagro Lestari (AIL) | North Sumatra |
| 6 | PT Hari Sawit Jaya (HSJ) | North Sumatra |
| 7 | PT Saudara Sejati Luhur (SSL) | North Sumatra |
| 8 | PT Gunung Melayu (GM) | North Sumatra |
| 9 | PT Rigunas Agri Utama (RAU) | Riau, Jambi |
| 10 | PT Tunggal Yunus Estate (TYE) | Riau |
| 11 | PT Mitra Unggul Pusaka (MUP) | Riau |
| 12 | PT Dasa Anugerah Sejati (DAS) | Jambi |

Our Operations in 2022

GRI 2-6



Planted Area (Ha)



93,873 Ha
Own estate



52,899 Ha
Plasma scheme
smallholders



39,116 Ha
Partnering
Independent
Smallholders

Our Production



Total CPO
1,162,645 MT



Total CPKO
129,755 MT

Total TOPAZ seeds
sold externally
16.05 Million seeds

Our Value Chain

GRI 2-6

Our business operations range from elite DxP (tenera) seed production, planting, and processing of FFB in our palm oil mills and KCPs for both CPO and CPKO. Our value chain began with the production of superior tenera TOPAZ seeds in our Oil Palm Research Station in Riau. Five varieties of TOPAZ, namely TOPAZ 1 (Nigeria), TOPAZ 2 (Ghana), TOPAZ 3 (Ekona), TOPAZ 4 (Yangambi), and Topaz Ganoderma Tolerant (GT), are delivered to our Riau Office for sale. These TOPAZ seed varieties are preferred by many of our customers in different regions of Indonesia due to its superiority in yield production and suitability to be planted across Indonesia climates and regions. With careful and curated nursery treatments, only the best quality of seedling are to be planted in our plantations and to be sold to smallholders who live nearby our nursery farm in Riau. Under the plantation business, we manage our plantations with sustainable practices in 30 own estates and harvest the quality FFB.

We deliver our harvested FFB to our CPO mills. We also source a portion of FFB from nearly 30,000 scheme smallholders and more than 8,500 independent smallholders which have been engaged in accordance to our sourcing policy. After the CPO is extracted from the mesocarp, the PK remain for further processes. We deliver the PK to our 11 kernel crushing plants (KCP) while also procuring additional PK from 27 third-party PK suppliers to produce CPKO. Our CPO, PK and CPKO are delivered to our customers to be processed at their refineries into cooking oils, biofuel, or other derivative products.

The map of our 22 mills, 11 KCPs and their respective traceability report can be referred to here: [Supply Chain Map](https://www.asianagri.com/en/supply-chain-map/)⁴For more information on how we ensure supply chain traceability, refer to pages 50.

⁴<https://www.asianagri.com/en/supply-chain-map/>

Our Purpose, Vision, and Core Values

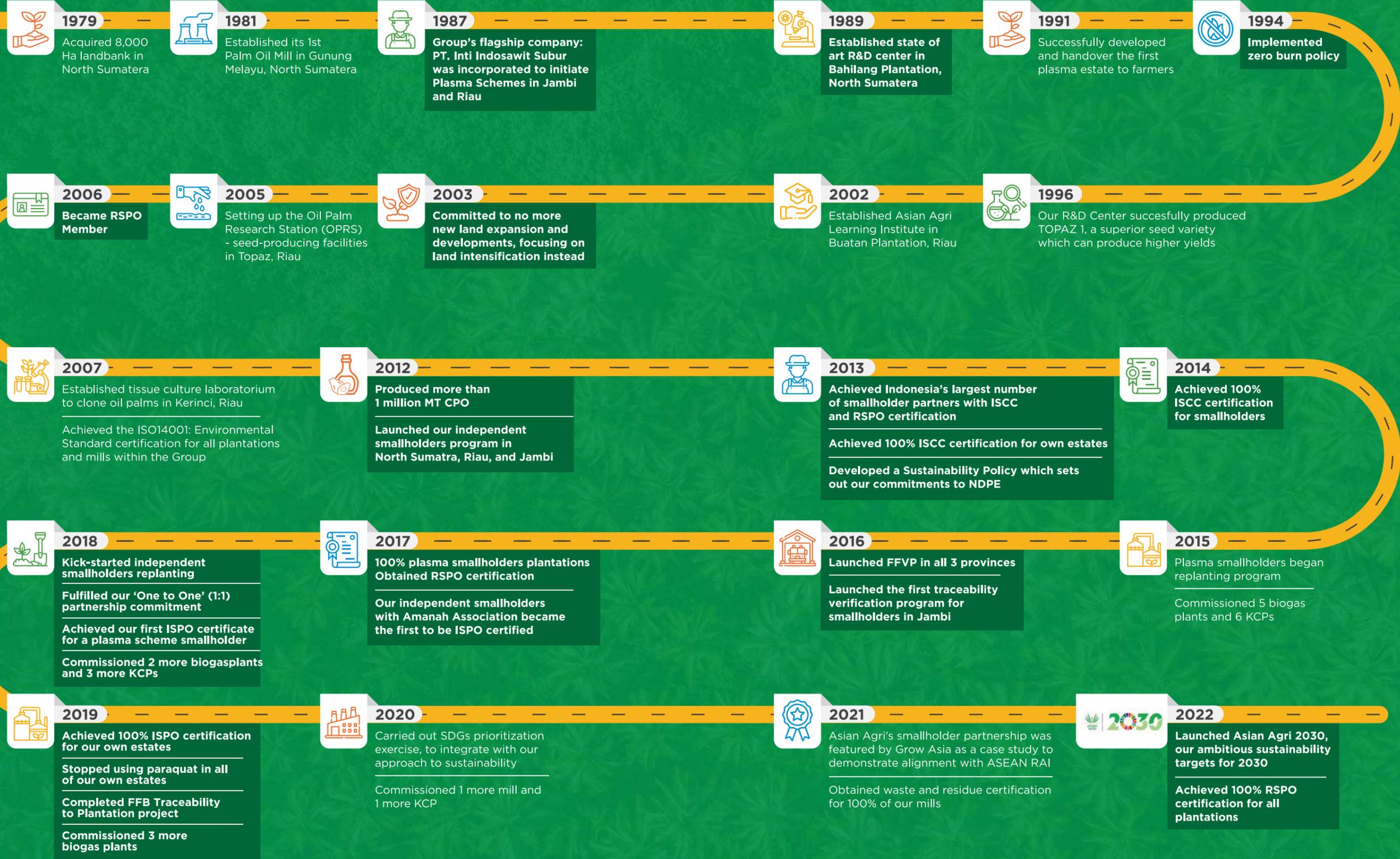
GRI 2-23

We are guided by our purpose to improve lives by developing resources sustainably, to achieve our vision of being one of the largest, best managed and sustainable palm oil companies while generating value for the wider society. To accomplish this, we strive to always apply and embody our TOPICC Core Values in all our actions and behaviours across the company.

| | |
|--------------------|--|
| Our Purpose | Improving lives by developing resources sustainably |
| Our Vision | To be one of the largest, best-managed, and sustainable palm oil companies, generating value for the Community, Country, Climate, Customer, and Company |

| Our Core Values | TOPICC | |
|-----------------|--|---|
| | Complementary Team We are aligned by our common purpose and work together as a complementary team | |
| | People We develop our people to grow with us | |
| | Costumers We understand our customers and deliver best values to them | |
| | Ownership We take ownership to achieve outstanding results and seek value at all times | Integrity We act with integrity at all times |
| | | Continuous Improvement We act with zero complacency and always strive for continuous improvement |

ASIAN AGRICULTURE'S MILESTONES OVER THE YEARS



Note: Abbreviations can be referred to in the [Abbreviation List](#)

Corporate Governance

GRI 2-9, 2-11, 2-12, 2-13, 2-15, 2-18, 2-27, 205-2, 205-3, 206-1, 207-1

Asian Agri is committed to the highest standards of business ethics across our operations and is committed to achieving its business objectives with high integrity and in compliance with Indonesia's laws and regulations.

In ensuring good governance in Asian Agri, our Managing Director sits as the highest governing position that is responsible for decision making on and provide oversight to overall the management and operation of Asian Agri. He is supported by our Management Committee which consists of several senior managements. Management Committee is responsible to provide strategic decision making on areas like operations, human capital, social, finance, and information and technology. In making decisions, our Managing Director and Management Committee also provide oversight ensuring it is taken in the best interest of the organization in the long run.

Our Managing Director and Management Committee are assessed internally through the use of a Balanced Scorecard⁵, which takes into account the company's performance over the course of the year. If the assessment reveals any areas that require improvement, adjustments or enhancements can be made to the business operations or organizational structure.

As a part of RGE Group, all our employees must adhere to RGE Global Code of Conduct. Employees should always be aware of any relationship which may be, or appear to be, a conflict of interest with RGE and take the necessary steps to avoid them. Furthermore, all of our employee and suppliers also need to comply with the Code of Conduct which provides them with guidelines on acceptable and unacceptable behavior. This includes, but is not limited to, standards on anti-bribery, anti-corruption, anti-competitive behavior, and anti-fraudulent practices. The Code of Conduct also provides policies towards no burning, protection of workers' welfare, promoting equal rights, and zero tolerance for child labor, sexual harassment, and violence in our workplaces. In order to maintain our ethical standards, it is mandatory for all employees

to refrain from engaging in activities or relationships that have the potential to result in a conflict of interest. Prior written approval is required for any employee engaging in business activities outside of Asian Agri. Disciplinary actions, legal consequences, or termination will be taken against any employee found to be in conflict of interest.

Our anti-competitive behavior policy stipulates prohibition towards practices that restrict competition and abuse by a company or companies with market power, such as price fixing, market sharing, bid rigging or abuses of a dominant position. Employees must always conduct themselves in a manner that complies with and does not breach the requirements and spirit of Competition Laws. This applies to all dealings with Asian Agri's competitors, trade associations, customers, suppliers and business partners.

We put forward our tax compliance in Indonesia as the country where we operate. The payment of taxes is to show our contribution to our country and community. We adhere to the tax regulations in Indonesia in paying taxes entitled to our company. We assure our tax payment is within the prevailing tax regulation, while adopting internal procedure to make sure a timely and accurate payment of taxes and accountability.

All employees receive a regular refresher socialization on our Code of Conduct adopted as the Company's Policy (*Kebijakan Perusahaan*) at least once a year. The policy is also printed and displayed at our offices and critical locations in our operations.

We recorded no cases of non-compliance with Indonesian laws and regulations in 2022. However, we had 1 non-compliance case that was carried over from 2021. In July 2022, we finally resolved an outstanding grievance case regarding the breaking of the Palm Oil Mill Effluent (POME) pond embankment that emerged in 2021. The case closure has been finalized as the Office of Environment and Forestry of Riau Province lifted the sanction in July 2022, after we fulfilled the corrective actions and administrative sanctions in accordance with local regulations since 2021. In 2022, we confirmed zero incidents of corruption and anti-competitive behaviour.

⁵ The Balanced Scorecard is a performance management tool widely used for strategic planning and assessment in organizations. This approach involves identifying key performance indicators (KPIs) across four perspectives: financial, customer, internal processes, and learning and growth.



OUR APPROACH TO ESG AND SUSTAINABILITY

The importance of Sustainable Palm Oil

Indonesia is the world's largest palm oil producer and exporter which makes the palm oil industry holds an important part of Indonesia's economy. Based on the latest market research⁶, global palm oil has reached 79 Million metric tons. Indonesia contributes to 59% of the market, while Malaysia contributes 25%. Palm oil has the highest yield per land cultivation area compared to any other vegetable oil and it provides a major source of income for many smallholder farmers who depend on it for their livelihoods. However, the rapid expansion of unsustainable and irresponsible palm oil production creates severe environmental problems such as deforestation, peatland drying, and associated fires which contribute to climate change, biodiversity loss, and low local air quality. Moreover, it can also spark conflicts over land ownership and erode workers' rights due to poor labor standards.

Therefore, sustainable palm oil production is urgently needed. Palm oil that is produced sustainably can safeguard forests, benefit the local agro ecological system, attract wildlife, and also protects smallholder and land rights of local people, uplifts their earning potential, and helps to establish fair conditions for growers and workers across the supply chain.

⁶ [United States Department of Agriculture, Oilseeds: World Markets and Trade, November 2022](#)

To that end, as one of the leading palm oil companies in Indonesia, we believe in the importance of producing palm oil in a sustainable and responsible manner. We are committed to continuous improvement in our ESG performance and initiatives, conserving the environment and protecting our workers and the rights of local communities while allowing the potential of the palm oil industry to lift millions of Indonesians out of poverty.

Our Sustainability Policy

GRI 2-23, 13.4.2

As an oil palm grower and miller, we are committed to the reliable, responsible, and sustainable production of quality palm oil and its derivative products. Therefore, to be able to realize and achieve our commitment, we have developed our Sustainability Policy to strategically position sustainable business practices at the core of our operations. Our Policy sets out our commitments to “No Deforestation, No Peat and No Exploitation” – or NDPE with the objective to protect high conservation value (HCV) and high carbon stock (HCS) areas, protection of peatlands, and drive positive socio-economy impact for people, smallholders, and communities.

Since 2003, at Asian Agri, we do not open a new land for our plantation. Since then, our focus is to increase our yield without expanding to new land and maintain that none of our oil palm is planted in deforested area. Our CPO yield in 2022 is 1.5 times higher than average CPO yield in Indonesia, which is 3.75 MT CPO/ Ha based on latest data from Indonesia’s Central Bureau of Statistics in 2021.

We also commit to maintain a moratorium on forest clearance and new peatland development. To do so, we conducted several assessments such as HCV assessments, peatland mapping and assessments, as well as social conflict mapping/Social and Environmental Impact Assessment (SEIA) to develop conservation and management plans.



Our Materiality Review

GRI 3-1, 3-2

A materiality assessment is an important step that we need to take to develop our ESG strategy. We conduct materiality assessment once for every two years and review them annually.

As our materiality assessment was conducted recently in 2021, hence, this year, we conducted a materiality review to update our materiality topics priority and to ensure the topics remain relevant to the business and stakeholders. Our materiality review consists of three stages:

1 Understanding Our Sustainability Context

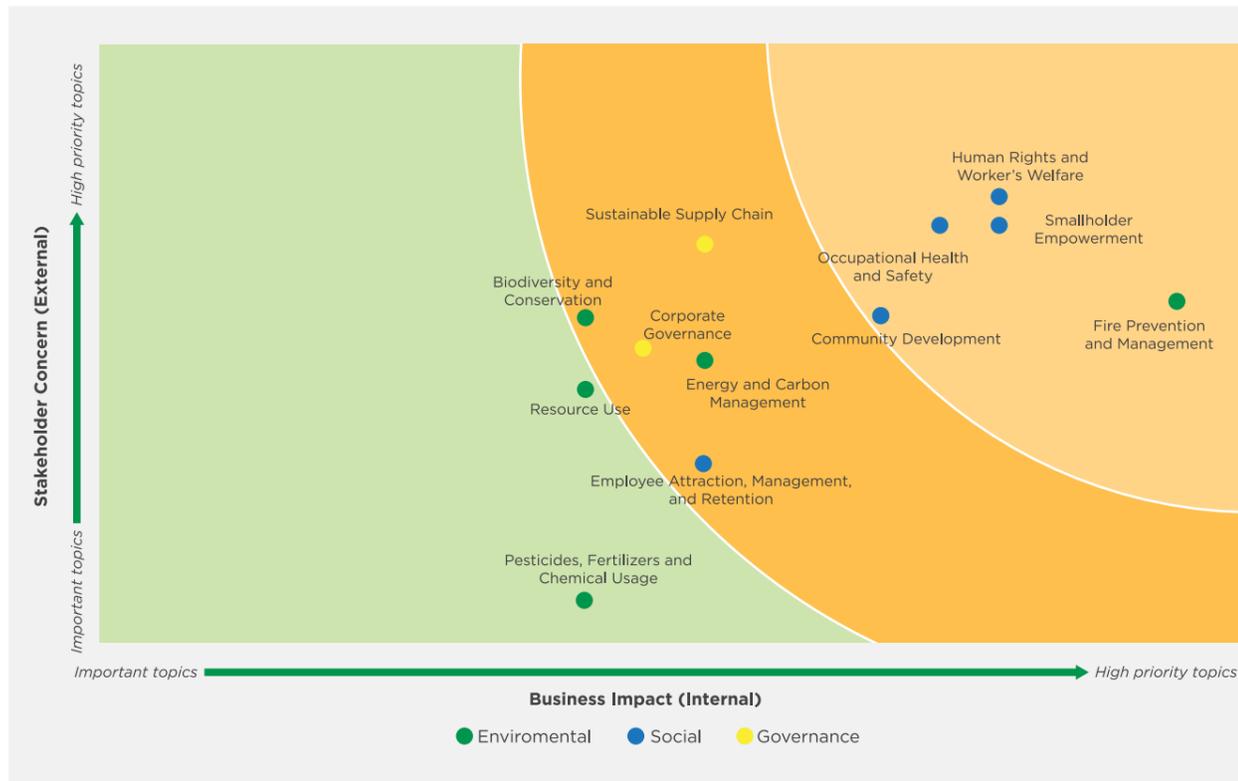
We conducted desktop research to better understand and assess developments as well as key trends in the reporting frameworks, certifications, and local and international regulations against 12 Asian Agri material topics.

2 Materiality Survey

We managed an online survey with selected internal and external stakeholders to better understand their perspectives on Asian Agri’s material topic and sustainability issues. Survey participants were asked to rank the list of 12 material topics based on their importance level for Asian Agri to manage, their suggestions for the topics that are not covered and how to improve our sustainability report. The total response gathered from the online survey is 55 responses; 18 responses from internal stakeholders and 37 responses from external stakeholders. Our internal stakeholders, including management committee were involved in this process. Moreover, responses from external stakeholders were gathered from 12 organizational groups, who are government agencies, buyers, banks, the media, vendors, smallholders or cooperatives, certification bodies, certification providers, NGOs, partnership platforms, and academia.

3 Result Assessment and Analysis

The information and suggestions gathered were assessed to refresh the materiality matrix on the topic prioritization as well as strengthen the narratives on our sustainability report. The materiality matrix represents the importance of the topic to our business and stakeholders. After conducting a materiality review, the material topic prioritization has changed, especially on Human Rights and Workers’ Welfare which have significantly increased in importance amongst our stakeholders. This is also in line with the key focus of GRI standards 2021 (in particular GRI 3: Material Topic), which highlighting impact on the human rights across company’s activities and business relationship.



Based on the materiality matrix above, we have identified five material topics that are considered high priority for both internal and external stakeholders. We committed to concentrating more of our efforts on managing the material topics designated as “high priority” and are providing more thorough explanations for these topics. Additionally, we implement policies, initiatives, and programs to improve the performance of all our material topics that are described in this report.

| Material Topic | Description |
|--|--|
| Human Rights and Workers' Welfare | Protecting the rights of all workers in our operations and supply chain by ensuring fair and favorable working conditions. This includes the prohibition of any form of forced and child labor, ensuring freedom of association and collective bargaining, and providing equal opportunities for all regardless of individuals' backgrounds. Respecting the rights of indigenous and local communities, including the right to give or withhold their Free, Prior, and Informed Consent (FPIC) |
| Fire Prevention and Management | Preventing the occurrence of forest fires by working closely with the community and strengthening their fire prevention capabilities, as well as responding swiftly when fires occur within our own and our suppliers' plantations |
| Smallholder Empowerment | Empowering smallholder partners to increase productivity gains, strengthen their sustainable farming practices, and improve their livelihoods |
| Occupational Health and Safety | Preventing any work-related fatalities, injuries and illnesses by promoting a safe and healthy work environment |
| Community Development | Empowering local communities through community development programs providing improvements in infrastructure, education, health and cultural engagement |
| Sustainable Supply Chain | Ensuring responsible sourcing practices by creating a traceable supply chain, as well as monitoring and engaging suppliers to meet high sustainability standards |
| Energy and Carbon Management | Contributing to climate action by managing the risks and reducing GHG emissions across our business operations. This includes increasing our renewable energy use, methane capture, reducing energy consumption and conserving forests |
| Corporate Governance | Ensuring the highest standards of corporate governance and conducting business activities with integrity and free from corruption |
| Biodiversity and Conservation | Identifying, conserving and managing areas of land and forests of High Conservation Value (HCV) and High Carbon Stock (HCS). This includes peatland management, establishment of riparian zones, and preventing habitat loss to protect biodiversity |
| Resource Use | Ensuring legitimacy of land and resource rights and minimizing the use of resources, including the efficient consumption and responsible management of water and waste |
| Employee Attraction, Management, and Retention | Ensuring our talent pool is motivated, skilled and productive by training and developing our employees, as well as providing competitive benefits and remuneration |
| Pesticides, Fertilisers and Chemical Usage | Responsibly managing the use of pesticides, fertilizers, and other chemicals to avoid contamination of land (soil) and water |



Asian Agri 2030 – Our Contribution to the SDGs

GRI 2-22

Asian Agri has been actively contributing to the United Nations Sustainable Development Goals (UN SDGs). We recognize our business role in achieving the UN Agenda and the importance of using a common language to communicate our sustainability progress. We have worked closely with PwC Singapore to conduct an initial identification of the company's business strength to the needs of Indonesia in general and the surrounding community in particular and to align our company's operations with the 17 UN SDGs indicators. Recently, we have developed AA2030, our new sustainability strategy, underpinned by KPIs and targets, which aligns our overall approach to sustainability with the SDGs. It is made up of targets under four pillars to ensure a mutually beneficial partnership with smallholders, contribution to community growth, promotion of climate protection, and responsible production.



SDG Target Aligned with AA 2030

Implementing Our Sustainability Commitments

To be able to perform our sustainability policies and AA2030 commitment and targets, we define and prioritize the following enablers:

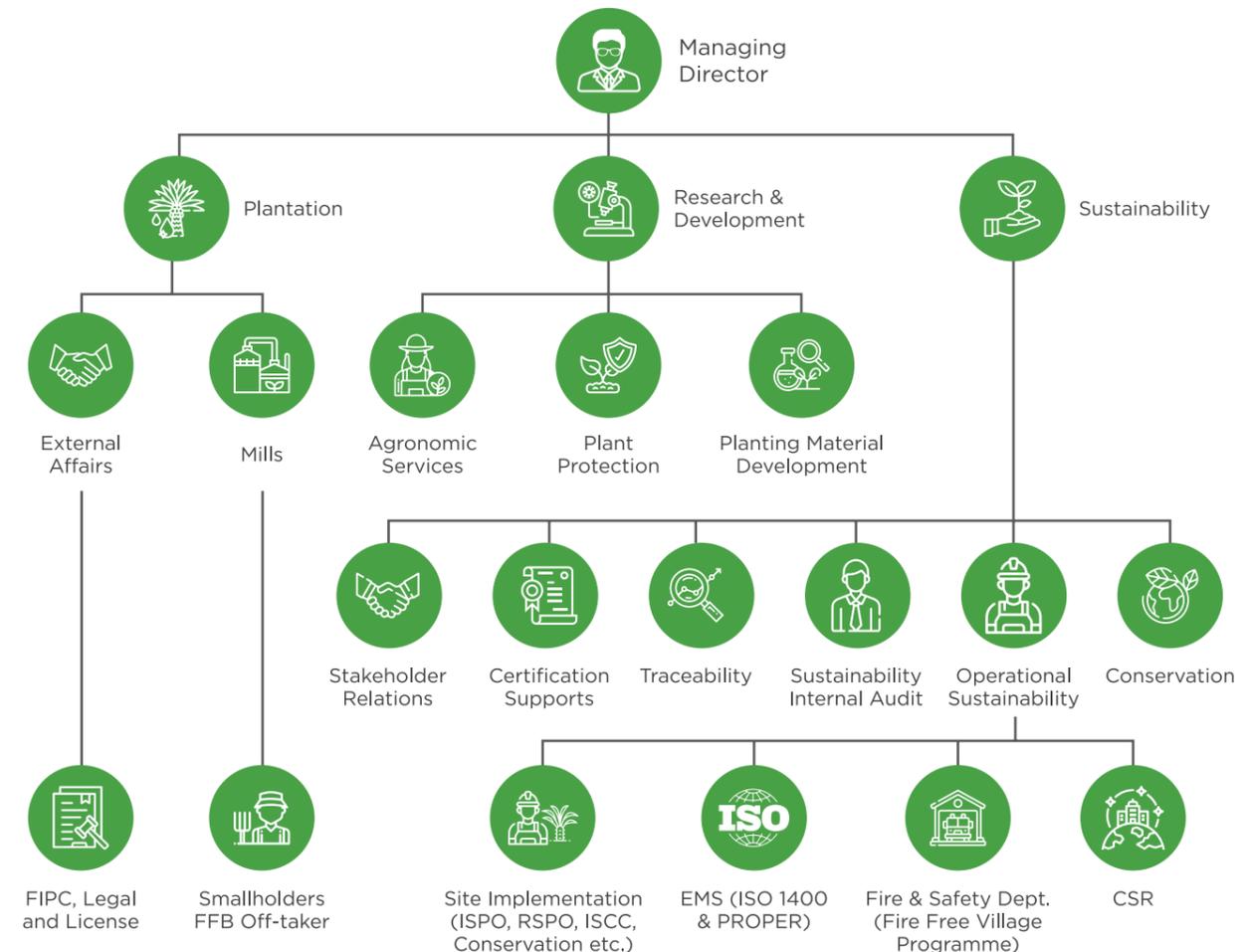
Sustainability Governance

GRI 2-9, 2-12, 2-13, 2-14, 2-17, 2-24

We have established our sustainability team since 2005 to develop the overall sustainability strategy, set up sustainability goals and KPIs, and coordinate with other departments in the implementation of the initiatives. Our sustainability team's tasks include but is not limited to:

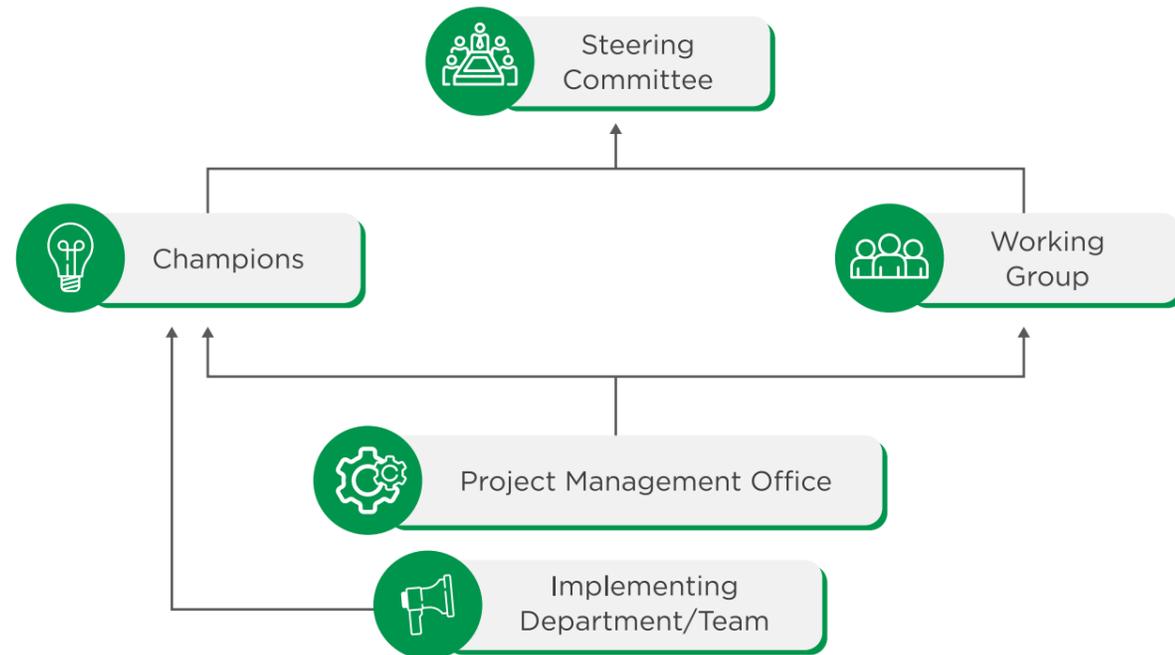
- Maintaining existing certifications
- Looking for and suggesting to adopt other potential certification to meet market demand
- Prevent and or give solutions for sustainability issues such as NDPE, grievance, etc.
- Support initiatives project such as traceability, NGOs/other stakeholder engagements
- Keep track of sustainability operations and report/publish to several platform.

The team is led by our Managing Director who is responsible for overseeing Asian Agri's business, including the decision-making process, providing resources, and overseeing the company's sustainability commitments and NDPE policy implementation. We conduct regular meetings to keep our Managing Director up to date and aware of Asian Agri's sustainability issues, such as the status of certifications, progress on projects, monitoring of performance, and sustainability reporting. In addition, our Managing Director and Management Committee regularly attend training and participate in the sustainability-related events such as workshops, seminars, and exhibitions, to advance the knowledge in sustainable development.



AA2030 Governance

We also set up the AA2030 Governance to ensure the activities of our business operation aligns with AA2030. It is led by the steering committee consisting of our Managing Director from Asian Agri and Directors from RGE to provide strategic oversight of our AA2030 strategy. Our AA2030 Champions provide operational leadership and oversee the implementation of our strategy, with the help of AA2030's Project management office and Implementation Department/Teams. Our AA2030 working groups are tasked with implementing and communicating our strategy. Both AA2030 Champions and Working Group should report the updated progress performance regularly to our steering committee.



Stakeholder Engagement

GRI 2-29

Engaging with stakeholders is an integral factor in the success of our business and operation. Our stakeholders are those who share the same purpose and vision. Having the same purpose can help us grow better together. Parties who are close to our operational areas are also our valuable stakeholders. We believe that catering to the needs of our direct community is crucial to maintain sustainability. Therefore, maintaining close engagement with our stakeholders is crucial for us to seek, listen and keep updated with their interests and concerns that affect our business, as well as collectively share ideas for implementing solutions and best practices to move towards sustainable and responsible businesses.

We maintain open, regular, and transparent communication with our stakeholders, through a variety of channels to obtain constructive feedback from them to help improve our operations, such as forums, trainings, site visits, and consultations. Each stakeholder group has different engagement method and frequency to make it efficient and effective. In that sense, we establish a good relationship and trust with our stakeholders as well as constantly meet their expectations.

The table below provides a detailed summary of our stakeholder engagement efforts in 2022. It includes the key stakeholder groups we have identified based on their interest and impact on our business, as well as the most appropriate method of engagement we adopt for each of these groups, topics and concerns raised and our response. We regularly review and improve our stakeholder engagement approach to ensure that it remains relevant.

| Stakeholder Group | Engagement Method and Frequency | Topics and Concerns Raised | Asian Agri's Response |
|---|--|---|---|
| Government bodies (e.g. Ministry of Trade, Ministry of Energy and Mineral Resources) | <ul style="list-style-type: none"> Site visits (as required) Seminars, forums (as required) Sustainability reports (once every 2 years), annual report (annually) Website (periodically) | <ul style="list-style-type: none"> Company's compliance with regulations on no deforestation, no peatland development, no burning Company's contribution to national agenda such as supporting smallholders, reducing GHG emissions and the carbon transition | <ul style="list-style-type: none"> Ensure clear communication of the company's compliance to regulations Ensure clear communication of the company's policies and performance on issues such as smallholder empowerment, reducing GHG emissions and the carbon transition |
| Buyers | <ul style="list-style-type: none"> One-on-one engagement (regularly) Sustainability reports (annually) Website (periodically) | <ul style="list-style-type: none"> Company's sustainability commitments and performance, on issues such as traceability and reducing GHG emissions | <ul style="list-style-type: none"> Ensure clear communication of the company's policies and performance on issues such as traceability and reducing GHG emissions |
| Employees | <ul style="list-style-type: none"> Internal meetings (regularly) Training (based on topics, twice a year) Sustainability reports (annually), annual report (annually) Website (periodically) | <ul style="list-style-type: none"> Employee welfare, development and benefits | <ul style="list-style-type: none"> Regularly review and improve our approach to employee attraction, management and retention |
| Smallholders - independent and plasma | <ul style="list-style-type: none"> One-on-one engagement (regularly, daily) Training, field studies and other engagements through our smallholder empowerment programs (regularly) | <ul style="list-style-type: none"> Support for replanting, fertilization, harvesting, certification compliance, quality seeds | <ul style="list-style-type: none"> Ensure our smallholder empowerment programs are fit-for-purpose and adequately meets their needs |
| Local Communities | <ul style="list-style-type: none"> Direct engagement through our community programs and Fire Free Village Program (regularly) Grievance mechanism (for socialization; annually) | <ul style="list-style-type: none"> Free, Prior and Informed Consent (FPIC) concerns Company's sustainability commitments and performance, especially on education, health, infrastructure, etc. | <ul style="list-style-type: none"> Ensure communication and implementation of FPIC commitments Provide relevant and effective support through our community programs and Fire Free Village Program |
| Industry groups and trade associations | <ul style="list-style-type: none"> One-on-one engagement (as required) Multi-stakeholder forums and events (as required, regularly) Sustainability reports (annually) | <ul style="list-style-type: none"> Company's sustainability commitments, initiatives and progress Opportunities for collaboration | <ul style="list-style-type: none"> Attend as spokesperson in several event and FGDs Participate in exhibitions |

| Stakeholder Group | Engagement Method and Frequency | Topics and Concerns Raised | Asian Agri's Response |
|--|--|---|---|
| Certification bodies (e.g. RSPO, ISPO, ISCC) | <ul style="list-style-type: none"> Audits (annually) Site visits (annually) Training (as required) Forums (as required) Reporting (annually) | <ul style="list-style-type: none"> Company's sustainability commitments and performance on issues such as no deforestation, no peatland development, no exploitation | <ul style="list-style-type: none"> Ongoing improvements in our understanding of certification requirements Helping to create the ISPO calculator |
| Non-Governmental Organizations (NGOs) | <ul style="list-style-type: none"> One-on-one engagement (as required) Multi-stakeholder forums (as required) Sustainability reports (annually) Website (periodically) | <ul style="list-style-type: none"> Company's sustainability commitments and performance on issues such as deforestation, peatland development and traceability Grievances lodged by stakeholders | <ul style="list-style-type: none"> Ensure clear communication of all sustainability commitments through our policies and reporting Investigate and respond to grievances raised |
| Banks and financial institutions | <ul style="list-style-type: none"> One-on-one engagement (as required) Sustainability reports (annually), annual report (annually) | <ul style="list-style-type: none"> Company's sustainability commitments, initiatives and progress Company's financial performance Opportunity to collaborate on smallholder replanting program | <ul style="list-style-type: none"> Shared information on our sustainability policy, commitments, programs and its progress |
| Media | <ul style="list-style-type: none"> One-on-one engagement (as required) Multi-stakeholder forums (regularly) Website and social media (ongoing) Sustainability reports (annually) | <ul style="list-style-type: none"> Company's sustainability commitments and performance on issues such as employee welfare, fires, smallholder partnerships, quality seeds | <ul style="list-style-type: none"> Issuing press releases Ensure clear communication of all sustainability commitments through our policies and reporting |
| Academia and Students | <ul style="list-style-type: none"> Site visits (as required) Educational programs – e.g. field trips for high school and university students to learn about oil palm (if programed; regularly) | <ul style="list-style-type: none"> Comparison between plasma and other schemes for research and learning purposes | <ul style="list-style-type: none"> Comparison between plasma and KKPA schemes for research and learning purposes |
| International stakeholders (e.g. European Parliament, EU Ambassadors) | <ul style="list-style-type: none"> Site visits (as required) One-on-one engagement (as required) | <ul style="list-style-type: none"> Company's sustainability commitments and performance on issues such as traceability | <ul style="list-style-type: none"> Build capacity and knowledge on agricultural practices in Indonesia |

Certification and Memberships

GRI 2-28

We believe that collaboration is key to improving our operating quality, enhancing relations with the community, and retaining our workers which results in achieving better company performance. Collaboration and partnership could help us keep up with the latest development and best practices in sustainable palm oil. Therefore, we established partnerships through memberships with both national and international organizations and associations.

In addition, we are assessed and included in various benchmark ratings. Since 2015, we have been assessed annually by the Sustainable Palm Oil Transparency Toolkit (SPOTT). We have also been submitting our response to the CDP Forest (formerly 'Carbon Disclosure Project') since 2018.

| No. | Memberships |
|-----|---|
| 1 | Roundtable on Sustainable Palm Oil (RSPO) |
| 2 | Fire-Free Alliance (FFA) |
| 3 | High Carbon Stock Approach (HCSA) |
| 4 | Tropical Forest Alliance 2020 |
| 5 | Sustainability Assurance & Innovation Alliance (SUSTAIN) |
| 6 | Indonesia Employers Association (APINDO) |
| 7 | Indonesian Palm Oil Producers Association (GAPKI) |
| 8 | Badan Kerja Sama Perusahaan Perkebunan Sumatera (BKSPPS) |
| 9 | Indonesian Bioenergy Power Producers Association (APLIBI) |
| 10 | Indonesian Germplasm Expedition Consortium |
| 11 | Oil Palm Genome Project (OPGP) Consortium |

One of our top priorities is complying with sustainable palm oil certification schemes. We viewed that it is essential for our business to be able to have better access to markets and unlock potential opportunities and benefits. We are proud to share that we have achieved the Indonesian Sustainable Palm Oil (ISPO), the Roundtable on Sustainable Palm Oil (RSPO), and International Sustainability and Carbon Certification (ISCC) in most of our mills and kernel crushing plants and we actively apply its standards and principles across our plantations and mills.

| Certification | Description |
|---|--|
|  Indonesian Sustainable Palm Oil | <p>A mandatory certification established in 2011 by the Government of Indonesia for all palm oil growers and millers in the country.</p> <ul style="list-style-type: none"> We have certified 100% of our plantations and mills in 2019 |
|  The Roundtable on Sustainable Palm Oil | <p>A global multi-stakeholder initiative that produces an international standard for the management of sustainable palm oil.</p> <ul style="list-style-type: none"> We became a member of RSPO⁷ in 2006. We have certified 100% of our plantations in 2022. We certified 20 out of our 22 mills in 2022. Certification for the remaining 2 mills are on progress, and still in line with RSPO time bound |
|  The International Sustainability & Carbon Certification | <p>An international certification system established based on the European Union (EU) Directive aimed at implementing environmentally, socially, and economically sustainable production of bio-based feedstocks and renewables in global supply chains.</p> <ul style="list-style-type: none"> We have certified 100% of our plantations and mills in 2013 We obtained waste and residue certification for 100% of our mills in 2021. |

⁷ As Asian Agri is not a legal entity, we have registered our holding company, PT Inti Indosawit Subur to RSPO.

| Certification | Description |
|---------------|---|
| | <p>The OU (Orthodox Union) Kosher is the world's largest and most widely recognized kosher certification agency, certifying over 1,201,950 products produced in more than 9,715 plants located in 104 countries around the world.</p> <ul style="list-style-type: none"> We have been Kosher certified since 2016 for its mills and kernel crushing plants. |
| | <p>Certification scheme that provides independent verification and certification that the basic manufacturing practices and prerequisites necessary for the implementation of an effective Hazard Analysis Critical Control Point (HACCP) food safety program are being followed.</p> <ul style="list-style-type: none"> Asian Agri has been GMP+ certified since 2015 for its palm kernel expeller products. |
| | <p>Certification based on a standard developed and published by the International Organization for Standardization (ISO) titled "Quality Management Systems-Requirements".</p> <ul style="list-style-type: none"> We have obtained ISO 9001 certification for Asian Agri Learning Institute (AALI) and Topaz nursery (OPRS). |
| | <p>International standard that specifies requirements for an effective environmental management system (EMS). It provides a framework that an organization can follow, rather than establishing environmental performance requirements.</p> <ul style="list-style-type: none"> We have obtained ISO 14001 certification for plantations and factories in 3 provinces: North Sumatra, Riau, and Jambi since 2005. |
| | <p>Sustainable certification for biomass products that has been recognized and applied throughout the world.</p> <ul style="list-style-type: none"> In December 2021, we succeeded in obtaining the GGL certificate. With this GGL certificate, Asian Agri's palm kernel shells (PKS) are ensured to come from sustainable sources. |

For more information on our participation in these certifications, refer to our company [website](https://www.asianagri.com/en/sustainability/standards-and-certifications/)⁸.

⁸ <https://www.asianagri.com/en/sustainability/standards-and-certifications/>

Research and Development (R&D)

A robust R&D program is pivotal to our sustainability approach and initiatives. Our R&D Department is aimed to support our management team in terms of obtaining technology packages based on continuous productivity. We continuously seek cutting-edge solutions to improve our agricultural practices, such as increasing land productivity, managing pests and diseases, improving oil extraction rates, optimizing fertilizer consumption rates, soil amelioration, and reducing waste. Additionally, it is undoubted that climate change may risk palm oil cultivation, therefore research is important for us to find adaptation and mitigation measures as well as necessary adjustments in our agriculture practices.

To support our research, the Asian Agri R&D Centre has set up an analytical laboratory that provides technical analysis services as well as training to promote knowledge, awareness, and skills in using technology to produce high-yield, and sustainable harvests. Our laboratories are accredited by the National Accreditation Commission for ISO 17025:2017 which stipulates the general requirements for the competence, impartiality and consistent operation of laboratories, ISO 9001:2015 for Quality Management System that are audited annually and consistently obtained high ranks in laboratory sample accuracy tests performed by the Wageningen Evaluating Programmes for Analytical Laboratories (WEPAL) of Wageningen University.



We are supported by a strong R&D team, totalling 51 experienced and qualified researchers and 371 research technicians specializing in agronomy, soil, pest, disease, breeding, biotechnology, and tissue culture.

Our R&D Centre is equipped with the following capabilities:

| Location | R&D Centre | Research Areas |
|---------------------------------|---|---|
| Tebing Tinggi, North Sumatra | Analytical Laboratory | Analysis of leaf nutrients, fertilisers, compost, oil palm, wastewater and FFB components analysis |
| | Agronomy | Provision of advisory services to plantation operation (Best Management Practices) |
| | Pest & Disease Laboratory | Developing Integrated Pest and Disease Management (IPM) technologies and provision of advisory services to plantation operation on controlling pests and diseases |
| | Statistics and Data Management | Analyzing data generated from trials (Agronomy, P&D and Breeding) and managing digital library |
| | Soil & Survey | Undertaking soil survey and mapping to get better understanding about soil condition (type, fertility, topography, and boundary) |
| Pangkalan Kerinci, Riau | Clonal Oil Palm Propagation Unit | Production of superior ramets through various tissue culture techniques |
| | Molecular Biology Laboratory | Planting material improvement via development of Marker Assisted Selection and Genomic Selection approaches. |
| Topaz, Riau | Oil Palm Research Station | Management of breeding trials and production of superior oil palm seeds |
| Various locations | Test fields | Allows us to test fertilisers, pest and disease control bioagents, progeny trials, as well as collect genetic resources in different agroclimates |

A Glance of Clonal Oil Palm Production Unit (COPPU)



In order to be more productive, Asian Agri commenced planting material improvement in 1996 with the introduction of wide range of genetic materials for its breeding program. A complementary program was launched in 2005 by establishing an oil palm tissue culture laboratory. In 2012, a cutting edge facility, Clonal Oil Palm Production Unit (COPPU) was built to support the objectives of tissue culture program i.e to develop efficient, reliable and cost effective propagation techniques for the culturing of elite parental palms for semi-clonal and bi-clonal seed production, and elite tenera palms with specific traits for commercial planting.

The elite parental palms were carefully chosen based on stringent selection criteria from breeding trials. We pay extensive attention to criteria such as production of crude palm oil (CPO) potential, oil to bunch, fresh fruit bunch, and other important traits of interest such as

low height increment, compact canopy, disease resistance, and drought resilience. Among the advantages in clonal propagation is its ability to reproduce ramets that carry the traits as per selected ortet (biological source).

Not only continuous improvement in term of lab protocol and cost in which COPPU has been endeavoring, but also in term of how to be more eco-friendly. Converting all the fluorescence tube lamps used in growth chambers with LED is one of the efforts, to reduce the use of electricity. In additional, our facility also collect rain-water and recycling the water condensate from our chiller as an alternative water supply for cleaning purposes in our facility. COPPU is currently evaluating the use of solar panel to harness solar energy as a sustainable source for our cooling and lighting requirement in tissue culture process

The focus of our research for the next few years will be in improving efficiency in fertilizer application using technology-driven precision agricultural techniques. This is an important aspect due to the rising cost of fertilizer and to meet sustainability standards. We will conduct site-specific fertilizer trials in the coming year. In addition, we will also continue to seek better techniques to control pests and diseases, such as using more aggressive and effective strains of bioagents to control pests and diseases and optimize ecosystem services.

One of our major R&D discoveries is the superior seed Topaz DxP which is proven to produce high FFB and oil yields even in marginal or infertile soil with relatively low rainfall frequency and slow vertical growth which is easier to harvest. In accordance with the Decree of the Minister of Agriculture No. 57, 58, 59 and 60/KPTS/SR.120/I/2004 dated January 16, 2004, Asian Agri secured a permit to distribute, sell and use varieties of the superior oil palm variety DxP Topaz seeds on 31 July 2004 in Pekanbaru, Riau. It was developed by a team consisting of 21 researchers at our Oil Palm Research Station (OPRS), aiming to help smallholder farmers to grow bigger harvests without increasing their land area. Please refer to our [website](#)⁹ for more information on our Topaz DxP seeds.

Mechanization and Digitalization

One of the Core Values in Asian Agri is Continuous Improvement (CI). With that spirit, we consistently explore new methods and technologies achieve better Quality, Higher Productivity and Lower Cost. These CI initiatives also include Mechanisation and Digitalisation.

In order to maintain the quality of FFB harvested from our estates, fast and efficient evacuation of these FFB to our mills for processing is critical. Additionally, due to the large volume of FFB to be evacuated, collection and transport efficiency is also crucial to ensure high productivity and lower costs. To achieve this, we have adopted mechanisation in the form of Tractor Grabbers and Bin Trucks to evacuate our crops. In addition to higher output, the use of these Tractor Grabber also reduces the physical effort of our workers, contributing to better occupational health and safety (OHS) for our employees. We are also currently doing mechanisation trials for other field activities such as manuring, harvesting and field maintenance.

In addition to mechanisation, Asian Agri has also embarked on a Digital Transformation journey. Some of examples of our Digital initiatives include:

| | |
|---|--|
|  <p>GPS-enabled Tablets for Field Data Acquisition:</p> | <p>Tablets are used by our field staff to collect data in the estate, which activities such as harvesting, field quality inspection, water management, security patrol and crop protection. All the data gathered in the field using these tablets are geo-tagged, ensuring traceability of all the activities back to the block level. Additionally, our truck drivers are also equipped with tablets, ensuring that the evacuation of crop from the field is also being tracked in almost real-time manner, reducing backlogs and increasing transport efficiency.</p> <p>All the data collected out in the field is consolidated in our datacentre and accessible both from the individual estate offices and Central Command Centre. The wealth of traceable data allows us to perform better planning for the daily operational activities out in the field, while enabling management at our Regional and Head Offices to performed advanced analytics for better decision making. In the future, Asian Agri will also rollout the initiative to our smallholders with the goal of improving their productivity and extend our traceability.</p> |
|---|--|

⁹ <https://www.asianagri.com/en/media-publications/articles/topaz-quality-seeds-of-asian-agri/>

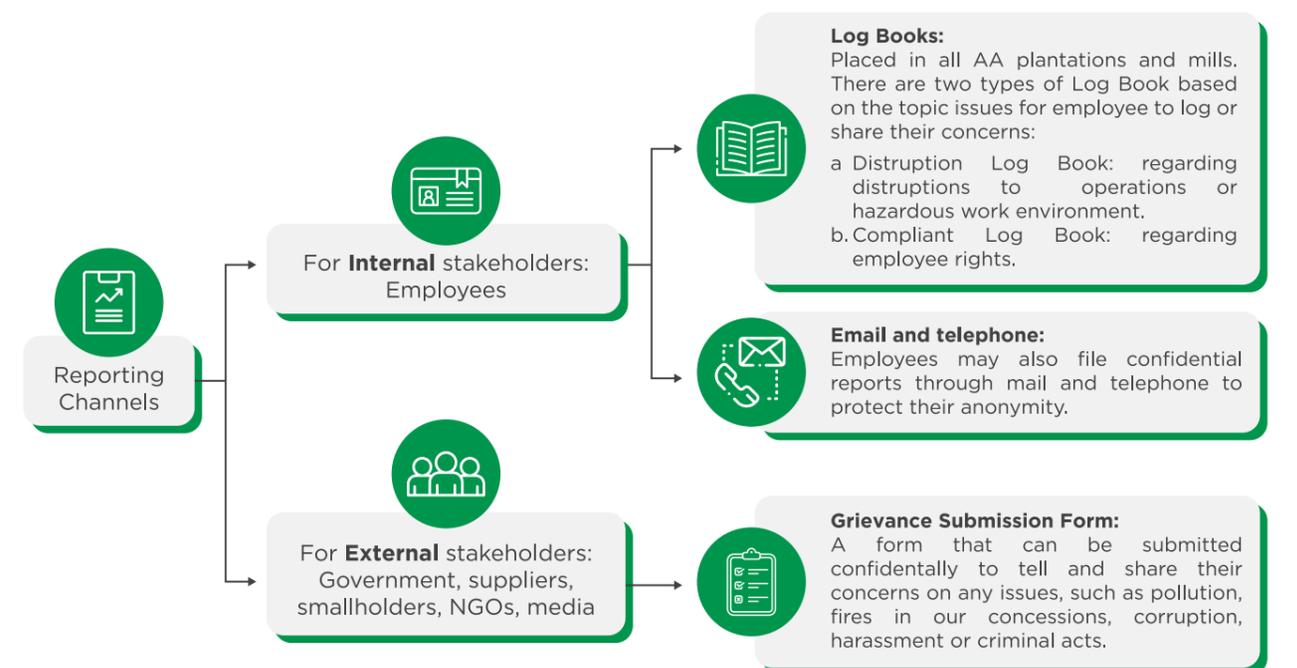
| | |
|---|--|
|  <p>Drone and tablet for plantation operation</p> | <p>In 2015, Asian Agri formed our own drone operations team. With the benefits of better quality, higher productivity and traceability, drones are used for various operational tasks, such as mapping, aerial imaging, stand optimisation (tree counting), pre-planting spraying and crop protection (pest control and plant health).</p> <p>These drones are equipped with the latest technology like Real Time Kinematics and even Multispectral sensors to provide us with accurate and consistent results. Better quality and higher productivity also allows us to enjoy cost savings.</p> |
|  <p>Tablet for mill operations</p> | <p>Asian Agri mills have also taken advantage of the benefits of using tablets for data acquisition. The various activities that have been digitalised include FFB grading, product dispatch, quality control, maintenance and inventory management. With realtime integration to our other systems, (eg. weighbridge and ERP), we are able to ensure data immutability, enhanced control, pro-active action and elimination of human error.</p> |

To fully reap the benefits of technology and digital tools in our business, a culture change has to happen in our organisation. This is accomplished by employing a strong Change Management methodology and developing talent. Asian Agri is committed to investing in Human Capital development, equipping our employees with the right set of knowledge and skills, allowing them to grow and realise their true potential.

Grievance Procedure

GRI 2-16, 2-25, 2-26

We are committed to providing a clear and transparent framework and response to any grievance raised by all our stakeholders. Hence, in 2014 we established a robust grievance procedure as a channel that enables stakeholders to express concerns and complaints anonymously with the aim of resolving challenges and issues yet still protecting them from retaliation. These issues may include land conflict, labor issues, human rights issues, OHS issues, and other matters. Since then, we have heard and addressed all grievances in a prompt and effective manner. The following grievance channels are available for both internal and external reporting:



Besides providing verification and feedback to any grievance raised, Asian Agri values feedback and inputs from our stakeholders as a constructive way to enhance supply chain transparency and assist in monitoring the progress of the implementation of our Sustainability Policy.

Critical concerns also can be communicated through the internal grievance procedure, which is shared with every department head. If the issue is considered of greater significance, it can be raised to the HR Department Head through private sessions between the relevant heads, and if necessary can involve Management Committee. In 2022, there were no critical concerns raised.

For further details on our reporting channels for reporting grievances, please visit our [website](#)¹⁰.

Process of handling grievances:

Once we receive a grievance from any of the channels above, our Grievance Committee will identify and verify the potential grievance. If the grievance is valid, we will ascertain whether the Verification Team is required to conduct field verification.

Our Grievance Committee will develop a time-bound action plan to resolve the grievance. The Grievance Secretariat will then monitor the progress of the action plan and update the case internally. Furthermore, if the grievance involves FFB supplier(s), we will also coordinate and follow up with the Commercial Department. They will then do the field verification and if any non compliant was found after investigation, they will push the FFB supplier to conduct corrective measures within three months. Depending on the grievance submitted, if the FFB supplier still unable to solve and follow the company's policy, the Grievance Committee may impose an immediate suspension on the FFB supplier.

In 2022, we have received a total of 7 grievances. All are related to new hotspot detections reported by RSPO. In response to these grievances, the Fire, Estate, and Sustainability Department visited the site immediately to verify the hotspot coordinates submitted by RSPO. After checking, no hotspots were found, and we sent the fire report form along with the evidence to RSPO. The cases were closed accordingly.

| No. | Data Received | Company/Unit | Case Details | Organization |
|-----|-------------------|--------------------------|-----------------------|--------------|
| 1 | 1 November 2022 | PT. Indo Sepadan Jaya | Detected New Hotspots | RSPO |
| 2 | 27 September 2022 | PT. Inti Indosawit Subur | | |
| 3 | 14 August 2022 | PT. Hari Sawit Jaya | | |
| 4 | 4 June 2022 | PT. Inti Indosawit Subur | | |
| 5 | 30 March 2022 | PT. Hari Sawit Jaya | | |
| 6 | 3 March 2022 | PT. Rigunas Agri Utama | | |
| 7 | 4 January 2022 | PT. Inti Indosawit Subur | | |

All our detailed and updated grievances are published on our [website](#)¹¹.

¹⁰ <https://www.asianagri.com/en/sustainability/grievance/>
¹¹ <https://www.asianagri.com/en/sustainability/grievance/grievance-update/>

Upholding Human Rights

GRI 2-23

At Asian Agri, we are dedicated to upholding human rights throughout our supply chain. To provide comprehensive guidance on this issue, we conducted a Human Rights Assessment with the help of a third-party expert at the end of 2019 and the beginning of 2022. The results of the initial assessment were used to develop our Human Rights Policy, which was first established in December 2019.

We have planned to update our Human Rights Policy in early 2023 for better alignment with national and international standards and to include more provisions. Our Human Rights policy:

- Acts in accordance with
 - The International Bill of Human Rights¹²
 - The UN Guiding Principles on Business and Human Rights
 - The Internal Labor Organizations' (ILO) Declaration on Fundamental Principles and Rights at Work
 - The UN Declaration on the Rights of Indigenous People
- Adheres to local and national laws as well as relevant international treaties ratified by the Indonesian Government
- Respects the ten principles of the United Nations Global Compact¹³
- Refers to international standards and voluntary initiatives that address human rights challenges

This policy applies to all Asian Agri employees and business units and we encourage our suppliers to also meet human rights standards. It outlines how we ensure human rights for our employees, manage human rights issues, engage stakeholders, provide a grievance mechanism, and maintain governance. Our System and Operational Audit team regularly monitors and periodically reviews the policy.



¹² Universal Declaration of Human Rights, International Covenant on Economic, Social and Cultural Rights, and International Covenant on Civil and Political Rights

¹³ Asian Agri respects the principles of the UN Global Compact, but we have not been a signatory of the UN Global Compact.



SMALLHOLDER PARTNERSHIP

“Since becoming a member in 2006, the collaboration between Asian Agri and RSPO has developed to create greater impact in the industry. We are impressed by Asian Agri’s efforts in supporting both scheme and independent smallholders in implementing and complying to our requirements. This year has been particularly inspiring to witness the success of the Smallholder Inclusion for Better Livelihood & Empowerment (“SMILE”) program, where 239 independent smallholders in the Labuhan Batu Regency achieved the RSPO sustainability certification. At RSPO, it is this level of ambition that we encourage companies to aspire to.”

Guntur Cahyo Prabowo, Acting Head of Smallholder Program, RSPO



At Asian Agri, we engage intensively with our smallholders and supply chain to implement sustainable farming practices and improve their livelihoods. We believe that the growth of our business goes hand-in-hand with the growth and development of our smallholder partners. As such, empowering smallholders forms an integral pillar of our industrial and business development.

Through our continuous engagements, we have established a transparent and ethical supply chain to consistently strengthen the traceability and sustainability of our products. By providing training, facilities, and market access, we help scheme and independent smallholders across our areas of operations improve their productivity, financial yield, and overall environmental management capabilities. These, in turn, allow us to contribute to the achievement of SDG 9 on Industry, Innovation and Infrastructure.

AA2030 Targets and Performance for Responsible and Sustainable Production

| 2030 Targets | Our Progress in 2022 |
|--|--|
| Double smallholder income through replanting program | 1.36x ton FFB/ha Average productivity of all replanted plantations was 20.4 ton FFB/ ha, from the baseline of 15 ton FFB/ ha |
| 100% completion of smallholders’ replanting program | Up to 24% completed Replanted more than 12,658ha of smallholder land since 2016, including 3,307ha replanted in 2022 alone |
| 100% ISPO certification for smallholders ¹⁴ | 25% completed 19 out of 76 KUD have been ISPO audited. Two of them have been certified by 2022, while 17 of them are expecting the certification results. |
| 5,000 independent smallholders to be RSPO certified | Up to 8% completed We started RSPO certification for independent smallholders in our Corporate Shared Value (CSV) program in 2020. 390 independent smallholders are RSPO certified by 2022. |

¹⁴ ISPO certification for smallholders is still a voluntary scheme until 2025 (referring to Presidential Regulation No. 44/2020).



SMALLHOLDER EMPOWERMENT

Management Approach

GRI 3-3

We consider ourselves as pioneers in smallholder partnerships, having forged and maintained close and collaborative partnerships with smallholders for over 35 years. At our core, we believe in nurturing a win-win relationship, where the growth of our business simultaneously grows and develops our smallholders and local communities. As a result, we have made long-lasting positive impact to the surrounding economy, environment, and communities, as well as safeguard smallholders' human rights.

Working with smallholders is one of Asian Agri's lifelines, given approximately 60% of our CPO production is supplied by smallholders. Asian Agri embed smallholders partnership within our business model, positioning smallholders as our important business partners. By doing so, we work closely with our smallholders to strengthen our cooperations and provide them various forms of assistance. Close partnership with smallholders is our commitment to enhance their livelihood, by understanding the importance of rights to an adequate standard of living.

Through our initiatives aimed at improving the productivity, profitability, and sustainability of smallholders' yields, we aim to achieve the following outcomes:

| | | |
|---|--|--|
| | | |
| <p>Economic Impact Contribute to the Government of Indonesia's strategic plan for sustained economic growth and rural development.</p> | <p>Social Impact Improve smallholder livelihood, finances, and entrepreneurship, contributing to their increased overall quality of life.</p> | <p>Environmental Impact Increase yield productivity without further land expansion, promote alternative land clearing methods, prohibit the use of fires, and implement sustainable farming practices</p> |

Doubling smallholder income through replanting program

In addition, we also set a bold ambition to double our smallholder income by 2030 by doubling their yield productivity, particularly through our replanting program. Our baseline yield rate is 15 Ton FFB/ha, accounting for reduced productivity due to aging and technical difficulties in harvesting tall palm trees. We will continue monitor annually the average yield productivity of our smallholders who joined our replanting program, and aiming to double the FFB yield.

Asian Agri's Journey in Empowering Smallholders

Since the establishment of Asian Agri, empowering and partnering with smallholders sits at the heart of our business. There are two types of smallholders that work with Asian Agri: **scheme smallholders** and **independent smallholders**.

Scheme Smallholders

Scheme smallholders are smallholders that operate under the Government of Indonesia's Plasma Transmigration Program (Perkebunan Inti Rakyat). Set up in 1987, the Program saw the relocation of rural farmers to palm oil growing areas where they were given 0.5 hectares of land for housing and farming, and another 2 hectares for oil palm plantation. Partnerships with local companies were allocated by the Government to support their livelihood and harvest through a contractual and/or credit agreement. Asian Agri was one of the first companies engaged in this Program.

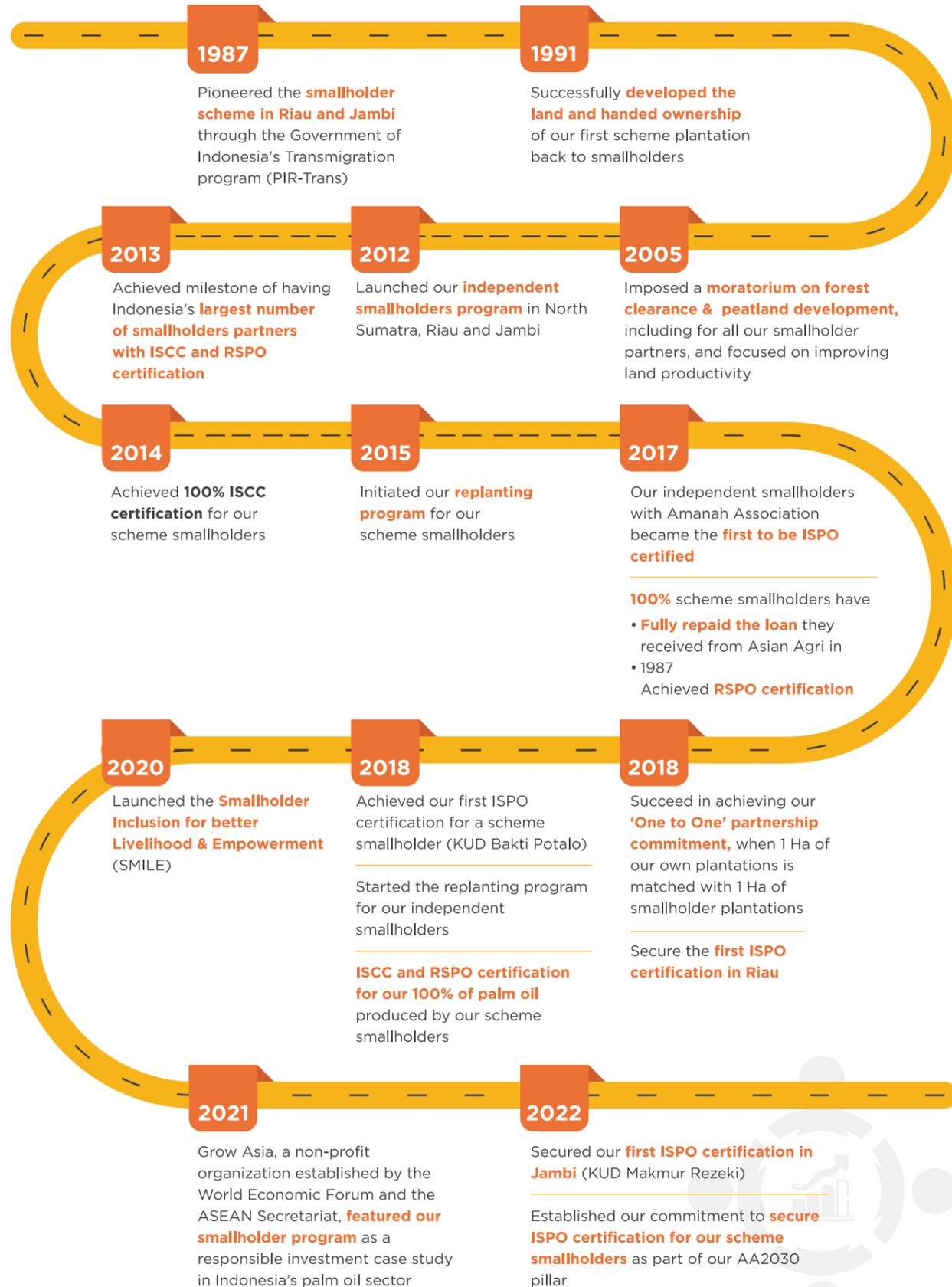
Independent Smallholders

Unlike scheme smallholders, independent smallholders do not have partnerships to any particular company or organization. As they independently finance and manage their own plantations, the plantation area possessed by independent smallholders range differently. Independent smallholders which have relatively small piece of plantation often lack access and awareness to sustainable farming practices, quality planting materials and financing. In recent years, there has been a growing push, internationally and nationally, to support independent smallholders to improve their livelihoods. Our efforts in supporting independent smallholders can be read in page 37.

As of 2022, we work with:

| | | | |
|--|---|--|---|
| <p>27,082 Scheme Smallholders managing around</p> | <p>52,899 hectares of land</p> | <p>8,525 Independent Smallholders managing around</p> | <p>39,116 hectares of land</p> |
|--|---|--|---|

The following timeline highlights key milestones that we have achieved in our journey.



Supporting Our Scheme Smallholders

GRI 203-1, 203-2, 413-1

At Asian Agri, we partner with scheme smallholders by providing them with access to financing, technical support, training and guidance for effective, sustainable, and efficient palm oil harvesting and management. We also have assisted them in obtaining RSPO and the ISCC certifications. Currently, we are working with them to obtain the ISPO certificates.

As part of our commitment to support smallholders, we share part of the profits earned from sustainable palm oil by investing the amount in scheme smallholder programs.

In 2022, we contributed a total of approximately

IDR 2.74 billion to fund various programs, which includes but not limited to:



Improving agronomic skills and knowledge;



Livestock cultivation



Renovating and building village and plantation infrastructures

Our programs, initiatives, and support have enabled our scheme smallholders to achieve a higher level of income. As of 2022, our scheme smallholders in Riau can earn approximately 2.7 times higher than the provincial minimum wage, while those in Jambi have earned around 2.5 times higher than the minimum wage in their province. Compared to 2021, our scheme smallholders in Riau and Jambi increased their income by 12.8% and 6.3% respectively in 2022.

This achievement not only highlights the positive impact of our sustainability efforts but also serves as a testament to our ongoing commitment to promoting equitable and sustainable livelihoods for our smallholders.

Scheme smallholder income trends compared with provincial minimum wage in IDR¹⁵



¹⁵ Provincial wage figures in 2021 are taken from the Circular Letter of the Indonesian Ministry of Labour Number 11/HK04/X/2020 regarding the Determination of the Minimum Wage for 2021 during the Covid-19 Pandemic



Establishing Strong Partnerships through our Plasma Management Team

We have set up a Plasma Management Team, tasked to oversee all aspects of our scheme smallholder programs, comprising of more than 100 dedicated personnel. Their responsibilities include liaising with our smallholder cooperatives to provide support on technical and commercial issues such as managing FFB sales and monitoring the implementation of our Best Management Practices (BMP) guidelines daily. Our Plasma Manager, assistants and foremen also conduct regular meetings with scheme smallholder cooperatives and farmer groups' representatives. These meetings ensure that there is continuous, transparent, and direct communication between Asian Agri and our scheme smallholders. The meetings also provide an opportunity for smallholders to raise any technical issues they may face or any grievances to the Company.

By establishing a dedicated Plasma Management Team, Asian Agri aims to establish a strong partnership that builds on trust and transparency with our scheme smallholders.

Our Programs

Given the volatility of FFB prices, our goal is to help scheme smallholders maintain high production through our smallholder programs. We have 4 key programs aimed at supporting our scheme smallholders:

- 
Replanting
- 
Fire Awareness and Prevention
- 
Obtaining Sustainability Certifications
- 
Knowledge Sharing on Palm Oil Management

Replanting

Once an oil palm has been replanted, they take up to three years to become productive. During this time, smallholders' incomes are significantly affected as they are unable to sell their FFB. Faced with this challenge, smallholders have the tendency to delay replanting, resulting in declining yields and lower income from the aging trees. At Asian Agri, we encourage our smallholders to replant at least 5% of their total area on an annual basis.

We believe that leading by example is one of prerequisites in having a successful replanting program. Asian Agri is paving the way on the replanting program before cascading the importance of replanting to the smallholders. We take actions to prove the results of yield increase after replanting, especially because we utilized best selected TOPAZ seeds.

Our holistic replanting program covers three focus areas of support:

Financial assistance:

We help our smallholders in their purchase of the TOPAZ seeds or seedlings and resources required for replanting by improving their access to funding. Within this initiative, Asian Agri acts as a guarantor for our smallholders to banks, financial institutions and/or the Indonesian Palm Oil Plantation Fund Management Agency (Badan Pengelola Dana Perkebunan Kelapa Sawit/BPDPKS).

We acknowledged that the replanting program is also set as one of the national agendas on sustainable palm oil. Asian Agri strives to maintain close communication with public institutions in supporting our smallholders, including BPDPKS which is disbursing financial assistance for smallholders in the replanting program.

By securing access to funds, our smallholders can purchase high quality seeds to improve their harvests and overall yield productivity. The return on investment of high-quality seeds is especially significant as oil palms typically have a productive life of about 25 years.

Land preparation:

In our efforts to promote sustainability, we provide support to smallholders in their land preparation for replanting. Our process begins by carefully felling old trees, chipping the wood for later use, tilling the soil, and fertilizing it to enhance its productivity. We help set up ideal planting points and conclude the process by holing the soil. This entire process takes a period of six months to complete, during which we ensure that all activities are carried out in a responsible manner.

Alternative sources of livelihood:

We acknowledge the challenges that smallholders face during the waiting period for their newly planted oil palms to bear fruit. To alleviate this challenge, we work with smallholders to identify and provide access to alternative sources of income. This includes offering cattle, day-old chickens, fish, goats, cows, and stingless honeybees (known as 'kelulut'), as well as vegetable seeds for cultivation. We believe that diversifying income streams is a critical component of supporting smallholders, which is why we also facilitate the expansion of non-agricultural businesses, such as the production of handicrafts. By providing smallholders with diverse and sustainable sources of income, we aim to help them through the waiting period and ensure the continued prosperity of their communities.

Our Smallholder Business: Agro-Tourism in the Middle of a Plantation in Siak Regency



Sunarto and his two sons, Kristiyono and Dwiyono, joined the government's PIR-Transmigration program and moved from Central Java to Riau in 1991. He started a new life as an oil palm smallholder in collaboration with Asian Agri.

Becoming an oil palm farmer poses various risks that can disrupt one's source of income, one of which is during replanting, when old oil palm trees are cut down and replanted. Smallholders will have to wait until the trees grow to be harvested, thus it is very important for smallholders to find other income streams while new trees grow.

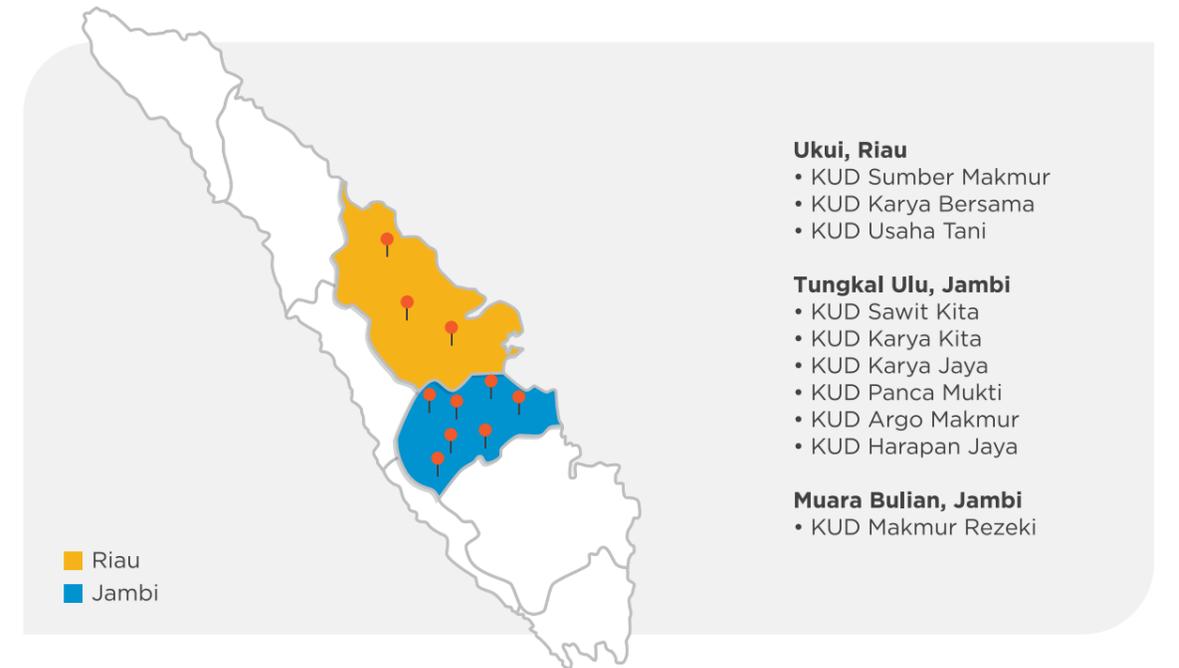
As a company, Asian Agri understands this risk very well and supports smallholders by providing training on alternative income programs that encourage and spark their entrepreneurial spirit. Sunarto was also one of the smallholders that attended this training in Yogyakarta. After

the training, Sunarto came up with various alternative livelihood ideas to support his income, one of which is a community swimming pool business built in his yard, namely Tirta Buana, which is still operating until now.

Currently Tirta Buana has four swimming pools, a garden planted with fruit trees such as oranges, papayas, etc., and a restaurant. With a ticket of 15,000 per person, visitors can enter the swimming pool and get free snack and drink. Now, it has become a tourist attraction in Siak Regency gathering about 1,000 visitors a week, mostly visited during the weekends by families and groups of friends.

Currently, his two sons share the responsibility of managing Tirta Buana, which now has seven employees. For Sunarto, nothing compares to the joy of seeing his sons work hand-in-hand and continue what he started.

Cooperatives (Koperasi Unit Desa/KUD) that made progress the replanting program in 2022 include:



As part of our AA2030 targets, our aim is to help 100% of smallholders, or approximately 60,000 ha, in completing the replanting program by 2030. Since the program's establishment in 2016, we have supported smallholders over a total area of 12,658 Ha, making up about 24% of our smallholders.

Obtaining Sustainability Certifications

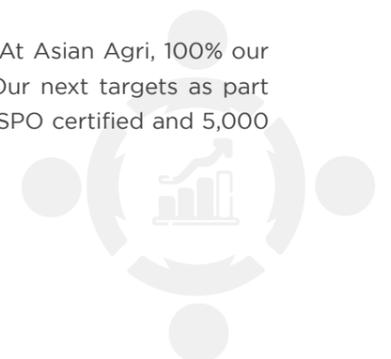
GRI 13.10.4, 13.23.4

Supporting our smallholders to obtain sustainability certifications ensures that the standards we implement at Asian Agri are maintained across our supply chain. Therefore, we assist smallholders to prepare their plantations to comply with recognized and established certification requirements such as the RSPO, the International Sustainability and Carbon Certificates (ISCC), and Indonesian Sustainable Palm Oil (ISPO).

In the process of securing the standards, smallholders receive various benefits such as tailored trainings, ongoing assistance, and preparation for certification assessments. Additionally, once these certifications are obtained, smallholders are eligible to receive a premium price for their products. Consequently, the increased profits received by smallholders enable them to re-invest in their operations, such as purchasing safety equipment and improve their overall livelihood.

Certifications are applied to plantations and to the produced oil separately. At Asian Agri, 100% our scheme smallholders' plantations have been certified by RSPO and ISCC. Our next targets as part of AA2030 are to aim for all cooperatives under scheme smallholder to be ISPO certified and 5,000 independent smallholders to be RSPO certified by 2030.

Our targets and progress on certifications for smallholders:



| Certification | Asian Agri's Journey | Target | 2022 Progress |
|---------------|---|--|--|
| | <ul style="list-style-type: none"> In 2017, our independent smallholders in Amanah Assosiasi obtained the first ever ISPO certification for independent smallholders in Indonesia In 2018, we achieved the first ISPO certification for our scheme smallholders in KUD Bukit Potalo | <ul style="list-style-type: none"> Begin ISPO certification as mandated by the Government by 2024. 100% ISPO certification for smallholders by 2030. | <ul style="list-style-type: none"> 18 cooperatives (KUD) have audited for ISPO certification 1 KUD in Jambi, KUD Makmur Rezeki obtained ISPO certification |
| | <ul style="list-style-type: none"> In 2012, we received the first RSPO certification of our scheme smallholder. In 2017, we assisted certifications for 100% of our scheme smallholder plantations in Riau and Jambi. | RSPO certification for 5,000 independent smallholders by 2030 | Certified 390 independent smallholders |
| | <ul style="list-style-type: none"> In 2013, we achieved the first certification for our scheme smallholders In 2014, we completed 100% of the certifications for our scheme smallholders | Maintain the certifications of scheme smallholders | Maintain the certifications of scheme smallholders. |

Fire Awareness and Prevention

In line with our zero-burning policy, we work closely with our smallholders to improve their awareness and capacity for alternative methods for land clearing. This includes providing them with heavy equipment and training to clear land without resorting to slash-and-burn techniques.

Further information on this program can be read in our Fire-Free Village Programme section in page 108.

Knowledge Sharing on Palm Oil Management

In addition to improving funding access and support for certifications, we also conduct knowledge-sharing socializations with our smallholders to increase their awareness of best practices in the industry. We have a dedicated team comprised of Asian Agri staff who regularly share knowledge and deliver training sessions to our smallholders. We conduct five types of routine training which encompasses a range of topics, including:

- Oil Palm Best Management Practices
- Refresher training on ISPO and RSPO certification
- First Aid and Occupational Health, Safety and Environment (OHSE)
- Fire Prevention
- Replanting programs with comparative studies with other smallholders

In 2022, we provided training to approximately 2,000 farmers and representatives.

Asian Agri is also committed to working closely with smallholders in assisting replanting implementation. We maintain intensive communication with them to understand what they need and are ready to support. We also provide targeted support for smallholders who have limited capital to develop their small-sized plantations.

Supporting our Independent Smallholders

GRI 203-1, 203-2

Despite making up a large majority of the country's plantations, independent smallholders in Indonesia tend to struggle with implementing sustainable agronomic practices. This may be due to a number of factors such as a lack of awareness of best practices, management support and access to funding. As a result, they are faced with lower yields and profitability.

We recognize that independent smallholders rely heavily on their plantations to support their livelihoods. Therefore, Asian Agri acknowledges the need to promote sustainable palm oil production and management to independent smallholders. This coincides with our commitment to support and empower our smallholders within our supply chain. In 2012, we began supporting independent smallholders through various initiatives, including our Corporate Shared Value (CSV) and the Smallholder Inclusion for Better Livelihood & Empowerment (SMILE) program, building on our years of experience working with scheme smallholders.

In 2022, independent smallholders supply 47.6% of Asian Agri's total FFB demands, of which 20.2% of this is supplied from our CSV program.

Corporate Shared Value (CSV) Program

Asian Agri's CSV program currently supports 8,525 independent smallholders in North Sumatra, Riau, and Jambi, managing a total of 39,116 Ha of land. The Program was developed based on the successes and lessons learned from our scheme smallholder programs, where the objective was to extend our resources to support our independent smallholders. This includes, but is not limited to:

- Helping them form cooperatives,
- Providing training on palm oil production and management best practices,
- Improving access to quality seeds, equipment, and access to funding for replanting purposes,
- Supporting them to obtain sustainability certifications.

In 2022, we supported almost 700 smallholders to process the RSPO Certification through the RSPO Independent Smallholder Standard (RISS) certification scheme. As part of AA2030 progress, 390 independent smallholders have obtained RSPO certification.

Strengthening the Implementation of our SMILE Program

The Smallholder Inclusion for better Livelihood & Empowerment (SMILE) program was first launched in 2020, in collaboration with Kao Corporation and Apical. The program was established to aim supporting 5,000 independent smallholders who manage approximately 18,000 hectares in North Sumatra, Riau, and Jambi. Through a series of customized engagements, webinars, and workshops, our team of experts will help guide independent smallholders to improve their yield, effectively attend to the needs of their estates, obtain sustainability certifications, and secure premium benefits from their certified palm oil production. The Program aims to provide a collaborative platform for building a more sustainable and traceable supply chain.

Furthermore, in our commitment to supporting independent smallholders in obtaining RSPO certifications, we have engaged with several parties, including FORTASBI¹⁶, Yayasan Setara Jambi, and Bentang Oasis Jambi. Our partnership with FORTASBI commended in 2021 and involves the management of KUDs in North Sumatra and Riau. Similarly, Yayasan Setara Jambi and Bentang Oasis Jambi have been tasked with assisting smallholders in Jambi, with our contract with the Yayasan Setara Jambi concluding in November 2022 and subsequently continued by Bentang Oasis Jambi. Through these partnerships, we aim to empower smallholders with the tools and resources to meet the standards of sustainability palm oil production.

The SMILE program is divided into three phases from 2020 to 2030 with the focal objective to increase smallholders' livelihood. To achieve that, we assist smallholders in obtaining RSPO certification, therefore the smallholders are eligible in receiving direct benefits in form of premium price from downstream partner. Through an 11-year period, our goal is to empower smallholders to become self-sufficient and adopt sustainable practices in their oil palm plantations. Our assistance is tailored to help smallholders settle and able to maintain their RSPO certificates accordingly.

¹⁶ Forum Petani Kelapa Sawit Berkelanjutan Indonesia (Indonesian Sustainable Palm Oil Farmers Forum).

Asian Agri's Support to Scheme Smallholders in KUD Jaya Makmur - Riau



Smallholder empowerment is always Asian Agri's priority in order to increase the livelihood of smallholders surrounding our estates and ensure quality FFB sourced from them. One of our partnerships with scheme smallholders is made with KUD Jaya Makmur located in Buatan Village, Riau Province. Established in 1994, KUD Jaya Makmur has 460 members with 920 hectares of palm oil plantation. In running the business, the KUD supports its members in providing transportation for FFB to mills, savings and loan facilities, and a mini-market.

Asian Agri has been supporting the scheme smallholders in this KUD since the beginning, after the smallholders started planting in the 1990s under *Perkebunan Inti Rakyat* Program from the government. Asian Agri's support includes but is not limited to, assurance of FFB purchase by our company, knowledge sharing of Asian Agri best practices, various pieces of training for business sustainability practices, the assistance of alternative income, and fertilizer

supply. Asian Agri also provides a dedicated employee to work closely with the KUD and continuously provide advice on Asian Agri's best practices and training in various topics e.g. harvest, pest, safety standards, fire prevention, and many more. Asian Agri maintains close communication with KUD and responds promptly whenever KUD raises comments or requests.

In the replanting season, Asian Agri supports the smallholders in managing the plantation from the seed planting until those are ready to be harvested while supporting them in getting alternative income while waiting for harvest time. On the other hand, the KUD is also providing a savings program for the members. Members can save 500,000 IDR per month to be utilized for replanting. Besides, members can borrow money from KUD for their livelihood. The KUD has successfully organized a replanting program for 170 hectares in phase 1 and will continue the phase 2 replanting for 172 hectares.

Asian Agri's Support to Independent Smallholders Under the Corporate Shared Value (CSV) Program in Asosiasi Berkah Makmur Bersama - Riau



Not only working with scheme smallholders, but Asian Agri also works together with independent smallholders under the CSV program. Among others, we partner with Association 'Berkah Makmur Bersama', located in Kehidupan Baru Village in Riau Province. Established in 2017, the association has 217 members from nine farmer groups with 682 hectares of land by the end of 2022. We do not differentiate our agreement and support between the scheme and independent smallholders. The only difference is that Asian Agri has more involvement in managing the land for scheme smallholders, meanwhile independent smallholders are less dependent and manage their plantations with their own resources.

We provide knowledge sharing of Asian Agri's best practices, training and assistance, and financial support. The financial support includes but is not limited to installment payments for fertilizer and assistance in obtaining bank loans. For the collective purpose, Asian Agri also provided the building of road infrastructure among plantation plots. On top of that, we supported the establishment of a legal entity for independent smallholders, either associations or cooperatives. We also provided a continuous patrol system for monitoring. An association member mentioned that he has increased his FFB yield by double with the support from Asian Agri. He felt that Asian Agri's best practices improved the way he treated his land and oil palms in a more mannered and sustainable way.

What's Next?

- We seek to continually improve and expand on our initiatives, which are critical to helping us meet the ambitious targets and commitments we have laid out in AA2030.
- We will continue to seek feedback from smallholders, experts, external consultants, NGOs and certification bodies on our progress and performance, as well as monitor and address any grievances raised.
- We strive to expand the coverage of our CSV program where we establish partnerships with more number of independent smallholders.



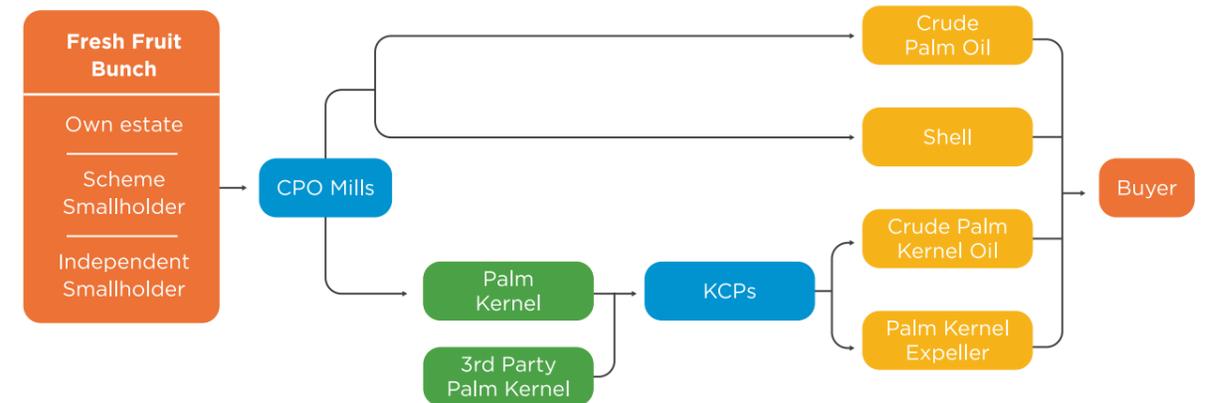
RESPONSIBLE SUPPLY CHAIN

Management Approach

GRI 3-3

Maintaining a responsible supply chain forms the foundation of our ability to deliver Asian Agri's products to our customers. It enables us to minimize our negative environmental and social impact, and guarantees that we have implemented the same sustainable, ethical, and fair standards throughout our business. It also ensures us to minimize human rights violation throughout our supply chain, including on the topic of safe working condition and prevention of child and forced labor in our suppliers. In addition to Asian Agri's plantations and mills, our supply chain encompasses our scheme and independent smallholders. The scale of our business means that our supply chain has significant impact on the development of the local economy, environment, and communities.

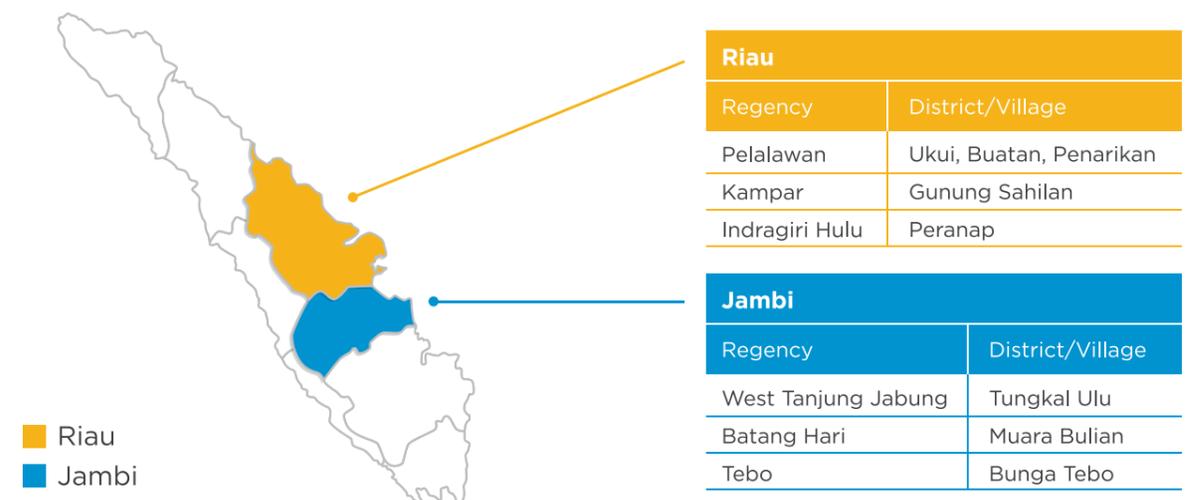
In building toward a fully sustainable supply chain, Asian Agri is committed to ensuring supply chain traceability. Our palm oil mills are supplied with FFB from our own plantations, scheme, and independent smallholders, whereas our Kernel Crushing Plants (KCP) are supplied with PK from our own and third-party mills.



As of 2022, Asian Agri owns 22 mills, 11 KCPs, 10 biogas plants and 30 of our own estates. Further details can be accessed in the [Supply Chain Map](#)¹⁷ section on our website.

Our Scheme and Independent Smallholders

We source, and support scheme smallholders located in Riau and Jambi.



| Scheme Smallholders | Riau | Jambi | Total |
|--|--------|--------|--------|
| Number of scheme smallholders | 14,725 | 12,357 | 27,082 |
| Number of scheme smallholder groups | 691 | 522 | 1,213 |
| Number of scheme smallholder cooperatives | 38 | 38 | 76 |
| Total planted area by scheme smallholders (Ha) | 29,450 | 23,449 | 52,899 |

| Independent Smallholder under Corporate Shared Value | North Sumatra | Riau | Jambi | Total |
|--|---------------|-------|--------|--------|
| Number of CSV smallholders | 2,219 | 2,237 | 4,069 | 8,525 |
| Total planted area by CSV smallholders (ha) | 14,640 | 8,633 | 15,843 | 39,116 |

¹⁷ <https://www.asianagri.com/en/supply-chain-map/>

Currently, our FFB suppliers consist of two categories:

Outgrowers - companies that own plantations ≥ 25 Ha.

Smallholders - individuals who own plantations < 25 Ha.

These smallholders supply to our mills through various channels, such as:

- **Direct**, where smallholders directly sell their produce to us.
- **Group**, through associations and cooperatives such as Koperasi Unit Desa (KUD), Asosiasi, and Gabungan Kelompok Tani (Gapoktan).
- **Agents/Dealers**, through an independent intermediary.

Our KCP Suppliers

| Region | 2022 | 2021 | 2020 |
|-----------------------------------|------|------|------|
| North Sumatra | 13 | 13 | 18 |
| Riau | 6 | 9 | 10 |
| Jambi | 8 | 13 | 11 |
| Number of suppliers ¹⁸ | 27 | 32 | 35 |

Our Journey to 100% Traceability

GRI 308-1, 414-1, 13.23.2

FFB Traceability to Plantation Level

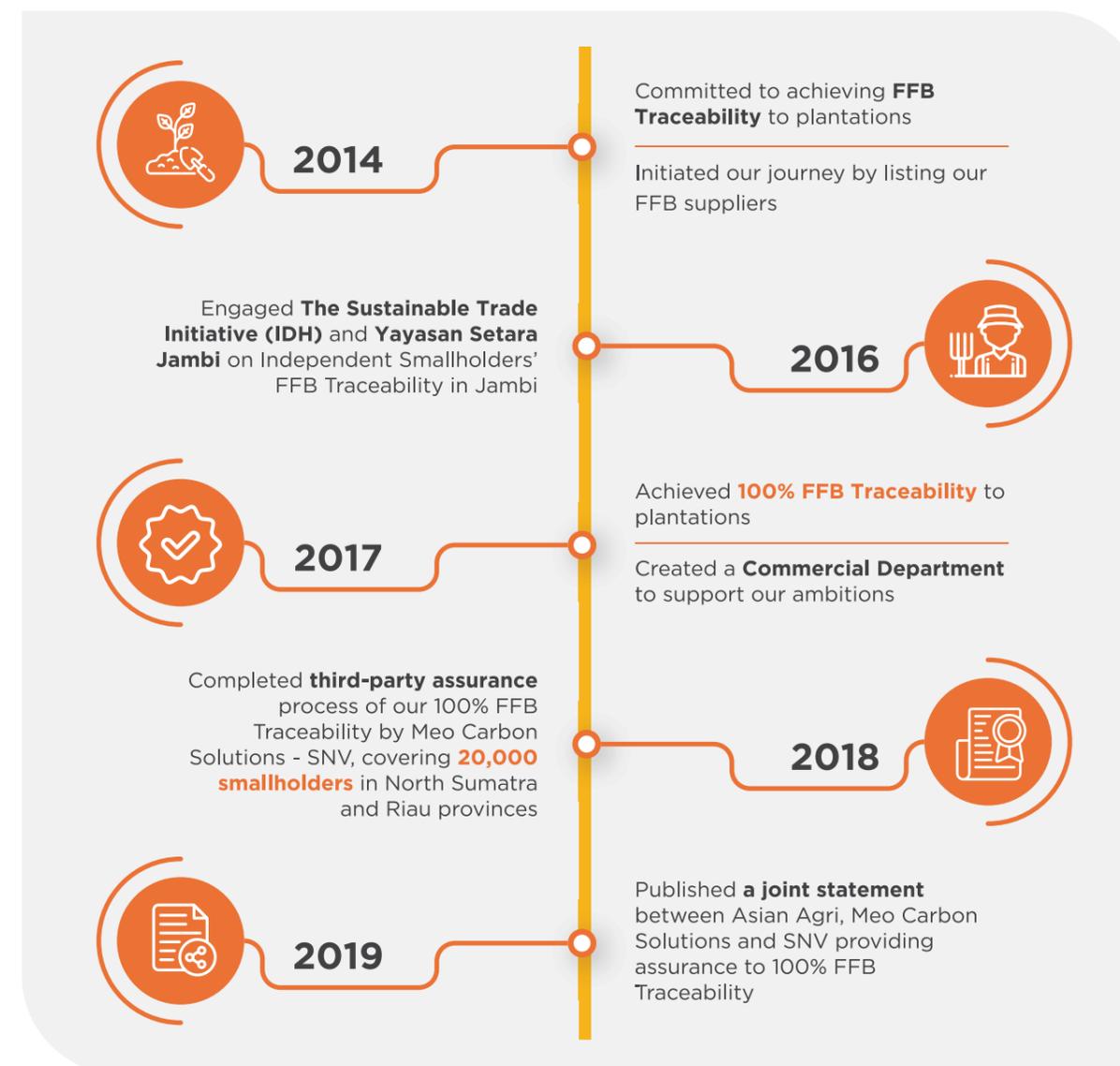
Securing traceability enables our FFB and products to be traced back to their origins. We recognize that traceability is an important element for Asian Agri's business as it helps us implement our commitments to maintaining a sustainable supply chain. It ensures that there is transparency that the resources we use are legally sourced and/or produced from an environmental and social conflict-free area.

Since we published our commitment to 100% FFB traceability in 2014, we have developed a systematic strategy on supply identification and supplier engagement, supported by a series of robust sourcing frameworks. This strategy involves the use of the latest technology, remote sensing and online monitoring tools to generate accurate and up-to-date traceability data. This not only benefits our business, but it also provides clear and tangible benefits to our smallholders in which the application of the technologies has improved their monitoring and management processes, as well as their access to finance.

Our efforts were rewarded in which we have achieved and maintained 100% FFB traceability to plantations since 2017.

¹⁸ Some suppliers are supplying to more than one KCP, so the total might not be the sum of each region.

The following timeline highlights our key milestones in this realizing this journey:



PK Traceability to Mill Level

We also have maintained 100% traceability to mills since 2018. We ensure all of our PK suppliers for our KCPs can be traced. Information regarding our PK suppliers and its coordinate location are available and verified in our [website](https://www.asianagri.com/en/supply-chain-map/)¹⁹.

FFB Traceability to Plantation Program

In our journey to maintaining 100% FFB Traceability, our recent focus is to continuously improve our performance in obtaining FFB traceability data from all our suppliers.

Under our Traceability to Plantation Program, Asian Agri aims to know, and have a record of, all the data and information related to our FFB suppliers. We recognize that there may be challenges that independent smallholders might face in obtaining data. Therefore, Asian Agri has launched various initiatives with the following partners to help us support smallholders in collecting data efficiently and effectively.

¹⁹ <https://www.asianagri.com/en/supply-chain-map/>

| Partner | Yayasan Setara Jambi & The Sustainable Trade Initiative | Meo Carbon Solution & SNV |
|------------|--|--|
| Location | Jambi | North Sumatra & Riau |
| Initiative | <ul style="list-style-type: none"> In 2016, we collaborated to conduct data collection from smallholders. In 2020, we completed the program in the beginning of the year. In doing so, we successfully traced and mapped 10,000 independent smallholders to their plantations. As a result of our efforts, we were able to obtain RSPO certificates for two KUDs in Jambi in 2019. | <ul style="list-style-type: none"> In 2018, we collaborated to verify our traceability system for 20,000 smallholders through a six-month program. The program is on-hold in 2020-2022 due to Covid-19 pandemic. The program is seeking opportunities to continue the second phase of the program |

Commercial Department

We established a Commercial Department in 2014 to manage FFB and PK traceability within our operations and supply chain. Our initial focus was on achieving 100% traceability of FFB to the plantation, which began with the listing of our direct FFB suppliers. Since then, we have strengthened our supplier policy and achieved 100% traceability to plantation in 2017. To complement the traceability that we have already done, we continue towards the next step, which is PK traceability to mill for our suppliers. In 2018, we achieved 100% PK traceability to mill. The Department comprises of two essential roles: FFB and PK Sourcing Officer and FFB Quality Officer, reporting to the Sourcing Manager.

The Sourcing Officer is responsible for identifying potential new suppliers, verifying their documentation, conducting site visits, and engaging with them to ensure compliance with our sustainability policies and requirements. Meanwhile, our FFB Quality Officer is tasked with monitoring the quality of the received FFB in each mill. Through these roles, we aim to ensure that our supply chain is both sustainable and meets the highest quality standards.

Ensuring Supplier Compliance

Promoting supplier compliance is crucial in maintaining that our sustainability standards are being met across our supply chain. This then ensures that there is a collective approach from all entities within our organization to realize our sustainability commitments.

At Asian Agri, there are two key processes to ensure supplier compliance: **sourcing policy engagement** and **supplier monitoring**.

1. Sourcing Policy Engagements

Asian Agri conducts a series of engagements with independent smallholders in their process of becoming our suppliers, starting from the socializing our sustainability standards. These standards are embedded in our No Deforestation, No Peat, and No Exploitation (NDPE) and sourcing policies. In this process, we also require smallholders to provide their data and information to Asian Agri, and we implement screening and verification processes to confirm their compliance.

The following chart outlines this process:



Some key examples of the data that we require from our suppliers include:

- Name and address of suppliers (for personal or legal entities);
- Plantation and mill GPS coordinates;
- Plantation area in hectare (Ha);
- Estimated production; and
- Any relevant required documents.

For more information on our suppliers, refer to our [supply chain map](#).²⁰

2. Supplier Monitoring

In providing transparency across our value chain, we conduct continuous monitoring of our FFB and PK suppliers. In 2022, we saw the greatest increase in FFB suppliers compared to previous years' trends, with 41 new suppliers, to support our increase in CPO production. This increase is due to the fact that we have implemented measures to optimize the capacity of our mills. We recognized that there was untapped potential to process additional FFB within our existing mill capacity, despite having limited land available for our own and plasma plantations. To address this, we began purchasing FFB from additional third-party suppliers.

The table below highlights the number of our suppliers for the past three years:

| Region | 2022 | 2021 | 2020 |
|-------------------|------|------|------|
| New PK Suppliers | 9 | 7 | 14 |
| New FFB Suppliers | 41 | 27 | 20 |

²⁰ <https://www.asianagri.com/en/supply-chain-map/>

As part of Asian Agri's monitoring process, we deploy teams to examine the condition of our suppliers' plantations. For plantations located near high-risk areas, coordinates are taken from the edge of the plantations (polygon shape) to make sure that there are no oil palms in no-go areas. We use this data to map out the location of their plantation and overlay this on the provincial spatial plan map to ensure the plantations are not located within illegal areas, such as national parks, wildlife reserves and conservation areas.

The monitoring is mandatory during supplier registration and when the supplier exceeds their FFB quota. When the quota is exceeded, our team will examine whether the supplier opened up a new land in no-go area.

We also conduct random checks and surveys of our suppliers' plantations. In doing so, we aim to minimize and prevent occurrences of non-compliance with our social and environmental policies, such as, but not limited to, child and forced labor. In cases where such violations are found, Asian Agri will launch a verification process, and if proven, actors will be subjected to immediate suspension. For smaller incidents such as workers failing to wear personal protective equipment (PPE) or incomplete registration of drivers, we will issue warnings and develop a corrective action plan, which includes a deadline for completion. Typically, the deadline for completion is set for three months after the incident has been formally reported.

What's Next?

- We will continue to implement best practices throughout operations to maintain the integrity of our business and the transparency and traceability of our supply chain
- We will enhance our traceability techniques through the digitalization of our supply chain of custody.





INCLUSIVE GROWTH

“We have a longstanding partnership with Asian Agri. Several Village Unit Cooperatives (KUD) members are partnering with Asian Agri. We respect and fully support Asian Agri’s move towards inclusive growth for all, especially farmers. On top of that, we really appreciate Asian Agri’s means of supporting the implementation of sustainable agriculture practices, assisting farmers to obtain certifications, and continuously providing capacity building to our KUD members. Asian Agri also helps farmers in promoting regenerative agriculture by collaborating on the use of EFB in independent smallholders’ plantations. Asian Agri’s programs are very much in line with the vision and mission of our organization. Therefore, we will continue to support each other to achieve and realize our common goals, to deliver and ascertain the sustainable impact on the society and the environment.”

Rukaiyah Rafiq, Head of Secretariat, Indonesian Sustainable Palm Oil Farmers Forum (FORTASBI)

“We have partnered with Asian Agri since the beginning and until now it has been going well and is mutually beneficial. Our relationship with the company is undeniably good. Asian Agri embraces us, upholds inclusivity, and prioritizes deliberation to reach a consensus. Asian Agri plays a prominent role and greatly helped and assist us, especially in the People’s Oil Palm Replanting Program (PSR), which aims to rejuvenate unproductive oil palm plants. In addition, we also received significant support from Asian Agri cadres stationed in our Village Unit Cooperatives (KUD) who ensured we carry out our operations effectively and efficiently. Everything went smoothly with assistance, training, and guidance from Asian Agri which was continuously given to us including archiving, data collection, criteria for ripe harvests, and fertilizing practices. We hope that Asian Agri can maintain its programs that support our growth and operations in a sustainable manner.”

Sudiyono, Head of the Village Unit Cooperative (KUD) Jaya Makmur

Our business relies upon people. It is vital that we can grow and keep our workers, employees, surroundings communities, and our consumers as our success depends on them. We recognize that labor issues remain prominent and complex to solve within the palm oil industry. As such, we are committed to attracting and retaining our employees and workers, building a decent workplace by embracing diversity and inclusivity, ensuring safe and healthy working conditions for our workforce, respecting their rights, and developing local communities.

We are committed to respecting and supporting human and labor rights as set out in the Universal Declaration of Human Rights (UDHR) and the International Labour Organization’s (ILO) Declaration on five aspects of Fundamental Principles and Rights at Work. Additionally, we have pledged to achieve the promotion of universal respect for and observe human rights and fundamental freedoms, based on the United Nations Guiding Principles on Business and Human Rights (UNGPs). These frameworks help Asian Agri to define and develop the guiding principles and policies relevant to human rights. We will ensure that our commitment to human rights applies to all of our employees, workers including our temporary workers and other stakeholders such as suppliers and partners.

To respect and promote the rights of Indigenous people, we will use every means of our disposal to uphold Free, Prior, and Informed Consent (FPIC) in every operation that affects them as recognized and in line with the United Nations Declaration on the Rights of Indigenous People (UNDRIP) and the principle of RSPO. Our commitments reflect in our AA2030 targets under inclusive growth pillars.



AA2030 Targets and Performance for Inclusive Growth

| 2030 Targets | Our Progress in 2022 |
|---|--|
| Zero extreme poverty surrounding our operational area | Conducted social mapping of the surrounding communities and establish a baseline on poverty. 9.1% achieved. We conduct vocational trainings for 455 out of 5000 people to equip them with proper skills. |
| Establishment of a small-medium enterprise that covers more than 500,000 ha | 10.7% achieved. Support establishment SME programmes in 17 out of 159 surrounding villages across 3 provinces. |
| Provide quality education access through 5,000 scholarship awards | Identified school-age children in the surrounding community to determine priority targets. 4.6% achieved. We provide 228 education packages out of total 5,000 packages to students. |
| Optimize recovery of waste oil | 4 press machines upgraded/added Upgrading and/or adding four presses in our three factories to a full-press machine which allows more efficient recovery of waste oil. |



LABOR RIGHTS AND WORKERS' WELFARE

Management Approach

GRI 3-3

We uphold the commitment to protect the human rights and labor standards of our workers, which also applied to our temporary workers and other stakeholders such as suppliers and partners. Our commitment outlines:

- 
Zero tolerance towards forced labor and child labor
- 
Equal opportunities, non-discrimination, and no harassment in the workplace
- 
Gender equality and protection of women workers
- 
Ensuring our workers have freedom of association and the right to collective bargaining

We are aware that our industry and workforce profile continues to evolve. For this reason, we keep on monitoring changes on labor rights risk across our operation through a variety of channels such as audits, daily checks, worker committees, and trade unions. We keep improving our policies, standard procedures, and processes to ensure both our worker's and subcontractors' welfare are protected and guaranteed.

No Forced Labor and Child Labor

GRI 408-1, 409-1

Asian Agri prohibits and enforces a strict policy against forced and child labor in any company activities. This policy also applies to all workers who are hired by our subcontractors. The palm oil industry is among the key industries vulnerable to forced and child labor especially working in upstream oil palm plantations. Workers are exposed to the risk of excessive working hours, OHS hazards, and low wages. Similarly, child labor might occur due to poor quality and availability of education facilities in the surrounding area and as they live in housing estates within the workplace, they possess hazards inherent with plantations.

As mitigation measures, we provide childcare and educational facilities to ensure children are not loitering or playing in plantations and ensure our own workers and encourage our suppliers to not bring their children to the plantations while they are working. In addition, our employees also conduct daily checks in our work environment. In terms of ensuring our subcontractors to comply with this policy, we required all of them to sign a commitment letter to zero tolerance towards forced and child labor. We also apply strict sanctions that lead to contract termination if violations are found.

Diversity, Gender Equality, and Equal Opportunities

GRI 405-1

At Asian Agri, we embrace diversity, non-discrimination, and equal opportunities in our workforce and working environment. We treat all employees fairly in terms of acceptance, assessment, working conditions and environment, and representation regardless of ethnicity, caste, national origin, religion or belief, disability, gender, sexual orientation, union membership, political views, and age. We prevent any forms of violence and harassment against women and we strive to promote and support the inclusion of women in our workplace. Women contribute to 23.1% of our total workforce. We have formed a Gender Equality Committee to examine how we can improve our commitment. This committee holds meetings at least twice a year on any issues related to discrimination, harassment, and equal opportunities. Moreover, this Committee also hold workshops and sharing knowledge in regards to health topic, household/family matters, and other related topics.

The table below represent the individuals within the organization's governance bodies/board and employee by gender, age, other indicators of diversity, i.e. ethnicity.

| Employee Category | 2022 | | 2021 | | 2020 | |
|-------------------|------|--------|------|--------|------|--------|
| | Male | Female | Male | Female | Male | Female |
| Board | 100% | 0% | 100% | 0% | 100% | 0% |
| Senior Managers | 94% | 6% | 91% | 9% | 91% | 9% |
| Middle Managers | 88% | 12% | 90% | 10% | 89% | 11% |
| Staff | 89% | 11% | 90% | 10% | 91% | 9% |
| Total | 89% | 11% | 90% | 10% | 91% | 9% |

| Employee Category | 2022 | | | 2021 | | | 2020 | | |
|-------------------|-------|-------|------|-------|-------|------|-------|-------|------|
| | 18-30 | 31-50 | ≥50 | 18-30 | 31-50 | ≥50 | 18-30 | 31-50 | ≥50 |
| Board | 0% | 0% | 100% | 0% | 0 | 100% | 0% | 0% | 100% |
| Senior Managers | 0% | 49% | 51% | 0% | 49% | 51% | 0% | 45% | 55% |
| Middle Managers | 0% | 78% | 22% | 2% | 78% | 21% | 1% | 77% | 23% |
| Staff | 62% | 34% | 3% | 58% | 37% | 5% | 61% | 34% | 4% |
| Total | 45% | 44% | 11% | 42% | 46% | 12% | 48% | 41% | 11% |

| Ethnicity | 2022 | 2021 | 2020 |
|---------------|-------|-------|-------|
| Batak | 27.7% | 28.5% | 29.6% |
| Javanese | 42.2% | 42.8% | 42.1% |
| Minang/ Malay | 12.3% | 11.2% | 11.1% |
| Others | 17.8% | 17.5% | 17.2% |

Freedom of Association and Collective Bargaining

GRI 2-30, 407-1

We recognize the importance and respect the rights of our employees to collective bargaining and join labor unions. We are also aware that unions play an essential role in improving good relations and engagement between workers and the company, accommodating an effective mechanism for raising grievances, and providing suggestions for negotiation, as well as retaining our employees. For that reason, we give freedom to our workers to join union and collective bargaining. At present, 100% of our workers are participating and part of the labor union.

Participation in labor unions allows our employees to better convey their expectations and aspirations. Through the Indonesian Worker Union (*Pimpinan Pusat Serikat Pekerja Seluruh Indonesia Sumatra* or PP SPSI), our collective work agreement was created and approved by all 160 member companies of the Agency for Corporation of Sumatra Plantation (*Badan Kerja Sama Perusahaan Perkebunan Sumatera* or BKSPPS). The agreement covers issues such as working time, number of working days, leave, wages, overtime rate, bonus, social security and assistance, health and safety, and termination. When disputes occur between workers and the company, PP SPSI Sumatra will assist the workers to report to the Manpower Office which will act as a mediator. If required, PP SPSI will also support the workers to submit their case to the governmental labor service agency or to the court. Moreover, some of our workers are also members of the Indonesian Trade Union Confederation (*Konfederasi Serikat Buruh Seluruh Indonesia* or KSBSI), which provides similar benefits as PP SPSI Sumatra.

What's Next?

- We will tighten our supervision regarding child labor and forced labor and increase our efforts to continuously observe and deprive any possibility of this practice in all areas of our operations
- We will continue to support and bridge our employees to the worker union
- We will encourage workers to entrust their children to our day care facility





OCCUPATIONAL HEALTH AND SAFETY

Management Approach

GRI 3-3

Safety is our top priority and everyone's responsibility. We strive to embed and maintain a safety culture across our entire business operation. We believe health and safety is not only a basic human right, but it also helps us to ensure productive operations and employee performance. The consequences of fatality and any major incidents as well as the cost to the company are immense. OHS is very dynamic with new occupational risks arise in line with the operational landscape changes or company innovation. We understand the necessity of OHS as it is the only way we are able to prevent and eliminate risks of accidents and illness among our workers, employees as well as our contracted third-party workers. We ensure the OHS policies, plans, and standards are put in place and kept updated. We strive and uphold a safe workplace targeting zero fatalities and disabilities in all our operations.

Protecting Our Workers from Hazards

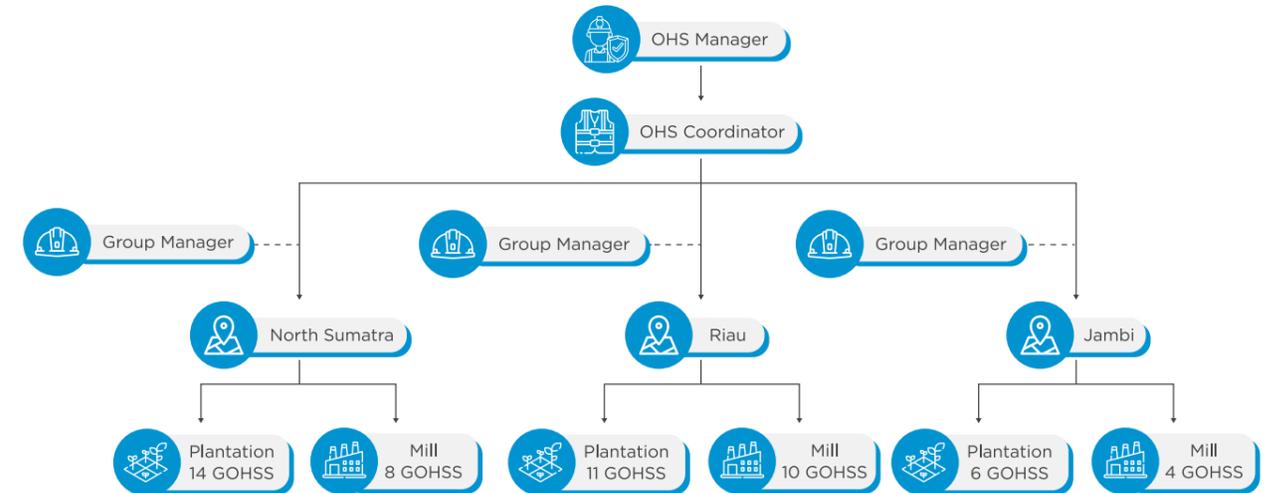
GRI 403-1, 403-2, 403-3, 403-4, 403-5, 403-7, 403-8

Occupational Health and Safety Management System

We have developed and implemented an OHS management system in accordance with government regulation of the Republic of Indonesia No. 50 of 2012 about the Implementation of Occupational Safety and Health Management System to minimize the risk to health and safety across our workplace which also in line with international standards including ISO 14001:2015 and ISO 45001:2018. All our workers, employees, sub-contractors, and suppliers working in all activities including plantations, mills, KCPS, biogas plants, offices, and other areas must follow the standards.

OHS Committees

We have different levels of governance to ensure that our approach to OHS remains robust, from our HSE Department at head office led by OHS Manager, OHS Coordinator, and General OHS Specialist (GOHSS) in each of our estates/plantations and mills, as well as OHS officers and teams in charge of investigations and risk assessments.



Our Health, Safety, and Environment (HSE) Department is responsible for setting OHS objectives, policy, and plan, as well as overseeing, monitoring, and reviewing the OHS performance within our company. In addition, each of our estates and mills has a General OHS Specialist, which is supervised by Group Manager and under OHS Coordinator, as a representative to carry out a regular inspection to ensure the safety protocols and standards are performed properly. They are responsible to identify potential hazards, providing regular or refresher training, and ensuring the safety equipment is available and in a good condition. They conducted a monthly meeting to discuss the performance, safety issues, and concerns to report to the OHS Manager. In addition, the summary and result of the meeting will be reported to Local Employment Agency quarterly.

Health and Safety Awareness Training

To instil a safety culture, our OHS Committees conduct regular trainings and safety drills for all our employees and workers. It is mandatory training that covers basic safety training, first aid, recognizing danger and risks at the workplace, safe handling of hazardous waste, OHS regulations and permits, emergency response procedures, and firefighting drills. Most of them are conducted on an annual basis. To ensure the training materials remain relevant, we seek feedback from the participants and keep them updated with new national and international OHS regulations and standards.

We conduct a refresher session every morning with our workers and employees prior to their work in plantations and mills to emphasize the importance of using Personal Protective Equipment (PPE) and ensure they are donning it precisely as well as adopting responsible and safe working habits.

To continuously remind our workers of the importance of safety, we distribute monthly safety bulletins and post safety notices on warning boards across all medium to high-risk areas as well as portals or gates. Moreover, to raise health awareness among our employees, we also conduct health workshops in collaboration with the company doctors on topics including drugs and substance abuse, the fight against stunting and malnutrition for mothers and children, and protection against COVID-19.

Hierarchy of Controls

Our workers are exposed to health and safety risks every day. In plantations, risks that might arise are animal bites, being hit by falling fruits, cuts, bruises, broken bones, sprains, and health effects due to chemical exposure. In mills and KCPs, some of the risks that might happen are slipping, falls, fire, burns, and accidents involving machines or heavy equipment.

At Asian Agri, we apply the hierarchy of controls as our approach to eliminating or reducing risks and hazards in the workplace. The hierarchy of controls has five levels of action that rank controls from the most effective to the least effective protection level, including:

Elimination: Whenever possible, we will eliminate hazard at its source in the first place. Some of the elimination controls that we have conducted including not using tool, ingredients and method that are forbidden by international and national law. For example, in terms of the use of chemicals, we have stopped using materials that are categorized by World Health Organization (WHO) as Class 1A and Class 1B hazardous pesticides, all chemicals listed under the Stockholm Convention and Rotterdam Convention especially Paraquat.

Substitution: Hazard and accident can occur if worker use inappropriate tools. We could choose safer tools to substitute the current ones for example choosing harvest pole with electrical insulation material to minimize risk of electrocution when working near to power line.

Engineering controls: We should reduce or prevent hazards from coming into contact with workers. Engineering controls can include modifying equipment or the workspace, using protective barriers, ventilation, and more. A simple form of technical control against the risk of work accidents due to exposure to chemicals is making a re-entry warning board as a guide for other workers to avoid the spraying area for three days. Although weed control has minimized the health risks by removing and replacing toxic substances, they still pose a health hazard.

Administrative controls: We have methods or procedures that aimed to minimize hazard exposure. For instance, prior to beginning any work, especially for high-risk activities, we conduct a Job Safety Analysis (JSA). This comprises assessing the required work procedure and identifying any risks that could occur.



Personal protective equipment (PPE): As protection, we provide and enforce our workers to use PPE including helmets, gloves, boots, goggles, masks, earmuffs, and high visibility clothing. Every workplace requires different PPE standards to be worn. For instance, workers working in the steam turbine must wear earmuffs, while workers handling chemicals wear masks, rubber gloves and apron. We will ensure all workers are protected and we will not allow them to begin work if they are not fully equipped with PPE.

We assess the feasibility of the five levels to determine and identify which actions will best control exposures and adequately protect our workers from the hazard. Reducing risk may involve one or more different controls. By implementing this hierarchy, we can lower our worker exposure and reduce the risk of work-related illness and injury.

Hazard Identification, Risk Assessment, and Incident Investigation

With regards to hazard identification and risk assessment, if any inappropriate practices are found, field workers could fill out report forms and submitted to the complaint book in each site office. These books can be filed anonymously and confidentially if deemed necessary, hence workers are protected from reprisals. We also hold regular meetings with foremen and/or worker representatives to ask their opinions regarding OHS-related information. They are also involved in every investigative activity carried out in the field. Their suggestions help us to formulate mitigation actions, especially regarding field work. In addition, new jobs or activities that are made into routines also need to be informed and reported as preventive measures to identify the hazards and risks that may occur.

We also encourage our workers to use stop work authority when a perceived unsafe condition or behavior may pose an imminent danger and notify the situation or any incidents to the OHS Officer through email and telephone.

Information gathered through these channels helps us to identify and update the hazards and risks faced by our workers regularly and improve our OHS management system accordingly. Our OHS specialists update risk assessments every time there is an incident or near miss. Risk assessment document also needs to be informed in the sustainability certification audit process.

In case of any incidents, the OHS officer in charge of the plantation or mill will investigate the situation. The OHS office will record an incident report and the investigation team will conduct a site investigation no later than 48 hours after the incident occurred, involving witness interviews and the acquisition of physical evidence. After the investigation is complete, the OHS team will provide recommendations to prevent a recurrence.

Starting from 2022, OHS team from Head Office will conduct site visit to investigate any major incidents occur within 48 hours. The Head Office OHS team will then record incident report and provide recommendations to prevent the incident from recurring. This is one of our actions to improve the implementation of HIRADC in our working culture. In the past, only incidents that resulted in fatality and permanent disability had to undergo this process.

To motivate all of our employees and workers and increase their awareness to embed safety practices in their daily work, starting from this year, we give awards as appreciation to units that achieve zero incidents or a significant reduction in accident rates.

Safeguarding Workers' Health

GRI 403-6

To ensure accessibility to medical facilities, first aid kits are in placed in every office and critical points in every mill and workshop. Moreover, our plantation foremen are equipped with first aid kits and also chemical MSDS (material safety data sheet) as source of information in case the chemical they are working with get in contact with part of body. Several health posts as representatives of the clinics that are responsible to stand by and handle minor injuries are spread across plantations and mills. Meanwhile, clinics are located in every estate or group of estates. Clinics are responsible for treating major medical cases, as well as giving confirmation and consent, and referring patients to the nearest hospital in case there is a severe accident or special case that could not be handled by the clinic. All our employees and workers, as well as their families are covered by health insurance, so it is free of charge for both treatment and medicine.

Furthermore, we provide annual medical check-up for all our workers and twice a year for workers that are regularly exposed to herbicides, pesticides, and other chemicals. The medical check-ups conducted by third-party lab personnel in our clinics.

Asian Agri Clinic in Buatan Estate



All clinics at Asian Agri has been integrated by The National Social Security Agency (and Social Security Provider - BPJS). Our clinics can take the following actions: health checks, pregnancy checks, childbirth, family planning, as well as assistance to acquire BPJS insurance. There are inpatient rooms, emergency rooms, observation rooms, and ambulances. The doctor is hired by Asian Agri. In addition to their main job, doctors also provide counselling related to work accidents, as well as other matters related to health or other illnesses to our workers and

employees. During the COVID-19 pandemic, vaccinations were carried out in the clinics. Antigen tests can also be done in the clinic.

The clinic also cooperates with the Public Health Center (Puskesmas) in conducting Corporate Social Responsibility programs. In 2022, our clinic is involved in the stunting program, assisting with stunting surveys, and providing vitamins, milk, and other complementary food for children's growth.

Our Performance

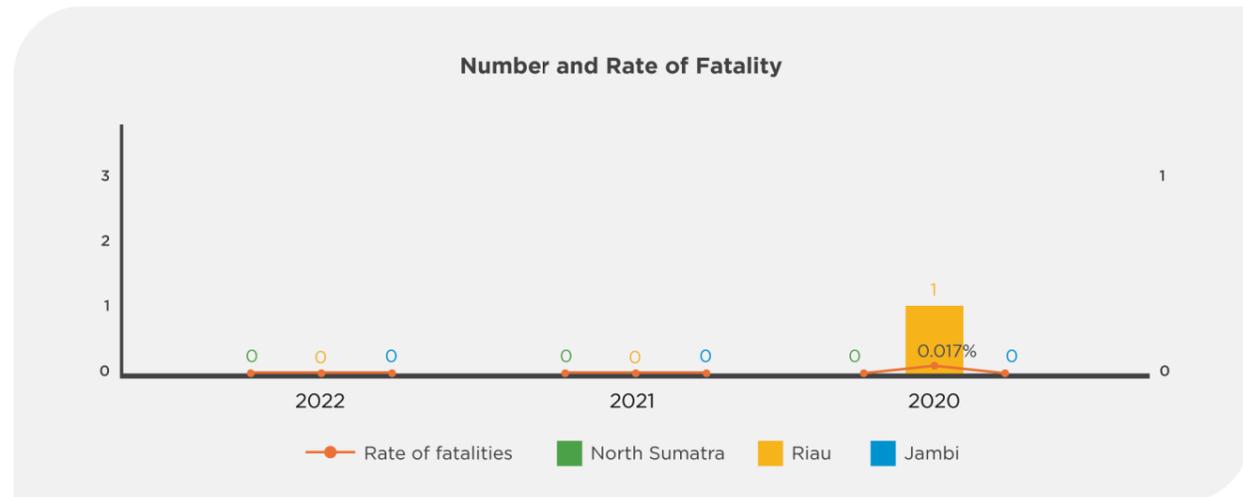
GRI 403-9

This year, we keep maintaining zero fatalities. However, we regret to report that we had one cases of injury resulting in permanent disability. The accident occurred at one of our Palm Oil mills in North Sumatra, due to lack of alertness of workers and inadequate machine safety operation information. The victim has received appropriate assistance and compensation and is still our employee. Machine safety improvements have been made and workers are always reminded to increase their vigilance and caution before starting work. We believe it is important to maintain and evaluate the incident records to identify the improvement and prevent similar incidents occur in the future. We will make all due efforts to meet our goal of eliminating fatalities and reducing the rate of injuries and illnesses.

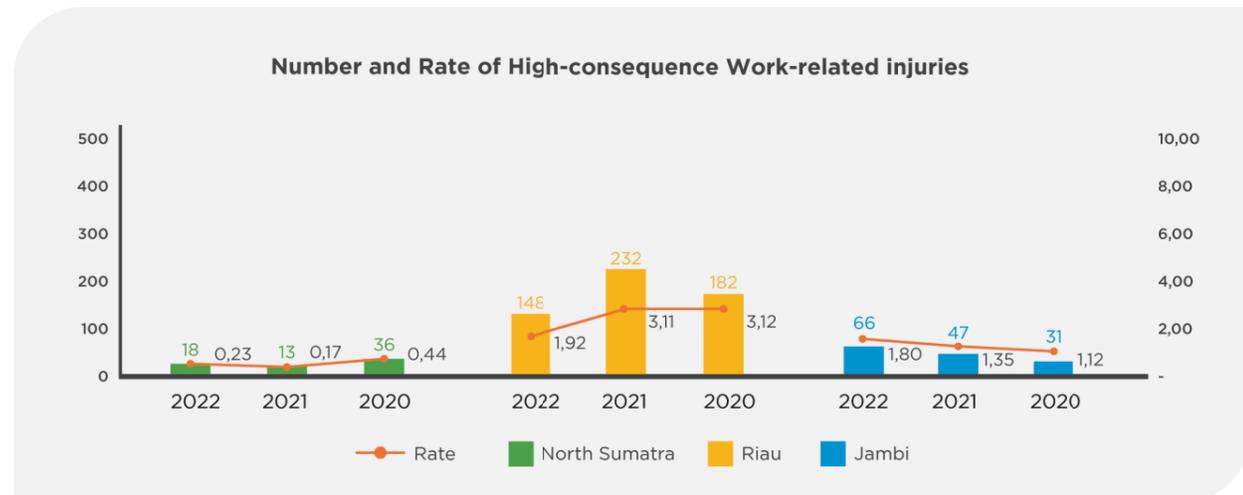
| Number of Hours Worked | | | |
|------------------------|---------------|------------|-----------|
| Year | North Sumatra | Riau | Jambi |
| 2022 | 15,638,494 | 15,453,447 | 7,313,510 |
| 2021 | 14,912,072 | 14,919,137 | 6,970,441 |
| 2020 | 16,489,286 | 11,657,654 | 5,542,562 |

There are several work activities that could cause high-consequence injuries, i.e. disability and death, including work at height, hazardous substances exposure, risk of cutting and crushing associated with operating machinery of the plant, electric shock, fire-related work, working in confined spaces, etc. We make sure to provide our employee with a proper training, safety equipment, and procedure to protect them from these types of high-consequence injuries.

Number and rate of fatalities²¹



Number and rate high-consequence work-related injury²²



²¹ Number of fatalities x 200,000/man-hours; Man-hours: Number of workers x scheduled working days x 7 hours per day

Number and rate of recordable work-related injuries²³

| Region | Year | Number of recordable work-related injuries | | Rate of recordable work-related injuries | |
|---------------|------|--|--------|--|--------|
| | | Male | Female | Male | Female |
| North Sumatra | 2022 | 15 | 3 | 0.19 | 0.04 |
| | 2021 | 13 | - | 0.17 | - |
| | 2020 | 36 | - | 0.44 | - |
| Riau | 2022 | 138 | 10 | 1.79 | 0.13 |
| | 2021 | 211 | 21 | 2.83 | 0.28 |
| | 2020 | 173 | 10 | 2.97 | 0.17 |
| Jambi | 2022 | 64 | 2 | 1.75 | 0.05 |
| | 2021 | 45 | 2 | 1.29 | 0.06 |
| | 2020 | 31 | - | 1.12 | - |

Main types of work-related injuries including injured by machinery, struck by falling FFB, cut wounds by work tools & heavy equipment, fall or slip, exposed to chemicals, injured by animals, accidents during travel to and from work sites, rigand burns due to fire or steam/ liquid/ heat engine.

What's Next?

- We will evaluate and continuously improve our occupational health and safety management system
- We will continue to improve the quality and services of our medical facilities and ensure all of our workers and employees have an access to our health services



²² Number of high-consequence work-related injuries x 200,000/man-hours; Man-hours: Number of workers x scheduled working days x 7 hours per day. Excluding fatality

²³ Recordable work-related injuries including medical aid, permanent disability, and fatality



EMPLOYEE ATTRACTION, MANAGEMENT, AND RETENTION

Management Approach

GRI 3-3

Our employees are the largest and most pivotal assets we have and so it is critical for us to provide a positive, productive, and comfortable working environment to attract and retain our employees. Strengthening productivity and improving the benefits and welfare of our workforce while providing rewarding career and growth opportunities is one of our priorities. We are committed to ensuring our workers receive fair wages and a decent living wage and inclusivity in the working environment by providing a fair treatment policy where the employees' values and human rights are respected and ensuring their welfare by providing competitive remuneration and social security for employees and their families in line with applicable laws.

Our Employee Profile

GRI 2-7, 2-8, 401-1

To support and run our business and operations, as of December 2022, we employ a total of 21,556 employees and workers which are 1,036 and 20,520 respectively. Our employees and workers work across our estates, mills, and offices based in Jakarta, North Sumatra, Jambi, and Riau.

Our employees, including our staff, ranging from assistant, manager, and upwards, are responsible to fulfil roles in office and back-office functions both in our headquarters and regional offices, overseeing the daily workers in mills and plantations, and other duties. In addition, our workers, including non-staff such as foremen, harvesters, fertilizers, drivers, security, etc., are in charge of operating machinery, harvesting FFB, fertilizing, maintaining security at the site, and other tasks. The employment status of our workers is divided into permanent and temporary contracts, with the respective number of 9,253 and 11,267.

The table below represent the number of employee and worker based on terms of employment, region and gender.

| Year | 2022 | | | 2021 | | | 2020 | | |
|---------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | Female | Male | Total | Female | Male | Total | Female | Male | Total |
| Number of employees and workers | 4,977 | 16,579 | 21,556 | 4,917 | 16,387 | 21,304 | 4,825 | 15,437 | 20,262 |
| Number of employees | 116 | 920 | 1,036 | 104 | 908 | 1,012 | 98 | 1,000 | 1,098 |
| Number of workers | 4,861 | 15,659 | 20,520 | 4,813 | 15,479 | 20,292 | 4,727 | 14,437 | 19,164 |
| Number of permanent employees | 625 | 9,664 | 10,289 | 597 | 9,043 | 9,640 | 613 | 9,087 | 9,700 |
| Number of temporary employees | 4,352 | 6,915 | 11,267 | 4,320 | 7,344 | 11,664 | 4,212 | 6,350 | 10,562 |

| Year | 2022 | | | | | 2021 | | | | | 2020 | | | | |
|---------------------------------|---------------|-------|-------|---------|--------|---------------|-------|-------|---------|--------|---------------|-------|-------|---------|--------|
| | North Sumatra | Riau | Jambi | Jakarta | Total | North Sumatra | Riau | Jambi | Jakarta | Total | North Sumatra | Riau | Jambi | Jakarta | Total |
| Number of employees and workers | 8,744 | 8,525 | 4,254 | 33 | 21,556 | 8,972 | 8,457 | 3,849 | 26 | 21,304 | 8,178 | 8,248 | 3,807 | 29 | 20,262 |
| Number of employees | 479 | 349 | 175 | 33 | 1,036 | 447 | 365 | 174 | 26 | 1,012 | 564 | 332 | 173 | 29 | 1,098 |
| Number of workers | 8,265 | 8,176 | 4,079 | - | 20,520 | 8,525 | 8,092 | 3,675 | - | 20,292 | 7,614 | 7,916 | 3,634 | - | 19,164 |
| Number of permanent employees | 4,304 | 4,118 | 1,834 | 33 | 10,289 | 3,916 | 4,013 | 1,685 | 26 | 9,640 | 3,992 | 3,919 | 1,760 | 29 | 9,700 |
| Number of temporary employees | 4,440 | 4,407 | 2,420 | - | 11,267 | 5,056 | 4,444 | 2,164 | - | 11,664 | 4,186 | 4,329 | 2,047 | - | 10,562 |

In oil palm plantation, we experienced peak and low crop seasons, in which peak crop occurs from June to October and is followed by low crop from November to May. This seasonal harvesting time also affects the company's employment practice as additional workers are often required for harvesting and fresh fruit bunch transportation during the peak crop season. During low crop season, some of these temporary workers may be allocated to work in areas such as fertilizing, manuring, and weeding. Besides seasonal crops, extraordinary events that need immediate action such as a major outbreak of pests or diseases might also require additional workers.

This year, we maintain our retention rate of approximately 80% for our employees and 67% for our workers and restrain the turnover rate of 20% and 33% for our employees and workers respectively. We experience workers turnover every year, especially among oil palm fruit' harvesters which we hire as temporary workers during peak crop. Below tables represent the total number and rate of new employee hires during the reporting period, by age group, gender and region.



Below tables represent the total number and rate of new employee hires during the reporting period, by age group, gender and region.

Number and Rate Employee Hired by Age Group

| Age Group | Worker | Employee | Total | % from total worker and employee |
|-----------|--------|----------|-------|----------------------------------|
| 18-30 | 2,302 | 69 | 2,371 | 11.0 |
| 31-50 | 1,594 | 43 | 1,637 | 7.6 |
| >50 | 33 | 3 | 36 | 0.2 |

Number and Rate Employee Hired by Region

| Region | Worker | Employee | Total | % from total worker and employee |
|---------------|--------|----------|-------|----------------------------------|
| Jakarta | - | 7 | 7 | 0.0 |
| North Sumatra | 1,588 | 60 | 1,648 | 7.6 |
| Riau | 1,275 | 29 | 1,304 | 6.0 |
| Jambi | 1,066 | 19 | 1,085 | 5.0 |

Number and Rate Employee Hired by Gender

| Gender | Worker | Employee | Total | % from total worker and employee |
|--------|--------|----------|-------|----------------------------------|
| Male | 3,244 | 96 | 3,340 | 15.5 |
| Female | 685 | 19 | 704 | 3.3 |

Fair Wages and Employee Benefits

GRI 2-20, 202-1, 201-3, 401-2, 405-2

Asian Agri provides benefits to attract and retain our employees and offers incentives based on their performance. In accordance with the 2018 RSPO Principle and Criteria, we conducted a Decent Living Wage (DLW) analysis in 2022 as the previous years to ensure all our employees receive fair wages and benefits. The calculation is based on the RSPO guidance on the DLW implementation, and this analysis is also verified annually by the auditor. The results showed that all our employees obtained wages and benefits according to RSPO DLW standards.

In determining the initial salary for new recruits, at any level, the factors that are considered are their capacity, expertise, salary positions offered in the market, internal and external benchmarking, and previous work history. In 2022, the salary and employment conditions for all our workers and employees, including entry-level employees and temporary workers, met and above the local minimum wage standards in their respective provinces and districts. Our basic salaries for workers are not differentiated by gender, while any difference in base salary for employee is determined by several factors, including their educational background, skills, and their experiences. Following that, several benefits we offer for our workers and/or employees are:

| Benefit | Employees | Workers |
|---|-----------|---------|
| Healthcare insurance | ✓ | ✓ |
| Performance bonuses and incentives | ✓ | ✓ |
| Special awards (e.g. length of service) | ✓ | |
| Allowances (e.g. house, car) | ✓ | ✓ |
| Trainings | ✓ | ✓ |
| Leaves (including marriage, sick, and parental) | ✓ | ✓ |
| Scholarship for children | ✓ | ✓ |

At Asian Agri, the determination of salary increments for workers and employees is carried out in a different way. For employees, the assessment is carried out annually based on individual performance, current position and salary, and equity within the company. External factors that are also taken into consideration are the country's macro and micro economy as well as benchmarking against market conditions for an equivalent position. The Compensation & Benefit Manager (C&B) is an independent party that carries out this assessment and submits the results to the Board of Directors to make a decision. Moreover, for workers, Operational and Strategic Human Resources use the Decrees regarding City/Regency/Provincial minimum wages and work agreements with unions as a reference in determining employee salary increases. The results of this assessment are then submitted to the Managing Director for a decision. Especially for permanent employees will receive an additional assessment based on performance.

In addition, workers and employees are also entitled to bonuses. Workers will also be assessed for their performance to decide on bonuses. The company's performance based on the Balanced Scorecard, performance against each individual's KPI and also benchmarking against market conditions are things that are taken into consideration. Meanwhile, bonuses for permanent employees are decided on the basis of company performance considerations, individual performance against KPIs and also palm oil industry benchmarking.

Furthermore, in regards of retirement plan and benefits, Asian Agri adheres to the Law no.11 of 2020 on Job creation which the calculation refers to the Government Regulation no.35 of 2021. These regulations stipulate the retirement age, old age security benefit (which is paid collectively by employess and company according to the provisions of the labor service), and the pension program. In addition, employess also receive communication and education to ensure that they understand how the pension plan works, severance pay, long service award, and compensation of rights. Selected employees are also given the option to be rehired on a contractual basis per year upon agreement of both parties.

Asian Agri also provide the following support for employees and their families based on-site in mills and estates, to ensure that they have access to fundamental facilities:

| | |
|--------------------------------------|--|
| Housing | Equipped with facilities such as standard furniture, water supplied from the mill or estate, electricity, and also includes building maintenance. |
| Health facilities | Every estate and mill has one clinic and ambulance that freely accessible to all our employees and families. |
| Education | Childcare, preschools, as well as elementary schools, are provided for free. Moreover, we also provide education facilities such as school bus and library. |
| Transport | A vehicle is provided to facilitate convenient travel across and within our estates. |
| Sports facilities | Soccer fields, tennis courts, badminton courts, and other sports facilities are available. |
| Places of worship | Churches and mosques are built or renovated and available in every estate and mill. |
| Community building activities | We organize cultural and religious events periodically to promote stronger community bonds among our employees and their families. We constantly sponsoring events including sports, religious, and cultural activities, especially during notable occasions such as Indonesia's Independence Day, company anniversaries, Ramadhan, Eid al-Fitr, Christmas, and Chinese New Year. In addition, we also provide cultural support to various villages that close/adjacent/inside our operational sites in North Sumatra, Riau and Jambi. |

Asian Agri's Child Care and Kindergarten



Asian Agri provides private non-commercial schools under its education foundation, namely Yayasan Permata Soga Andalan (Riau), Yayasan Dharma Bina Warga Indosawit (North Sumatra), Yayasan Permata Agri Jambi (Jambi), from childcare, kindergartens, and elementary schools. Childcare and kindergarten are available in every estate group covering several estates and mills, while a total of 11 elementary schools are spread across North Sumatra (4), Riau (5), and Jambi (2). Childcare and kindergartens are provided by Asian Agri free of charge as a benefit for workers and employees. Asian Agri provides buildings, salaries for teachers, certification, and undergraduate scholarships for elementary school teachers. In terms of operational costs,

we received the operational budget for the educational unit (Bantuan Operasional Satuan Pendidikan - BOSP) from the Indonesian Ministry of Education and Culture. The teachers in childcare and kindergarten come from employees' families that have been trained.

In Buatan, Riau, childcare obtained an operating permit in 2018 and is accredited in 2022. In October 2022, the childcare curriculum has been standardized and has been approved by the Office of Education and Curriculum Administration. Meanwhile, the kindergarten in the Buatan estate received an operational license in 2015 and was accredited in 2019.

Asian Agri's Contribution to the Education Sector



To contribute to community development and improve the quality of its human resources, Asian Agri plays an active role in improving the quality of education for employees' families and communities living around the company's operations, by providing scholarships and improving the quality of educational facilities.

One of the ways Asian Agri contributes through education is through the "Yayasan Sayap Garuda" program which provides scholarships for outstanding students for the children of outstanding employees. Students from elementary to high school level and above are selected and get scholarships based on their academic results and the performance of their parents in the company.

In addition, Asian Agri, in collaboration with the Tanoto Foundation, regularly helps carry out school renovations and provides new facilities such as a library, school buses, and toilets.

| Scholarship Recipients | | | | |
|------------------------|-------------------|--------------------|--------------------|------------|
| Region | Elementary School | Junior High School | Senior High School | Total |
| North Sumatra | 42 | 26 | 15 | 83 |
| Riau | 45 | 23 | 12 | 80 |
| Jambi | 30 | 20 | 13 | 63 |
| Grand Total | 117 | 69 | 40 | 226 |

Training and Development

GRI 404-1,404-2

We aspire our employees to have the opportunity to grow professionally and individually. Hence, we provide training and development to help us gain and retain top talent, encourage continuous improvement, increase productivity, and enhance workplace engagement and relationships, which all lead to more profit. Some trainings we have provided for our employees are provided below.

Type and scope of programs implemented and assistance provided to upgrade employee skills.

| No. | Type of Training/ Programmes | Detail Trainings |
|-----|---------------------------------------|---|
| 1 | Technical Training | Basic Fire, Job Safety Analysis Training, Refreshment of Machinery and Equipment Standard Operating Procedure, Sustainability Awareness, ISO 140001:2015 Training, and Business Improvement Workshop. |
| 2 | Soft-skills Training | Analytical Creative Thinking, Change Management, Communication and Presentation Skill, Effective Communication, Leadership and People Management, Problem Solving and Decision Making, People Manager Mastery, Supervisory Management, and Self and Team Development. |
| 3 | Certification | EMS: ISO 14001 : 2015 Interpretation and Internal Audit, General HSE Expert Certification, Energy Auditor Certification, Young Industry Hygiene Certification, Certification for Medics (Midwives), Class I Boiler Operator Permit Certification, HSE Electrical Technician Operator Permit Certification, Class I Welder Certification, Energy Manager Certification, Lift and Transport Aircraft Operator Certification, Certification of Officer of Water Pollution, Certification of Officer of Air Pollution, Certification of Officer for Hazardous Waste Management, ISO 9001 : 2015 Awareness Training & Internal Audit Certification |
| 4 | International/National Seminar | The Indonesian Palm Oil Conference 2022, The International Society for Oil Palm Breeders 2022, The Malaysian oil scientists' & technologists' association: Quality of Palm Oil, Plantation Sector ESG Session, Accounting and Fiscal Bookkeeping; Change Leadership for Transformation, Human Capital National Conference 2022, The Roundtable Conference (RT RSPO) |
| 5 | Workshop | Workshop: Leader Standard Work. |
| 6 | Outreach Programme | Budget Mill Department, Calendar Meeting Outlook. |

Number of training sessions held

| Employee Category | 2022 | 2021 | 2020 |
|-------------------|------------|------------|-----------|
| Senior Management | 7 | 11 | 3 |
| Middle Management | 68 | 70 | 15 |
| Employees | 106 | 70 | 49 |
| Workers | 36 | 20 | 24 |
| Total | 217 | 171 | 91 |

This year, our average training hours per employee is **25.18**. The table below shows the number of employees who received training sessions.

| Employee Category | 2022 | 2021 | 2020 |
|-------------------|--------------|--------------|--------------|
| Senior Management | 45 | 42 | 7 |
| Middle Management | 528 | 626 | 84 |
| Employees | 2,050 | 1,638 | 1,441 |
| Workers | 2,486 | 1,259 | 1,239 |
| Total | 5,109 | 3,565 | 2,771 |

Note: One employee could receive more than one training per year.

Case Study: Asian Agri Learning Institute (AALI)

As our company continues to grow and evolve, in 2002, we established the Asian Agri Learning Institute (AALI) which is based in Pangkalan Kerinci, Riau for the recruitment process. Each year, we invite approximately 200 – 250 fresh graduates from universities across Indonesia each year to apply for the program which equips them with skills such as horticulture, mill processing, management, leadership, and certification. AALI was built to educate and train prospective planters and managers in sustainable palm oil production through Plantation Center of Excellence (PCoE) programs.

In 2022, we trained 207 individuals and 161 of them are currently employed. Following a competitive selection process, the trainees' performance is assessed during training for the employment suitability criteria.



There are five PCoE Graduate Trainee Programs available, including:

Estate Assistant Training (EAT)

To support the work in plantation sites (estate)

Mill Assistant Training (MAT)

To assist in operations at the palm oil mill or kernel-crushing plant

Administration Assistant Training (AAT)

To take care of administrative matters

Traction Assistant Training (TAT)

To work in the workshop and be responsible in the transport and heavy machinery used in the estates

Commercial Officer Training (COT)

To serve commercial-related work, in particular FFB sortation

The program includes:



Classroom Sessions (3 months)

Taught by industry experts and our experienced employees regarding sustainable palm oil production as well as introduction to our internal sustainability policy and commitment.



On-the-job Training (3 months)

Practical session where the trainee are sent to our mills, estates, or plasma smallholder partners.



Evaluation

After six months, trainees are evaluated based on their performance, competence, and character and their suitability to be employed by Asian Agri.

To ensure and maintain the competency of the employee, there will be another assessment after two years of job placement. This is conducted to review their performance, how they apply their knowledge in practice, and how they adapt to the work environment. There are no negative consequences if employees did not do well in the assessment. If their assessment results are lacking, they are required to attend refresher training. This case has rarely happened as working directly in the field provides employees greater work experience.

In addition, AALI also runs several training programs, including:

| No. | Type of Training/ Programmes | Detail Trainings |
|-----|--|--|
| 1 | Annual development program for management | To improve the skills of employees in management positions, in areas such as leadership, change management, decision-making, and finance. |
| 2 | Refresher training on technical and soft skills | To upgrade and/or maintain employees' technical and soft skills such as refresher training of heavy equipment, boilers, mill's standard operational procedure, safety, and basic fire. |
| 3 | Young assistant development programme | To ensure and maintain the competency of the employee under two years of job placement. |
| 4 | New product introduction training | Conducted in collaboration with vendors to familiarize new products. |

What's Next?

- We will coordinate with cooperatives to monitor and ensure our employees and workers obtain fair wages and higher-than-local minimum wages
- We aim to collaborate with local or international training centers to increase our employee capacity in terms of sustainable agriculture practice
- We will review and adjust the benefits of our worker and employee from time to time



COMMUNITY DEVELOPMENT

Management Approach

GRI 3-3

Our Sustainability Policy states clearly that as a company, we are committed to respecting the human rights of indigenous and local communities wherever our operations take place. Apart from that, we are also committed to providing assistance and access to improve the economy of rural communities. Our long-term partnerships with communities and village unit cooperatives guide us to address critical issues impacting communities in areas where we operate. We aim to achieve net zero extreme poverty in the communities surrounding our operational area and provide quality education access through 5,000 scholarship awards as well as vocational trainings for 5,000 people by 2030.

One of the activities of Sekolah Sawit Lestari in SMKN 1 Pangkalan Kerinci

Protecting the Rights of Indigenous People and Local Communities

GRI 13.14.3, 13.14.4

We ensure and recognize the rights of indigenous and local communities to give or withhold their free, prior, and informed consent (FPIC) to any projects or operations that may affect them or their territories. We will also ascertain a fair, transparent, and legal process.

Asian Agri has no new land use change for oil palm plantation since 2003, and our area does not infringe with indigenous land. However, since 2021 we update our social mapping by conducting FPIC as part of SEIA in all of our operations which is planned to be completed in 2024. Currently, our focus is on replanting and intensification efforts on existing land including scheme smallholder plantations. Prior to any scheme smallholder replanting, FPIC must be obtained to ensure the local communities get a clear understanding of the conditions and have the opportunity for negotiation. Our FPIC process includes:

- Conduct preliminary studies to identify land owners and oil palm trees that need to be replanted
- Identification of village unit cooperatives (KUD), associations, and farmers to be contacted for engagement and discussion of the program
- Prepare materials for engagement/discussion with village unit cooperatives (KUD), associations, and farmers including: explanation regarding the replanting process, possible social and economic impacts, potential risks and benefits of replanting activities, etc.
- Provide adequate time and opportunity for smallholders to think, communicate and negotiate before making decisions to do replanting

Asian Agri prioritizes the principle of mutual respect in discussions or engagements. We do not force farmers who do not want to do replanting or if an agreement has not been reached. We ensure that all farmers undertaking replanting under our program have expressed their consent and have been informed in a clear and detailed manner.

Conflict Resolution

We accommodate any complaints and conflicts from the local community through our robust grievance

mechanism system. We will try our best to handle all grievances in an accountable manner and create a win-win solution for both parties. We also have a dedicated team consisting of around 150 employees whose main focus is to handle and maintain engagement and communication with smallholders and local communities. This way will not only prevent any misunderstanding which leads to conflict but also build a close relationship with our smallholders and surrounding communities.

Social and Environmental Impact Assessment (SEIA)

As regulated by the Indonesian government, we have conducted a SEIA which aligns with FPIC principles prior to beginning any major activities. The SEIA is the continuation and an update of our Environmental Impact Assessment (Analisis Dampak Lingkungan or AMDAL). In addition, we engage with an independent organization that provide expert social consulting service, Lingkar Komunitas Sawit (LINKS), to support us in examining and strengthening our approach to managing the social aspects of our impact assessment. In 2022, LINKS has conducted a social impact assessment of our five units, namely PT SSL (1 mill, 1 estate), PT GM (1 mill, 3 estates), PT HSJ (2 mills, 3 estates), PT AIL (1 estate) in North Sumatra and PT RAU (2 mills, 1 estate) in Riau.

Driving Rural Development

GRI 413-1

We have set out ambitious targets in AA2030 to support the local community where we operate through our Corporate Social Responsibility (CSR) programs in all of our operational area. Our CSR programs are designed to be aligned with local government programs. At the Regional Development Planning Meeting (called the Musyawarah Perencanaan Pembangunan - Musrenbang), all potential programs are discussed and selected based on community needs (represented by the village head) and the sustainability of the program. In 2022, regional government focus programs include health, especially stunting, education, and economic programs.

Asian Agri's CSR Program Focus:

| | |
|--|---|
| | <p>Social and Culture</p> <p>Our CSR program includes providing food or basic need packages to underprivileged communities around our operational areas during Ramadhan month or Eid al-Fitr. In addition, we also provide sports facilities and equipment to encourage the local community to exercise and maintain their health.</p> |
| | <p>Education</p> <p>We are committed to increase the quality of education in local communities. Our support is divided into two types:</p> <ul style="list-style-type: none"> Physical support, by renovating existing schools, facilities and infrastructures. We also provide schools amenities, build libraries and sanitation facilities. Non-physical support, such as providing trainings to teachers and providing scholarship to students from elementary school to university. |
| | <p>Healthcare</p> <p>Healthcare is a basic need we continuously invest in to improve the quality of healthcare facilities for local communities. This year we have:</p> <ul style="list-style-type: none"> Integrated Services Post (Posyandu), provide free examination and organize blood donation. Provided vitamins for pregnant women and food fortifications to improve toddler nutrition. Renovated existing clinics, ensured medicine availability and provided more medical devices. Held COVID-19 second and third vaccinations for all our employees and local communities. |
| | <p>Economy</p> <p>We are supporting rural communities to have alternative livelihoods, especially for our smallholders during replanting programs, for example:</p> <ul style="list-style-type: none"> Fisheries: Asian Agri assists with providing seed, feed, and marketing Livestock: cows, goats, chickens Beekeeping Crafts (from oil palm fronds) <p>Quintessentially, the community development program initiative aims to eradicate zero extreme poverty with an income of five hundred thousand per month, especially in villages close to mills or plantations with an average distance of 5-10 km. Based on the survey, there are 159 villages in Riau (62), North Sumatra (43), and Jambi (54). We support them by creating Small and Medium Enterprises in line with potential community development.</p> |
| | <p>Infrastructure</p> <p>We build roads to open access and trigger economic activity of the surrounding village that is considered remote. We also drilled water wells for clean water access, improved drainage systems and sanitation facilities as well as constructed houses of worship including mosques and churches.</p> |
| | <p>Environment</p> <p>Our CSR program in the environmental sector includes supplying and planting fruit trees on riverbanks near our operational areas. This is important to prevent erosion and local people can benefit from the fruit.</p> |
| | <p>Disaster Relief</p> <p>Indonesia located in the ring of fire area, so it is prone to natural disasters such as earthquakes, tsunamis, and volcanic eruptions. To help local communities who are victims of natural disasters, we participate in distributing humanitarian aid in the form of basic needs such as groceries, clothing, first aid and medicines. These humanitarian actions are usually carried out in cooperation with other companies, universities, and other local institutions. Often, we send an advance team to the location of the incident or collect information about what form of assistance is most needed at that time so that it is more targeted.</p> |

Sekolah Sawit Lestari



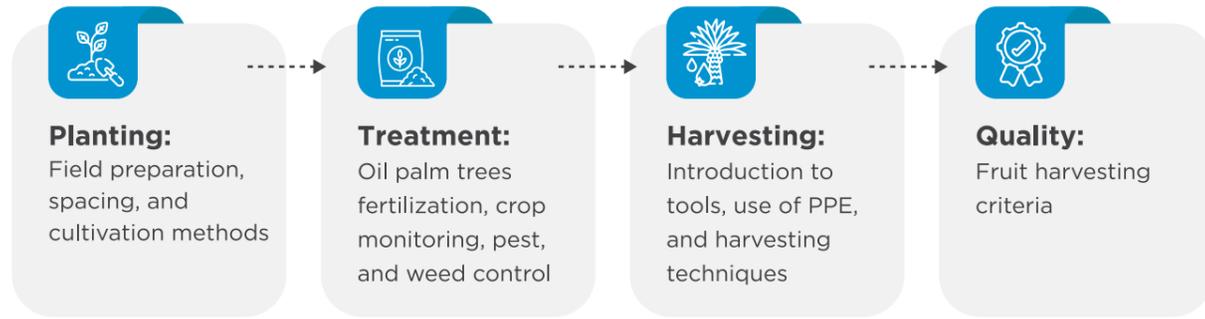
Asian Agri is partnering with schools to educate students about sustainable palm oil farming practices through a program called "Sekolah Sawit Lestari". This program targets schools located near the plantation. In Riau province, Asian Agri has been collaborating with SMKN 1 Pangkalan Kerinci since 2016.

Twice a week, the Asian Agri team visits the school and teaches students majoring in plantation agribusiness for one hour lesson. Teachers are also trained on sustainable palm oil so can assist students in the learning process. In addition to theoretical studies, students are also guided and undergo practical activities in the field. During the first three years of oil palm farming, students are taught several activities, including land clearing, seeding, fertilizing, and harvesting.

Vocational Training for Our Community

The initiative was started as a part of our commitment to AA2030, which aims to provide 5,000 people with access to quality education and vocational training by 2030. This initiative began in May 2022 with the communities surrounding the plantations as the main participants. We hope to enhance their employability and support their personal development by imparting knowledge and skills about working on plantations. This vocational training will become a regular program held every two months until 2030 in all Asian Agri plantation areas located in North Sumatra, Riau, and Jambi.

The training is carried out for three days, combining two days of theory lessons and one day of practical lessons. Participants are taught about best management practices in oil palm plantations, with a focus on harvesting FFB. It consists of the following four modules:



We expected to have 480 participants in the first year and then 600 annually thereafter. By end of 2022, 455 participants had attended our harvester vocational training.

Contributing to Food Security in the Community

GRI 13.9.1

Ensuring food security of the local community has been stipulated as part of Asian Agri's Sustainability Policy under the pillar of Positive Socio-economic Impact for People, Smallholders, and the Community. It is part of our company's responsibility to ensure that the communities surrounding our plantations are empowered and have sustained food sources.

Since the early years of our business, we have been working together with smallholders and local communities for cattle farming, poultry farming, fishery, beekeeping, and planting of fruit trees or vegetables. In 2014, Asian Agri was involved in the governmental program for bank loan assistance called Loan for Food Security and Energy (Keuntungan Kredit Ketahanan Pangan dan Energi - KKPE). We were chosen as a moderator and organizer to manage the program and purchase cows for smallholders. The smallholders then repay the loan through Asian Agri monthly over three years. As the program has finished, smallholders could have alternative income and eventually secure food sources for them and the wider community.

Today, we continue to support the smallholders and local communities in food security through alternative income assistance and CSR program. Especially during idle periods i.e. after the start of replanting until the first harvest, alternative income assistance became our priority in maintaining income for the smallholders. We are also working closely with cooperatives (KUD) in giving knowledge, technical, and financial assistance in the farming of food sources. 'No-burn incentives' is also a given reward which focuses on socioeconomic enhancement in the village, including for farming other than oil palms. We strive to diversify the food sources in our surrounding areas in order to diversify alternative income as well as to maintain the environment in balancing our homogenous oil palm plantation.

What's Next?

- We will continue to collaborate with local cooperatives and heads of villages to maintain the relationship with local community and support their development through our CSR program.
- We will conduct field surveys in all our operational areas to identify community needs and recommend new topics for vocational training programs.



CONSUMER HEALTH AND SAFETY

Management Approach

GRI 3-3

For many years, palm oil is still the most traded vegetable oil globally. The major use of palm oil is for human consumption, of various purposes in the supply chain. The hygiene and safety of palm oil may become the determinant of food products derived from palm oil. On the other hand, end consumers continue to be more aware of the products they consume and their relation to food safety. We also recognize that consumers have a right to expect that products are safe and comply with product safety requirements. Thus, food safety became a major priority in Asian Agri to warrant our consumers on the benefits of palm oil. Our company is committed to ensure the hygiene and safety of our products. While it may not be included as a materials topic identified in the materiality review this year, consumer health and safety is always Asian Agri's main priority.

Ensuring Food Safety

GRI 416-1

As an agriculture company, it has been a commitment for Asian Agri to always ensure customers' health in consuming our products. Palm oil contains saturated and unsaturated oils, vitamin E, beta-carotene, and antioxidants which can be beneficial for consumers' health. Since 2015, we have been part of the Good Manufacturing Practices (GMP) certification scheme which provides independent verification and certification of food safety.

We also ensure our food quality to meet one of the strict requirement for food to increase the product acceptance across dietary restrictions. Since 2016, our mills and KCPs have been Kosher certified, meaning that our products, ingredients, production facility and actual production have no trace of non-Kosher substances.

One of our AA2030 goals is to optimize the recovery of waste oil, signifying our rigorous commitment to have separation of our food-grade oil with non food-grade oil. By the end of 2021, we have equipped all of our 22 mills with waste and residue oil recovery facilities to separate low-quality for non food purpose and high-quality CPO, eventually allowing us to produce healthy food-grade crude palm oil. The waste and residue oil recovery facilities allow us to prevent waste and residue oil which contain higher contaminants namely 3-MCPD (known as chloropropanols) and GE (Glycidyl fatty acid esters) to enter the same container with pure CPO extracted from palm mesocarps.

In 2022, we did not have any incidents of non-compliance concerning the health and safety impacts of our products and did not have any products recalled for food safety reasons.

What's Next?

- We will continue to maintain our 100% food grade CPO and seek opportunities in optimizing waste and residual oil.



CLIMATE POSITIVE

“WRI Indonesia appreciates Asian Agri’s commitment and concrete actions to maintain its zero deforestation commitment towards the Net Zero Emission target, especially through near real-time monitoring of deforestation along its supply chain, empowerment of independent smallholders towards sustainable palm oil certification, and engagement of small-medium suppliers to commit to policies No deforestation, No peat conversion, No human rights exploitation (NDPE).”

Bukti Bagja, Supply Chain and Livelihood Transformation Senior Manager, World Resources Institute (WRI) Indonesia



Climate change is one of the greatest global challenges in the 21st century that poses risks to the global economy and, sequentially, brings climate-related risks to Asian Agri and our stakeholders. In 2021, the Intergovernmental Panel on Climate Change (IPCC) published the first report under its sixth assessment cycle with the United Nations (UN) referring to the report as a 'Code Red for Humanity'. In 2022, two following reports from IPCC's sixth assessment cycle mentioned that some of the impacts of global warming will be irreversible and urgent actions are required to deal with increasing risks.

Relying much on the rainwater and climatic conditions, palm oil plantations are exposed to climate change risks. Rain intensity may increase or decrease in different locations, while rain seasonality may become less regular. As the dry periods will become more intense, the palm oil yield is foreseen to decrease. On the other hand, too high and too low rain intensity become a threat to our peatland and the drainability requires more careful management.

As temperatures become warmer as one of the symptoms of climate change, soil water evaporates more quickly, thus better soil management will be needed. Warmer temperatures may also pose risks of pests or disease outbreaks and decrease natural pollination.

Eliminating the adverse impacts of climate change is also one of commitments in upholding human rights. According to Office of the United Nations High Commissioner for Human Rights (OHCHR), climate change has profound impacts on a wide variety of human rights, including the rights to life, self-determination, development, food, health, water and sanitation and housing²⁴.

Asian Agri has acknowledged the climate change risks to our operation, hence we are encouraged to take part in improving the global climate and slowing down climate change. Asian Agri is committed to achieving Net-Zero Emissions from our land by 2030. We also strive to reduce our greenhouse gas (GHG) emissions from our operations continuously. In reducing our emissions, we are promoting the use of renewable energy which generate lesser emission, and aim to utilize 100% renewable energy for our operations by 2030. In addition, we aim to continuously reduce methane emissions from our mill operations, by capturing them using methane capture facilities in our biogas plants and using them as part of our renewable energy source.



ENERGY AND CARBON MANAGEMENT

Management Approach

GRI 3-3

GHG reduction is a catalyst for reducing climate change impacts. In September 2022, Indonesia has increased its target for GHG emissions reduction to 31.89% unconditionally and 43.20% conditionally²⁵ by 2030 against emission rate in 2010. The agriculture, forestry, and other land uses (AFOLU) sector is mandated to contribute the majority of GHG emissions reduction. AFOLU is expected to reduce GHG emissions by 17.7% unconditionally and 25.8% conditionally by 2030 against emission rate in 2010, which makes up more than half of the national reduction target.

Carbon dioxide and methane gas are the main components of GHG. Palm oil companies are prone to emitting carbon from their land conversion, POME, peatland use, fertilizer, and water use. To respond to those risks, palm oil companies need to put measures to also reduce their emissions through crop sequestration, methane capture, and other renewable energy options. Stakeholders expect companies to monitor their sources of GHG and implement measures to reduce their emissions.

AA2030 Targets and Performance for Climate Positive

| 2030 Targets | Our Progress in 2022 |
|---|--|
| One-to-one restoration area | Started the process of obtaining legal permits for the areas that we want to develop as restoration ecosystem |
| Net-Zero Emissions from Land Use | Conducted GHG Scope 1 & 2 accounting based on GHG Protocol to help us determine our total emissions and continuing the progress of restoration ecosystem target that is expected to absorb carbon dioxide released into the atmosphere |
| Optimize methane capture facilities for all mills | Conducted feasibility studies in some of our potential mills to be added with methane capture facilities |
| 100% renewable energy for our operations | Planned the procurement of solar panels while identifying other types of suitable renewable energy |

²⁴ Retrieved from OHCHR publication on [Understanding Human Rights and Climate Change](#)

²⁵ [Indonesia's enhanced NDC](#). Conditional target is subject to the availability of international support for finance, technology transfer and development and capacity building, while unconditional target is based on the country's own resources and capabilities.

Sustainable palm oil has a lower carbon footprint than conventional palm oil. Asian Agri is committed to managing our best practices aligned with the standards of sustainable palm oil and strive to certify our performance, one of which is through RSPO. It has been estimated that RSPO-certified sustainable palm oil has an average emissions factor 35%²⁶ lower than that of conventional palm oil, demonstrating the significant impact sustainable production can have on reducing palm oil's emissions.

Responding to the challenges of energy and carbon management, we aim to achieve Net-Zero Emissions from our land use by 2030. We aim to continuously reduce our emissions in land operations and manage 100,000 hectares of restoration ecosystem area apart of our concessions that are planned to absorb our released carbon dioxides after a series of conservation efforts. Besides, among the strategies to reduce emissions, we target to rely on 100% renewable energy for our operations by 2030.

Meeting our Net-Zero Emissions Targets

At Asian Agri, we have been taking steps towards a transition to low-carbon solutions and investing increasingly in renewable energy to meet our needs.

Pursuit of energy efficiency and renewable energy use

GRI 2-4, 302-1, 302-3

Almost all of our energy consumption (in terajoule) is fueled by renewable energy sources, and only a small portion is fueled by non-renewable sources. Subsequently we further utilize the renewable fuel such as from biomass and biogas to generate electricity for our operations.

Since 2020, all our operations have been using B30 biofuel as mandated by the government. Besides supporting energy circularity, our GHG emissions from non-renewable fuel in plantations and mills can be partially reduced.

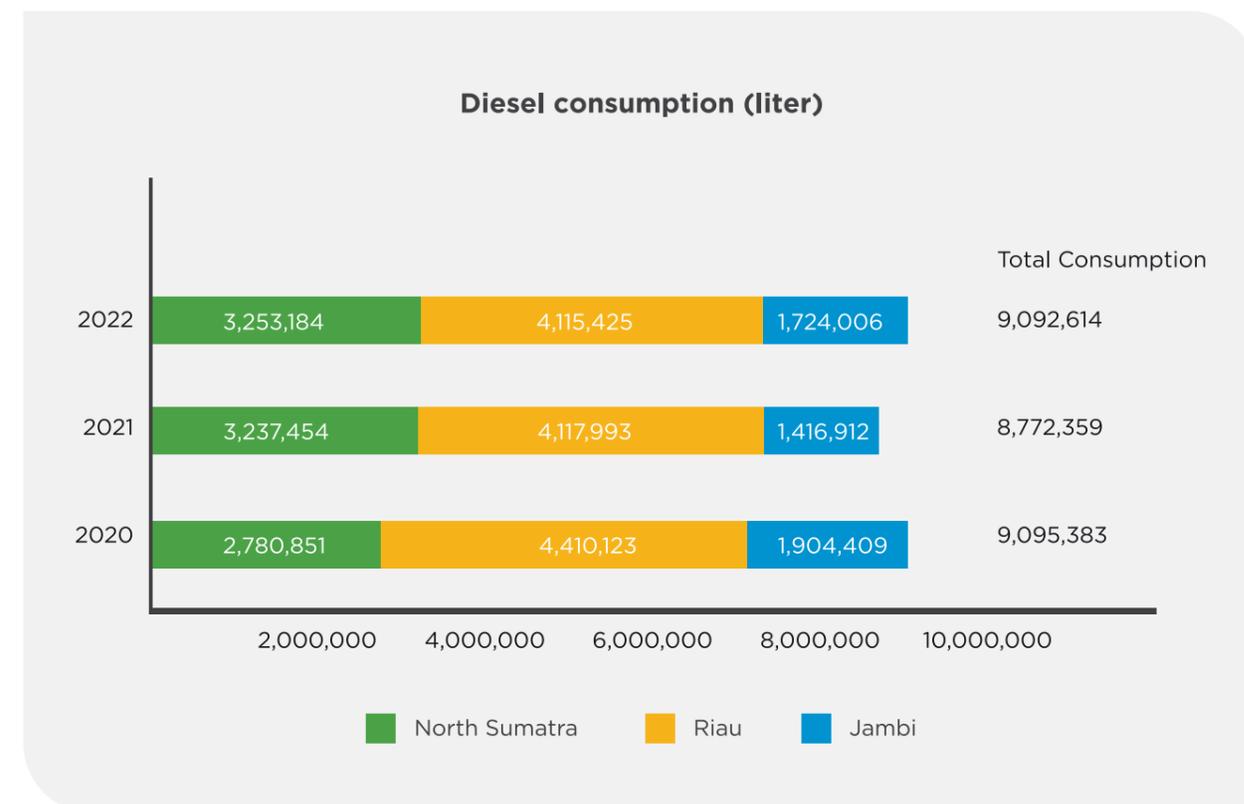
| Energy Source | Procurement | Electricity Generator | Main usage |
|--|---------------------------------|-----------------------|---|
| Renewable: Fiber and palm kernel shell (so-called biomass) | By-products in Asian Agri mills | Steam turbine | The electricity is used to operate our mills and KCPs |
| Renewable: Biogas | Captured from our biogas plants | Gas engine | The electricity is used for <ul style="list-style-type: none"> Our mills and KCPs Our housing complex Sale to State Electricity Company's (<i>Perusahaan Listrik Negara/ PLN</i>) grid |
| A mixture of renewable and non-renewable: Biodiesel (B30) | Procured from a third party | None | B30 is mainly used for transportation and heavy equipment for cultivation and field maintenance |
| | | Diesel generator | When necessary, we utilized B30 as fuel to generate electricity for supporting our mills and KCPs as well as our housing complexes and offices |

²⁶ According to the study by Jannick Schmidt and Michele De Rosa in 2019 titled [Comparative Life Cycle Assessment of RSPO-certified and Non-certified Palm Oil](#)

The table below shows total energy consumption within the organization (Terajoules/ TJ)

| Energy consumption | 2022 | 2021 | 2020 |
|--|-----------|-----------|-------------------|
| Fuel consumption | | | |
| Total fuel consumption from non-renewable sources | 361 | 348 | 367 |
| Total fuel consumption from renewable sources | 11,222 | 10,250 | 10,115 |
| Electricity consumption | | | |
| Electricity consumption (purchased from grid) | 24 | 23 | N/A ²⁷ |
| Electricity sold | | | |
| Electricity sold (from self-generated electricity) | 2 | 6 | 8 |
| Total energy consumption²⁸ | 11,605 | 10,615 | 10,474 |
| CPO Production (MT) | 1,162,645 | 1,070,247 | 1,056,218 |
| Intensity of Energy Consumption (TJ / MT CPO) | 0.00998 | 0.00992 | 0.00992 |

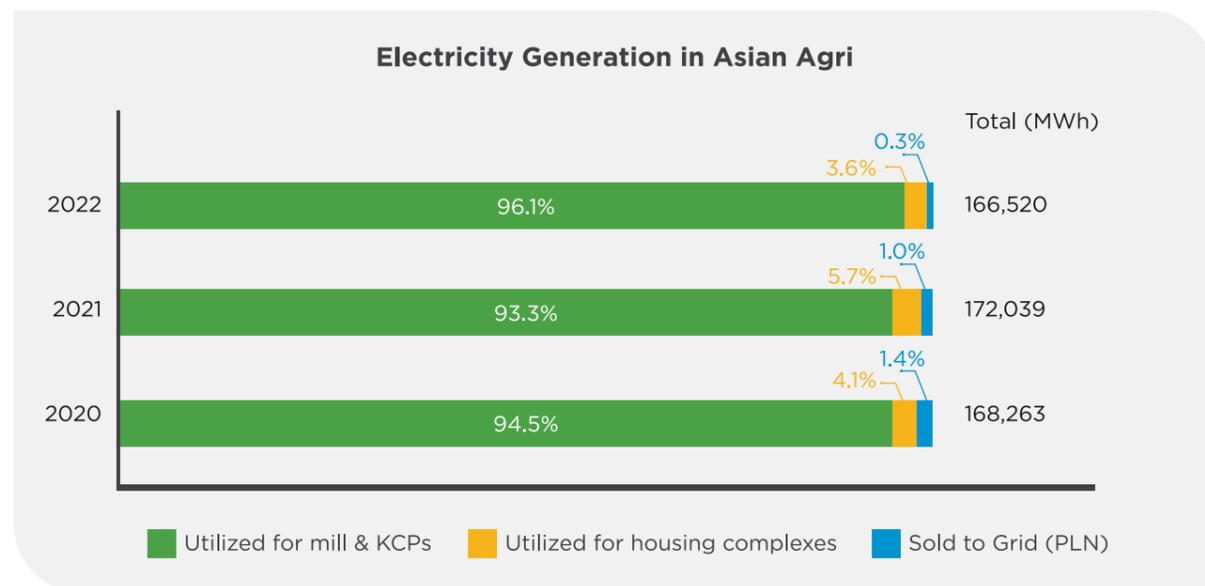
Note: Asian Agri does not purchase or sell energy for heating, cooling, and steam



²⁷ Our electricity consumption in 2020 is not recorded in an exhaustive manner as how we did for 2021 and 2022

²⁸ Total energy consumption is calculated from the total fuel consumption (renewable and non-renewable) plus the electricity consumption purchased from the grid minus the electricity sold

Apart from diesel fuel used directly for transportation and machineries, we further utilize our renewable and non-renewable fuels to generate electricity as outlined below:



Compared to our Sustainability Report 2021, we updated our calculation methodology for fuel consumption from both renewable and non-renewable sources and electricity consumption in 2020 and 2021 in this report.

The restatement of fuel consumption is to utilize more specific calorific values²⁹ than in previous reports. Meanwhile, the restatement of electricity consumption is to better align with GRI standard and eliminate double-counting of self-generated electricity.

Electricity consumption in this report calculated the amount of electricity purchased from the grid. Meanwhile, the electricity consumption in our previous reports calculated from the self-generated electricity from our fuel consumption.

Our GHG emissions

GRI 305-1, 305-2, 305-4

In between 2012 - 2021, we conducted GHG calculations by using the GHG Calculator from RSPO, in which the calculator is only applicable to account for our estates and mills certified by RSPO. In 2022, we engaged with external consultants to help us re-assess our carbon footprint for the year of 2021 across all our operations without any exclusion and to establish a tool for our emission calculation.

Parallel with the bigger scope of in the new GHG accounting method, the total Scope 1 and 2 GHG emission of 2021 using the new calculation is bigger than the total emission of 2021 that we reported in Sustainability Report 2021. As consequence, there is also a significant increase of total emission from the reporting year of 2020 to 2021.

We recognize that the majority of our emissions came from:

- Plantation: Peatland oxidation, land conversion, and fertilization
- Mill: Methane emission from our POME

²⁹ Calorific values utilized for fuel consumption in this report are:
 Non-renewable= B30 Biodiesel = 70% of Industrial Diesel: 39.6 MJ/L (Source) and 30% of Pure Biodiesel: 39.9 MJ/ L (Source)
 Renewable= Palm Fiber: 11.5 MJ/kg (Source), Palm Shell: 19.2 MJ/kg (Source), and Methane: 39.8 MJ/m³ (Source)

The table below present total Scope 1 and 2 GHG emissions and intensity

| Scope | 2022 | 2021 | 2020 |
|--|------------------------------|------------------------------|------------------------|
| Scope 1 GHG emissions (tCO ₂ eq) | 3,096,458 | 3,170,401 | 2,660,082 |
| Scope 2 GHG emissions (tCO ₂ eq) | 5,657 | 5,878 | 1,240 |
| Total Scope 1 and 2 GHG emissions (tCO ₂ eq) | 3,102,116 | 3,176,279 | 2,661,322 |
| Biogenic emissions | 858,085 | 827,719 | Not calculated |
| CPO Production (MT) | 1,162,645 | 1,070,247 | 1,056,218 |
| Scope 1 and 2 GHG emission intensity (tCO ₂ eq/ MT CPO) | 2.67 | 2.97 | 2.52 |
| Calculation Guideline | ISO 14064-1 and GHG Protocol | ISO 14064-1 and GHG Protocol | RSPO GHG Calculator v4 |

Starting for 2021 data, we employed operational control approach in calculating our GHG emissions. The calculation was based on GHG Protocol's Scope 1 and 2 emissions and encompassed CO₂, CH₄, and N₂O gases. The Global Warming Potentials (GWP) rates used were sourced from the IPCC Fifth Assessment Report (AR5).

According to GHG Protocol Corporate Standard, direct CO₂ emissions from the combustion of biomass shall not be included in Scope 1 and reported separately. At Asian Agri, our biogenic emissions originate from biodiesel B30 used in our stationary and mobile diesel engines, palm kernel shells and palm fiber.

The change in the GHG emission calculation method

GRI 2-4

Here is the comparison of organizational and emission boundaries of GHG emission calculation in 2021 according to ISO 14064-1 and GHG Protocol Scope 1 & 2 in contrast to RSPO GHG Calculator v4.

The table below indicates the comparison of organizational boundaries of the GHG accounting

| Emission Source | Using GHG Protocol Scope 1&2 | Using RSPO GHG Calculator v4 |
|-----------------|---|--|
| Estates | 33 (30 Own Estates + 3 Scheme Smallholders Estate) | RSPO Certified Estates: 27 Own Estates |
| Mills | 22 in total (inclusive of entities with biogas plants and KCPs) | RSPO Certified Mills: 18 Mills (inclusive of entities with biogas plants and KCPs) |
| KCPs | | |
| Biogas Plants | | |
| Offices | 4 | 0 (not calculated) |

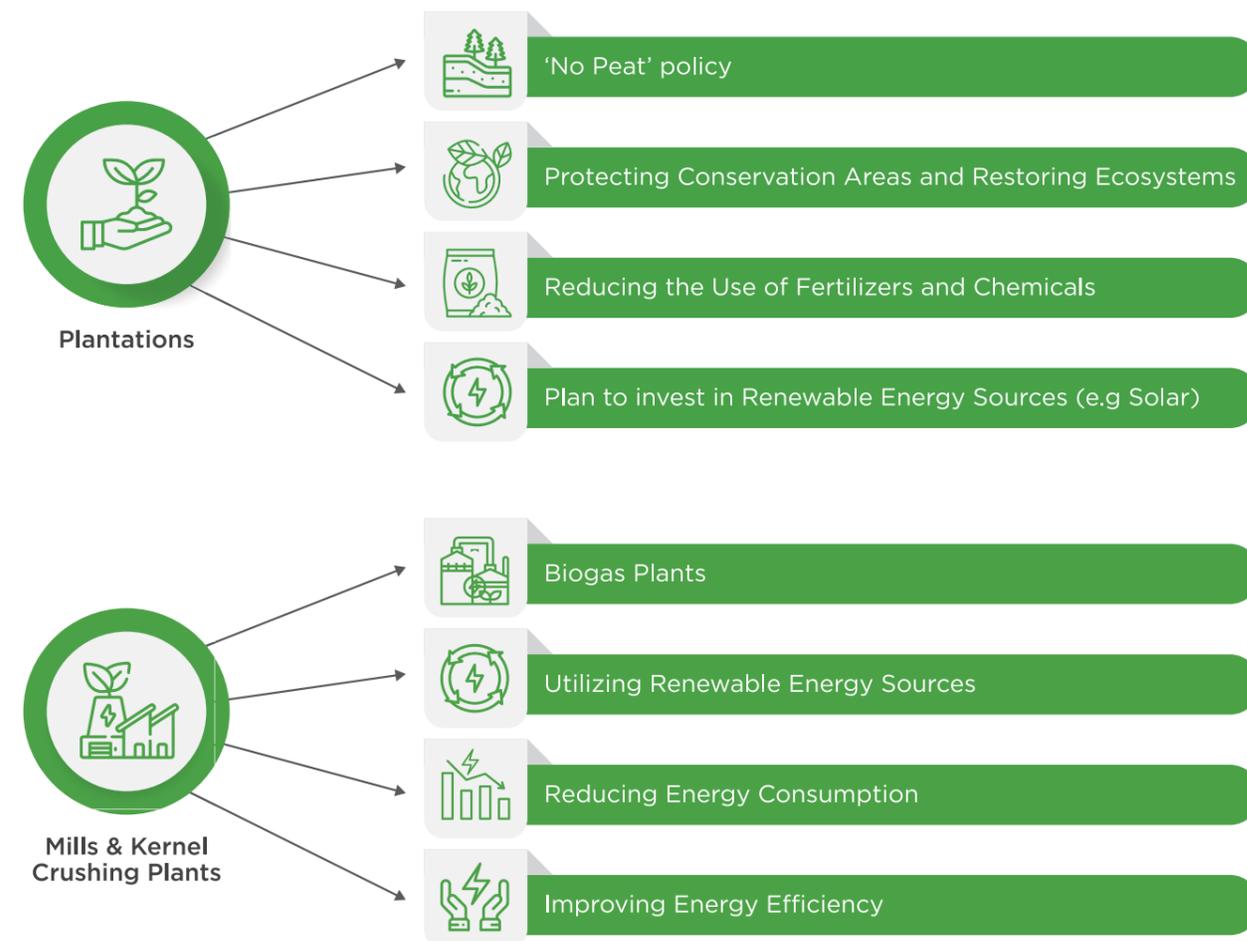
The table below shows the comparison of emission boundaries of the GHG accounting

| Category | Emission Source | GHG Emission in 2021 Using GHG Protocol Scope 1&2 (MT CO ₂ e) | GHG Emission in 2021 Using RSPO Calculator v4 (MT CO ₂ e) |
|---|---|--|--|
| Scope 1 = Emissions from Plantation | Land Conversion (Land Use Change (LUC)) | 1,039,370 | 499,793 |
| | Fertilizer (Synthetic Fertiliser) | 68,451 | 72,568 |
| | N ₂ O (Organic Fertiliser + Emission from Peat Soil) | 162,312 | 262,016 |
| | Estate fuel consumption (stationary + mobile) | 13,567 | 20,149 |
| | Peat Oxidation | 1,291,891 | 1,415,981 |
| | Process emissions from POME (methane) | 589,067 | 303,216 |
| | Pesticides | 1,656.89 | Not assessed |
| Scope 1 = Emissions from Mills | Mill fuel use (stationary + mobile) | 3,391 | 3,390 |
| | Fugitive emissions due to refrigerant | | |
| | AC | 21.98 | Not assessed |
| | Fridge | 0.3022 | Not assessed |
| | Fugitive emission due to fire extinguishing agent | 0.0244 | Not assessed |
| | Process Emissions (WWTP, chemical, reactions) | | |
| | Chemical | 644.42 | Not assessed |
| Scope 2 = Electricity | Electricity from the national grid | 5,879 | 1,146 |
| Scope 3 and others (not included in GHG Protocol) | Crop sequestration | Not assessed | -473,737 |
| | Export excess power | Not assessed | -3 |
| | Palm Kernel Shell (PKS) sales | Not assessed | -426,715 |
| | Emission from the third party FFB | Not assessed | 1,162,999 |

The difference of emissions from LUC, POME, and electricity consumption is due to the difference of coverage of mills, estates, and offices in the GHG accounting. Specifically for the LUC, the cut off year for land use utilized in the new GHG accounting is 20 years, which is in accordance with IPCC, while the cut off years previously input into RSPO GHG Calculator are not uniform.

Reducing Our Carbon Footprint

To reduce our carbon footprint, we continue to use multiple strategies with different approaches across our supply chain



In our Plantations

'No Peat' Policy

We understand that peatland oxidation, when development on peatland releases high levels of stored carbon into the atmosphere, can contribute significantly to our GHG emissions. We adopt a firm stance and strictly prohibit new developments on peatland of any depth. For more information on our approach to peatland protection, please go to page 104.

Protecting Conservation Areas and Restoring Ecosystems

We are putting effort to offset our emissions by protecting areas with High Conservation Values (HCV) and High Carbon Stock (HCS) in our estates as well as by planning to restore degraded land in the same size of our total land. Restoration of degraded land is our One-to-One Restoration commitment by 2030 to, among other purposes, take the carbon credits from the preserved ecosystem. For more information on our approach to protecting conservation areas and restoring ecosystems, please go to page 102.

Reducing the Use of Fertilisers and Chemicals

We understand that the use of fertilizer, pesticides, and other chemicals can contribute to our GHG emissions. As part of our strategic response, Asian Agri has been putting effort to seek sustainable practices such as:

- Partially substituting synthetic fertilizers with our EFBs and POME which is pumped directly to flatbeds in our estates. The application of EFB and POME is also part of our effort to not waste any by-products of our FFB.
- Constraining the use of excessive fertilizer. We continually implement our 4C fertilizer stewardship approach which are Correct dosage, Correct method, Correct timing, and Correct placement. The approach is reflected in our site specific fertilizer program, ensuring effective and efficient use of fertilizer on a targeted area only.
- Reducing the use of chemicals and pesticides by implementing an Integrated Pest Management approach that imposes lower carbon.

For more information on our approach to the use of chemicals, please go to page 122.

Plan to invest in Renewable Energy Sources (e.g Solar)

We strive to reduce our consumption of fossil fuel for power generation. Previously, we rely on purchased electricity from grid or generated electricity from our diesel generator to turn on our public facilities e.g. road lamps, housing complexes, and buildings such as church and halls. In 2022, we started to have a feasibility study on the installation of solar panel.

In our Mills & Kernel Crushing Plants (KCPs)

Biogas Plants

We are currently operating 10 biogas plants with methane capture technology in our mills. These biogas plants have been supporting our goal of renewable energy adoption, GHG emission reduction, and safe discharge of effluent.



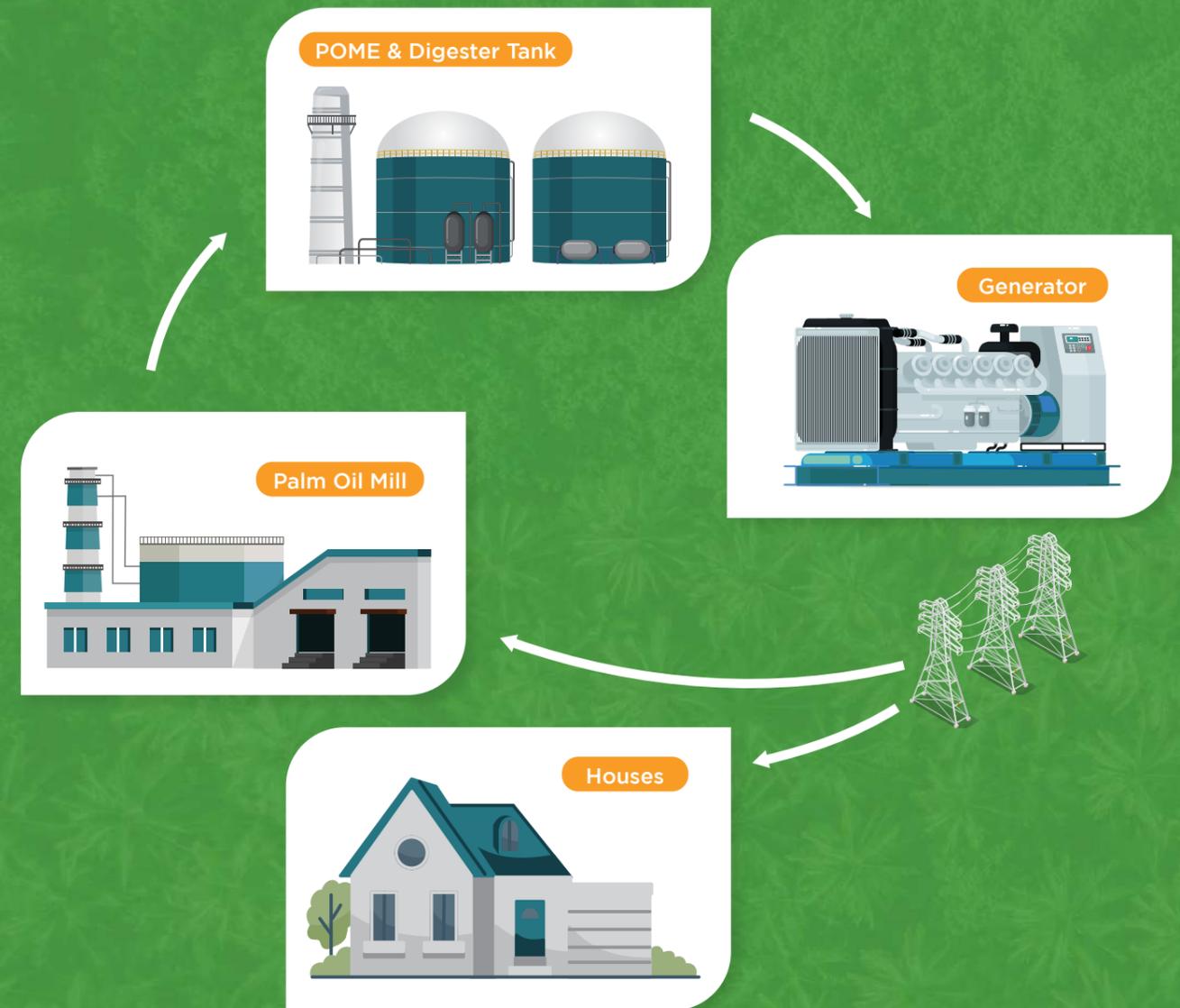
Our biogas plants:

- Generate renewable energy by using organic waste from the palm oil production process, allowing us to power out our operations and housing. The total production potential is 20 MWh of electricity. Power generated from combusting methane gas can reduce our diesel consumption for generating power.
- Have the potential to reduce almost 90% of the methane produced* as they are built with methane capture facilities - proven to be one of the most effective ways to reduce carbon emissions from milling activities.
- Treat POME by transforming its organic matter into gas fuel. The treatment can reduce the Biological Oxygen Demand (BOD) and Chemical Oxygen Demand (COD) significantly, thus POME can be safely applied to land as fertilizer or discharged to rivers or peatland.

*In line with ISCC GHG calculations.



HOW OUR BIOGAS PLANTS GENERATE ENERGY FROM ORGANIC WASTE



- 1. Palm Oil Mill:** The biogas plants are constructed at our palm oil mills to take advantage of the readily available supply of leftover biomass from the production process - or POME.
- 2. POME & Digester Tank:** The POME is fed into a digester tank, where it is converted into methane by microorganisms through anaerobic digestion process.
- 3. Generator:** The gas is then sent to the power plant, which generates 1.2-2.2 MW of power per biogas plant depending on whether the biogas plant has one or two gas engines each
- 4. Houses:** The electricity generated is used for our own operations such as operating palm oil mills and Kernel Crushing Plants (KCPs), for housing complexes in our estates and sold to the grid.

Utilizing Renewable Energy Sources

Asian Agri has been using the renewable energy of biomass fuel for many years. In all our mills, we use fiber and palm shells as biomass fuel for our boilers instead of coal or diesel. We do not leave any by-product of FFB wasted, and convert them as fuel. Besides for internal use, we also sell any excess of biomass such as kernel shell to third parties to be used as biomass fuel.

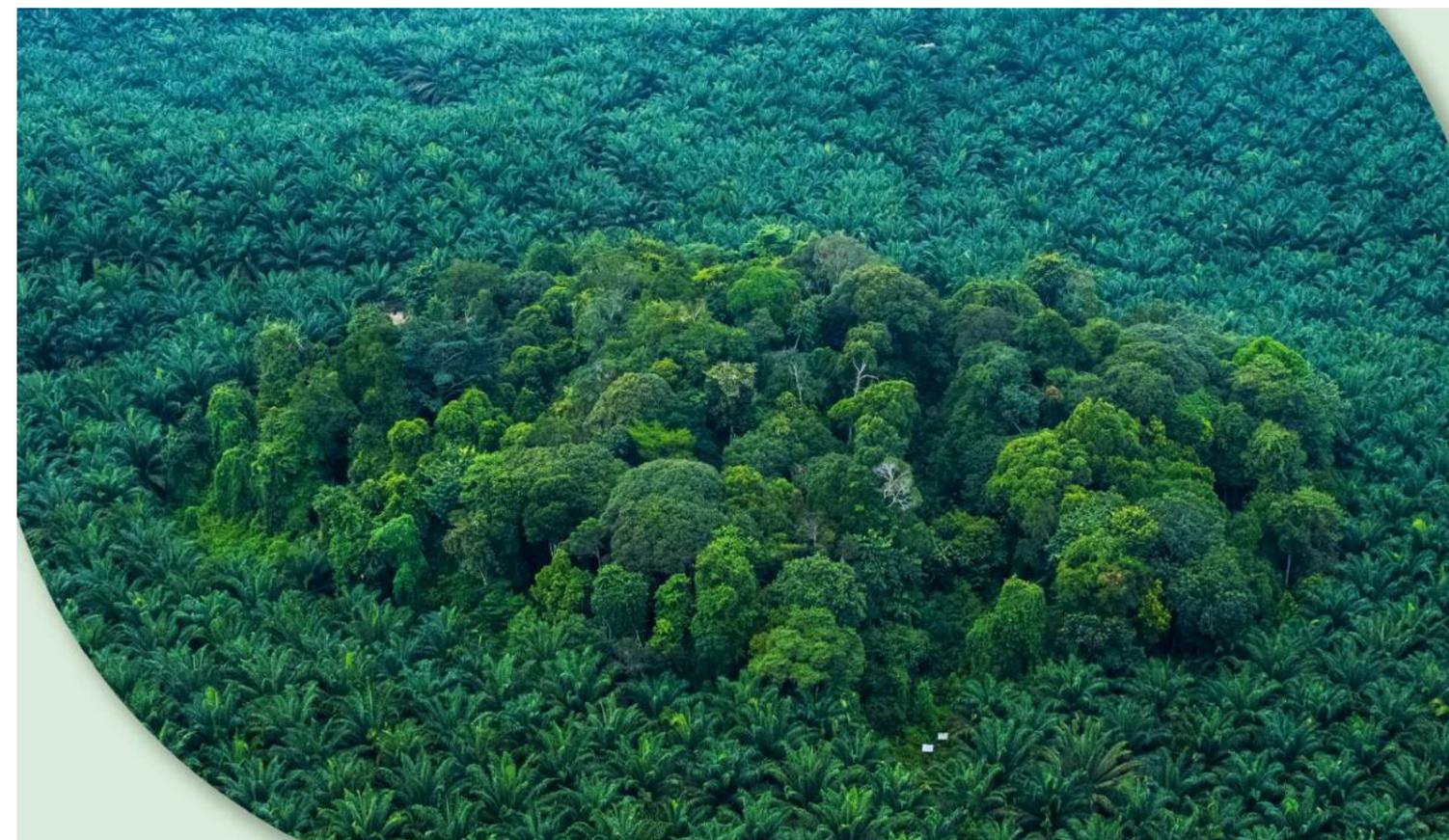
Reducing Energy Consumption and Improving Energy Efficiency

We continuously seek ways to optimize our daily operations while improving our energy efficiency. Some examples of our efforts to adopt sustainable practices include:

- Monitoring of air emissions from boiler chimneys and generators based on ISO 14001 Environmental Management System procedures by our internal team every six months and verified by a third party.
- Monitoring of the amount of energy used per tonne of CPO, PK and CPKO produced to analyze energy efficiency and plan targeted strategies accordingly.
- Investing in technologies to achieve higher production with lower energy consumption in our mills.
- Investing in SCADA (Supervisory Control and Data Acquisition) system to monitor the performance of our machinery and increase process efficiency.
- Optimizing trucking usage – for example, to transport FFB and EFB in single trips.
- Raising awareness on saving energy to nurture an eco-green mindset in our employees (e.g. for electricity, air conditioning, water) by placing multiple reminders to reduce energy consumption around our operational areas.

What's Next?

- To continuously reduce our emissions, we plan to gradually add methane capture facilities for the remainder of our mills.
- We will continue to make progress on the procurement and installation of solar panels for our operation.
- We will optimize our fertilizer use efficiently with our 4 approaches: Correct Dosage, Correct Method, Correct Timing, and Correct Placement
- We continue reducing chemical pesticides use and optimize the use of biological control for our pest management



BIODIVERSITY AND CONSERVATION

Management Approach

GRI 3-3

Our palm oil plantations are located in three provinces in Sumatra which are deemed to have a high biodiversity level in their forests. Our current estates, including those owned by our plasma smallholders, were developed in the 1990s on degraded forests with low biodiversity value and had been granted concession permits by the government. 75% of our plantation is on mineral soil which produces low GHG emissions compared to peat, while 25% is on peat soil with special care on them. Asian Agri is committed to conserving biodiversity and natural capital in our concessions and the surrounding area, by commencing our effort in managing 100,000 hectares of natural ecosystems.

Our Focus on Replanting

Since 2003, we have placed a moratorium on any forest clearance and new peatland development. Instead, we focus on replanting and increasing yield in our existing estates and smallholders' land.

Replanting remains our key priority to allow us to continue growing our business in a sustainable manner. Generally, after 25 years, we replant new trees when our existing oil palms have reached maturity and are no longer considered productive in terms of yield and quality of FFB. In line with our 'zero burning' policy, the existing trees are cut down, and the leaves and fronds are left to decompose to enrich the soil with nutrients. This replanting process to prepare the land takes about six months. We use high-quality Topaz seeds developed in-house for replanting, and support our plasma and independent smallholders in this process.

Our goal as part of AA2030 is to help 100% of our smallholders complete our replanting program. We continue to invest significantly in our replanting efforts, working closely with our smallholders. Learnings gathered through engagements with smallholders are critical to helping us improve our approach.

Currently, we have replanted more than half of our own estates, and have replanted more than 12,500 ha of smallholder land since 2016, including around 3,300 ha replanted in 2022 alone

Commitment to One-to-One Restoration Area GRI 304-3

As part of AA2030, we aim to manage 100,000 hectares of conservation ecosystem area by 2030, to match our 100,000 hectares of planted land. This commitment is the subsequent target of our previous successful achievement on One-to-One commitment where we matched 100,000 hectares of smallholders' plantation to 100,000 hectares of our plantation. The experience of achieving a One-to-One commitment will enable us to work on our restoration target.

Our main activity will be to conserve the ecosystem in the area. We also restore several locations in the land which the ecosystem has been degraded. After obtaining the permit, we plan to start carrying out our restoration programs rigorously. As part of our AA2030 targets, we aim to be able to net-off our emission in a year with the carbon reduction from our activities by conserving, restoring and enriching by 2030.

To succeed our restoration effort, we adhere to the legal process of getting permits and environmental compliances of meeting the requirements in every aspect. We have identified several locations in Indonesia that we consider impactful as ecosystem restoration and carbon sequestration areas. Currently, we are progressing in the process of obtaining the ecosystem restoration permit which is expected to require several stages in the upcoming years.

Protecting Conservation Areas and Biodiversity GRI 304-1, 304-2, 304-4

Setting Aside our Areas of High Conservation Values (HCV) and High Carbon Stock (HCS) GRI 304-3

As reflected in our Sustainability Policy, we conducted relevant assessments to all our estates including HCV assessment, HCS assessment, peatland mapping, and Social and Environmental Impact Assessments prior to new planting.

We completed HCS assessment by a Technical Committee comprised six highly experienced scientists. Although Asian Agri do not plant in new area since 2003, we adhere to HCS policy and assessment as part of our sustainability commitment.

We have completed HCV assessment for all of Asian Agri companies in 2014. Our HCV assessments were conducted by third-party RSPO-approved assessors and peer-reviewed by independent assessors, in line with sustainability certifications. We are committed to using licensed HCV assessors accredited by the HCVRN's Assessor Licensing Scheme (ALS) for both our own plantations and also for all of our suppliers. These assessments include issues such as habitat quality, soil conditions, peat presence and river quality.

Through these assessments, we identified HCV areas that have been set aside as conservation areas. We take measures to safeguard these HCV areas from any development plans that could potentially disrupt the environment and habitat of various species. This is an important step in preserving the microclimate in our plantation.

In addition, we establish riparian zones and areas that are of high cultural value to local communities. Subsequently, we develop and implement conservation and management plans accordingly. The riparian zone serves not only as a protective barrier to protect water sources which are used in our operations and by local communities but also to prevent erosion.

We also identified flora and fauna species within our concessions listed as Critically Endangered and Endangered in the IUCN Red List, including the scaly anteater, milky stork, silvery gibbon, crab-eating and southern pig-tailed macaque, great green leafbird and yellow-handed mitered langur. We monitor our areas twice a year to ensure that there is no disturbance in the habitats of protected flora and fauna. A full list of endangered species found in our concessions can be found on our [website](#).³⁰

None of our own managed areas is in, adjacent to, or contains a portion of protected areas. The closest conserved forest to our operational area is Tesso Nilo National Park, which is about 16km from the Ukui estate.

Implementation Approach

We maintain a strict policy against trapping, hunting, and fishing of endangered species. We inform the local community about this policy by putting up signboards prohibiting trapping, hunting, fishing, and trespassing in these areas. We have also conducted HCV training for our smallholders on our own estates. Besides, we signed conceptual agreements with communities surrounding our areas to conserve areas of high social value. We have also assigned field staff to monitor and record details of relevant species on a daily basis. We have a team on the ground patrolling our concession areas, and if a breach in our policy is found, individuals will be given a warning or prosecuted by law for major violations.

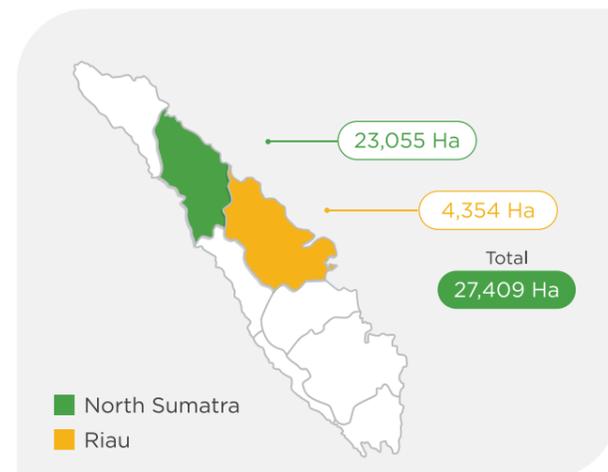
To ensure that these management plans are implemented, we have established a dedicated team to oversee the process:



³⁰ <https://www.asianagri.com/en/sustainability/sustainability-policy/zero-deforestation/>

Peat Management

We recognize the importance of peatland ecosystems as crucial carbon sinks for the planet, and if not managed properly, estates on the peatland can potentially be a large source of GHG emissions. The protection of peatland is an important pillar in our Sustainability Policy. We are currently managing seven estates on peatland located in North Sumatra and Riau, representing around 25% of our total area. All of our estates on peatland were planted back in the 1990s. We are committed to no new development on peat, defined as organic soils with 65% or more organic matter, regardless of the depth of peat. Prior to any new planting, peat experts from our R&D department conduct peatland mapping and assessments, where they produce a peatland map showing areas that should be protected from any new development. For areas assessed to be unsuitable for replanting, we collaborate with expert stakeholders and communities to explore options for long-term restoration or alternative uses.



Note: We do not operate on any peatland areas in Jambi.

We preserve the quality of peatland in our concessions to store its organic matters and prevent it from releasing emissions by following the best practices prescribed by RSPO:

- **Measuring drainage levels:** We conduct drainability assessments five years prior to replanting in peatland areas to determine the suitability of the land. This helps us to determine the best water management approach for the peatland, for example using bunds, water gates,

and weirs to prevent the inflow of water during the monsoon period which can damage peatlands. Our procedure requires that water levels should be maintained throughout the year at between 50-70cm from ground level. To do this, we create water barriers or gates on each drainage channel.

- **Measure subsidence levels:** We preserve peatland by installing subsidence poles at strategic locations to monitor the level of peat subsidence monthly.

What's Next?

- We have identified several locations in Indonesia that we consider suitable as ecosystem restoration areas. Currently, we are at the stage of obtaining an ecosystem restoration permit, which is expected to be obtained in the coming years.
- We will maintain our commitment to intensify our operation in the same plot of land without new land use change.
- We will continue strengthening our water management on peat area.



FIRE PREVENTION AND MANAGEMENT

Management Approach

GRI 3-3

Preventing hotspots and fires is a key priority for us to continue operating in a responsible manner. We recognize that fire prevention and management remain challenging for our industry. Forest fires and the transboundary haze have been a long-standing problem in Indonesia, particularly during the dry months between July to October, when fires can spread rapidly and widely. The causes of this issue remain complex, including factors such as the use of traditional slash-and-burn methods to clear land, conversion of highly flammable peatland for agriculture, the difficulty of attributing the cause of fires, and challenges of extinguishing fires. The incident of fire and haze can be threats for the rights to life and to health if the issues are not managed properly.

Asian Agri has proven our commitment to preventing zero burning policy, which has been our lifeline since the early years of our business.

'Zero Burning' and 'No-Peat' Policy

Asian Agri implemented a strict 'zero burning' policy for land clearing in 1994 for all future replanting and became one of the pioneers³¹ in introducing a zero-burning policy. Our zero-burning policy is stipulated in Asian Agri's company policy. Our suppliers and smallholders are also required to adhere to this policy.

Recognizing that planting on highly flammable peatland is also a major cause of forest fires, we also implemented a strict 'no-peat' policy and prohibit developments on peatland of any depth. For more information on our approach to the protection of peatland, go to page 104.

Fire Prevention and Mitigation in Our Concession and in the Smallholders'

For more than 40 years of operation, we persistently strengthen our fire prevention and mitigation measures. We continuously examine hotspot information raised by the internal Fire and Prevention Management team, satellite imagery, and our grievance procedure. Human activities such as throwing cigarette butts and burning trash may pose risks of starting hotspots, however, a hotspot does not always mean that forest fire is igniting, but suspecting a fire usage in a certain area. Thus, we make continuous improvements in raising awareness among the smallholders and the community, such as by putting up signboards and strengthening our community-based programs called Fire Free Village Program (FFVP).

In 2022, we maintained to have zero fire incidents. There were 7 detected hotspots in our concessions raised by RSPO. Our Fire and Prevention Management team immediately conducted further investigation and field checks and determined that no fires were found and those cases were closed. Detailed reports on how we investigated the detected hotspots can be found in our [grievance log](#)³². This achievement is not only credited to our internal team, but also to the local communities in our surrounding area, especially FFVP communities, in preventing fires.

| Year | Own Estates | | Smallholders | | Surrounding Communities | |
|------|--------------------|-----------------|--------------------|-----------------|-------------------------|-----------------|
| | Number of hotspots | Number of fires | Number of hotspots | Number of fires | Number of hotspots | Number of fires |
| 2022 | 7 | 0 | 2 | 0 | 104 | 0 |
| 2021 | 4 | 0 | 1 | 0 | 344 | 0 |
| 2020 | 0 | 0 | 2 | 0 | 30 | 0 |

Responding to fire incidents

Asian Agri believes that fire prevention is our responsibility. We provide fire-related training to our trainees as part of Asian Agri Learning Institute. Annually, we also have refresher training in each region for all modules. Training modules include spotting fire risks, fire drills, and basic fire-fighting methods.

To ensure that we are well-equipped to respond to hotspots or fires if they occur, we have the following emergency response measures in place, working in close partnership with the local fire brigade:

- Dedicated team monitoring the occurrence of hotspots using satellite imagery.
- Operational teams sent out to attend to emergency situations. The fire operation team consists of employee representatives who have been appointed and trained with additional trainings of incident preparedness.
- Providing fire equipment and infrastructure to combat and extinguish fire occurrences.

³¹ One of the external news media in this [publication](#) has bestowed the title of "pioneer"

³² <https://www.asianagri.com/en/sustainability/grievance/grievance-update/>

Fire Free Alliance (FFA): Working Together for a Fire-Free Indonesia



In 2016, Asian Agri became a member of FFA in the same year as our launching of FFVP. FFA is a voluntary multi-stakeholder group consisting of forestry and agriculture companies, NGOs, and other partners who are committed to working together to achieve lasting solutions for a fire-free Indonesia.

As a member, we share data and information with the FFA Secretariat and also conduct discussions with other members to better address problems of persistent fires and transboundary haze in Indonesia. Membership in FFA also enables Asian Agri to share best practices from our FFVP with other stakeholders and to learn from their own experiences. In 2016, five villages that participated in Asian Agri's FFVP pilot project achieved fire-free success.

The involvement of Asian Agri in FFA persists until today. In 2022, the area of focus for is to carry on with fire prevention programs such as



Raising Awareness for Communities Living Around Forest Area



Monitoring of Hotspots by Regular Patrol and Using Satellite Imagery



Providing Assistance to Local Communities in Land Clearing Without Burning



Providing Incentives for Economic Development for Local Communities

Fire Free Village Programme

Asian Agri believes that engagement with local communities is vital in succeeding our zero fire incident. We initiated our community-based Fire Free Village Programme (FFVP) with 10 villages in 2016, eight villages in Riau and two in Jambi. The FFVP is a holistic program designed to engage and support the local community to use alternatives to clear their land instead of slash-and-burn methods. Such methods of community engagement have been recognized as a proven method for fire prevention. By 2022, we have worked with 16 villages in Riau and Jambi, covering 343,276 hectares of land to prevent fires. These villages were selected to join FFVP for their vicinity to our plantations and their proneness to fires e.g located in the peatland area or with recurring fire incidents.

The table below represent the number of Villages in our FFVP

| Number of Fire-Free Villages | Villages | Total Land Covered (Ha) | Population |
|------------------------------|--|-------------------------|------------|
| Riau | 1. Rantau Baru 2. Tambak 3. Lubuk Ogong 4. Segati 5. Bagan Limau 6. Sotol 7. Lalang Kabung 8. Delik 9. Kuala Terusan | 173,006 | 28,974 |
| Jambi | 1. Teriti 2. Muara Sekalo 3. Semambu 4. Tuo Sumay 5. Suo-Suo 6. Lubuk Bernai 7. Lubuk Lawas | 170,270 | 16,380 |

Working with Potential Villages

We undergo the following steps before including new villages in the FFVP:

1. Assessing fire risk: We assess our internal data and hotspot data trend from satellite imagery to understand any village which is prone to fires.
2. Cooperating with government agencies: In getting external support in the FFVP and aligning with the regional agenda, it is crucial that we work together with government agencies, such as the Coordination Board for Agriculture, Fishery and Forestry (*Bakorluh – Badan Koordinasi Penyuluhan Pertanian, Perikanan dan Kehutanan*), and the Estate Crop Agency (*Dishutbun – Dinas Kehutanan dan Perkebunan*).
3. Signing off agreement with village head: Asian Agri and village head will sign an agreement, after the administration and technical support have been set up.
4. Electing village crew leaders: Our HR department will select members from the community to be village crew leaders if they fulfill certain criteria, such as physical fitness, previous fire-fighting experience, and strong communication skills. Their main role is to prevent fires, conduct patrols, firefight, and report to stakeholders, such as the village head.
5. Training village crew leaders: We conduct training in partnership with stakeholders, such as the Instructor Coordination Board (*Badan Koordinasi Penyuluh*), and the Training Center for Environment and Forestry (*Balai Diklat Lingkungan Hidup dan Kehutanan*).

Implementation of the FFVP

Forest fire prevention has been a national agenda that became a priority for the government, private companies, and local community. In FFVP implementation, Asian Agri works closely with stakeholders, such as the Indonesian National Armed Forces, police, Environmental Affairs and Forestry Ministry's Fire Task Force "Manggala Agni", and the village communities. We are collaborating with them on activities such as joint patrolling, training and knowledge sharing.

Our FFVP consists of the following components:

| | |
|--|--|
| Enhancing Community Awareness | <p>We are engaging with the local community to increase their awareness of the negative health impact of fire and haze. Community awareness is an important foundation for preventing fire risk, understanding that hotspots are mainly initiated in the surrounding communities.</p> <p>To do this, we appoint a group consisting of our estate managers, village crew leaders, members of FFVP called Fire Care Community (<i>Masyarakat Peduli Api</i>), and sub-village heads to coordinate and exchange information regarding fire occurrences within our operations and in the community. Members use an instant messaging platform or mobile phone to alert us on cases.</p> |
| Training Community Leaders | <p>We are selecting the patrons of FFVP villages as Community Fire Crew Leaders and training them as the campaigner of fire prevention and the specialist of fire suppression system. The trainings are conducted by the Manggala Agni, police, Human Resource Training Center of the Ministry of Environment and Forestry, and NGOs.</p> <p>The Community Fire Crew Leaders undergo up to 52 hours of classroom training at the Training Centre for Environment and Forests, as well as three days of practical lessons. During training, participants learn the basic skills needed to use a GPS-based Android, execute fire patrol, inform the public about fire safety and prevention, and participate in carefully controlled fire simulations.</p> <p>In 2022, Community Fire Crew Leaders participated in patrols and discussion sessions with villagers or public officials, with support from village leaders and security personnel.</p> |
| Assisting with Land-Clearing Alternatives | <p>We are educating the communities with alternatives to slash-and-burn land-clearing techniques. Our techniques involve no fire, no harm to peatlands, maintaining soil health, and implementing the circularity of felled trees. Besides, we also assist in the implementation of these alternatives, including lending heavy machinery.</p> |
| Providing 'No-Burn' Incentives to Develop the Local Economy | <p>We will reward the villages that successfully prevent fires in their village for one year with a reward equivalent to IDR100 million. Meanwhile, a partial reward equivalent to IDR50 million is given to villages that limit burning to under one hectare. Instead of distributing the reward in cash, we provide funding that they can use to develop the local economy and infrastructure. In previous years, villages have utilized the reward for the construction of roads, bridges, and places of worship, or the setting up of businesses such as motorcycle wash stations and handicraft stalls.</p> |



'No-Burn Incentives' Distributed

Since 2017, we have distributed a total of IDR 2.7 billion to incentivize villagers involved in FFVP to prevent fires in their communities.

| Year | Number of Villages | Amount Distributed (IDR) |
|------|--------------------|--------------------------|
| 2017 | 5 | 500 million |
| 2018 | 11 | 1,050 million |
| 2019 | 6 | 500 million |
| 2020 | 1 | 100 million |
| 2021 | 4 | 200 million |
| 2022 | 4 | 350 million |

What's Next?

- We will continue to enhance our programs in preventing hotspots and forest fires with various stakeholders, which include raising awareness, capacity building, and community development programs



RESPONSIBLE AND SUSTAINABLE PRODUCTION

“We are highly driven by our vision to be one of the best-managed and sustainable palm oil companies. Asian Agri continuously improves our business to aim for a long-lasting production while generating values to everyone. Our company has been promoting eco-green practices for our sustainable operations since our early years and will continue to improve. Until today, we maintain 100% of our sustainability certifications and have achieved 90% reduction of methane emissions in our 10 biogas plants. In addition, we also strive to implement circular economy best practices, one of which is to eliminate any waste materials from our plantations and mills.”

Mr. Bukit Sanjaya, Deputy Managing Director, Asian Agri



Aligning with SDG 12 of Responsible Consumption and Production, the production process in agriculture companies, especially in the palm oil sector, remains to be the interest of many stakeholders, especially our consumers. The targets in SDG 12 take interests in achieving sustainable management and efficient use of natural resources, improving waste management, promoting sustainable public procurement, and building capacity for sustainable development³³. Those targets are considered prerequisites in upholding human rights in the area of rights to life, rights to adequate food, rights to safe drinking water, and rights to disposal of natural resources.

By aligning with SDG 12 and upholding human rights, Asian Agri understands that there is always room to continuously improve business sustainability and we are excited to embark on this journey. Continuous improvement in good agricultural practices, good manufacturing practices and chemical use reduction are among our commitments to deliver the best product for our consumers.

AA2030 Targets and Performance for Responsible and Sustainable Production

| 2030 Targets | Our Progress in 2022 |
|--|--|
| No new land use change for plantations | Maintain to not open up new land for plantation No land expansion is our living commitment since 2003 and it will remain our commitment moving forward. |
| Promote eco-green for sustainable operations | <ul style="list-style-type: none"> Maintain 100% sustainability certifications Almost 90% reduction of methane emissions in our 10 biogas plants Almost 90% of Biogas yield is used for power generation which is around 40% of total power generated |
| Implementing circular economy best practices | Continuously improving the circularity of our operations in every aspect, one of which is recycling our organic waste to fertilizer. Implementing circular economy for us is like a journey that has no end. We aim to continuously seek ways to improve our circularity. |
| Reduce 50% of pesticide use | Set the pesticide use in 2022 as the baseline of our pesticide use reduction by half in 2030 Identifying the effectiveness of existing biological measures while exploring new strategies |

³³ Retrieved from OHCHR publication on [SDG and Human Rights](#)



RESOURCE USE

Management Approach

GRI 3-3

The oil palm sector is vulnerable to contributions in environmental degradation, especially water stresses and waste pollution. Sector operations require a vast amount of water and generates a bulk quantity, particularly organic waste, both liquid and solid. Therefore, we believe practicing good and responsible agriculture is crucial. At Asian Agri, we are committed to managing our waste and we aim to reuse and recycle as much of the by-products generated as possible. With good management of resource use, we aim to provide assurance for the rights to healthy environment and access for safe resources for our communities to live.

Water Usage

GRI 303-1, 303-3, 303-5

Water is the main component of our operations, therefore we measure and monitor water data of our operations to ensure that water is used sustainably. Water is used for the following purposes:

| | |
|--|---|
| | Power Generation Water is used in our steam turbines for power generation. |
| | Sterilization of FFB Steam sterilization of the FFBs facilitates fruits being stripped from the bunches. It also softens the fruit mesocarp for digestion, facilitates the release of oil, and minimizes kernel breakage. |
| | Household Consumption Daily water uses by our workers and their families including for drinking, washing, and cooking. |
| | Irrigation for Nurseries Water is required for seedlings in nurseries. Plantations that are rainfed do not require irrigation, even during drier seasons. |

For our plantations, we use rainfed and no irrigation systems. As part of our Environmental Impact Assessment, we assess water risk prior to new development and we do not operate in water-stressed areas. Raw water is treated and monitored according to the standard quality parameters for the above uses prior to utilization. Parameters that we analyze and monitor regularly includes pH, Total Dissolved Solid (TDS), silica, total hardness, chlorine level, and alkalinity. The total volume of water withdrawn is regularly measured and monitored at all of our mills. To meet our needs, we depend on two freshwater³⁴ sources below:

| Surface water (Rivers) | Groundwater |
|--|--|
| Utilized for the operations of our mills and for use in our housing complexes (occupied by our employees/workers and their families). All water withdrawn is treated to ensure chemical content is safe for daily use. | Mainly for domestic and agricultural purposes, such as irrigation in nurseries beyond the reach of our mill pumps. |

The table below represent our water withdrawal by source and per region in (Mega Litre) as well as our total water consumption in this reporting period.

| Region | 2022 | | 2021 | | 2020 | |
|-------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | Surface Water | Ground Water | Surface Water | Ground Water | Surface Water | Ground Water |
| North Sumatra | 1,901.52 | 576.56 | 1,946.34 | 594.54 | 1,913.84 | 678.69 |
| Riau | 3,330.31 | 352.77 | 3,112.71 | 347.99 | 2,770.10 | 399.83 |
| Jambi | 1,630.13 | 158.85 | 1,498.18 | 159.53 | 1,294.54 | 159.22 |
| Total | 6,861.96 | 1,088.18 | 6,557.23 | 1,102.10 | 5,978.47 | 1,237.74 |
| Total Water Withdrawn | 7,950.13 | | 7,659.29 | | 7,216.21 | |
| Total Water Discharge ³⁵ | 416.56 | | 81.06 | | 80.24 | |
| Total Water Consumption | 7,533.57 | | 7,678.23 | | 7,135.97 | |

³⁴ water with concentration of total dissolved solids equal to or below 1,000 mg/L

³⁵ Total water discharge is only based on POME and exclude domestic wastewater discharge

Waste Management

GRI 306-1

Our plantation and mill operation produces organic and inorganic waste in the form of solid and liquid waste.

| Organic Waste | Inorganic Waste |
|--|---|
| <p>Solid waste: palm fronds and trunks, EFB, palm fibers, and palm kernel shells</p> <p>Liquid waste: POME</p> | Used lubricant, chemical packaging, oil-stained rags, used battery, medical waste, electronic waste, used air filter, and used resin. |

Palm oil fronds and trunks are large quantities of biomass obtained from plantations. Moreover, from our mills operation, every ton of FFB contains in approximately 15-20% empty fruit bunches (EFB), around 11-12% fibers, and 4-5% palm kernel shells. It also produces a large amount of liquid waste or POME that contains a high amount of organic matter, oil, and grease, Chemical Oxygen Demand (COD) (>50,000 mg/L), and Biochemical Oxygen Demand (BOD) (>25,000 mg/L) which becomes a major threat to aquatic life if it is discharged untreated.

Reducing our Organic Waste

GRI 306-2, 306-3, 306-4, 306-5

Asian Agri has always used a circular economy in its business practices. Furthermore, our best practices in plantations and mills help us to avoid wasting by-products. More organic waste will be produced as our CPO output rises. Therefore, we are continuously attempting to minimize and incorporate it again into our daily operations.

| | | |
|-------------------------|--------------------------------------|---|
| Plantation Waste | Oil Palm Fronds | Applied in the oil palm plantations as soil mulch and fertilizer due to their large quantities of nutrients. Oil Palm Fronds is approximately 14 tons/ha/year while Oil Palm Trunks is only available during replanting. |
| | Oil Palm Trunks | |
| Mill Waste | Empty Fruit Bunch (EFB) | Acts as an organic fertilizer and conserves soil moisture. The EFB from the mill is transported back to the plantation and placed around and in between the tree. |
| | Mesocarp Fiber | As a fuel for boilers to run steam turbines in our mills, providing a renewable source of energy. For PKS, due to their economic value, 85.85% of palm kernel shells produced in 2022 are sold to a third party. Moreover, palm kernel expellers are all sold as cattle feed. |
| | Palm Kernel Shell (PKS) | |
| | Palm Oil Mill Effluent (POME) | Utilization as a land application with flatbed system. After meeting the threshold quality standards, POME will be pumped back to plantations, especially in plantations close to palm oil mills. In addition, we utilize POME as a raw material or feedstock for our biogas power plants. The biogas plants not only act as a POME treatment facility, but also generate clean energy. |

Below is the amount of our organic waste generated from the palm oil mills operation.

| Type of Waste | 2022 | | | 2021 | | | 2020 | | |
|------------------------|-----------------|------------------------------|----------------------------|-----------------|------------------------------|----------------------------|-----------------|------------------------------|----------------------------|
| | Waste generated | Waste diverted from disposal | Waste directed to disposal | Waste generated | Waste diverted from disposal | Waste directed to disposal | Waste generated | Waste diverted from disposal | Waste directed to disposal |
| EFB [MT] | 1,008,519 | 775,625 | - | 899,145 | 899,145 | - | 878,841 | 878,841 | - |
| Fiber [MT] | 732,306 | 732,306 | - | 637,836 | 637,836 | - | 644,446 | 644,446 | - |
| Shell [MT] | 346,089 | 48,964 | - | 318,259 | 55,492 | - | 318,065 | 318,065 | - |
| Total Solid Waste [MT] | 2,086,914 | 1,556,895 | - | 1,855,240 | 1,592,473 | - | 1,841,352 | 1,841,352 | - |
| POME [Mega Litre] | 3,049 | 2,632 | 416.56 | 2,842 | 2,761 | 81.06 | 2,654 | 2,574 | 80.24 |

This year, our total organic waste production is higher than the previous two years. Compared to last year, in 2022, our organic waste has increased by 8.5%. This is in line with our increase in CPO production this year. CPO production will be directly proportional to the waste produced.

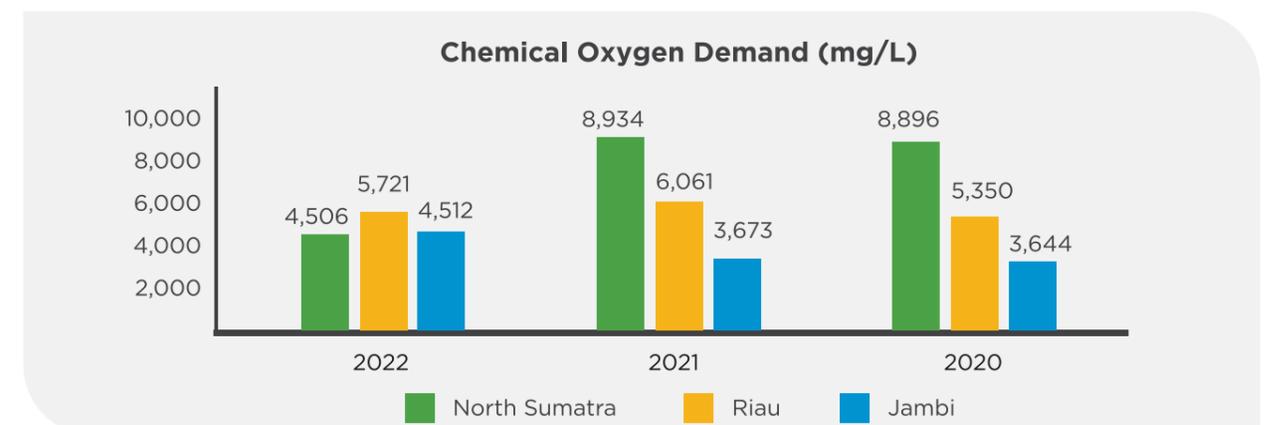
Safe Discharge of Effluents

GRI 303-2, 303-4

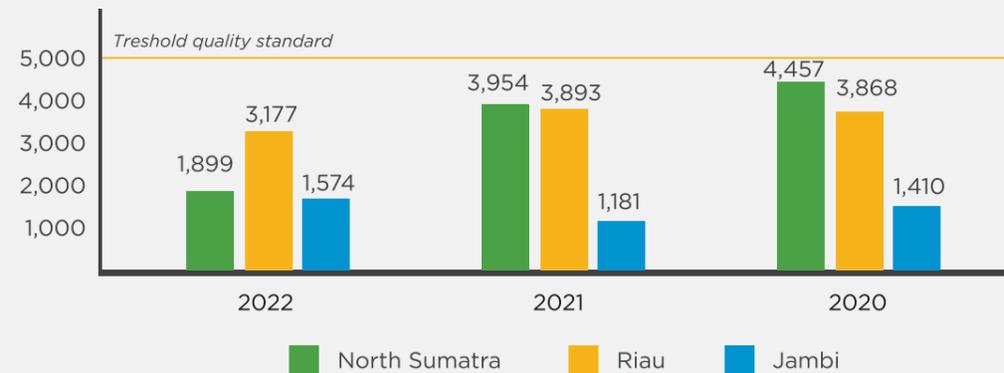
We treat and monitor the quality and quantity of all effluents from our operations prior to being discharged into water bodies or land. In some of our mills, we use POME as feedstock for our biogas plants, while in some others, POME is treated in open pond wastewater treatment facilities. To lower BOD and COD levels, we use pumps to circulate the effluent in the ponds. We also use sprayers and aerator pumps to ensure more oxygen is absorbed into POME. By doing these steps, we can lower the COD and BOD levels to meet the standard required by regulation before discharge.

POME contains Nitrogen, Phosphorus, Potassium, Magnesium, and Calcium, so it can be used as fertilizer. POME land applications also can avoid methane emissions, provide additional water, and nutrients. Additionally, it can help sustain crop yields in years with low rainfall and drought-prone areas. We use POME as organic fertilizer in our plantations in North Sumatra, Riau, and Jambi. We continue to follow and comply with the Minister of Environment Decree No. 28 of 2003 which regulates POME for land application and states that POME quality standards must meet a maximum BOD of 5000 mg/L and a pH between 6 - 9. *This regulation does not regulate COD threshold for land application implementation.*

Below are the graphs of POME for land application as organic fertilizer



Biochemical Oxygen Demand (mg/L)



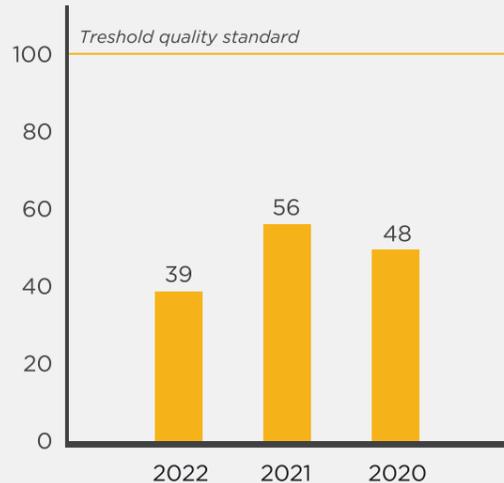
The COD levels in North Sumatra were lower than the previous year by almost half due to testing of samples in different laboratory. This year we sent samples to a lab with better accreditation. Different labs may have different methods and standards. Moreover, the distance from the sample source to the test site can also affect sample quality, which leads to different results range.

In addition, we also follow and comply with the Minister of Environment Regulation No. 5 of 2014 which regulates POME discharge into the environment with maximum quality standards covering BOD 100 mg/L, COD 350 mg/L, and a pH between 6 – 9. Especially for our plantations which are under peatlands in North Sumatra, POME must be discharged into water bodies, in our case is river. Therefore, we continuously monitor its quality to meet regulated standards. We also periodically check the downstream of the river once a month for COD, BOD and pH parameters. The results still comply with applicable regulatory standards. This year, we continued to maintain our effluent lower than the regulated threshold. Our POME discharge is also categorized as freshwater.

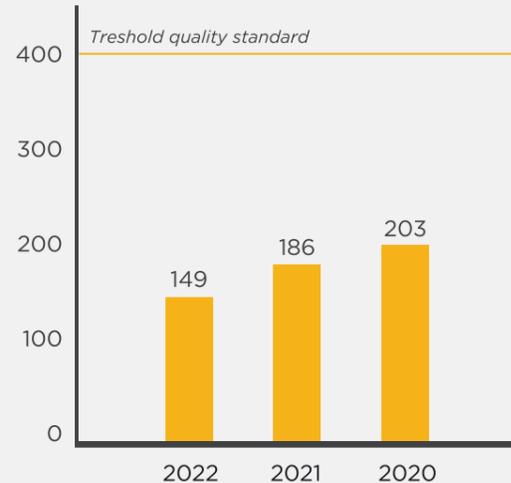
We examined the three parameters stipulated by the Minister of Environment regulations. The pH of effluent discharge into rivers for our palm oil mill in North Sumatra and Riau in 2022 were 7.6 and 8.04 respectively, and 7.7 in average.

Below graphs represent quality of POME discharged into rivers

Biochemical Oxygen Demand (mg/L)



Chemical Oxygen Demand (mg/L)



Managing Inorganic Waste

GRI 306-2, 306-3, 306-4, 306-5

In addition to organic waste, we also manage inorganic waste. For inorganic hazardous waste, we assign licensed service providers to treat hazardous waste approved by the government. Prior to collection, we store hazardous waste in designated areas and monitor it closely. Meanwhile, non-hazardous waste, such as household waste, will be collected and disposed of at dedicated landfills in our concessions, while other wastes such as metal scrap are collected by third-party companies for recycling or to be reused as appropriate. No inorganic waste from our operations is diverted to disposal.

The table below shows the inorganic waste, that are categorized as hazardous waste, generated from our operations each year. All of our hazardous waste is collected by certified third-party companies for recycling and/or disposal according to government environmental regulations.

| Type of Waste [MT] | Hazardous Waste Generation | | | Disposal operations |
|--------------------|----------------------------|---------------|----------------|---|
| | 2022 | 2021 | 2020 | |
| Used lubricant | 59,194 | 53,304 | 57,235 | Incinerations for power generation |
| Chemical packaging | 18,985 | 18,562 | 29,478 | Incinerated |
| Lube filters | 8,434 | 8,109 | 8,799 | Incinerated |
| Battery | 4,562 | 7,043 | 5,402 | Recycle as raw material |
| Medical waste | 0.481 | 0.574 | 0.794 | Incinerated |
| Electronic waste | 0.816 | 0.766 | 0.490 | Incinerated, recycle as raw material (glass tube/ bulb) |
| Used air filter | 0.105 | 0.113 | 0.160 | Incinerated |
| Used resin | 1,089 | 0.275 | - | Incinerated |
| Total | 93,665 | 88,745 | 102,358 | |

Eliminating Losses

GRI 13.9.1

Asian Agri is committed to increase the efficiency across its operations, one of which is to eliminate losses. In our operations, losses are sometimes unavoidable. Losses can occur at any stage of production, among others:

- Loose fruits during FFB harvesting**
 During harvesting, our workers will hand pick the oil palm loose fruits and check that no loose fruit is wasted.
- Loose fruits while transferring FFB to mill**
 Upon arrival of the FFB at the mill, we ensure that no loose fruits are wasted in the process of unloading from the truck until reaching the fruit lorry for sterilization. We will also manage that less palm oil fruit that stuck in the loading ramp.
- Unoptimized oil extraction from process**
 In parallel with facility improvement to segregate our food and non-food grade oil, our machineries have better pressure to extract more oil contains from FFB and EFB. This improvement not only allows us to optimize waste and residue oil, but also prevents oil losses due to suboptimal extraction.
- CPO drops from leaking pipes.**
 Our worker in mill regularly checks mill equipment as a preventive action, so as to prevent CPO drops from happening.

What's Next?

- We will continue to monitor and ensure waste disposal complies with regulations
- We will initiate a target and action plan to reduce water consumption.
- We will maintain and monitor the water consumption intensity (ton FFB/ton water) to ensure the mill operation use water efficiently





PEST MANAGEMENT AND CHEMICAL USAGE

Management Approach

GRI 3-3

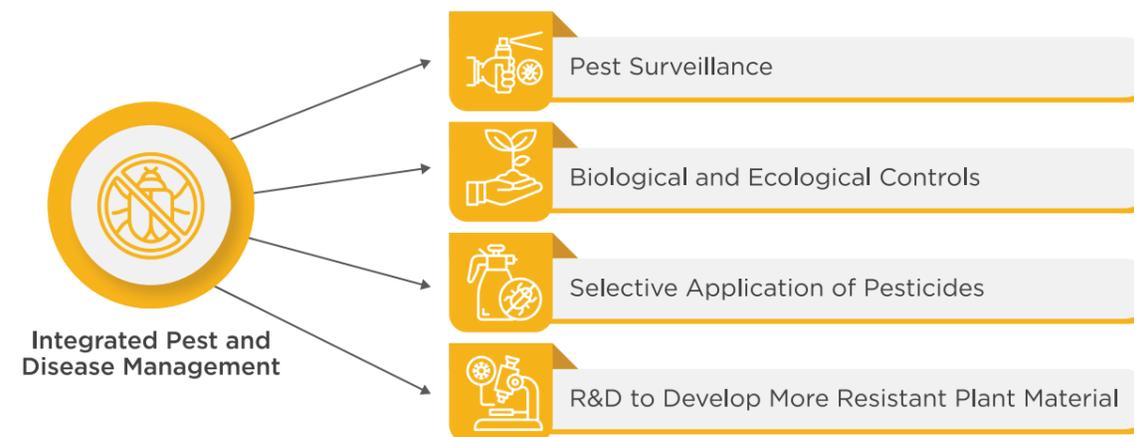
Asian Agri is committed to managing pests and diseases and applying fertilizers using sustainable practices. We continuously make sure that our oil palms stay healthy and continue to produce high yields. To achieve this, controlling pests, parasites, and weeds becomes our focus. At the same time, we always strive to safeguard the natural environment of our plantation. We avoid using unsustainable use of chemicals for fertilizers and pesticides even though they might be the cheapest and most straightforward methods. Our guiding principle is to maintain the sustainability of our plantation environment and protect our people from harmful chemicals, while promoting the rights of healthy living environment for our people.

Our worker releasing assassin bugs to their host plant, white alder flower. Breeding bugs as the natural predator of bagworms is one of our biological pest control.

Integrated Pest and Disease Management (IPM and IDM)

GRI 13.6.1

We implement an IPM and IDM approach in our plantations, in line with standards established under the Agronomy Policy Manual (APM). This means that while we do use chemicals to control pests and diseases, it is done selectively and used in combination with other biological and ecological controls:



Pest Surveillance

Early warning systems for a targeted pesticide application

Close monitoring of pests is the solid foundation for Asian Agri in IPM and IDM, where we are relying on a comprehensive array of tools to monitor pest populations on a regular basis. We implement early warning systems to detect pests to prevent them from spreading, allowing us for targeted pesticide applications. The data gathered also enables us to determine the appropriate course of action, such as selecting the right methods of pest control and applying the right dosage of pesticides. Pest surveillance enables us to optimize our products while minimizing our environmental impact.

Biological and Ecological Controls

Natural methods to reduce the pest population

Asian Agri acknowledges that natural intervention poses fewer negative impacts on the environment and always strives to reduce the use of chemical substances. Our best practice is to fight off pests using their natural predators and improve the ecological environment to sustain the natural pest-predator ecosystem. Our oil palms are at risk of pest species such as rhinoceros beetles, leaf-eating caterpillars, woolly caterpillars, bagworms, bunch moths, rodents, and termites on peat soils. For example, the adult rhinoceros beetle often attacks the shoots of oil palms and young palms, leading to serious damage and even the death of the palm tree. Our methods of biological and ecological control include:

- **Breeding predatory species:** We breed and nurture the predatory species for pests in our plantation. We breed specific species of insects (e.g. *Sycanus* sp.) in our estate insectary and release them periodically to augment natural populations in the field. We avoid over-spraying weeds in the field to maintain the natural habitat for predatory insects. In addition, we also build houses for owls (*Tyto alba*) for them to roost and breed. Owls act as natural predators of rodents.
- **Growing the host plants of predator habitats:** We plant specific plant species which can attract and host predatory insects. White alder (*Turnera subulata*) and coral vine (*Antigonon leptopus*) is planted in many plots on our plantation to be host plants for nettle caterpillar predators, as well as senna (*Cassia coganensis*) for bagworm predators.

- Destruction of pest breeding sites: Using the data gathered from pest surveillance, we detect the pest breeding sites and destroy them.
- Use of traps: We install nets in some spots in our plantation and put sex pheromones on them. The pheromone attracts adult rhinoceros beetles that eventually will not be able to let go of themselves from the net. Besides, we also install lights with food bait to attract and trap moths.
- Use of natural pathogen: We apply naturally occurring pathogens for pests, such as bacteria, fungi, and viruses as a substitute for chemical pesticides.

Rearing barn owls to control the rat population



We house and breed barn owls (*Tyto alba*) in our plantations as they are natural predators of rat pests. Each pair of barn owls can cover 25ha of plantations. At 6 months of age, the owls are ready to leave their nests to hunt for prey. Unlike other predatory birds of prey that rely on speed, owls rely more on their acute hearing ability to detect the location of their prey.

Asian Agri has a dedicated team to monitor and maintain the health of these owls.

Attracting assassin bugs to fight off nettle caterpillars



We also nurture predatory insects named *Sycanus*, a species of assassin bug. These bugs can help to eradicate nettle caterpillars – another common pest in the plantations. To rear these bugs, we grow species of flowers that are home to the *Sycanus*, such as white alder (*Turnera subulata*) and coral vine (*Antigonon leptopus*).

Using natural pathogen as bioagent of pest control

Besides using predatory species, we bring in natural pathogen such as bacteria, fungi, and virus which can cause diseases to pests in our plantation. These pathogens are safe for humans as well as for the natural environment. Examples of the natural pathogens are:

- Bt bacteria (*Bacillus thuringiensis*) is applied to combat oil palm bunch moth (*Tirathaba rufivena*)
- Fungi *Metarhizium* sp. are used to eliminate rhinoceros beetle (*Oryctes rhinoceros*)
- Nucleopolyhedrovirus (NPV) solution is sprayed to eliminate cotton leafworm (*Spodoptera litura*)
- Virus extracted from sick nettle caterpillars (*Parasa lepida*) is applied to infect healthy nettle caterpillar

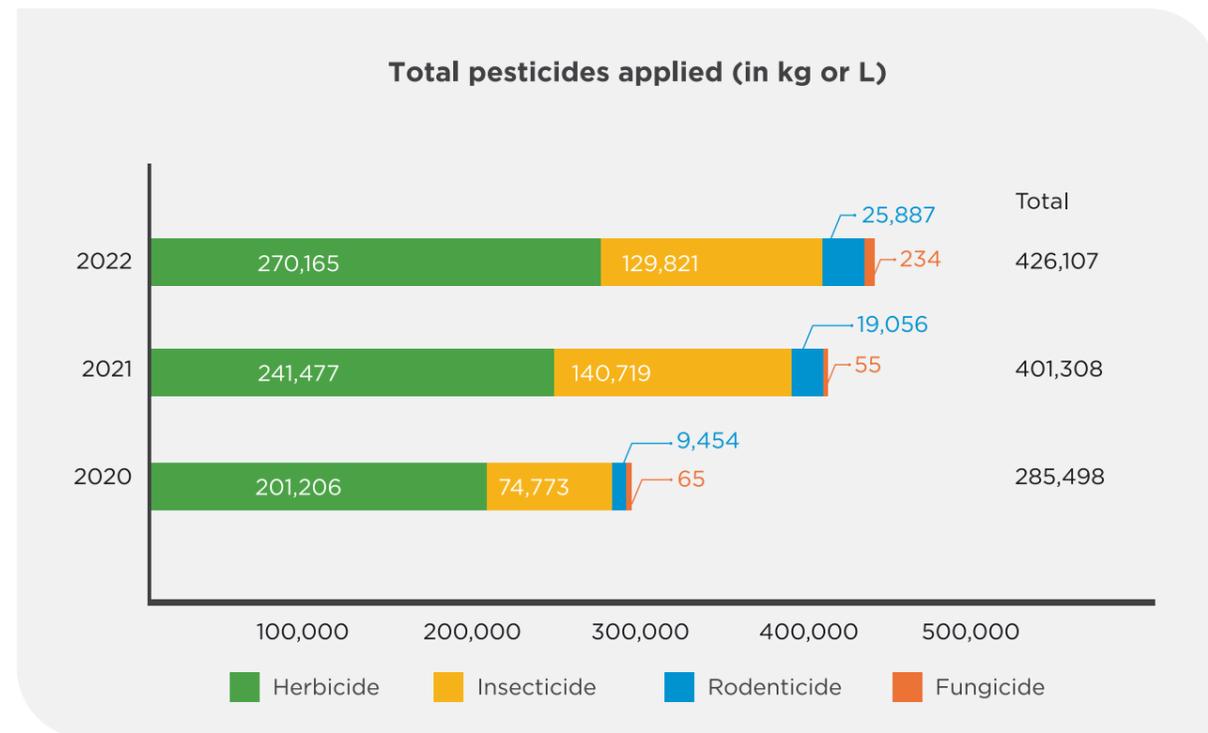
Selective Application of Pesticides

Using selected pesticides in targeted dosage and application

When the biological control cannot keep up with the pest attack on the determined threshold, we apply chemical pesticides to our oil palms as necessary only and in a targeted manner. For example, pesticides are applied via trunk injection or root infusion technology, or by spraying the shoots and axils of young palms.

We only procure registered pesticides and monitor their types and dosages. Since November 2019, we have prohibited the use of World Health Organisation (WHO) Class 1A and Class 1B pesticides, chemicals listed under the Stockholm Convention and Rotterdam Convention, as well as the use of paraquat.

To ensure the safety of our workers when handling pesticides and other chemicals, we provide them with adequate PPE and training on the application of each pesticide type, including the stop-work scenario when the hazard is heightened at a certain point. To maintain the health of our people, workers who have frequent contact with pesticides undergo regular medical check-ups twice a year. Pregnant workers will be allocated to other assignments in a safer environment until they are permitted to resume working with chemicals.



The trend indicates a rise in our pesticide usage from 2021 to 2022, primarily driven by the increased usage of herbicides to combat weed growth during periods of high rainfall. Additionally, the usage of rodenticides has also increased due to intensified protection measures during replanting.

R&D to Develop More Resistant Plant Material

We also develop new planting material which is more tolerant towards diseases, in particular *Ganoderma boninense*. Our research team is also focusing on the most suitable techniques and methods to control pest populations.

Controlling root pathogen in oil palms with more resistant planting materials

Ganoderma boninense is pathogenic fungus one of major threats for oil palms, especially the roots. *G.boninense* is the cause of Basal Stem Rot disease that may lead oil palms to death. In the past, thousands of our oil palm trees in North Sumatra were once infected by Ganorderma and made us conduct early replanting cycles. After years of research and evaluation, our R&D team developed an IDM strategy against the pathogen which includes:

- Planting pathogen-tolerant oil palm varieties e.g. Topaz GT D x P. Topaz GT D x P variety is one of the breakthroughs that is developed by our in-house researchers.
- Inoculating oil palm seedlings with a fungal bioagent for added protection. Our R&D team introduced endophytic *Trichoderma spp.* to oil palms during nursery screening, that has been found to be effective in suppressing *G.boninense* infection
- Ensuring a proper land preparation to reduce the amount of *G.boninense* inoculum in the soil
- Conducting a regular census and removal of infected oil palms to reduce the risk of infection of healthy palms

Fertilizer Usage

GRI 13.5.1

Besides water, fertilizer is the staple need of oil palm cultivation. It makes up to 35% of CPO production costs and is subject to price fluctuations. In 2022, the global price for nitrogen and ammonia fertilizer experienced a significant hike that impacted national prices. Despite the challenge, we did not get lenient with our best practice in fertilizer application and follow through the recommendations from our R&D.

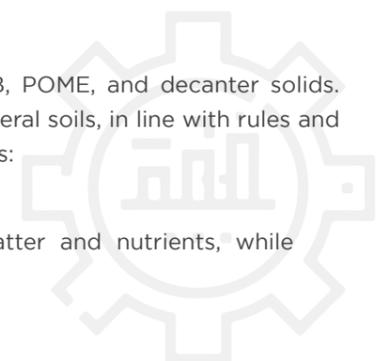
On the other hand, improper use of inorganic fertilizer may pose negative impacts on our workers, the environment, and communities. For example, excessive fertilization can lead to severe pollution of groundwater and waterways. Therefore, Asian Agri adopted our approach in applying inorganic fertilizers following the 4C stewardship approach: Correct dosage, Correct method, Correct timing, and Correct placement. At the same time, we also reduced the use of inorganic fertilizers as much as possible, replacing them with organic fertilizers from our waste by-products.

In the application of fertilizers, we also ensure the health and safety of our workers with the same manner as the application of pesticides.

Using organic fertilizers

Our mills produce a significant amount of waste by-products, namely EFB, POME, and decanter solids. Currently, 100% of all waste by-products are used for land application on mineral soils, in line with rules and specifications by the Ministry of Agriculture. This brings about several benefits:

- Lowering pollution risks
- Improving the sustainability of the soil by incorporating organic matter and nutrients, while conserving moisture
- Cost-effectiveness from the partial substitution of inorganic fertilizers



Using inorganic fertilizers

Organic fertilizers alone are insufficient for our oil palms, thus we complement organic fertilizers with inorganic fertilizers.

In general, inorganic fertilizers are vital for younger oil palms for optimum growth and the intake is high, particularly during their prime years of 8-20 years of age. When the oil palm reaches around 23 years of age, or 2 years before they are felled, we stop applying fertilizers.

We continuously monitor our use of inorganic fertilizer to assess the effectiveness of the fertilizer use. We adopt 4C stewardship approach to maintain inorganic fertilizer use at a normal threshold and prevent excessive use of chemicals that may pose harms to the environment.

The average ratio of inorganic fertilizer usage (ton/Ha)

| Region | 2022 | 2021 | 2020 |
|-----------------------|-------------|-------------|-------------|
| Mature Plant | | | |
| North Sumatra | 1.09 | 1.28 | 1.28 |
| Riau | 1.10 | 1.18 | 1.15 |
| Jambi | 1.14 | 1.23 | 1.27 |
| Average | 1.10 | 1.23 | 1.23 |
| Immature Plant | | | |
| North Sumatra | 0.60 | 0.60 | 0.75 |
| Riau | 0.85 | 0.59 | 0.92 |
| Jambi | 0.98 | 0.89 | 0.80 |
| Average | 0.76 | 0.70 | 0.81 |



'Site-specific' fertilizer program

In our pursuit of a sustainable journey in preventing the over-application of fertilizers, Asian Agri adopts a 'site-specific' fertilizer program for our estates. We rely on a dedicated team within our R&D department to provide recommendations on the proper application of both organic and inorganic fertilizers based on a "balanced nutrient budget" concept. The recommendation is made for each specific field, with an understanding that each site has different plant characteristics, soil profiles, and microclimate. This 4C fertilizer stewardship approach ensures we produce the maximum yield at the lowest fertilizer dosage. We also conduct annual leaf tissue analysis and soil survey analysis every five years to monitor the health of the oil palms. R&D also evaluates new, cost-effective fertilizer technology to improve nutrient uptake efficiency and minimize losses and environmental pollution.

Soil Management

GRI 13.5.1

Good quality soil is essential to produce oil palm and maintain our sustainability. It is imperative to protect the organic matter in the topsoil from degradation and reduce soil erosion, given that three-quarters of our estates are on mineral soil and are located in a humid and tropical climate. We develop and use soil maps of our estates to guide our soil management process. To mitigate soil erosion, we employ the following methods:

- Applying fertilizers properly to maintain the balance of soil minerals and their physical structure.
- Planting legume cover crops in newly cleared areas before planting oil palms to restore the nitrogen level. In the mature phase of the oil palm tree lifecycle, we also maintain a good cover of mixed natural vegetation.
- Selective weeding to avoid removing certain plants which protect the soil.
- Terracing and stacking pruned oil palm fronds along the contour of estates using slopes to reduce surface run-off.
- Constructing planting terraces and soil traps to reduce soil erosion in steeper areas.

What's Next?

- We will continue to explore new strategies in reducing our pesticide use and identify new approaches in our biological control. Our R&D team works closely with the teams in the plantation to understand necessary interventions that are environmentally friendly.



ASSURANCE STATEMENT

SGS INDONESIA'S REPORT ON SUSTAINABILITY ACTIVITIES IN THE THE ASIAN AGRICULTURE SUSTAINABILITY REPORT 2022

NATURE OF THE ASSURANCE/VERIFICATION

PT. SGS Indonesia was commissioned by Asian Agri to conduct an independent assurance of the Sustainability Report 2022. The scope of the assurance, based on the SGS Sustainability Report Assurance methodology, included the text, and data in accompanying tables, contained in this report.

INTENDED USERS OF THIS ASSURANCE STATEMENT

This Assurance Statement is provided with the intention of informing all Asian Agri's stakeholders

RESPONSIBILITIES

The information in the Report and its presentation are the responsibility of the directors or governing body and the management of Asian Agri. SGS has not been involved in the preparation of any of the material included in the Report.

Our responsibility is to express an opinion on the text, data, graphs and statements within the scope of verification with the intention to inform Asian Agri's stakeholders.

ASSURANCE STANDARDS, TYPE AND LEVEL OF ASSURANCE

The SGS ESG & Sustainability Report Assurance protocols used to conduct assurance are based upon internationally recognised assurance guidance and standards including the principles of reporting process contained within the Global Reporting Initiative Sustainability Reporting Standards (GRI Standards) GRI 1: Foundation 2021 for report quality, GRI 2 General Disclosure 2021 for organisation's reporting practices and other organizational detail, GRI 3 2021 for organisation's process of determining material topics, its list of material topics and how it manages each topic, and the guidance on levels of assurance contained within the AA1000 series of standards.

The assurance of this report has been conducted according to the following Assurance Standards:

- SGS ESG & SRA Assurance Protocols (based on GRI Principles and guidance in AA1000)
- AA1000ASv3 Type 2 (AA1000AP Evaluation) with level of assurance is Moderate.

Assurance has been conducted at a moderate level of scrutiny

SCOPE OF ASSURANCE AND REPORTING CRITERIA

The scope of the assurance included evaluation of quality, accuracy and reliability of specified performance information as detailed below and evaluation of adherence to the following reporting criteria:

- Global Reporting Initiative Sustainability Reporting Standards 2021 (in accordance) and GRI 13: Agriculture, Aquaculture and Fishing Sectors 2022
- AA1000 Accountability Principles (2018)

ASSURANCE METHODOLOGY

The assurance comprised a combination of pre-assurance research and interviews with relevant accountable managers and employees at the representing office at Jakarta , and site visit to :

- Tungkul Ulu both mill and estate in Jambi Province
- Muara Bulian both mill and estate in Jambi Province
- Gunung Melayu 1 both mill and estate in North Sumatera Province
- Gunung Melayu 2 both mill and estate in North Sumatera Province

Asian Agri Sustainability report 2022 covers PT. Inti Indosawit Subur as parent company and 12 subsidiaries.

Companies operates in 3 Provinces, North Sumatera Province, Riau Province and Jambi Province.

LIMITATIONS AND MITIGATION

Financial data drawn directly from independently audited financial accounts has not been checked back to source as part of this assurance process.

Some statements and data within the scope were not assured due to lack of accessible records during the timescale allowed for assurance, and these are clearly marked throughout the Report.

STATEMENT OF INDEPENDENCE AND COMPETENCE

The SGS Group of companies is the world leader in inspection, testing and verification, operating in more than 140 countries and providing services including management systems and service certification; quality, environmental, social and ethical auditing and training; environmental, social and sustainability report assurance. SGS affirm our independence from Asian Agri , being free from bias and conflicts of interest with the organization, its subsidiaries and stakeholders.

The assurance team was assembled based on their knowledge, experience and qualifications for this assignment, and comprised auditors registered with International Register of Certificated Auditors (IRCA), Environmental Management System (EMS) Lead Auditor, Quality Management System (QMS) Lead Auditor, Occupational Health and Safety Assessment Series (OHSAS) Lead Auditor , Round Table on Sustainable Palm Oil (RSPO) Auditor, International Sustainability and Carbon Certification (ISCC) Auditor. Some members of the assurance team have completed the IRCA Corporate Responsibility Training Programme and have experience of auditing in Palm Oil Estate and Crude Palm Oil Plant and are internationally renowned for their expertise in sustainability.

FINDINGS AND CONCLUSIONS

ASSURANCE/VERIFICATION OPINION

On the basis of the methodology described and the verification work performed, we are satisfied that the specified performance information included in the scope of assurance is accurate, reliable, has been fairly stated and has been prepared, in all material respects, in accordance with the reporting criteria.

We believe that the organisation has chosen an appropriate level of assurance for this stage in their reporting.

QUALITY AND RELIABILITY OF SPECIFIED PERFORMANCE INFORMATION

1. It is recommended to improve internal system and control by implementing data validation on primary source data.

ADHERENCE TO AA 1000 ACCOUNTABILITY PRINCIPLES STANDARD (2018)

Inclusivity

Asian Agri has made a commitment to be accountable to those on whom it has an impact or who have an impact on it as stated in policies such as Environmental Policies, High Carbon Stock Conservation, Green House Gases Monitoring and Mitigation, and Zero Burning Policy, Code of Conduct Policy. Inclusivity is the participation of stakeholders in developing and achieving an accountable and strategic response to sustainability.

Materiality

Asian Agri has identified stakeholders and issues that are material to each group of stakeholders and the Report addresses these at the appropriate level to reflect their importance and priority to these stakeholders. Asian Agri determine materiality aspects based on crucial issues and concerns of stakeholders that collected by interview and online survey to stakeholders including employees, buyers, smallholders, certification bodies, NGO, consultants, academics, banking, governments. Materiality which to be high priority issues are fire prevention and management, community development, human rights and worker's welfare, smallholders empowerment, and occupational health and safety.

Responsiveness

Asian Agri has responded to stakeholder's issues that may affect its sustainability performance and is addressed through decisions, actions and performance, as well as communication with stakeholders.

Impact

Asian Agri has identified and fairly represented impacts that were monitored and measured. Asian Agri has established processes to monitor, measure and evaluate impacts that lead to effective decision making management within organization.

ADHERENCE TO GLOBAL REPORTING INITIATIVE SUSTAINABILITY REPORTING STANDARDS (2021)

In our opinion, the the Asian Agri Sustainability Report 2022 is presented in accordance with the Global Reporting Initiative Sustainability Reporting Standards 2021 and GRI 13: Agriculture, Aquaculture and Fishing Sectors 2022 and fulfills all the required content and quality criteria.

Foundation

In our opinion, the content and quality of the report adheres to the GRI Reporting Principles of Balance, Clarity, Comparability, Completeness, Sustainability context, Timeliness and Verifiability

General Disclosures

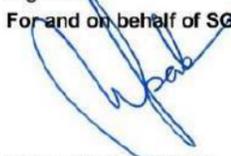
All the General disclosures required for reporting in accordance with the Global Reporting Initiative Sustainability Reporting Standards 2021

Material Topics

Asian Agri disclose material topics that represent an organization's most significant impacts on the economy, environment, and people, in accordance with Global Reporting Initiative Sustainability Reporting Standards 2021 and GRI 13: Agriculture, Aquaculture and Fishing Sectors 2022

Signed:

For and on behalf of SGS Indonesia



Waras Putri Andrianti
Business Manager
Jakarta, Indonesia
2 May 2023

WWW.SGS.COM



AA1000
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GRI Content Index

| | |
|---------------------------------------|--|
| Statement of use | Asian Agri has reported in accordance with the GRI Standards for the period of 1 st January until 31 st December 2022. |
| GRI 1 used | GRI 1: Foundation 2021 |
| Applicable GRI Sector Standard | GRI 13: Agriculture, Aquaculture and Fishing Sectors |

| GRI STANDARD | GRI NUMBER | DISCLOSURE | PAGE | OMISSION |
|---------------------------------|------------|---|--------------|--|
| GENERAL DISCLOSURE | | | | |
| GRI 2: General Disclosures 2021 | 2-1 | Organizational details | 11 | |
| | 2-2 | Entities included in the organization's sustainability reporting | 5, 11 | |
| | 2-3 | Reporting period, frequency and contact point | 5 | |
| | 2-4 | Restatements of information | 92-93, 95-96 | |
| | 2-5 | External assurance | 131-133 | |
| | 2-6 | Activities, value chain and other business relationships | 11-12 | |
| | 2-7 | Employees | 72-73 | |
| | 2-8 | Workers who are not employees | 72-73 | |
| | 2-9 | Governance structure and composition | 16 | |
| | 2-10 | Nomination and selection of the highest governance body | | Confidentiality constraint. Given that Asian Agri is a group of private companies, we restrict disclosure of the matter. |
| | 2-11 | Chair of the highest governance body | 16 | |
| | 2-12 | Role of the highest governance body in overseeing the management of impacts | 16, 23-24 | |
| | 2-13 | Delegation of responsibility for managing impacts | 16, 23-24 | |
| | 2-14 | Role of the highest governance body in sustainability reporting | 16 | |
| | 2-15 | Conflicts of interest | 16 | |
| | 2-16 | Communication of critical concerns | 33-34 | |
| | 2-17 | Collective knowledge of the highest governance body | 23 | |

GRI Content Index

| GRI STANDARD | GRI NUMBER | DISCLOSURE | PAGE | OMISSION |
|-----------------------------|------------|--|------------|--|
| | 2-15 | Conflicts of interest | 16 | |
| | 2-16 | Communication of critical concerns | 33-34 | |
| | 2-17 | Collective knowledge of the highest governance body | 23 | |
| | 2-18 | Evaluation of the performance of the highest governance body | 16 | |
| | 2-19 | Remuneration policies | | Confidentiality constraint. Given that Asian Agri is a group of private companies, we restrict disclosure of the matter. |
| | 2-20 | Process to determine remuneration | 75 | |
| | 2-21 | Annual total compensation ratio | | Confidentiality constraint. Given that Asian Agri is a group of private companies, we restrict disclosure of the matter. |
| | 2-22 | Statement on sustainable development strategy | 6-7, 22-23 | |
| | 2-23 | Policy commitments | 13, 18, 35 | |
| | 2-24 | Embedding policy commitments | 23-24 | |
| | 2-25 | Processes to remediate negative impacts | 33-34 | |
| | 2-26 | Mechanisms for seeking advice and raising concerns | 33-34 | |
| | 2-27 | Compliance with laws and regulations | 16 | |
| | 2-28 | Membership associations | 26-28 | |
| | 2-29 | Approach to stakeholder engagement | 24-26 | |
| | 2-30 | Collective bargaining agreements | 63 | |
| MATERIAL TOPIC | | | | |
| GRI 3: Material Topics 2021 | 3-1 | Process to determine material topics | 19-20 | |
| | 3-3 | List of material topics | 21 | |

GRI Content Index

| GRI STANDARD | GRI NUMBER | DISCLOSURE | PAGE | GRI 13 REFERENCES |
|---|------------|--|----------|-------------------|
| CORPORATE GOVERNANCE | | | | |
| GRI 3: Material Topics 2021 | 3-3 | Management of material topics | 16 | 13.25.1, 13.26.1 |
| GRI 205: Anti-Corruption 2016 | 205-2 | Communication and training about anti-corruption policies and procedures | 16 | 13.26.3 |
| | 205-3 | Total number and nature of confirmed incidents of corruption | 16 | 13.26.4 |
| GRI 206: Anti-competitive Behavior 2016 | 206-1 | Legal actions for anti-competitive behavior, anti-trust, and monopoly practices | 16 | 13.25.2 |
| GRI 207: Tax 2019 | 207-1 | Approach to tax | 16 | |
| SMALLHOLDER EMPOWERMENT | | | | |
| GRI 3: Material Topics 2021 | 3-3 | Management of material topics | 38 | 13.22.1 |
| GRI 203: Indirect Economic Impacts 2016 | 203-1 | Infrastructure investments and services supported | 41 | 13.22.3 |
| | 203-2 | Significant indirect economic impacts | 41-49 | 13.22.4 |
| GRI 413: Local Communities 2016 | 413-1 | Operations with local community engagement, impact assessments, and development programs | 39-49 | 13.12.2 |
| SUSTAINABLE SUPPLY CHAINS | | | | |
| GRI 3: Material Topics 2021 | 3-3 | Management of material topics | 50 | 13.23.1 |
| GRI 308: Supplier Environmental Assessment 2016 | 308-1 | New suppliers that were screened using environmental criteria | 52 | |
| GRI 414: Supplier Social Assessment 2016 | 414-1 | New suppliers that were screened using social criteria | 52 | |
| GRI 13.23. Supply Chain Traceability | 13.23.2 | Describe the level of traceability in place for each product sourced, for example, whether the product can be traced to the national, regional, or local level, or a specific point of origin (e.g., farms, hatcheries, and feed mill levels). | 53-56 | 13.23.2 |
| | 13.23.3 | Report the percentage of sourced volume certified to internationally recognized standards that trace the path of products through the supply chain, by product and list these standards. | 27-28,46 | 13.23.3 |

GRI Content Index

| GRI STANDARD | GRI NUMBER | DISCLOSURE | PAGE | GRI 13 REFERENCES |
|--|------------|---|-------|----------------------------|
| | 13.23.4 | Describe improvement projects to get suppliers certified to internationally recognized standards that trace the path of products through the supply chain to ensure that all sourced volume is certified. | 46-47 | 13.23.4 |
| LABOR RIGHTS AND WORKERS WELFARE | | | | |
| GRI 3: Material Topics 2021 | 3-3 | Management of material topics | 61 | 13.15.1, 13.16.1, 13.17.1, |
| GRI 408: Child Labour 2016 | 408-1 | Operations and suppliers at significant risk for incidents of child labour | 62 | 13.18.1 13.17.2 |
| GRI 409: Forced or Compulsory Labour 2016 | 409-1 | Operations and suppliers at significant risk for incidents of forced or compulsory labour | 62 | 13.16.2 |
| GRI 405: Diversity and Equal Opportunity 2016 | 405-1 | Diversity of governance bodies and employees | 62-63 | 13.15.2 |
| | 405-2 | Ratio of basic salary and remuneration of women to men | 75 | 13.15.3 |
| GRI 407: Freedom of Association and Collective Bargaining 2016 | 407-1 | Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk | 63 | 13.18.2 |
| OCCUPATIONAL HEALTH AND SAFETY | | | | |
| GRI 3: Material Topics 2021 | 3-3 | Management of material topics | 64 | 13.19.1 |
| GRI 403: Occupational Health and Safety 2018 | 403-1 | Occupational health and safety management system | 64-65 | 13.19.2 |
| | 403-2 | Hazard identification, risk assessment, and incident investigation | 68 | 13.19.3 |
| | 403-3 | Occupational health services | 69 | 13.19.4 |
| | 403-4 | Worker participation, consultation, and communication on occupational health and safety | 65-66 | 13.19.5 |
| | 403-5 | Worker training on occupational health and safety | 65 | 13.19.6 |
| | 403-6 | Promotion of worker health | 68 | 13.19.7 |
| | 403-7 | Prevention and mitigation of occupational health and safety impacts directly linked by business relationships | 66 | 13.19.8 |

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| GRI STANDARD | GRI NUMBER | DISCLOSURE | PAGE | GRI 13 REFERENCES |
|--|------------|--|---------|-------------------|
| | 403-8 | Workers covered by an occupational health and safety management system | 64 | 13.19.9 |
| | 403-9 | Work-related injuries | 70-71 | 13.19.10 |
| EMPLOYEE ATTRACTION, MANAGEMENT AND RETENTION | | | | |
| GRI 3: Material Topics 2021 | 3-3 | Management of material topics | 72 | 13.15.1, 13.20.1 |
| GRI 405: Diversity and Equal Opportunity 2016 | 405-2 | Ratio of basic salary and remuneration of women to men | 75 | 13.15.3 |
| GRI 201: Economic Performance 2016 | 201-3 | Defined benefit plan obligations and other retirement plans | 76 | |
| GRI 202: Market Presence 2016 | 202-1 | Ratios of standard entry level wage by gender compared to local minimum wage | 75 | |
| GRI 401: Employment 2016 | 401-1 | New employee hires and employee turnover | 74 | |
| | 401-2 | Benefits provided to full-time employees that are not provided to temporary or part-time employees | 75 | |
| GRI 404: Training and Education 2016 | 404-1 | Average hours of training per year per employee | 79-80 | |
| | 404-2 | Programs for upgrading employee skills and transition assistance programs | 79 | |
| RIGHTS OF LOCAL COMMUNITIES AND COMMUNITY DEVELOPMENT | | | | |
| GRI 3: Material Topics 2021 | 3-3 | Management of material topics | 82 | 13.12.1, 13.14.1 |
| GRI 413: Local Communities 2016 | 413-1 | Operations with local community engagement, impact assessments, and development programs | 83-84 | 13.12.2 |
| GRI 13.14: Right of Indigenous People | 13.14.3 | List the locations of operations where indigenous peoples are present or affected by activities of the organization. | 83 | 13.14.3 |
| | 13.14.4 | Report if the organization has been involved in a process of seeking free, prior, and informed consent (FPIC) from indigenous peoples for any of the organization's activities | 83 | 13.14.4 |
| GRI 13.9 Food Security | 13.9.1 | <ul style="list-style-type: none"> Describe the effectiveness of actions and programs on food security at local, regional, national, or global levels. | 86, 119 | 13.9.1 |

GRI Content Index

| GRI STANDARD | GRI NUMBER | DISCLOSURE | PAGE | GRI 13 REFERENCES |
|--|------------|--|------------|-------------------|
| | | <ul style="list-style-type: none"> Report partnerships which the organization is part of that address food security, including engagement with governments. Describe policies or commitments to address food loss in the supply chain. | | |
| CONSUMER HEALTH AND SAFETY | | | | |
| GRI 3: Material Topics 2021 | 3-3 | Management of material topics | 87 | 13.10.1 |
| GRI 416: Customer Health and Safety 2016 | 416-1 | Assessment of the health and safety impacts of product and service categories | 88 | 13.10.2 |
| GRI 13.10 Food Safety | 13.10.4 | Report the percentage of production volume from sites certified to internationally recognized food safety standards, and list these standards | 27-28,46 | 13.10.4 |
| ENERGY AND CARBON MANAGEMENT | | | | |
| GRI 3: Material Topics 2021 | 3-3 | Management of material topics | 91, 97-100 | 13.1.1 |
| GRI 302: Energy 2016 | 302-1 | Energy consumption within the organisation | 93 | |
| | 302-3 | Energy intensity | 93 | |
| GRI 305: Emissions 2016 | 305-1 | Direct (Scope 1) GHG emissions | 95 | 13.1.2 |
| | 305-2 | Energy indirect (Scope 2) GHG emissions | 95 | 13.1.3 |
| | 305-4 | GHG emissions intensity | 95 | 13.1.5 |
| BIODIVERSITY AND CONSERVATION | | | | |
| GRI 3: Material Topics 2021 | 3-3 | Management of material topics | 101 | 13.3.1, 13.4.1 |
| GRI 304: Biodiversity 2016 | 304-1 | Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas | 103 | 13.3.2 |
| | 304-2 | Significant impacts of activities, products and services on biodiversity | 102-103 | 13.3.3 |
| | 304-3 | Habitats protected or restored | 102 | 13.3.4 |
| | 304-4 | IUCN Red List species and national conservation list species with habitats in areas affected by operations | 103 | 13.3.5 |

GRI Content Index

| GRI STANDARD | GRI NUMBER | DISCLOSURE | PAGE | GRI 13 REFERENCES |
|--|------------|--|--------------|-------------------|
| GRI 2: General Disclosure 2021 | 2-27 | Compliance with laws and regulations | 16 | |
| GRI 13.4: Natural Ecosystem Conversion | 13.4.2 | Report the percentage of production volume from land owned, leased or managed by the organization determined to be deforestation- or conversion-free, by product, and describe the assessment methods used. | 18 | 13.4.2 |
| FIRE PREVENTION AND MANAGEMENT | | | | |
| GRI 3: Material Topics 2021 | 3-3 | Management of material topics | 105-110 | |
| RESOURCE USE | | | | |
| GRI 3: Material Topics 2021 | 3-3 | Management of material topics | 114 | 13.7.1, 13.8.1 |
| GRI 303: Water and Effluents 2018 | 303-1 | Interactions with water as a shared resource | 115 | 13.7.2 |
| | 303-2 | Management of water discharge related impacts | 117-118 | 13.7.3 |
| | 303-3 | Water withdrawal | 115 | 13.7.4 |
| | 303-4 | Water discharge | 117-118 | 13.7.5 |
| | 303-5 | Water consumption | 115 | 13.7.6 |
| GRI 306: Waste 2020 | 306-1 | Waste generation and significant waste-related impacts | 116 | 13.8.2 |
| | 306-2 | Management of significant waste-related impacts | 116-117 | 13.8.3 |
| | 306-3 | Waste generated | 116-117, 119 | 13.8.4 |
| | 306-4 | Waste diverted from disposal | 116-117 | 13.8.5 |
| | 306-5 | Waste directed to disposal | 116-117 | 13.8.6 |
| PEST MANAGEMENT AND CHEMICALS USAGE | | | | |
| GRI 3: Material Topics 2021 | 3-3 | Management of material topics | 122 | |
| GRI 13.6 Pesticide | 13.6.1 | <ul style="list-style-type: none"> Describe the pest management plan of the organization, including the rationale for the selection and application of pesticides and any other practices of pest control. Describe actions taken to prevent, mitigate and/or remediate negative impacts associated with the use of extremely and highly hazardous pesticides. | 123-127 | 13.6.1 |

GRI Content Index

| GRI STANDARD | GRI NUMBER | DISCLOSURE | PAGE | GRI 13 REFERENCES |
|--------------------------|------------|---|---------|-------------------|
| | | <ul style="list-style-type: none"> Describe the actions, initiatives, or plans to switch to less hazardous pesticides and actions taken to optimize pest control practices. Describe the training provided to workers on pest management and the application of pesticides." | | |
| Use GRI 13.5 Soil Health | 13.5.1 | Describe the soil management plan, including: <ul style="list-style-type: none"> A link to this plan if publicly available; The main threats to soil health identified and a description of the soil management practices used; The approach to input optimization, including the use of fertilizers." | 127-130 | 13.5.1 |

ABBREVIATION

| | | |
|----------|--------|---|
| A | AALI | Asian Agri Learning Institute |
| | AA2030 | Asian Agri's goals for 2030 |
| | AMDAL | Analisis Dampak Lingkungan |
| B | BOD | Biochemical Oxygen Demand |
| C | CDP | Carbon Disclosure Project |
| | COD | Chemical Oxygen Demand |
| | CPO | Crude Palm Oil |
| | CSR | Corporate Social Responsibility |
| | CPKO | Crude Palm Kernel Oil |
| | CSV | Corporate Shared Value |
| D | DLW | Decent Living Wage |
| E | EFB | Empty Fruit Bunch |
| | ESG | Environmental, Social and Governance |
| | EU | European Union |
| F | FAC | Fire Awareness Community |
| | FFA | Fire Free Alliance |
| | FFB | Fresh Fruit Bunch |
| | FFVP | Fire-Free Village Programme |
| | FPIC | Free, Prior and Informed Consent |
| G | GHG | Green House Gas |
| | GMP | Good Manufacturing Practice |
| | GRI | Global Reporting Initiative |
| H | HCS | High Carbon Stock |
| | HCV | High Conservation value |
| | HCSA | High Carbon Stock Approach |
| | HSE | Health, Safety and Environment |
| I | IDR | Indonesian Rupiah |
| | IDM | Integrated Disease Management |
| | ILO | International Labour Organisation |
| | IPCC | Intergovernmental Panel on Climate Change |
| | IPM | Integrated Pest Management |
| | ISCC | International Sustainability and Carbon Certification |
| | ISO | International Organization for Standardisation |
| | ISPO | Indonesia Sustainable Palm Oil |
| | IUCN | International Union for Conservation of Nature |
| J | JSA | Job Safety Analysis |

ABBREVIATION

| | | |
|----------|--------|---|
| K | KCP | Kernel Crushing Plant |
| | KPPA | Kredit Koperasi Primer untuk Anggota |
| | KUD | Koperasi Unit Desa |
| N | NDC | Nationally Determined Contribution |
| | NGO | Non Governmental Organization |
| | NDPE | No Deforestation, No Peat and No Exploitation |
| | NPP | New Planting Procedures |
| O | OHCHR | Office of the United Nations High Commissioner for Human Rights |
| | OHS | Occupational Health and Safety |
| P | PK | Palm Kernel |
| | PKS | Palm Kernel Shell |
| | POME | Palm Oil Mill Effluent |
| | PPE | Personal Protective Equipment |
| R | R&D | Research and Development |
| | RGE | Royal Golden Eagle |
| | RSPO | Roundtable on Sustainable Palm Oil |
| S | SDG | Sustainable Development Goals |
| | SEIA | Social and Environmental Impact Assessments |
| | SMILE | SMallholder Inclusion for better Livelihood & Empowerment |
| | SPOTT | Sustainability Policy Transparency Toolkit |
| T | TNI | Indonesian National Armed Forces |
| | TOPICC | Complimentary Team, Ownership, People, Integrity, Customer, Continuous Improvement (Asian Agri's core values) |
| U | UDHR | Universal Declaration of Human Rights |
| | UNGP | UN Guiding Principles on Business and Human Rights |
| | UNSDG | United Nation Sustainable Development Goals |

GLOSSARY

AMDAL / Environmental Impact Assessment (EIA): The assessment by which the anticipated impacts on the environment of a proposed development or project are measured. If the likely impacts are unacceptable, design measures or other relevant mitigation measures can be taken to reduce or avoid these effects.

ASEAN RAI: The ASEAN Guidelines on Promoting Responsible Investment in Food, Agriculture and Forestry (ASEAN RAI) is a regionally-adopted, voluntary framework to guide investment decision making for both private and public sector actors. Formally adopted by the ASEAN Ministers of Agriculture and Forestry in 2018, ASEAN RAI includes 10 social, environmental, and governance (ESG) principles about how to avoid risks and have positive impact specifically in the food, agriculture and forestry sectors.

B30: A type of biodiesel with a fuel blend containing bio content of 30%. This was rolled out by the Indonesian government in Jan 2020 to reduce reliance on fossil fuels.

Biofuel: A fuel that is produced from biomass – i.e. plant material or animal waste

Biogas: Gas produced by the anaerobic digestion or fermentation of organic matter, such as manure, sewage sludge, municipal solid waste, biodegradable waste or any other biodegradable feedstock. Biogas produces methane and carbon dioxide and can be used as fuel.

Biological Oxygen Demand (BOD): A measure of the dissolved oxygen needed by microorganisms during the oxidation of reduced substance in waters and wastes.

Chemical Oxygen Demand (COD): The amount of oxygen needed to oxidize the organic matter present in water.

Collective Bargaining: The ongoing process of negotiation between representatives of workers and employers to establish the conditions of employment.

Deforestation: Conversion of forest to another land use or long-term reduction of the tree canopy cover. This includes conversion of natural forest to tree plantations, agriculture, pasture water reservoirs and urban areas but excludes timber production areas managed to ensure the forest regenerates after logging.

Effluent: Liquid waste from industrial activity

Fire-Free Village Programme: A fire management pilot program which provides training, equipment and economic incentives to local communities to help prevent fire. Members of the Fire Free Alliance (FFA), including APRIL, Asian Agri, IOI Group, Musim Mas, Sime Darby, Wilmar International Limited, are currently implementing their own FFVPs as part of their membership commitments.

Free, prior and informed consent (FPIC): Free, Prior and Informed Consent (FPIC) is a specific right that pertains to indigenous peoples and is recognised in the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP). It allows them to give or withhold consent to a project that may affect them or their territories. Once they have given their consent, they can withdraw it at any stage. Furthermore, FPIC enables them to negotiate the conditions under which the project will be designed, implemented, monitored and evaluated.

Freedom of Association: The right of a person to join with other people, for example, as a union, to defend their labour rights.

GLOSSARY

Fresh Fruit Bunches (FFB): The fruit from the oil palm which is then processed into crude palm oil and palm kernel. This is the raw material for palm oil mills.

Forced Labour: Work that is performed involuntarily and under the menace of any penalty. It refers to situations in which persons are coerced to work through the use of violence or intimidation, or by more subtle means such as manipulated debt, retention of identity papers or threats of denunciation to immigration authorities.

Greenhouse Gas (GHG) Emissions: Gas in the atmosphere that absorbs and emits radiation within the thermal infra-red range. This process is the fundamental cause of the greenhouse effect. The primary GHG emitted from palm oil mill are carbon dioxide, methane and nitrous oxide.

High Carbon Stock (HCS): HCS forests are those identified through the HCS Approach as forested areas to be prioritized for protection from conversion. HCS are divided into six classifications which are Open land (OL), Scrub (S), Young Generating Forest (YRF), Low Density Forest (LDF), Medium Density Forest (MDF), and High Density Forest (HDF).

High Carbon Stock Approach (HCSA): A methodology that distinguishes forest areas for protection from degraded lands with low carbon and biodiversity values that may be developed. The methodology was developed with the aim to ensure a practical, transparent, robust, and scientifically credible approach that is widely accepted to implement commitments to halt deforestation in the tropics, while ensuring the rights and livelihoods of local peoples are respected.

High Conservation Values (HCV): Biological, ecological, social or cultural values which are considered outstandingly significant or critically important, at the national, regional or global level (source: HCV Resource Network).

Hotspot: An indicator of a potential fire at a particular site on the ground.

Indonesia Sustainable Palm Oil (ISPO): A policy adopted from Circular Letter No.092/TU.200/E-ISPO/9/2012 by the Ministry of Agriculture on behalf of the Government of Indonesia with the aim to improve the competitiveness of the Indonesian palm oil on the global market and contribute to the objective set by the President of the Republic of Indonesia to reduce greenhouse gases emissions and draw attention to environmental issues.

Indigenous Communities: Indigenous communities are distinct social and cultural groups that share collective ancestral ties to the lands and natural resources where they live, occupy or from which they have been displaced. The land and natural resources on which they depend are inextricably linked to their identities, cultures, livelihoods, as well as their physical and spiritual well-being.

Integrated Disease Management (IDM): The practice of using a range of measures to prevent and manage diseases in crops. Hazard analysis is used to identify the potential for infection so that preventative or curative measures can be put in place to minimise the risk of disease infection and spread.

Integrated Pest Management (IPM): An ecosystem-based strategy that focuses on long-term prevention of pest damage through a combination of techniques such as biological control, habitat manipulation, modification of cultural practices, and use of resistant varieties.

GLOSSARY

International Sustainability and Carbon Certification (ISCC): The first international certification system that can be used to prove sustainability and greenhouse gas savings for all kinds of biomass and bio-energy based on EU Renewable Energy Directive's (RED) requirements. The ISCC seal proves that biomass was produced in an environmentally friendly way. ISCC also covers social sustainability principles and thus provides more security for companies.

Kernel Crushing Plant (KCP): A plant that processes palm kernel into Crude Palm Kernel Oil (CPKO).

Koperasi Unit Desa (KUD): Village cooperatives

Net Zero: A target of completely negating the amount of greenhouse gases produced, by reducing emissions and implementing methods of absorbing carbon dioxide from the atmosphere.

No Deforestation, No Peat and No Exploitation (NDPE): An important policy for the palm oil industry on sustainable palm oil adopted by companies. NDPE policies include commitments to the following: Free, Prior and Informed Consent (FPIC) for indigenous and other local communities, zero burning, preventing poor working conditions, and preserving High Conservation Value (HCV) areas, High Carbon Stock (HCS) areas and peatlands.

Non Governmental Organisation (NGO): An organization that is neither a part of a government nor a conventional for-profit business.

Palm Oil Mill Effluent (POME): One of the by-products of the Fresh Fruit Bunch process.

Palm Kernel: The edible seed of the oil palm fruit, which yields two types of oil: palm oil and palm kernel oil.

Palm Kernel Shell: The byproduct of palm kernel oil production, which can be used as biofuel.

Palm Oil: An edible vegetable oil produced from the fruit of oil palm trees. It is a versatile oil that can be used for a wide variety of products, from cooking oil to food products and cosmetics.

Peatland: Terrestrial wetland ecosystems in which waterlogged conditions prevent plant material from fully decomposing. Peatlands store more carbon than all other vegetation types combined. They are known to cover at least 3% of global land surface and are important for preventing and mitigating the effects of climate change.

Plasma Transmigration Programme (Perkebunan Inti Rakyat): A programme initiated by the Indonesian government to encourage the development of smallholder plantations with the assistance and cooperation of plantation companies (the nucleus) which assist and support the surrounding community plantations (the plasma).

Provincial Spatial Planning: A general spatial plan for the province which is an elaboration of the National Spatial Planning (RTRWN). It contains: objectives, policies, strategies for spatial planning for the province; provincial spatial structure plan; provincial spatial pattern plan; determination of provincial strategic areas; directions for the use of provincial space; and directions for controlling the use of provincial space. The preparation of the RTRWP must refer to the RTRWN, guidelines for spatial planning, and regional long-term development plans.

GLOSSARY

RSPO PalmGHG Calculator: Developed by the Greenhouse Gas Working Group 2 (GHG-WG2) of the RSPO, to allow oil palm growers to estimate and monitor their net greenhouse gas emissions.

Smallholders: Farmers who grow oil palm, alongside with subsistence crops, where the family provides the majority of labour and the farm provides the principal source of income, and the planted oil palm area is less than 50 hectares. More than 3 million smallholders and small-scale farmers make a living from palm oil globally. There are 2 types of smallholders mentioned in this report: Independent and Plasma Scheme Smallholders.

Social and Environmental Impact Assessments (SEIAs): A process for predicting and assessing the potential environmental and social impacts of a proposed project, evaluating alternatives and designing appropriate mitigation, management and monitoring measures.

Transboundary Haze: Consists of smoke, dust, moisture, and vapour suspended in air to impair visibility. Haze pollution can be said to be "transboundary" if its density and extent is so great at source that it remains at measurable levels after crossing into another country's air space. Haze pollution can originate from large-scale forest and land fires characterised by a high concentration of particulate matter.

Roundtable on Sustainable Palm Oil (RSPO): An organization that unites stakeholders from 7 sectors of the palm oil industry: oil palm producers, processor or traders, consumer goods manufacturers, retailers, banks/ investors, and environmental and social non-governmental organization (NGOs) to develop and implement global standards for sustainable palm oil. RSPO is a global, multi-stakeholder initiatives on sustainable palm oil.

Sustainability: A balancing act where business decisions take into account the impact they may have on the triple bottom line aspect of sustainability which are social, environment, and economic

Stakeholder: Refers to any group, individual, member or system that affects or can be affected by company's actions

Traceability: A process for tracing palm oil throughout the supply chain from source of FFB origin.
 'Zero-burn' policy: A policy towards land clearing where either logged over secondary forests or an old area of plantation tree crops such as oil palm are cut, chipped, stacked and left on site to decompose naturally.



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