



PERMATA HIJAU GROUP

# EMBRACING CHANGE FOR BETTER FUTURE

SUSTAINABILITY REPORT 2021



# CONTENTS



# ABOUT THIS REPORT

This Sustainability Report marks Permata Hijau Group's first year of reporting our sustainability performance and progress, communicating how we are working towards our vision to be a leading and sustainable palm oil company.

## SCOPE OF THE REPORT

[102-45, 102-46]

This report covers the operations of Permata Hijau Group in Indonesia which includes 13,000 Ha of planted area, 4 palm oil mills, 6 refineries, 5 kernel crushing plants, 3 biodiesel plants, 2 oleochemical plants and 1 specialty fat plant. The scope for disclosure covers our employees and contracted workers directly remunerated by Permata Hijau Group.

## REPORTING FRAMEWORK

[102-54]

This report is prepared in accordance with the Global Reporting Initiative (GRI) Standards: 2016. Our GRI content index can be found on pages 54-58.

## REPORTING PERIOD AND SCOPE

[102-50, 102-52]

The information contained in this report covers our operations from 01 January 2021 to 31 December 2021. Where applicable, data from previous financial years have been included for comparison. In addition to this report, sustainability-related information is also available on our website which is regularly updated.

## EXTERNAL ASSURANCE

[102-56]

As this is our first sustainability report, we decided that it is premature to engage a third party to provide assurance. In lieu of external assurance, we would like to provide guarantee for the veracity of the data we provided as it was dispensed in good faith and has undergone a rigorous review process.

## FEEDBACK CONTACT

[102-53]

We value opinions from our stakeholders to help us improve our approach to sustainability and this report. Please send your feedback to:

### PERMATA HIJAU GROUP

Jl. Iskandar Muda No. 107  
Medan, 20154

T +62-61-4577-777

E [Sustainability@permatagroup.com](mailto:Sustainability@permatagroup.com)



# MESSAGE FROM THE PRESIDENT DIRECTOR

[102-14]

## Dear stakeholders,

I am pleased to present our FY2021 Sustainability Report. This report marks Permata Hijau Group's first sustainability report, communicating our sustainability commitments, approach and progress. I hope this report will be the first of the many such reports to follow in the future.

## RESPONSE TO COVID-19

The Covid-19 pandemic has proven to be much more than a public health crisis. It has resulted in unprecedented impacts across the world and affected every aspect of business operations. At the same time, it has reinforced the importance of sustainability in ensuring the resilience of our operations.

As a business, we have a fundamental responsibility for ensuring the wellbeing and livelihoods of those we work with. We took decisive actions to ensure the health and safety of our employees by implementing measures in line with guidance provided by relevant health authorities. We implemented work from home where possible. However, given the in-person nature of much of our business, many of our workers have to do work in person. For those workers, we provided personal protective equipment, enforced

social distancing measures and implemented strict visitor protocols. As a result, our team was able to work safely to keep operations going.

We also actively participated in relief efforts to alleviate hardships caused by Covid-19 and have provided aid worth an estimated IDR 4 billion to local, provincial, and national governments as well as local NGOs to buy medical masks, personal protective equipment, rapid test kits and other medical necessities to help combat Covid-19.

## PROGRESS IN FY2021

While navigating the pandemic remains a top priority, Permata Hijau Group has remained steadfast in our sustainability commitments. We are pleased to have made progress on a number of topics.

Since having first achieved 100% traceability to mills in 2018, we are proud to announce we have maintained that achievement in 2021. We also greatly increased our traceability to plantation from 34% to 54% in 2021 and are on track to meet our target to achieve 100% traceability to plantation by 2025. In the meantime, we continued to engage with our suppliers and conducted our first online supplier workshop in light of Covid-19 restrictions. The workshop was a success, and we are currently



## MESSAGE FROM THE PRESIDENT DIRECTOR

assessing if this move to an online platform can be made permanent. To supplement this workshop, we are planning a series of deeper engagements with our higher-risk suppliers in the form of on-site visits. We hope to provide more in-depth and personalized training and socialization on sustainability and traceability to help our suppliers in their move toward sustainability.

We maintained our membership and have continued to play an active role in prominent sustainability forums and associations including ISPO, RSPO, ISCC and POCG among others. We joined RSPO as a member in 2006 and our downstream operations have been certified with RSPO SCCS since 2014 and ISCC since 2015. This past year PT. Nubika Jaya, a subsidiary of Permata Hijau Group, became our first upstream unit to receive RSPO P&C certification.

On the environmental conservation front, we remained committed to our NDPE Policy. We are pleased to report that we had had zero deforestation or fire in our own plantations over the past year. We also continued our biodiversity conservation efforts despite the pandemic. This past year, we partnered with the Leuser International Foundation and the Barumon Nagari Wildlife Sanctuary to restore degraded land in Aceh and support the protection of Sumatran elephants.

In recognition of our sustainability efforts over the past year, we received several awards in 2021 including Industri Hijau level 5 and PROPER Hijau Awards for our subsidiaries PT. Victorindo Alamlestari and PT. Nagamas Palmoil Lestari.

### LOOKING AHEAD

As the need for sustainable palm oil becomes increasingly critical, we are committed to doing our part. At the same time, we also recognize that environmental conservation is only one aspect of sustainability and acknowledge the role of palm oil in uplifting the livelihoods of the local population. Thus we will remain committed to our NDPE and Sustainability Policy and continue to use our position as an integrated company to influence those in our value chain to do the same.

In making sure that these issues are properly managed and monitored, the Board will continue to regularly review material ESG factors and integrate these in our strategic formulation. For Permata Hijau Group, this means expanding our current initiatives while working towards the targets we have set for ourselves to reduce our emissions and water use intensity, maintain 100% traceability to mills and improve traceability to plantation.

I would like to thank our employees and stakeholders for their continued support in our sustainability efforts. I am confident that we will continue to see further progress as we recover from the pandemic and hope that our progress thus far has inspired others to join us on this journey.

Sincerely,  
**JHONNY VIRGO**  
President Director



# ABOUT PHG

[102-1, 102-2, 102-3, 102-4, 102-6, 102-7, 102-9]

Permata Hijau Group was established in 1984 as a palm oil cultivation company. Since then, we have grown into a fully integrated palm oil corporation and a major player in the industry. Permata Hijau Group’s operations span the entire palm oil value chain from cultivating to manufacturing and distributing palm oil and its derivatives for the domestic and international market.

We produce and market a wide range of high-quality palm oil products including crude palm oil (CPO), cooking oil, specialty fats for baking, oleochemicals for personal care and industrial products and biodiesel. The products are produced following strict quality and manufacturing standards and have obtained certifications such as ISO 9001, ISO 22000, HACCP, GMP and FSSC 22000.



High quality cooking oil manufactured by PHG



Permata Hijau Group is a fully integrated company spanning the entire palm oil value chain

Today, Permata Hijau Group is one of the top 10 palm oil processors and traders in the country. We attribute our success to our long-term history in the industry, utilization of state-of-the-art technologies, high economies of scale, high quality human resources, the integrated nature of our operations and our commitment to sustainability which all contribute to producing high quality and cost-efficient products the benefit of which we pass on to our consumers, suppliers and our community. We will continue to serve our customers on a long-term basis and respond to their ever-changing needs and demands.

## ABOUT PHG

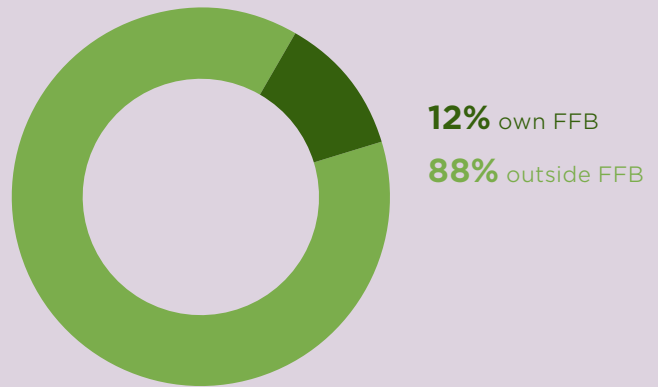
Our workforce of more than 4,000 employees across Indonesia supports our business including our headquarters in Medan as well as our upstream and downstream operations across the Indonesian provinces of North Sumatra and Riau. They are led by our Senior Management Teams which comprises of 11 members including 1 woman.

Our estates cover 13,000 Ha of planted area which in 2021 produces around 200,000 tonnes of FFB. This number is expected to go up as our replanting process moves toward completion and the newly replanted palms mature and begin producing fruits. We also source fruits from various third-party suppliers including larger plantation companies as well as independent smallholders.



Dumai port where we ship our products to our customers

### FFB Processed at our Palm Oil Mill



Aside from our plantations, we also own and operate

- 

**4** palm oil mills
- 

**5** kernel crushing plants
- 

**3** biodiesel plants
- 2** oleochemical plants
- 6** refineries
- 1** specialty fat plant

These facilities are supported by our head office in Medan and three representative offices in Jakarta, Kuala Lumpur and Singapore respectively.

Our operations are additionally supported by **236 third-party supplier mills** from whom we purchase palm oil and kernels. Our total crude palm oil production in 2021 was around 305,000 tonnes.



# ABOUT PHG



Our operational map

Our vision is to be a leading and sustainable palm oil company by producing quality products that benefit communities.

To fulfil this vision, we are guided by the following set of core values:



**Teamwork**

Great things can be achieved by working as a team



**Integrity**

Acting with honest and honour by adhering to the highest ethical standards



**Professionalism**

Knowing how to do it, when to do it and doing it right



**Communication**

Listening and responding with a positive attitude



**Excellence**

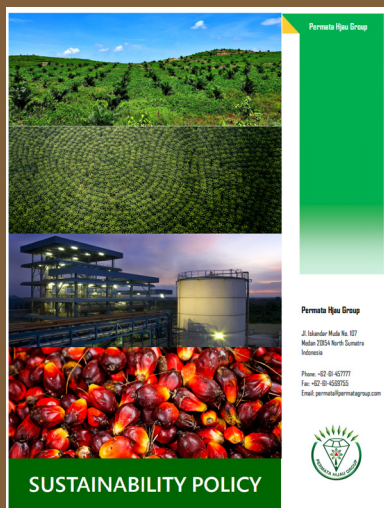
Giving our utmost efforts in everything we do



# OUR APPROACH TO SUSTAINABILITY

[103-1]

Our approach to sustainability is guided by our vision to be a leading and sustainable palm oil company. It is also inspired by our core values of Teamwork, Integrity, Professionalism, Communication and Excellence. We believe that the growth of our business should not come at the expense of the environment or the people and we strive to implement principles of sustainability in all our activities.



## OUR SUSTAINABILITY POLICY

[103-2]

Our sustainability policy sets out our commitment to ensure that our operations protect and support the environment and the communities where we operate. We expect all of our suppliers and third parties which might use our processing facilities to adhere to our sustainability policy. This is reflected in our supplier code. Both of these documents are published on our [website](#) and are actively communicated and socialized to all our employees through annual training and retraining programs and to our suppliers during the onboarding process and throughout the year through sustainability workshops and annual questionnaires. More details of our engagement with our suppliers can be found on pages 48-49.

Our sustainability policy is built around four pillars:



### Environment

We will protect the environment surrounding our operations. This means no burning, no deforestation, conserving HCV areas and HCS forests, conserving peat areas, adopting agronomic best practices, improving yield and reducing our emissions. A summary of our environmental management can be found on pages 20-35.



### Social

We will respect the human rights of the people we work and interact with as well as those impacted by our operations. This includes our employees, smallholders and indigenous and local communities where we operate. A summary of our workplace standards and community engagement can be found on pages 36-44.



### Ethics and integrity

We will conduct business ethically and within the boundaries of national and local laws and regulations. We will not tolerate any form of corruption or bribery. A summary of our code of conduct can be found on page 11.



### Quality, certification and traceability

We will produce safe and high-quality products in compliance with ISO 9001, 14001, GMP, HACCP and other relevant certifications. To support our vision to become a sustainable palm oil company, we will also endorse sustainability certifications such as RSPO and ISPO and work towards certifying all our business units as well as tracing our entire supply chain. A summary of our certifications and membership associations can be found on pages 50-52.

# OUR APPROACH TO SUSTAINABILITY

## MONITORING AND GRIEVANCE SYSTEM

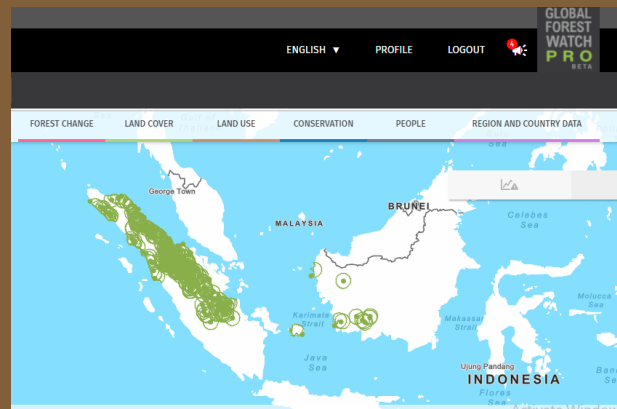
[103-2, 103-3, 102-17]

To ensure that our Sustainability Policy is implemented across our operations and supply chain, we implemented a monitoring and grievance system to catch any potential or actual infringement of our policy early on and provide a channel for our stakeholders to report infringements that might have escaped detection by our monitoring system.

### Monitoring

We use Global Forest Watch’s (GFW) GLAD forest alert to provide early warning for any deforestation which might have occurred in our supply base. The GLAD alert system uses NASA landsat imagery and automatically flags areas where the forest canopy has been disturbed. The GLAD system analyzes the most recent images and compares them to historical data to determine where trees have been lost. It provides “weekly” updates but the actual disturbances may have happened much earlier than the detection. This is because the time lag between a disturbance event and its detection by GLAD can range between three days and several months depending on the cloud covers of the monitored area. More details about our monitoring system can be found on page 21.

Another challenge with the system is the coarse resolution deriving from the enormous monitoring area (the GFW default is a circle of 50 km around each palm oil mill). In our case, the monitoring area covers almost half of the island of Sumatra. Consequently, we receive a massive number of alerts and have difficulty separating noises from actual deforestation that is happening inside our supply base.



Our monitoring area in GFW covers almost half of the island of Sumatra

We are working to refine the monitoring area by advancing our traceability to plantation. By identifying the source of our fruits first to the village level and ultimately to individual plantation level, we will be able to shrink the monitoring area and to properly respond to actual relevant alerts. We also monitor potential fire hazards by subscribing to GFW’s fire alert and overlaying hotspots data obtained from VIIRS and NOAA satellite with our supply base area. Hot spots detected within our supply base which persisted over two consecutive days are marked as high probability fire incidence and communicated to our operation unit or our suppliers for investigation and action.

A more in-depth discussion of our deforestation and fire monitoring system and their challenges and what we are doing to overcome them are discussed in page 21.



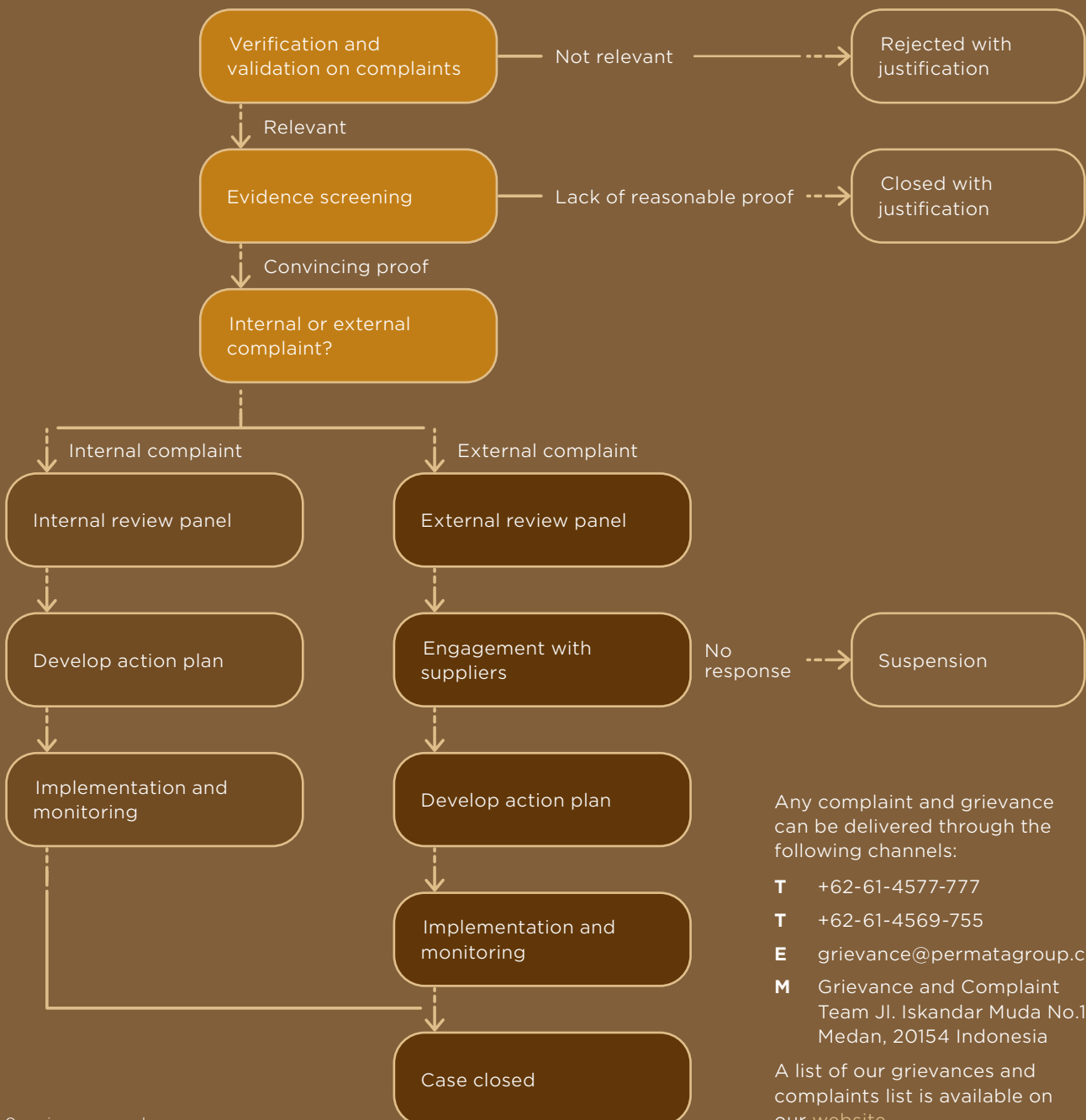


# OUR APPROACH TO SUSTAINABILITY

## COMPLAINT AND GRIEVANCE

Working with our stakeholders to identify and address any concerns is an important aspect of our approach to ensure sustainable business practices.

We invite stakeholders (be it internal or external) to lodge any grievances and complaints through our grievance and complaint system. The grievances and complaints are processed following the flowchart:



Any complaint and grievance can be delivered through the following channels:

- T** +62-61-4577-777
- T** +62-61-4569-755
- E** [grievance@permatagroup.com](mailto:grievance@permatagroup.com)
- M** Grievance and Complaint Team Jl. Iskandar Muda No.107 Medan, 20154 Indonesia

A list of our grievances and complaints list is available on our [website](#).

# OUR APPROACH TO SUSTAINABILITY

## OUR SUSTAINABILITY GOVERNANCE

[103-3, 102-18, 102-19, 102-20, 102-26, 102-32]

A robust corporate governance system is crucial to the successful integration and management

of sustainability at a company. Sustainability governance helps a company implement sustainability strategies across the business, manage target setting and reporting, strengthen stakeholder relations, and ensure overall accountability.



Our sustainability governance

## OUR APPROACH TO SUSTAINABILITY

The Sustainability Department is overseen by the Board of Directors and led by the Director of Sustainability. The Director of Sustainability is a member of the Board and reports on sustainability-related topics at the Board's weekly meetings.

Responsibilities for day-to-day operations is delegated to our Head of Sustainability who leads four teams with their own responsibilities:

1. The quality and food safety team work to ensure our product is produced in accordance with our quality standard and is safe to consume and use.
2. The health, safety and environment team work to ensure a safe and healthy workspace for our employees and that our operations operate within the legal environmental parameters set by the government.
3. The sustainability implementation team work to instil a culture of sustainability within our operations and promote initiatives such as energy efficiency, greenhouse gas reduction, water efficiency, and others that go beyond the legal requirement in environmental and social management.
4. The traceability, grievance and stakeholder engagement team work to engage with our stakeholders to promote sustainability, traceability, and transparency and also to solve grievances and disputes that may arise.

The Head of Sustainability liaises daily with the Director of Sustainability on the planning and implementation of our sustainability strategies.

### ETHICS AND INTEGRITY

Permata Hijau Group commits to uphold full compliance to all applicable laws and regulations in all our operations. We also adopt a zero-tolerance approach to any form of corruption and bribery. This commitment is enshrined in our ethics policy and is manifested in our code of conduct which is read and signed by all our employees. The code of conduct covers expectations on professionalism, human rights, transparency, conflicts of interest, political impartiality, anti-corruption and zero tolerance to fraud.

To provide a safe, secure and anonymous channel to report any violations of our ethics policy and our code of conduct, we established a whistleblower procedure. This procedure shares a similar communication channel as the general complaint and grievance discussed on page 09. Permata Hijau Group does not tolerate or condone any retaliatory actions taken against any employee or external stakeholder for whistleblowing. We will take disciplinary action against any party within our jurisdiction which is found to have taken such retaliatory actions against whistleblowers.

### STAKEHOLDER ENGAGEMENT

Our approach to sustainability is also informed by the interests and concerns of our stakeholders and their input is greatly valued in our decision making.

We engage with a number of stakeholders including employees, local communities, government, NGOs, suppliers and buyers on key ESG topics through various engagement channels. We engage our employees through annual employee surveys and bipartite meetings with our workers union. Local communities, government and NGOs are engaged through annual stakeholder consultation meetings as well as other coordination visits. We conduct annual questionnaires and workshops for our suppliers and participate in our buyers' workshops and questionnaires. We also participate in various ESG ratings and scorings such as Ecovadis, CDP and SPOTT.

A summary of our stakeholder engagement can be found on page 53.



# OUR APPROACH TO SUSTAINABILITY

## SUSTAINABLE DEVELOPMENT GOALS (SDGS)

Permata Hijau Group fully supports the Sustainable Development Goals (SDGs) which were adopted by the United Nations (UN) in 2015 as a universal call to create a better and more sustainable future by 2030. The SDGs are designed to end poverty, hunger, AIDS, and discrimination against women and girls. We implement several activities which support one or more SDGs and throughout our report have indicated which SDGs we contribute to.



<b>1</b> NO POVERTY 	<b>2</b> ZERO HUNGER 	<b>3</b> GOOD HEALTH AND WELL BEING 	<b>4</b> QUALITY EDUCATION 	<b>5</b> GENDER EQUALITY 	<b>6</b> CLEAN WATER AND SANITATION 
<b>7</b> AFFORDABLE AND CLEAN ENERGY 	<b>8</b> DECENT WORK AND ECONOMIC GROWTH 	<b>9</b> INDUSTRY, INNOVATION AND INFRASTRUCTURE 	<b>10</b> REDUCED INEQUALITIES 	<b>11</b> SUSTAINABLE CITIES AND COMMUNITIES 	<b>12</b> RESPONSIBLE CONSUMPTION AND PRODUCTION 
<b>13</b> CLIMATE ACTION 	<b>14</b> LIFE BELOW WATER 	<b>15</b> LIFE ON LAND 	<b>16</b> PEACE, JUSTICE AND STRONG INSTITUTIONS 	<b>17</b> PARTNERSHIPS FOR THE GOALS 	

# OUR APPROACH TO SUSTAINABILITY

## OUR MATERIAL TOPICS

[102-15, 102-46, 102-47]

Topic	Description
Climate change mitigation and adaptation	Minimizing the environmental impacts of our business and building resilience against climate change
Conservation of HCV areas and HCS forests	Identifying and conserving land with high biological, ecological, social or cultural value and large stores of carbon
Fire and haze prevention	Working with smallholders and local communities to prevent and manage forest fires
Pest management and fertilizer use	Reducing the use of harmful synthetic chemicals while promoting biological pest control methods and organic fertilisers
Waste management	Ensuring safe and proper management and disposal of waste
Water and effluents management	Minimizing our water consumption and ensuring the proper treatment and disposal of effluent
Community and smallholder livelihoods	Supporting smallholders and local communities in employment, health and wellbeing, education, and infrastructure
Respecting human rights	Promoting fair and favourable working conditions including preventing forced, bonded or child labour and promoting freedom of association
Occupational health & safety and employee wellbeing	Ensuring a high level of health, safety and wellbeing for our employees and contractors
Human capital development	Attracting talented individuals and providing training and development opportunities to build a high-performing and engaged workforce
Corporate governance and ethics	Ensuring the highest standards of ethical business conduct and conducting business free of bribery and corruption
Product quality and safety	Ensuring the highest standard of quality and safety for our products
Supply chain traceability	Working with suppliers to ensure the traceability of raw materials

# OUR SUSTAINABILITY PROGRESS

[103-2, 103-3]

## SUSTAINABILITY MILESTONES

### 2006

- Became a member of RSPO

### 2008

- Commissioned our first methane capture facility

### 2010

- Equipped all our palm mills with methane capture facilities

### 2014

- Obtained our first RSPO SCCS certification

### 2015

- Published our Sustainability and NDPE policy
- Obtained our first ISCC certification

### 2020

- Upgraded our Sustainability and NDPE policy
- Launched our sustainability dashboard
- Conducted our first supplier workshop

### 2018

- Achieved 100% traceability to mills

### 2021

- Obtained our first RSPO P&C certification
- Conducted our first online supplier workshop
- Implemented a visiting program for high-risk suppliers

### 2022

- Published our first sustainability report





# OUR SUSTAINABILITY PROGRESS

## TARGETS AND PROGRESS

Topic	2021 commitments and target	2021 progress	Future commitments and targets
Climate change	<ul style="list-style-type: none"> <li>• Maintain the methane capture systems installed in our mills</li> <li>• Continue to explore opportunities for GHG reductions</li> </ul>	<ul style="list-style-type: none"> <li>• Avoided 164,000 tCO<sub>2</sub>e from our methane capture plants</li> <li>• Achieved PROPER Hijau for two of our subsidiaries and PROPER Biru for our remaining operations (a requirement for PROPER Hijau is to reduce GHG emissions)</li> </ul>	<ul style="list-style-type: none"> <li>• Reduce our GHG emission intensity by 5% by 2030 from a 2020 baseline</li> <li>• Maintain and increase PROPER ratings across our operations</li> </ul>
Conservation of HCV areas and HCS forests	<ul style="list-style-type: none"> <li>• Continue conserving HCV areas and HCF forests by:                             <ul style="list-style-type: none"> <li>» Continuing our commitment to NDPE</li> <li>» Continuing to implement best management practices on existing plantations on peat</li> <li>» Continuing to train and socialize our suppliers on our sustainability policy</li> <li>» Continuing to socialize villagers on HCV areas and HCFs forests and imploring them not to encroach</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• No encroachment reported in our monitored HCV area</li> <li>• Engaged with suppliers with suspected deforestation in a timely manner</li> <li>• Conducted HCV and HCS conservation training and/or refreshment for employees</li> </ul>	<ul style="list-style-type: none"> <li>• Continue monitoring and conserving HCV areas and HCS forests</li> </ul>
Fire and haze prevention	<ul style="list-style-type: none"> <li>• No use of fire for planting or pest/disease control</li> <li>• Continue implementing our integrated fire monitoring and response system</li> </ul>	<ul style="list-style-type: none"> <li>• No fires in our concession</li> <li>• Established a hotspot early warning system to complement GLAD hotspot alerts</li> <li>• Continued to socialize villagers on fire prevention and management</li> <li>• Continued to socialize suppliers on no fire for planting or pest/disease control</li> </ul>	<ul style="list-style-type: none"> <li>• Expand our fire monitoring and response system outside of our concessions and operational units including launching a Fire Free Village Program</li> </ul>

# OUR SUSTAINABILITY PROGRESS



## TARGETS AND PROGRESS

Topic	2021 commitments and target	2021 progress	Future commitments and targets
Pest management and fertilizer use	<ul style="list-style-type: none"> <li>Continue reducing the use of synthetic pesticides and fertilizers</li> <li>Continue to phase out paraquat and WHO 1A and 1B pesticides as well as those listed in the Stockholm and Rotterdam Conventions</li> </ul>	<ul style="list-style-type: none"> <li>Continued to implement an integrated pest management system (IPM) in our plantations</li> <li>Continued to phase out paraquat and WHO 1A and 1B pesticides as well as those listed in the Stockholm and Rotterdam Conventions</li> </ul>	<ul style="list-style-type: none"> <li>Continue reducing the use of synthetic pesticides and fertilizers</li> <li>Fully phase out paraquat and WHO 1A and 1B pesticides as well as those listed in the Stockholm and Rotterdam Conventions</li> </ul>
Waste management	<ul style="list-style-type: none"> <li>Continue to innovate our waste management systems</li> </ul>	<ul style="list-style-type: none"> <li>100% of our hazardous waste handled as per the government regulations by licensed transporters</li> <li>Achieved PROPER Hijau for two of our subsidiaries and PROPER Biru for our remaining operations (a requirement for PROPER Hijau is to reduce hazardous and non-hazardous waste)</li> </ul>	<ul style="list-style-type: none"> <li>Continue to innovate our waste management systems</li> <li>Implement our combined black soldier fly larva and chicken/fish farm CSR project by the end of 2023</li> <li>Maintain and increase PROPER ratings across our operations</li> </ul>
Water and effluents management	<ul style="list-style-type: none"> <li>Continue ensuring effluent complies with quality limits set by the relevant authorities</li> <li>Continue reducing water consumption</li> </ul>	<ul style="list-style-type: none"> <li>No incidents of non-compliance to government regulation on effluent</li> <li>Achieved PROPER Hijau for two of our subsidiaries and PROPER Biru for our remaining operations (a requirement for PROPER Hijau is to reduce water footprint and effluent discharge)</li> </ul>	<ul style="list-style-type: none"> <li>Expand our current water reduction initiatives</li> <li>Reduce our water use intensity by 5% by 2030 from a 2020 baseline</li> <li>Maintain and increase PROPER ratings across our operations</li> </ul>

# OUR SUSTAINABILITY PROGRESS

## TARGETS AND PROGRESS

Topic	2021 commitments and target	2021 progress	Future commitments and targets
Community and smallholder livelihoods	<ul style="list-style-type: none"> <li>• Begin the implementation of a more effective and targeted CSR program by shifting our CSR program from charity based programs to community development programs</li> <li>• Respond to the COVID-19 pandemic by channelling our charity towards pandemic alleviation efforts</li> </ul>	<ul style="list-style-type: none"> <li>• Assisted 213,280 beneficiaries with USD 320,000 in aid through our CSR program</li> </ul>	<ul style="list-style-type: none"> <li>• Develop an effective CSR program with emphasis on community development</li> <li>• Develop a smallholder engagement and education program to improve yield and sustainability of smallholder</li> </ul>
Human rights	<ul style="list-style-type: none"> <li>• Continue ensuring our operations and suppliers are in full compliance with labor laws</li> <li>• Continue conducting stakeholder consultations and supplier workshops to discuss human rights topics</li> </ul>	<ul style="list-style-type: none"> <li>• No substantiated human rights complaints in our operations</li> <li>• Continued to conduct stakeholder consultations and supplier workshops to discuss human rights topics</li> </ul>	<ul style="list-style-type: none"> <li>• Continue ensuring our operations and suppliers are in full compliance with labor laws</li> <li>• Continue to conduct stakeholder consultations and supplier workshop to discuss human rights topics</li> </ul>
Employee health, safety and wellbeing	<ul style="list-style-type: none"> <li>• Continue creating a safe and healthy working environment</li> <li>• Achieve SMK3 Gold flag rating for all our operations</li> <li>• No work fatalities</li> </ul>	<ul style="list-style-type: none"> <li>• Implemented procedures to ensure the health and safety of employees during the COVID-19 pandemic including achieving an 82% vaccination rate for our employees</li> <li>• Achieved gold flag (highest level) rating in SMK3 (Indonesian health and workplace safety) certification for 80% of our operations</li> <li>• 3 work fatalities</li> <li>• 0.17% time lost due to accidents</li> </ul>	<ul style="list-style-type: none"> <li>• Continue creating a safe and healthy working environment</li> <li>• Achieve SMK3 Gold flag rating for 100% of our operations</li> <li>• No work fatalities</li> <li>• Minimize time lost due to accident</li> </ul>



# OUR SUSTAINABILITY PROGRESS

## TARGETS AND PROGRESS

Topic	2021 commitments and target	2021 progress	Future commitments and targets
Human capital development	<ul style="list-style-type: none"> <li>Continue providing training and opportunities for continuous development</li> </ul>	<ul style="list-style-type: none"> <li>4000 employees trained and retrained</li> </ul>	<ul style="list-style-type: none"> <li>Continue providing training and opportunities for continuous development</li> </ul>
Corporate governance and ethics	<ul style="list-style-type: none"> <li>Continue to socialize and retrain our employee on the code of ethics</li> <li>No incidents of anti-competitive behaviour, monopolistic practice or corruption or bribery cases</li> </ul>	<ul style="list-style-type: none"> <li>Continued to socialize and retrain our employee on the code of ethics</li> <li>No incidents of anti-competitive behaviour, monopolistic practice or corruption or bribery cases</li> </ul>	<ul style="list-style-type: none"> <li>Continue to socialize and retrain our employee on the code of ethics</li> <li>No incidents of anti-competitive behaviour, monopolistic practice or corruption or bribery cases</li> </ul>
Product quality and safety	<ul style="list-style-type: none"> <li>No incidents of non-compliance with regulations concerning the health and safety of our products</li> <li>No complaints from customer on our product quality and safety</li> </ul>	<ul style="list-style-type: none"> <li>No incidents of non-compliance with regulations concerning the health and safety of our products</li> <li>No complaints from customer on our product quality and safety</li> </ul>	<ul style="list-style-type: none"> <li>Maintain no incidents of non-compliance with regulations and zero complaints from customers</li> </ul>



# OUR SUSTAINABILITY PROGRESS

## TARGETS AND PROGRESS

Topic	2021 commitments and target	2021 progress	Future commitments and targets
Supply chain traceability	<ul style="list-style-type: none"> <li>Maintain 100% traceability to mills</li> <li>Continue to increase % of fruit traceable to plantation</li> <li>Continue working with suppliers to refine the use of GFW to detect deforestation and fire</li> <li>Continue engaging with suppliers on traceability</li> </ul>	<ul style="list-style-type: none"> <li>Maintained 100% traceability to mills</li> <li>Achieved 54% traceability to plantation</li> <li>Conducted our first online supplier workshop in light of Covid-19 restrictions</li> <li>Implemented a regular visiting program for high-risk suppliers</li> </ul>	<ul style="list-style-type: none"> <li>Maintain 100% traceability to mills</li> <li>Continue increasing % of fruit traceable to plantation and achieve 100% traceability to plantation by 2025</li> <li>Improve and refine the detection of deforestation and fire in supplier plantations using GFW and other monitoring system</li> <li>Continue engaging with suppliers on traceability</li> </ul>
Sustainability certification	<ul style="list-style-type: none"> <li>Continue working towards obtaining RSPO SCCS certification for 100% of our business units, RSPO P&amp;C certification for 100% of our palm oil mills and RSPO P&amp;C certification for 100% of our plantations</li> </ul>	<ul style="list-style-type: none"> <li>Obtained RSPO SCCS certification for 75% of our business units</li> <li>Achieved first RSPO P&amp;C certification for one of our mills, representing 25% of our mills</li> <li>Obtained RSPO P&amp;C certification for 17% of our plantations</li> </ul>	<ul style="list-style-type: none"> <li>Maintain RSPO and ISCC certification and continue working towards 100% RSPO SCCS and P&amp;C certification across our operations</li> </ul>



# PROTECTING OUR ENVIRONMENT

## CONSERVATION OF PEAT, HCV AND HCS FORESTS

[103-1]



At Permata Hijau Group, we understand that peatlands and forests provide many important services to the environment. They serve as an important carbon reservoir, storing as much as 4 trillion tons of carbon (forests store around 1.3 trillion tonnes while peatlands store double that). They also serve as habitats for numerous species of plants and animals, many of which are rare, threatened and/or endangered. Indonesia's forests and peatlands are among some of the most extensive and biodiverse in the world and their protection and conservation play an important role in climate change mitigation at the national and global level.

This knowledge and our desire to contribute to their protection and conservation drove us to commit to No Deforestation, No Peat and No Exploitation (NDPE) as stated in our Sustainability Policy. We will fully adhere to our policy and expect our suppliers to do the same. The NDPE clause is also included in our supplier code which must be signed and returned by our suppliers. Both these documents can be found on our [website](#).

### Preventing Deforestation

[103-2, 103-3]

We use Global Forest Watch (GFW) Pro and regular field patrols to monitor our conservation areas (as identified by HCV and HCS assessments) for early warnings of deforestation. To complement this monitoring effort, we educate local surrounding communities on the importance of conservation areas and implore them not to encroach on those areas.

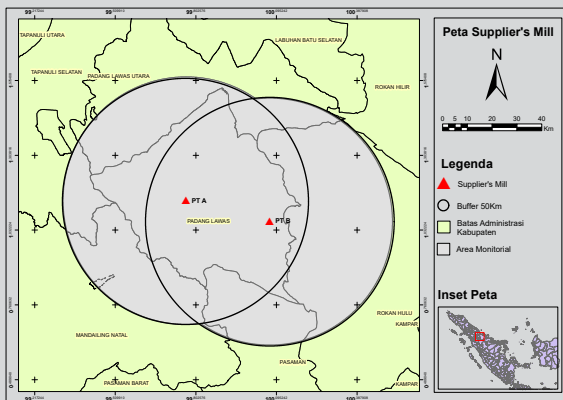
Our suppliers are monitored using similar methods. We use disturbances detected by GFW occurring within a 50 km radius of our suppliers' mills as indicators of potential deforestation within their operations. We are currently working with our suppliers to refine this monitoring area by mapping their fruit sources using risk-based approach as part of our traceability to plantation programme. By doing so we hope to be able to identify each mill's suppliers to the village level and work towards identifying the true source of their fruits. By narrowing down the sources of our fruits, we can narrow down our monitoring area.



# PROTECTING OUR ENVIRONMENT

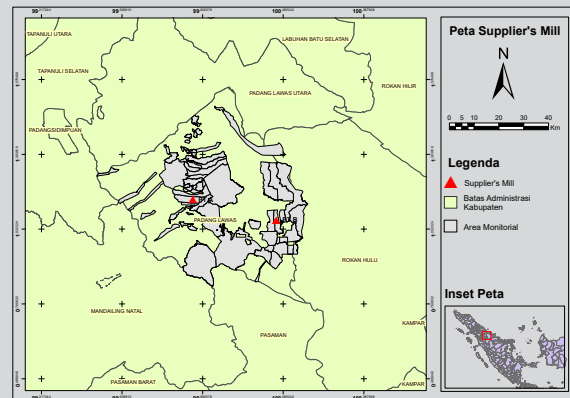
## Refining Suppliers' Deforestation Monitoring

Global Forest Watch provides a useful baseline to monitor our suppliers for potential deforestation. However, the coarse resolution of GFW where any disturbances within a 50 km radius of our suppliers' mills are deemed as potential deforestation is quite limiting to the effectiveness of our monitoring efforts.



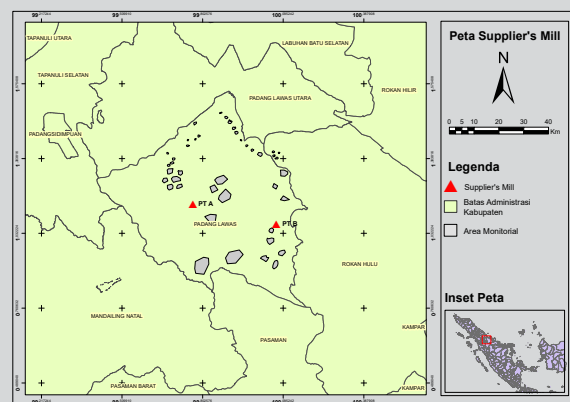
Stage 0: 50 km radius around the mill as the monitoring area. Note that the above image depicted two hypothetical mills and their supply base

To address this limitation, we are conducting a traceability to plantation campaign. In the first stage, we aim to map out all the villages which serve as sources of the palm fruits procured by our suppliers. This will greatly reduce the area that needs to be monitored.



Stage 1: Supplying villages as the monitoring area. Note that the above image depicted two hypothetical mills and their supply base

In the second stage, we ultimately hope to be able to pinpoint the sources of our palm fruits to individual plantations.



Stage 2: Supplying plantations as the monitoring area. Note that the above image depicted two hypothetical mills and their supply base



We had zero deforestation or fire within our operations and no verified deforestation or fire in our suppliers' operations in the past year. Nevertheless, as part of our Sustainability Policy, any non-High Carbon Stock Approach (HCSA)

compliant deforestation after 2020 (if found) will be remediated or compensated in accordance with RSPO Remediation and Compensation Procedure (RACP) procedure. We require our suppliers to implement the same policy.

# PROTECTING OUR ENVIRONMENT



## Fire Management and Prevention

[103-1, 103-2, 103-3]

Permata Hijau Group is committed to zero use of fire for any planting (new or replanting) or for pest and disease control in our plantation. We developed and implemented an integrated fire monitoring and response system that includes the following:

1. Fire awareness and prevention training

We provide fire awareness and prevention training for all our workers. Local villagers are also socialized on the topic during stakeholder consultations. To indicate any potential fire hazards, we put up Fire Danger Rating (FDR) markings around our plantations with 4 levels of danger: Low, Medium, High, and Extreme. Ratings are adjusted depending on the last day of rain.

- I. If it is raining on the day of or has rained the day before, the rating will indicate a low risk of fire
- II. If it has not rained in the past 2-3 days, the rating will indicate a medium risk of fire
- III. If it has not rained in the past 4-5 days, the rating will indicate a high risk of fire
- IV. If it has not rained in more than 5 days, the rating will indicate an extreme risk of fire

FDR markings are clearly and prominently displayed in areas with high traffic to reach as many workers as possible. We also installed FDR markings at the entrance to our plantations so villagers are informed as well.

2. A robust early warning system

We constructed fire towers to aid in spotting fires. A fire tower enables us to detect smoke and fire from several kilometres out. We are also subscribed to the Global Forest Watch's GLAD alert system as well as VIIRS and NOAA hotspot alert system for any fires which might occur in our or our suppliers' plantations. If a suspected fire is detected through GLAD, VIIRS, NOAA or our fire towers, patrol teams are sent out to control and extinguish the fire if necessary.



Fire danger rating markings erected in our plantations

3. A well trained and well-equipped firefighting team

Our fire-fighting team is equipped with fire fighting equipment in line with government regulation. In our larger units, teams are also supported by fire engines. Many of the members of our firefighting teams have received Fire Fighting Training Certificate Class A, B, C and D.

We will continue to improve our fire monitoring and prevention and are looking to expand the system outside of our concessions and operational units in the future. We aim to launch a Fire Free Village Program which will provide socialization and training for villages around our concessions to minimize fire incidences and to quickly respond to any fires which broke out. Villages that manage to achieve a zero fire hotspot for an entire year will be rewarded.

We had zero fire within our operations and no verified fire in our suppliers' operations in the past year.



Fire tower to monitor fire incidences



# PROTECTING OUR ENVIRONMENT

## Protecting High Conservation Value (HCV) Areas [103-2, 103-3, 304-1, 304-2, 304-3, 304-4]

We are an integrated palm oil company with upstream, midstream, and downstream operations such as plantations, mills, refineries and oleochemical plants. As such our operations have a direct and indirect impact on biodiversity, mainly through land use change from the establishment of our own and our suppliers' plantations.

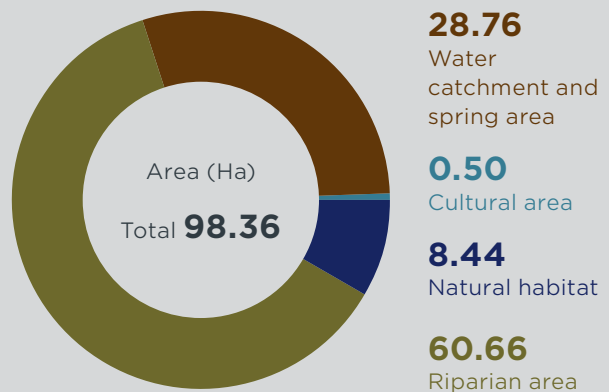
We are committed to manage HCV areas and to protect their natural functions and biodiversity including ensuring that no hunting of protected species occurred within our concession area.

We identify conservation areas within our concessions through HCV assessments conducted by HCVRN ALS licensed assessors. To date 98.36 Ha of HCV area (1% of our concessions) spread out across our plantations in Padang Lawas regency, North Sumatra have been identified. All of the identified HCV areas are managed and monitored

and fortunately none of our HCV areas require any restoration.

The assessments have also identified 36 plant species and 54 animal species within our concession area, some which have been identified as vulnerable, near threatened and endangered.

### HCV areas by land type:



## Total number of IUCN Red List species and national conservation list species with habitats in areas affected by operations

	IUCN rating				
	Least concern	Near threatened	Vulnerable	Endangered	Critically endangered
Total number of plant species	60	-	3	-	-
Total number of animal species	50	3	-	1	-

As part of our HCV monitoring program, our staff will periodically patrol the HCV areas in our concession. To prevent the encroachment of our HCV areas, we erect and maintain signs and markings demarcating HCV areas and actively socialize to locals during stakeholder consultations on the presence of HCV areas and the necessity of preserving them. We also provide socialization and training on HCV areas for all our staff and workers.

Unlike our own plantation's HCV areas, we have considerably less influence over the management and monitoring of the HCV areas in our suppliers' plantations and have to rely on the return of our sustainability questionnaire and visits to our suppliers' mills. As part of our supplier engagement programs, we require our suppliers to fill in and return a sustainability questionnaire. In the questionnaire, suppliers are invited to elaborate

## PROTECTING OUR ENVIRONMENT

on their NDPE and sustainability policy as well as to update us of its implementation. They are also encouraged to disclose activities and programs that they have implemented to protect the environment, mitigate climate change, and improve the economic well-being of the local communities.

In addition to our sustainability questionnaire, we also established a supplier risk assessment system. The aim of the risk assessment system is to identify high-risk suppliers for further engagement such as training and socialization on NDPE and other sustainability principles, training on traceability to plantation and if the situation calls for, a supplier audit.

### Rehabilitation of conservation areas [103-2, 103-3]

Aside from continuing to monitor our HCV areas, we are also seeking opportunities to participate in forest restoration and wildlife conservation projects. We stopped the manuring and spraying of oil palms planted in our riparian areas. The hope is that by doing so, it will encourage the growth of natural vegetation in the area. In addition to riparian area rehabilitation, we also collaborated with local NGO, LSM Pecinta Alam Bahari, to plant 6,000 mangrove seedlings near our refinery in Dumai.

Permata Hijau Group also seeks to protect and restore forests outside of our concession. In 2021, we worked with the Leuser International Foundation to support 52 local coffee farmers to establish shade-grown coffee (agroforestry) on 60 hectares of degraded land in Gayo Highland, Aceh. The Gayo Highland is located within the Leuser Ecosystem Zone which contains one of the richest expanses of tropical rainforest and is the last place on Earth where the Sumatran elephant, rhino, tiger and orangutan can all be found within one area.



Zulkarnaen, Tingkem Village Secretary shows appreciation for the collaborative project by Permata Hijau Group and Leuser International to restore degraded land in his village

We also provided Rp. 200,000,000 in aid to Barumun Nagari Wildlife Sanctuary to support the construction of a new elephant shed. We also provided food for the elephants sourced from local farmers which we support as part of our community development program. The sanctuary currently houses 15 Sumatran Elephants (11 of which were rescued from the wild and 4 of which were born in the sanctuary) and 2 Sumatran Tigers (both rescued from the wild) across 600 Ha of land.

### Protection of High Carbon Stock (HCS) Forests and Peatland Management [103-2, 103-3]

While we have not cleared any new land for oil palm cultivation since the early 2000s, we are committed to ensure that any new developments will neither involve deforestation (based on the HCSA definition of forests) nor encroachment on HCV or HCS areas. All our future development will be preceded by HCV and HCS assessments using the HCSA toolkit and conducted by assessors accredited by HCVRN and HCSA. We are also committed to conduct Social and Environmental Impact Assessments (SEIA) prior to any new development or planting.

We will not develop new oil palm plantations on peat (following the Indonesian interpretation of RSPO's definition of peat) regardless of depth and will manage all our existing plantations on peat (around 250 hectares) in accordance with RSPO Best Management Practices (BMP).

# PROTECTING OUR ENVIRONMENT

The oxidation of peat is directly proportional to the depth of drainage. As such we must maintain water levels in our peat area at an optimum level to allow for minimal oxidation while maximizing yield. We do this by installing water control structures such as water weirs and water gates to regulate water levels, rulers and piezometers to monitor water levels, and subsidence poles to measure and monitor the rate of subsidence.

We conducted Peat Drainability Assessments for all our peat areas prior to replanting as required by the RSPO. To date we have carried out 6 soil and peat

assessments (combined with our HCV assessment) and 1 drainability assessment in our estates. The results of the assessment indicated that our existing plantations on peat were suitable for replanting.

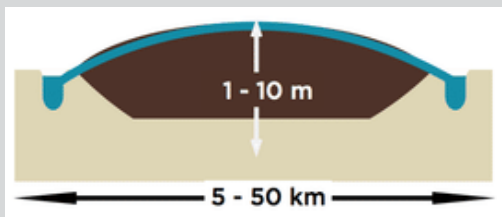


We install water gates to control the water level in our peat area

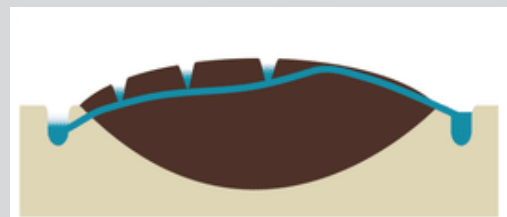
### Peatland drainage

Peatlands contain significant stores of carbon. Oil palm planting in peatlands requires peat to be drained to lower the water level which in turn causes the peat to begin decomposing. Unless properly managed, the decomposition of peat

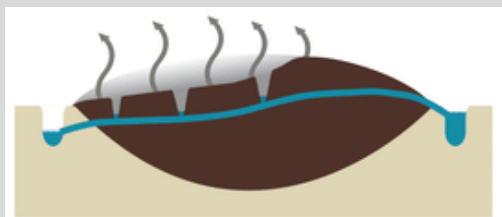
can cause significant carbon emissions and peat shrinkage (soil subsidence). The images below show the stages of peatland degradation following lowering of the water table from drainage



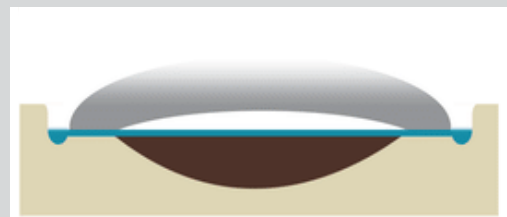
**1. Natural situation:** Peat is created from the accumulation of vegetation over thousands of years. The water table lies close to the surface.



**2. Drainage:** As peat is drained for planting, the water table is lowered. When peat is exposed to air, it begins to decompose resulting in the release of carbon emissions and soil subsidence.



**3. Continued drainage:** The dried peat decomposes causing further carbon emissions and soil subsidence. Dried peat also poses a high risk of fire.



**4. End stage:** Most of the stored carbon emissions in peat above the drainage limit is released into the atmosphere within decades unless conversation or mitigation measures are taken.

Page, S. E., Morrison, R., Malins, C., Hooijer, A., Rieley, J. O., and Jauhainen, J. (2011a). Review of peat surface greenhouse gas emissions from oil palm plantations in Southeast Asia. Technical Report 15, The International Council on Clean Transportation, Washington, DC.

# PROTECTING OUR ENVIRONMENT

## PEST MANAGEMENT AND FERTILIZER USE

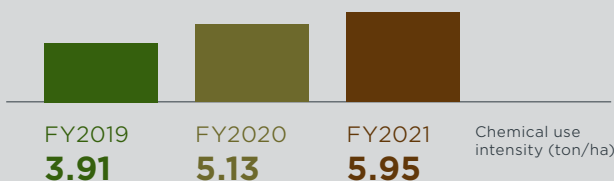
[103-1, 103-2, 103-3]



The use of chemicals such as synthetic fertilizers and pesticides is an unavoidable facet of plantation operations. However, these chemicals can adversely impact the environment in and around our operations. Groundwater contamination from soil leaching and surface water contamination due to the runoff from the rain are the two main environmental concerns. The use of chemicals can also negatively impact the health of workers who handle them. Permata Hijau is aware of the negative impacts and is committed to reducing the use of synthetic pesticides and fertilizers.

We use soil and leaf analysis to inform our manuring programmes to minimize excessive and ineffective fertilizer application.

### Quantity of chemicals (pesticides and fertilizers) used per hectare



Our chemical use intensity increased between 2020 and 2021 due to the maturing of our newly replanted palm. On the other hand, our chemical use intensity in 2019 and 2020 were lower because many of our older palms were not fertilized in preparation for relocation and our newly replanted young palms required less fertilizer.

Where possible, we use organic fertilizers derived from waste products which contain a good amount of valuable macro and micronutrients. We implemented a land application system whereby treated palm oil mill effluent (POME) from our mills is used in our plantations as organic fertilizer and for irrigation. We also trialled the installation of belt presses in some of

our mills to separate solids from effluent which can be applied in our plantations. Other wastes from our operations recycled into organic fertilizers include boiler ash and decanter solids.



Our land application systems recycle the nutrients present in POME back into the plantation

Our integrated pest management (IPM) system similarly utilizes natural and organic means to control pests, thus reducing the need for chemical pesticides. We use barn owls to control the rat population in our plantations. We also plant crops such as the allamanda flower to encourage the presence of beneficial insects that prey on the larvae of oil palm pests and mucuna bracteata to control the growth of weeds as well as provide supplemental nitrogen to young palm plants.

We are committed to phasing out the use of chemicals with the most negative impacts on the environment including paraquat, a chemical herbicide with high levels of toxicity, WHO class 1a and 1b chemicals as well as those listed in the Stockholm and Rotterdam convention.

We provide proper protective gear to our chemical handling workers and mandate their use in all chemical handling activities. We also provide chemical training for our workers who handle them. Chemical waste is stored in dedicated temporary hazardous waste storage facilities on our sites and is disposed of by certified third parties.



All our employees are equipped with proper protective equipment

# PROTECTING OUR ENVIRONMENT

## WATER AND EFFLUENT MANAGEMENT

[103-1]



### Water management

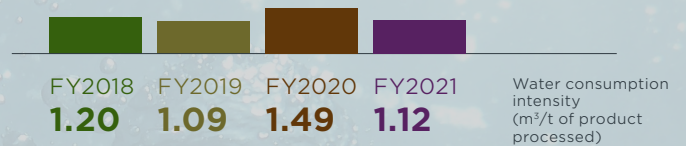
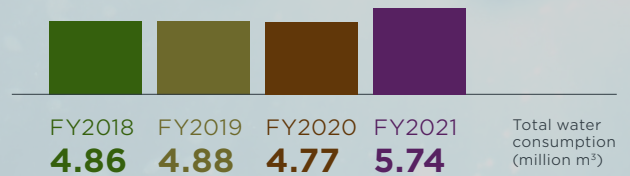
[103-2, 103-3, 303-4, 303-5]

Water efficiency is an important aspect of our sustainability management. We have therefore implemented several programmes and initiatives to reduce, reuse, and recycle water where possible. We installed rainwater collection drains on the roofs of our plants and employees' homes to supplement our water withdrawal. In a single plant, collected rainwater can provide up to 2% of total water usage. Other initiatives to reduce water withdrawal and consumption include using palm fibres instead of water to clean up accidental oil spills in our plants and reusing reject water from our reverse osmosis water treatment system to wash and clean our plants which can save us up to 10% of our water consumption.

 **Our water saving initiatives reduce water consumption by up to 12%**

We will continue to seek out and innovate ways to reduce our water usage and have set ourselves a target to reduce our 2030 water consumption intensity by 5% compared to a 2020 baseline. While we have no new water efficiency initiatives planned for the near future, we aim to continue expanding our current initiatives across our business units such as installing more rainwater collection drains.

## Water consumption



Our water consumption increased by more than 20% in 2021 compared to 2020 due to the expansion of our processing capacity with our new refinery in Dumai coming online. On the other hand, our water consumption intensity in 2021 decreased by almost 25% compared to 2020. This was due to the increased utilization of our plant capacities in 2021 after decreased utilization in 2020 caused by the Covid-19 lockdown.

## Effluent management

[103-2, 103-3]

Permata Hijau Group ensures that any effluent discharged complies with quality limits set by the relevant authorities. To do this we built wastewater treatment plants combining chemical and biological treatments for our palm oil mills, refineries and other downstream operations to treat both POME and palm oil refinery effluent (PORE).

In addition to the typical wastewater treatment plants which utilize a series of open lagoons and ponds, we constructed methane capture facilities in our palm oil mills to reduce GHG emissions and odors. In some of our mills, we also installed belt presses to separate out solids from effluent which in turn reduces its organic load. The separated solids are then used as organic fertilizers for our plantations.

# PROTECTING OUR ENVIRONMENT



A wastewater treatment plant in one of our units

Where possible, we recycle POME and other effluent into organic fertilizer and irrigation for our plantations through our land application system. This is supplemented with our integrated pest management (IPM) system which promotes the use of natural and organic means to control pests. These initiatives not only minimize effluent discharge, but also reduce the need for synthetic chemicals and with it, the potential run off of those chemicals into surrounding water bodies.

For our refineries and downstream operations, we constructed chemical based wastewater treatment plants which used flocculent and coagulant to remove organic materials from our wastewater, reducing their Chemical Oxygen Demand (COD) and Biological Oxygen Demand (BOD) to the level compliant with the government regulations which we hope to maintain.

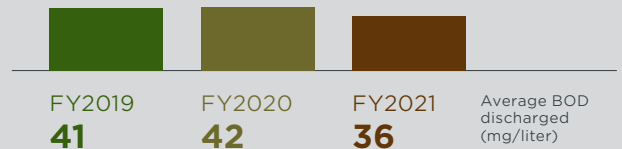


Belt presses are installed in some of our mills to help reduce effluent's COD load

## BOD of effluent by discharge destination

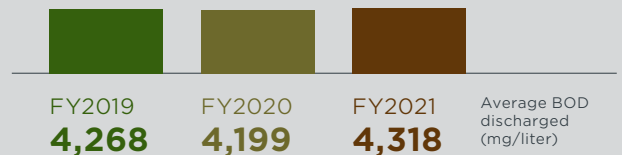
### Natural water body

Regulation standard (mg/litre): 100



### Land application

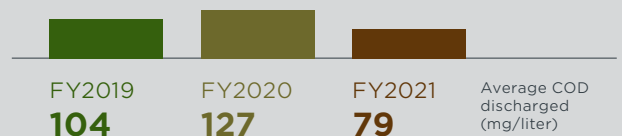
Regulation standard (mg/litre): 5,000



## COD of effluent by discharge destination

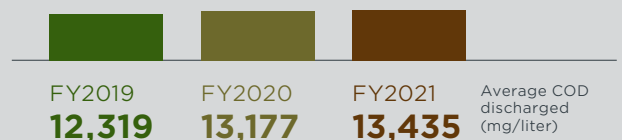
### Natural water body

Regulation standard (mg/litre): 350



### Land application

Regulation standard (mg/litre): NA



# PROTECTING OUR ENVIRONMENT

## WASTE MANAGEMENT

[103-1]



Permata Hijau Group is committed to ensuring all our waste is treated and disposed of in full compliance with the Indonesian law and regulations. Where possible we aim to promote the 3R's (reduce, reuse, and recycle) for all our waste.

### Hazardous waste

[103-2, 103-3, 306-1, 306-2, 306-3, 306-5]

We ensure the proper handling of hazardous waste by providing well-built and well equipped temporary hazardous waste storage facilities on our sites and engaging with certified third parties to transport and dispose of the waste. a target to reduce our 2030 water consumption intensity by 5% compared to a 2020 baseline. While we have no new water efficiency initiatives planned for the near future, we aim to continue expanding our current initiatives across our business units such as installing more rainwater collection drains.

### Quantity of hazardous waste produced by our operations

	FY2019	FY2020	FY2021
<b>Spent bleaching earth (SBE) (t)</b>	15,242	19,038	32,342
<b>Fly ash and bottom ash (FABA) (t)</b>	15,144	15,742	26,585
<b>Chemical container (t)</b>	63	65	122
<b>Other hazardous waste (t)</b>	324	327	559
<b>Total (t)</b>	30,773	35,172	35,608



Our hazardous waste is handled by certified third party transporters

Hazardous waste produced by our operation increased in 2021 compared to 2020 due to the expansion of our processing capacity with our new refinery in Dumai coming online.

In our plantations, empty chemical containers from synthetic pesticides and fertilizers are our main source of hazardous waste. We promote the controlled use of these chemicals through our integrated pest management (IPM) system and scientifically based manuring programs. By using natural and organic means to control pests and provide nutrients, we reduce the need for chemicals and thus reduce the empty chemical containers that need to be disposed of. We further minimize potential human and environmental exposure to dangerous chemicals by restricting the use of WHO Class 1a and 1b chemicals and those listed in the Stockholm and Rotterdam convention.

In our refineries, the main source of hazardous waste is Fly Ash and Bottom Ash (FABA) from coal fired boilers and Spent Bleaching Earth (SBE). To minimize FABA we promote the use of biomass such as Palm Kernel Shell (PKS) as a replacement for coal in our power plants. Out of our six refineries, four have phased out the use of coal and use palm kernel shells instead.

### Coal substituted and FABA avoided through the use of biomass in our refineries

	FY2019	FY2020	FY2021
<b>Coal substituted (t)</b>	460,289	445,984	491,500
<b>FABA avoided (t)</b>	23,014	22,299	24,575

# PROTECTING OUR ENVIRONMENT

## Non-hazardous waste

[103-2, 103-3, 306-1, 306-2, 306-3, 306-4, 306-5]

Non-hazardous waste from our plantations and mills includes empty fruit bunches (EFB) and palm kernel shells (PKS) which are predominantly reused and recycled. EFB can be reused as mulch and organic fertilizer. It can also be pressed and shredded into fibres that can be used to power boilers in our mills.

The use of EFB in our mills replaces PKS which can then be exported to and used in our sister refineries to replace coal and generate power.

We also began separating organic waste and non-organic waste from our waste streams. Non-organic waste is sent for recycling at third-party facilities while organic waste is predominantly sent to landfills.

### Recycling organic waste into a food source for black soldier fly larvae

Permata Hijau Group is committed to continually innovate our waste management systems. We are currently looking into ways to recycle our organic waste and one such way is to compost it and use it as a food source for black soldier fly larvae (BSFL). Organic waste is an effective substrate for growing larvae which can then be harvested and processed into animal feed.



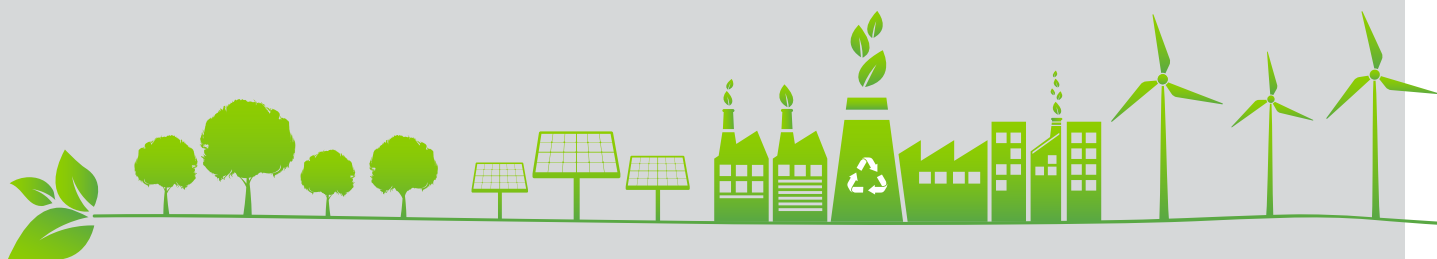
BSFL provide a sustainable source of protein and other nutrients in animal feed

BSFL composting is easy to operate and does not require a large amount of space. A single larva can consume up to 200 mg of food waste per day and can pupate within 2 weeks. The high fat and protein content of BSFL and prepupae also make it a good source of protein. The BSFL can be processed and sold as animal feed or the BSFL composting farm can be combined with chicken and fish farming on site.



BSFL can thrive on various food waste including fruits and vegetables, grains and commercial food waste

We hope to realize this idea and partner with a technology provider by the end of this year. The combined BSFL, chicken and fish farm will be managed by a local community group as part of our community development program.





# PROTECTING OUR ENVIRONMENT

## Quantity of non-hazardous waste generated and disposal method

Waste type	Disposal method	FY2019	FY2020	FY2021
EFB (t)	Reused as organic fertilizer or fuel	308,701	298,567	339,581
PKS (t)	Reused as fuel	115,908	111,672	115,416
Mesocarp fibre (t)	Reused as fuel	190,307	186,048	197,348
Inorganic general waste (t)	Sent to landfill, municipal waste processor or recycled by third party	1,531	1,537	1,688
Organic general waste (t)	Sent to landfill or municipal waste processor	1,101	997	949
Total (t)		617,549	598,822	654,982

### Permata Hijau Group’s subsidiaries receive PROPER Hijau awards

Permata Hijau Group annually participates in the Programme for Pollution Control, Evaluation and Rating (PROPER), a national public environmental reporting initiative established by the Indonesian Ministry of Environment.

The programme measures the environmental compliance of companies operating in Indonesia using a color-coded rating:

- Black (hitam)    Repetitive non-compliance

---

- Red (merah)    Some non-compliance

---

- Blue (biru)    Full compliance

---

- Green (hijau)    Full compliance with some beyond compliance programmes

---

- Gold (emas)    Full compliance with well-developed beyond compliance programmes

While we have consistently maintained PROPER Biru rating in our operations, we received PROPER Hijau rating for our subsidiaries PT. Nagamas Palm Oil Lestari and PT. Victorindo Alam Lestari for the first time in 2021.



2 of our subsidiaries received PROPER Hijau ratings in 2021

Of the 2,593 companies participating in PROPER in 2021, only 47 were awarded PROPER Emas and 186 were awarded PROPER Hijau. Permata Hijau Group is proud to be part of this select few honored and will continue to implement sustainable practices in every level of operations.

# PROTECTING OUR ENVIRONMENT

## CLIMATE CHANGE

[103-1]



Greenhouse gases (GHG) are a group of gases whose properties allow them to absorb and retain heat from the sun. The main greenhouse gases in the earth’s atmosphere are water vapor (H2O), carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O) and ozone (O3). The presence of GHGs in the atmosphere traps the heat reflected off the surface of the earth and causes an increase in ambient temperature. This warming effect allowed contemporary life forms to thrive. However, continued and uncontrolled increase in the concentration of atmospheric GHGs, especially those caused by anthropogenic activities, are threatening to cause an irreversible climate change and ultimately a runaway greenhouse effect. Actions are urgently needed to combat it. At Permata Hijau Group, we focus our efforts on two aspects: to manage physical climate risks and to combat climate change.

### Managing physical climate risks

[103-2, 103-3]

The tropics where Permata Hijau Group operates are expected to see more frequent and intense droughts and floods. Our short-term adaptation strategy is focused on looking at ways to better manage water supply such as storing floodwater from the wet season for use during the dry season. Over the longer term, we are looking at procuring drought and flood-resistant palm varieties for replanting.

### Combating Climate Change

[103-2, 103-3, 305-1, 305-2, 305-4, 305-5]

#### Quantifying our GHG emissions

GHG emission reduction is at the heart of Permata Hijau Group’s efforts to combat climate change. But before we can begin to reduce our emissions however, we first need to identify the sources of our GHG emissions and quantify them. To that end we utilize the GHG Protocol Standard and the RSPO PalmGHG calculator.

We use the GHG Protocol Standard to inform our direct (scope 1) and indirect (scope 2) GHG emissions emitted by our operations. Presently, we have omitted other indirect (scope 3) GHG emissions from our calculations but hope to quantify and report these emissions in the future.

### Carbon footprint of our operations calculated using the GHG Protocol Standard

	FY2019 (tCO2e)	FY2020 (tCO2e)	FY2021 (tCO2e)
Scope 1	630,926	637,457	873,606
Scope 2	4,272	5,477	2,733
<b>Total</b>	<b>635,198</b>	<b>642,934</b>	<b>876,339</b>

### Carbon emission intensity of our operations calculated using the GHG Protocol Standard

	FY2019 (tCO <sub>2</sub> e/t)	FY2020 (tCO <sub>2</sub> e/t)	FY2021 (tCO <sub>2</sub> e/t)
	0.13	0.15	0.13

Similar to changes in our total water consumption and water consumption intensity, our carbon footprint increased by almost 36% in 2021 compared to 2020 due to the expansion of our processing capacity with our new refinery in Dumai coming online while our carbon emission intensity decreased by 13% in 2021 compared to 2020 due to increased utilization of our plant capacities.

Our carbon footprint would have been much higher if not for our use of biomass in our power plants. Our biogenic emissions (emissions produced by the combustion of biomass which is recycled back by the palm trees and is not included in our carbon footprint calculations above) in 2021 is 611,241 tCO2e which is equal to 70% of our scope 1 and 2 emissions.

### Biogenic emissions from biomass

	FY2019 (tCO <sub>2</sub> e)	FY2020 (tCO <sub>2</sub> e)	FY2021 (tCO <sub>2</sub> e)
	381,684	568,262	611,241

# PROTECTING OUR ENVIRONMENT

We also use PalmGHG to evaluate the GHG emissions of our RSPO certified palm oil mills. PalmGHG is a life-cycle greenhouse gas emission calculator which includes indirect emissions from our suppliers such as emission from fertilizer production and transport, fuel production and transport and others. PalmGHG also includes emissions from land use change although Permata Hijau Group has no emissions from land use change in 2021 as we have not cleared any new land for oil palm cultivation since the early 2000s (before the RSPO cut off date of November 2005).

### Carbon emission intensity of our RSPO certified palm oil mills calculated using PalmGHG

	FY2021
tCO <sub>2</sub> e per tonne of crude palm oil (CPO)	4.86
tCO <sub>2</sub> e per tonne of palm kernel (PK)	4.86

#### Reducing our GHG emissions

We design our GHG emission reduction plan accordingly with a focus on the following activities:

1. Construction of methane capture plants

Permata Hijau Group was one of the first companies in Indonesia to install methane capture facilities in our palm oil mills. We commissioned our first methane capture facility in 2008 and equipped all our palm oil mills with methane capture facilities by 2010. Three of our methane capture facilities have been registered as CDM projects by the UNFCCC:

- » Project 2130: Methane Recovery in Wastewater Treatment, Project AIN07-W-04, Sumatera Utara, Indonesia
- » Project 2633: AIN08-W-03, Methane Recovery in Wastewater Treatment, Sumatera Utara, Indonesia
- » Project 2421: Nubika Jaya Biogas Extraction for Bio-Hydrogen Production



The biogas captured by our methane capture facilities are utilized to generate electricity or bio-hydrogen

Since their commissioning, these projects have generated a total of 91,215 Certified Emission Reduction credits which were sold to the Netherlands, Switzerland and Japan through our partners AES AgriVerde and Mitsubishi. These projects would have generated more CERs had the CER market not collapsed in 2012.



Our methane capture facilities prevent the release of

**164,000 tCO<sub>2</sub>e** annually

## PROTECTING OUR ENVIRONMENT

### 2. Committing to no deforestation, no peat and no exploitation (NDPE)

We released our Sustainable and NDPE policy in 2015 marking our commitment to zero deforestation and zero peat conversion. While we have not developed any new plantations since the early 2000s, this policy will ensure that any new potential developments will not be located in forested or peat areas which will greatly reduce future GHG emissions from land use change.

### 3. Practicing peat best management practices

For existing peat areas located within our concession, we practice RSPO Best

Management Practices (BMP). This includes installing water weirs and gates in our canals to maintain water levels at an optimal 50-70 cm below ground level and monitoring the rate of subsidence in our peat areas.

### 4. Improving yield

One of the best ways to increase palm oil production without increasing GHG emissions or adverse environmental impacts is to increase palm yield. To increase our yield, we engage in best agronomic practices, including replanting old palms with high quality palm seedlings. More information on measures we are implementing to improve yield can be found on page 35.



Replanting old palms with high quality palm seedlings can increase palm oil production without needing additional land

While we will continue to seek out and innovate opportunities for emission reductions, we recognize that our current initiatives already cover the most obvious and impactful opportunities, such as methane capture. Future reduction activities may be limited in their impact. As such, we have set a modest target of reducing our carbon intensity by 5% by 2030 compared to a 2020 baseline.

We selected a more recent baseline to ensure that we are focused on driving future improvement. This target applies to Scope 1 and 2 GHG emissions for all our operations upstream and downstream. As we progress, we will review this target on regular basis to ensure that it remains appropriate to drive decarbonisation across our business.

# PROTECTING OUR ENVIRONMENT

## Yield and extraction improvement

[103-1, 103-2, 103-3]



As demand for palm oil rises, so do concerns over its environmental impacts. Palm oil is native to tropical regions which are also home to a host of flora and fauna as well as a number of indigenous communities. The clearing of land to develop new plantations is therefore one of the biggest concerns for the industry.

We recognize that one of the best ways to mitigate the environmental impacts of palm oil is by increasing existing land productivity. By doing so, we can meet the growing demand for palm oil without the need for land clearing for new plantations. We are constantly on the lookout for ways to improve our productivity whether that means an increase in FFB yield or CPO extraction rates. This is reflected in our continuous improvement policy which aims to consistently improve on all aspects of our operations.

One way we improve yield in our plantations is through our replanting program. Replanting older and less productive palm and replacing them with younger and more productive trees is necessary to produce more oils without the need for additional space. This replanting program took on more urgency for us as our plantations are generally older plantations planted in the 1990's and early 2000's. We replace the older palms with high quality tenera seedlings sourced from reputable sources with certification.



Good nursery management is important in ensuring our seedlings blossoms into healthy and fruitful palms

Other than replanting we also implemented other methods to increase our yield. These include best management practices such as science-based manuring and integrated pest management. In our mills, we utilize science-based harvesting timing to ensure the palm fruits supplied to our mill are ripe which yield the most oil.



Harvesting ripe fruits is important to increase our oil yield

In the future, we hope to share our best management practices with our corporate suppliers and smallholders. We plan on doing so by conducting routine sustainability workshops for our suppliers and visiting supplier mills.



# EMPOWERING OUR PEOPLE AND COMMUNITIES

[103-1]

## COMMUNITY AND SMALLHOLDER LIVELIHOOD

[103-1]



The palm oil sector plays an important role in improving the livelihoods of communities in Indonesia by providing job opportunities in remote areas and stimulating economic activities in those areas. It is estimated that 4.5 million people are directly employed in the palm oil industries and another 12.5 million are indirectly employed.<sup>1</sup> As a major player in the palm oil sector, Permata Hijau Group plays a part in this and along with the government and other economic actors strives to create strong and prosperous communities in the areas where we operate.

### Rights of indigenous and local communities

[103-2, 103-3, 413-1]

Permata Hijau Group respects the rights of indigenous people and local communities. We follow the principles of Free, Prior and Informed Consent (FPIC) in all our current and future dealings with these communities and respect the right for them to give or withhold consent for land in which they hold legal, communal or customary rights or tenures.

### Social impact assessment

We conduct social impact assessments for all our current and future developments. The results of the assessment guide our engagements with the locals and provide inputs in designing our social programs. By understanding our impacts on the local community, we can identify aspects of our business that may need attention to mitigate their negative impacts while fostering positive impacts. The social impact assessment also provides a baseline to help us develop our CSR programs.

### Community engagement

We regularly invite locals and institutions to share their concerns, advice, and inputs to our operations as part of our stakeholder consultations. We also take the opportunity to use these consultations to familiarize stakeholders and provide training on our Sustainability Policy (i.e. no land burning and protecting HCV areas) as well as collect further input for our CSR programs. These stakeholder consultations also provide avenue to diffuse any disagreement or conflict which may be brewing in the back.

In addition to the stakeholder engagement, we assigned dedicated personnel in each of our units of operation to continuously engage with local communities, local governmental bodies and local NGOs to collect and analyse inputs from them to minimize risk of conflicts.

### Conflict resolution

We set up a complaint and grievance mechanism for our stakeholders to use. This mechanism covers all non-compliance issues including land conflicts. Stakeholders may raise complaints and grievances through multiple avenues including email, phone, mail or in person at our offices. More information on our Complain and Grievance system can be found on our [website](#).



<sup>1</sup> <https://gapki.id/en/news/19975/indonesian-palm-oil-industry-complies-with-labor-regulations>

# EMPOWERING OUR PEOPLE AND COMMUNITIES

## Community investment [103-2, 103-3, 203-1]

While we believe our presence has already generated a positive contribution to the local economy through employment opportunities and stimulating local economic activities, we continue to provide direct assistance to our surrounding communities through our Corporate Social Responsibility (CSR) programs.

Our CSR programs revolve around four pillars:



### 1. Permata Cerdas



### 2. Permata Sehat



### 3. Permata Hijau



### 4. Permata Ekonomi dan Sosial



Education through Permata Cerdas  
Increased access to education can contribute to poverty reduction. This is why we seek to improve access to education and knowledge for the locals, particularly underprivileged students, through our Permata Cerdas programs. Over the last three years, we awarded 320 scholarships to outstanding and disadvantaged students, provided subsidies to 20 local schools and madrasahs, and sponsored a fully equipped computer lab for a local university.



## Healthcare through Permata Sehat

We believe that health is the most important factor in maintaining a strong and prosperous society. Permata Hijau Group is therefore committed to providing and making health services accessible for the surrounding local communities. We do so by providing subsidies to local health centres, coordinating blood donation drives, conducting free mass circumcisions for children and offering free check-ups and treatment.

During the Covid-19 pandemic, we provided IDR 4 billion in aid to local, provincial, and national governments as well as local NGOs to buy medical masks, personal protective equipment, rapid test kits and other medical necessities. We also worked with local health authorities to organize mass vaccination drives for our employees and their families.

More than **82%** of our employees had been vaccinated by the end of 2021.



During the ongoing Covid-19 pandemic Permata Hijau Group assisted our employees and their family members to get vaccinated

# EMPOWERING OUR PEOPLE AND COMMUNITIES



## Environmental protection through Permata Hijau

Permata Hijau Group understands that environmental protection is at the heart of all sustainable development. In line with our [Sustainability Policy](#), we are committed to zero deforestation, protection of HCV

areas in our plantations, zero use of fire to clear land, zero new development in peat area and many others. We also seek opportunities to participate in the restoration and rehabilitation of damaged natural ecosystems such as mangrove forests restoration and degraded land reforestation through our Permata Hijau programs.

### Rehabilitating degraded land and building elephant enclosures

In 2021, we worked with the Leuser International Foundation (LIF) to help restore degraded land around the arabica coffee plantations in Gayo Highland, Aceh. The program launch was marked by the signing of a Memorandum of Understanding (MoU) between representatives from Permata Hijau Group and LIF. Stakeholders from the local plantation agency and local villages were also present to witness the ceremony.

The program aimed to restore 60 Ha degraded and burnt land by planting 8,000 coffee and hardwood trees such as avocado, mindi, lekpa, kesemek and kerto that provide shade, water storage and erosion prevention. The program also created job opportunities for 52 local coffee farmers.

We also worked with the Barumon Nagari Wildlife Sanctuary in Padang Lawas Utara which is home to a dozen Sumatran elephants and tigers. Both species have been labelled as critically endangered by the IUCN. We donated Rp. 200,000,000 to help construct an elephant enclosure and committed Rp. 100,000,000 a year to provide fruits and vegetables for the elephants as part of our “feed the elephant” program. This program also supported local farmers by purchasing fruit and vegetable crops from them at a set price thus providing an income guarantee.



Permata Hijau Group supports local farmers in surrounding communities through the purchase of fruit and vegetable crops for our “feed the elephant” program



Permata Hijau Group worked with the Barumon Nagari Wildlife Sanctuary to support the protection of critically endangered Sumatran elephants



# EMPOWERING OUR PEOPLE AND COMMUNITIES



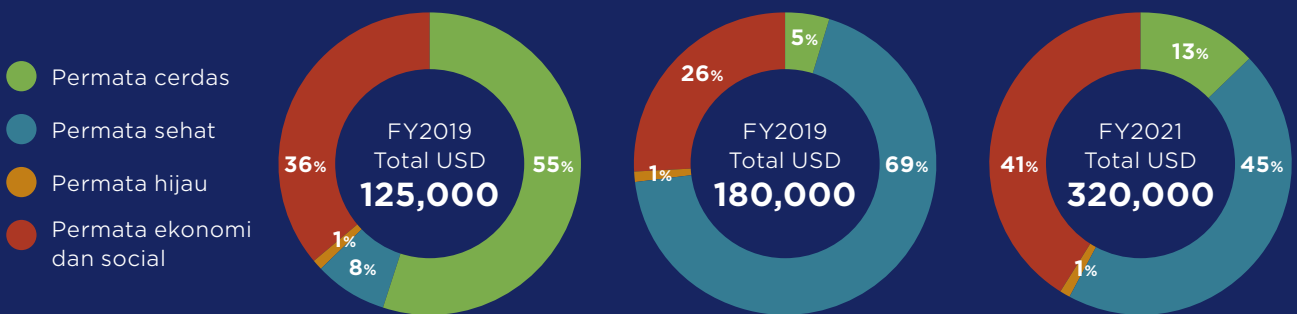
## Economic and social development through Permata Ekonomi and Sosial

Through our Permata Ekonomi and Sosial programs, we aim to improve the standard of living of the local communities and address food security issues by forging economic partnerships with local villages and youth organizations to provide decent work and livelihoods. Our programs offer trainings and guidance to local palm oil farmers. We also provide them with good quality oil palm seedlings to help in the replanting their old plantations. We also encourage entrepreneurship by providing start-up capital for aspiring locals businesses. In the past three years, we supported 2 local youth groups in Padang Lawas in building catfish farms. We also supported one of our local farmer cooperatives by guaranteeing the purchase of their farm products to support our “feed the elephant” program.

In addition to our community development programs, we also provide charitable assistance to those in need. Our activities include providing subsidized basic food products such as rice, sugar, cooking oil, etc through our pasar murah drives and donating basic foodstuff packages to underprivileged people in the lead-up to the Hari Raya holiday.

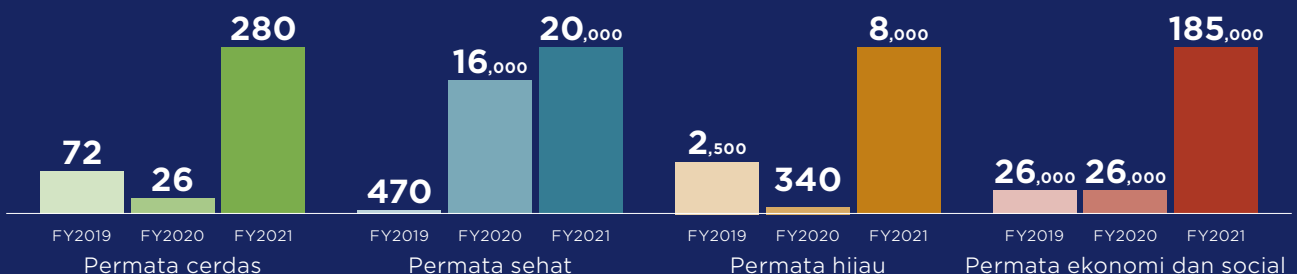
Access to buildings and roads is crucial to accelerating economic progress and reducing poverty. As such we have invested extensively to build infrastructure in local villages. Over the past three years, we funded the construction of several artesian wells to provide clean water and provided building materials to support the construction of places of worship. We also loan out heavy equipment such as dump trucks and loaders to local communities to aid in local infrastructure projects.

### Spending allocation by program (%)



Our CSR spending allocation was changed dramatically in 2020 and 2021 due to COVID 19. Health related program was expanded significantly in 2020 before being dialled back in 2021.

### Beneficiaries by program (people)



# EMPOWERING OUR PEOPLE AND COMMUNITIES

## RESPECTING HUMAN RIGHTS

[103-1]



Labour and human rights issues within the palm oil industry have been under intense scrutiny over the past decade, particularly over the past two years with the US State Department's recent investigation and sanction on two prominent Malaysian oil palm growers. At Permata Hijau Group, we are committed to ensuring our operations and suppliers are in full compliance with Indonesian labour laws as well as promoting a discrimination-free working environment.

### Labor conditions and human rights

[103-2, 103-3]

#### Forced and child labour

We prohibit the use of forced and child labour and do not hold our workers' identification documents against their will. All our workers enter employment with us willingly and are provided with an employment contract. We require all new hires to be at least 18 years old and check the birthdates of all our applicants. We also socialize our workers to ensure that they do not bring their spouses or children to help them in their work.

#### Fair wages

We ensure that all our workers are paid at least the prevailing minimum wage, set each year by the Indonesian government, and strive to provide a decent living wage. In addition to wages, we also provide in-kind benefits for all workers employed in our production units including free housing, water and electricity. For our target-based employees (such as harvesters), we ensure set targets are fair and achievable by one person working a normal working week. We maintain records of all paid salaries and provide payslips, either electronically or printed if requested, to all our employees.

#### Freedom of association and collective bargaining

We respect the rights of our workers to join trade unions and/or to collective bargaining agreements.

The workers in our plants and plantation are free to join trade union and conduct union activities. We also provide support to labor union activities such as providing venue for meeting etc.

#### Harassment, abuse and discrimination

We have a zero-tolerance policy towards harassment, abuse or discrimination of any kind on our premises. Victims of harassment, abuse or discrimination can report complaints and grievances through our whistleblowing system. Whistle-blowers are guaranteed anonymity and protection from reprisals.

### Gender equality and inclusion

[103-2, 103-3, 405-1]

As part of our commitment to gender equality and inclusion, we established a gender committee comprised entirely of female workers which serves to advocate for women workers' rights, develop extracurricular programs for women workers and address complaints regarding gender-based harassment. When a complaint is received, the committee will conduct enquiries, assist and provide redress to victims and recommend penalties and actions against the harasser to management.

We are also committed to protecting women's reproductive rights and provide our women workers with 90 days of maternity leave. We recognize that lack of access to childcare is one of the main reasons women leave the workforce. To address this, we provide crèche facilities at our production units as well maternity room facilities for working and breastfeeding mothers. We also provide special arrangements for pregnant and breastfeeding mothers working in positions that could be potentially dangerous to the baby's health, such as those working with chemicals, by reassigning them to other jobs while they are pregnant or breastfeeding.

11% of our workforce are women while 14% of our management positions and 9% of our senior management positions are filled by women. We provide equal pay to both men and women working in the same position.

# EMPOWERING OUR PEOPLE AND COMMUNITIES

## EMPLOYEE HEALTH, SAFETY AND WELLBEING

[103-1, 403-4]



Maintaining the health and safety of our employees is vital to maintaining our operations. As part of our commitment to creating a safe and healthy working environment, we set up an occupational health, safety and environment (OHSE) committee in each of our operational units. The committees are composed of the workers and the management, including at least one licensed occupational health and safety expert (ahli K3), and is headed by the site manager. They are responsible for all health and safety issues within their units including dealing with fallouts from work accidents. The committee is also responsible for conducting monthly meetings and producing annual health and safety reports for senior management in our headquarters.

### Occupational Health and safety management system

[103-2, 103-3, 403-1, 403-2, 403-9]

We implemented an occupational health and safety (OHS) management system based on Indonesian national regulation No. 50 year 2012. The Indonesian Ministry of Manpower endorses and awards companies with SMK3 certification for Occupational Health and Safety Management based on performance against 8 principles and 166 criteria. Implementation is divided into 3 levels: beginner, intermediate and advanced. Companies at the beginner level are only audited against 64 criteria while those at the intermediate and advanced level are audited against 122 and 166 criteria respectively. Advanced level implementation is further divided into 2 grades: silver flag for scores between 60% and 84% and golden flag for scores of 85% or higher. 80% of Permata Hijau Group's units have received a golden flag (Bendera Emas), the highest available SMK3 certification.



Successful implementation of Advanced SMK3 will be awarded Silver or Gold flag, Permata Hijau Group achieved Gold flag for all of our operational sites

We conduct Hazard Identification and Risk Assessments (HIRA) for all our production processes. Assessments are conducted jointly by the OHSE committee and respective operational departments to identify and qualify all potential health and safety risks in our operations and find ways to eliminate or mitigate those risks. Assessments are reviewed annually as well as whenever there is a work accident or when new equipment and/or workflows are installed or implemented. Workers are also encouraged to report work-related hazards and dangerous situations through an anonymous suggestion box. These inputs will be used to inform our regular HIRA reviews.

In 2021, we suffered 3 deaths due to work accidents, 18 heavy injuries and 100 light injuries. We lost 16,345 hours due to accidents or 0.17% of our total work hours. We regret the lives lost and the injuries that occurred within our units of operation and will redouble our efforts to create a safe and health working environment for our workers.

# EMPOWERING OUR PEOPLE AND COMMUNITIES

## Health and safety culture

[103-2, 103-3, 403-5, 403-7]

All employees are trained on health and safety including firefighting, first aid, emergency situations and other topics. Select employees undergo occupational health and safety expert training (Ahli K3), a two week-long nationally recognized program, where upon completion participants become licensed Occupational Health and Safety Experts.



All of our employees undergo health and safety training covering topics such as first aid

We put up safety signs and banners throughout our operational units to continually remind employees to prioritize health and safety and ensure they are equipped with the proper personal protective equipment when they work.

Safety inspectors are employed to implement and monitor our health and safety system.



Our employees are provided with proper personal protective equipment to protect them from occupational hazard

## Protecting our employees during the Covid-19 pandemic

To protect the health and safety of our employees during the Covid-19 pandemic, we implemented measures in line with guidance provided by relevant health authorities including mask mandates, a work from home program for office employees, social distancing in our offices and facilities, providing disinfection sprays for our offices, checking temperatures and installing hand sanitizers and washbasins at the entrance of our facilities, and giving workers access to free swab test kits. We also conducted mass vaccination drives for our employees and families.

Where possible, we also switched from face-to-face to virtual meetings and audits (internal and

external). For meetings that must be done in person, we implemented a strict visitor protocol across our entire premises requiring a negative PCR test conducted within the last 24 hours. We also worked with the Barumon Nagari Wildlife Sanctuary in Padang Lawas Utara which is home to a dozen Sumatran elephants and tigers. Both species have been labelled as critically endangered by the IUCN. We donated Rp. 200,000,000 to help construct an elephant enclosure and committed Rp. 100,000,000 a year to provide fruits and vegetables for the elephants as part of our “feed the elephant” program. This program also supported local farmers by purchasing fruit and vegetable crops from them at a set price thus providing an income guarantee.

# EMPOWERING OUR PEOPLE AND COMMUNITIES

## Access to healthcare

[103-2, 103-3, 403-3]

Permata Hijau Group provides medical insurance to all our workers through the Indonesian government’s BPJS kesehatan program. We also ensure that primary health care facilities are located within one hour driving distance of our plantations and plants. In the event of an emergency, we have ambulances on standby.

We also provide regular medical check-ups for all current and prospective employees. For general employees, medical check-ups will include typical blood and urine tests. We conduct additional tests for those working with chemicals and dusty or noisy areas such as cholinesterase tests (to identify signs of poisoning from pesticides), thorax/spirometry tests, and hearing tests.

## Employee wellbeing

[103-2, 103-3, 403-6]

We subscribe to the principle of prevention before intervention and thus promote a healthy lifestyle for our workers including no smoking, proper hydration and regular exercise. We put up flyers on our announcement boards and throughout our facilities encouraging workers to stop smoking. Smoking is also strongly restricted within our premises. Employees caught smoking within our facilities are subject to heavy fines and other disciplinary actions. Flyers and urine charts are similarly posted throughout our facilities to remind workers to stay hydrated. Lastly, we built several sports facilities including badminton courts, football fields, and table tennis courts within our premises to encourage regular physical activity.

## HUMAN CAPITAL DEVELOPMENT

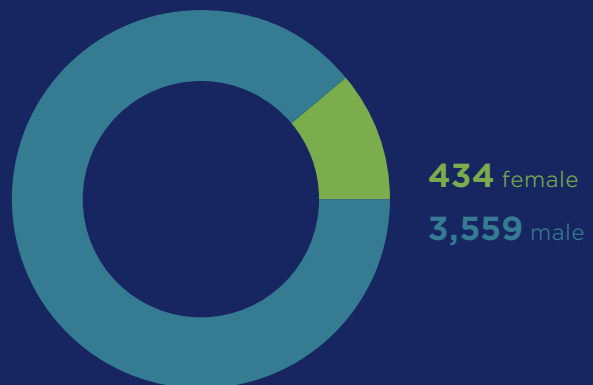
[103-1, 405-1]



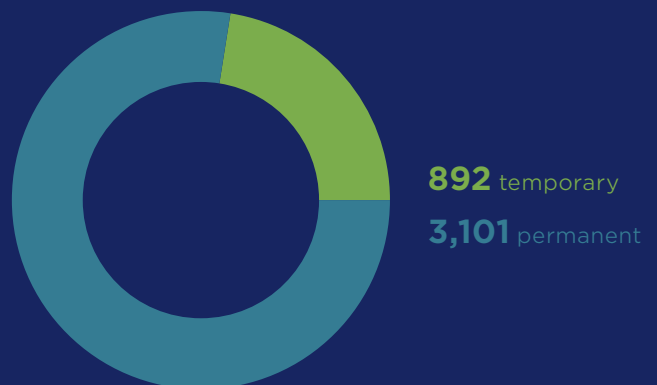
Our employees are our core asset. Attracting and maintaining top talent is therefore key to ensuring the long-term success of our business. We do this by providing employees with attractive incentives including opportunities for growth and professional development as well as employee benefits.

Our operations currently employ 3,993 workers spread over our operations in North Sumatra and Riau.

## Employees by gender



## Employees by contract type



## Talent Attraction

[103-2, 103-3]

We begin building our talent pool early on by offering scholarships to academically deserving students, especially those living in the areas where we operate. These students are given priority during our recruitment process after they graduate. We also recruit students from various universities in Indonesia to participate in internships. These internships allow students to develop practical experience in our plantations and mills while also providing us with an opportunity

## EMPOWERING OUR PEOPLE AND COMMUNITIES

to evaluate potential hires. To complement the above mentioned strategies, we conduct regular recruitment drives at universities and high schools.

### Talent Retention

[103-2, 103-3, 401-2, 404-3]

Retaining top talent is a priority for management. We do so by offering competitive pay and performance bonuses as well as implementing the following:

1. Annual performance evaluations  
We conduct annual performance evaluations to assess the performance of employees over the past year. To prevent favouritism, we gather feedback not only from their superiors but also from their colleagues, either within their own or different department, with whom they interact.
2. Multiple windows for promotions  
Growth opportunities can be a key incentive for highly skilled talent. We provide three windows in a year (January, May and September) when our employee can be given a promotion. This multiple windows provide flexibility in managing and rewarding our employees.
3. Annual employee survey  
We recognize that employees appreciate being given a voice in managing the company. As such, we conduct annual company-wide employee surveys where employees can provide inputs and advice as well as score our management team. The results of the surveys are publicly reported to all employees.
4. Promoting from within  
We strive to promote existing employees into open positions before considering external hires. External hires will only be considered if there are no qualified employees to fill in the position or the position requires certain skill sets not available within the company.
5. In kind benefits  
In addition to wages, we also provide in-kind benefits. Employees based in production units are provided with free housing including full

access to electricity and running water. They also have access to sports and recreational facilities, places of worship, and medical and educational facilities. Head office employees are provided with gym memberships, subsidized lunches and free medical insurance.

We also employ part time workers in our operations (mostly in our plantations) to work on activities which are seasonal in nature such as manuring and spraying. Due to the nature of our plantations which are generally small in size and scattered across our estate, manuring and spraying are not full year activities and precludes the maintenance of permanent staff. While we have looked into converting our part time workers to full time by reducing the total number of workers and increasing the length of the workday, this is challenged by the timeframe needed to achieve optimum impact from manuring and spraying and by the unwillingness of our part time workers to increase their workday. Most of our part time workers are local villagers for whom part time work at our estates is a source of supplementary income.

### Talent Development

[103-2, 103-3, 404-2]

We provide regular training for all our workers and staff. All new workers are provided with induction training where they are provided with a brief of Permata Hijau Group's history, vision, mission and culture. They are also trained on standard operating procedures, health and safety and any certification programs required for their position. Existing workers are provided with annual refreshment training on the above in addition to specialized training and accreditation to become qualified personnel.

In addition to technical training, we also provide leadership, communication and self-improvement training. We conduct annual leadership workshops for management on leadership, problem-solving, empathy, and effective communication led by well-qualified and renowned trainers. Due to the ongoing Covid-19 pandemic, most of our trainings were conducted online.

# RESPONSIBLE BUSINESS



## CORPORATE GOVERNANCE AND ETHICS

[103-1]



We believe that implementing good corporate governance to foster ethical values and good behaviour will ensure long-term sustainable growth and ultimately enhance the confidence of shareholders and other stakeholders of the company.

### Code of conduct

[103-2, 103-3, 102-16]

Our code of conduct contains basic principles of personal behaviour and professionalism. It serves as a guide for employees to uphold company values such as: Teamwork, Integrity, Professionalism, Communication and Excellence. Areas covered in the code of conduct include professionalism, confidentiality, conflicts of interest, competition, bribery, human rights and environmental management among other topics.

We expect all our employees to uphold good business ethics and adhere to all applicable laws and regulations. The code of conduct is provided to all new employees to read and is part of the onboarding process. It is also regularly socialized to our employees through our regular training program. The code of conduct is also easily accessible in our internal communication platform.

### Anti-corruption and anti-bribery

[103-2, 103-3]

Anti-corruption and anti-bribery are an integral part of our code of conduct and we have a zero tolerance policy towards any form of corruption or bribery. Any violation is considered as a serious breach of trust and results in the most severe punishment.

### Whistleblowing

[103-2, 103-3, 102-17, 205-3]

Employees are obligated to report any violations to our code of conduct. They are encouraged to do so through our formal channel of communication for complaints and grievances. We will provide protection against reprisal for any employees

who submit a report in good faith. All violations are reported to and are handled by our Human Resources Department and/or the Board of Directors.

In 2021, there were no reported incidents of anti-competitive behaviour, monopolistic practice or corruption or bribery cases involving Permata Hijau Group.

## CONSUMER AND CUSTOMER

### Protecting consumer health

[103-1, 103-2, 103-3, 416-2]

We supply crude palm oil, cooking oil, specialty fats and oleochemicals to our customers to be processed further into food, feed, personal care products, biodiesel and other chemicals for domestic and international markets. Our customers came from all over the world with China, India and Europe being the top three export destinations.

We are committed to producing safe and high-quality products. This means implementing good manufacturing practices, continuous improvement measures and operating in line with the relevant global standards. Our palm oil products have achieved numerous food and feed safety certifications such as ISO 9001, ISO 22001, Good Manufacturing Practice (GMP), Hazard Analysis and Critical Control Point (HACCP), and Food System Safety Certificate (FSSC 22000). Those certifications provide assurances to our consumers that our product is safe to consume and is of high quality.

We had no incidents of non-compliance with regulations or customer complaints concerning the health and safety of our products in 2021.

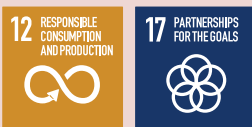
### Sustainable palm oil

In addition to quality and food safety certification, we also employ third-party certifications to measure our progress towards sustainability. We have successfully obtained and maintained several sustainability certifications for our palm oil including RSPO and ISCC. In addition to sustainability certifications, we also participate in multiple sustainability scorecards such as SPOTT, Forest 500, CDP and Ecovadis. A summary of our certifications and membership associations can be found on pages 50-52.

# RESPONSIBLE BUSINESS

## SUPPLY CHAIN

[103-1]



We recognize that developing a supply chain aligned with our sustainability policy is essential to realizing our commitment to producing sustainable palm oil. As such we actively engage with our suppliers to reinforce the importance of sustainability and traceability as well as provide technical support to support suppliers on their own journey.

### Our supply chain

[103-2, 103-3, 102-9]

As an integrated palm oil company, we source our materials from many different suppliers. These include raw materials such as palm fruit, palm oil, and palm kernels as well as other supporting materials such as fertilizers, pesticides, fuels, chemicals and other materials.

Palm fruit sourced from our own plantations as well as third-party suppliers are processed in our palm oil mills. Our third-party palm fruit suppliers are numbered in the high hundreds, a majority of whom are independent smallholders. We also source palm fruit from larger outgrowers, farmer cooperatives, and plantation companies. The produced palm oil and palm kernel proceed in our mills are then processed in our refineries and kernel crushing plants along with oil and kernel purchased from third parties. In 2021, we purchased oil and kernel from 236 palm oil mills most of which are in North Sumatra, Aceh and Riau. We also purchase from Jambi, West Sumatra, South Sumatra, West Kalimantan and Central Kalimantan.

## Supply chain traceability

[103-2, 103-3]

We consider traceability as one of the most important aspects of our drive towards sustainability. However, we also understand that the complexities of the palm oil supply chain with its multitudes of smallholders and middlemen means creating a full supply chain map will be a colossal challenge. As such we adopt a two-tiered approach to traceability:


1. Tier one: Traceability to the Palm oil mill
2. Tier two: Traceability to the Plantation

We are committed to achieving full traceability to our suppliers (first to mills and later to plantations) and have developed traceability to mill and traceability to plantation systems.

### Traceability to mill

88% of our palm oil and kernel are sourced from third-party palm oil mills. To be considered fully traceable to mills suppliers are required to provide the mill name, mill address, and GPS coordinates of the mill. Detailed information regarding our supplier mills including mill name, parent company, mill address, GPS coordinates and UML ID (a unique universal ID created by a consortium comprised of the World Resource Institute (WRI), Rainforest Alliance (RA), Proforest and Daemeter) can be accessed through our [traceability dashboard](#). We have achieved 100% traceability to mill since 2018 and managed to maintain that achievement in 2021.

---

 **100%** traceability to mills in 2021.

---





# RESPONSIBLE BUSINESS

## Traceability to plantation

Traceability to plantation is exponentially more difficult to achieve than traceability to mill because of the vast and diverse sources of fruit being supplied to mills. A single mill's supply chain can include large plantations as well as smaller plantations and smallholders, many of whom only work on 2-5 hectares of land and sell their fruit through middlemen. 40% of Indonesian palm fruit is grown by smallholders. Due to this complexity and limited time and resources available, we adopted a risk-based three-tier definition of what constitutes as being traceable to plantation.

1. For plantation companies:

- Name of the plantation
- Address of the plantation - at minimum the name of the village (Desa) or sub-district (Kecamatan) should be provided
- GPS coordinates
- Size of the plantation
- Volume supplied to the mill

2. For independent outgrowers, independent smallholders, and smallholder cooperatives:

- Name of the grower/cooperative
- Address of the grower/cooperative - at minimum the name of the village (Desa) or sub-district (Kecamatan) should be provided
- Volume supplied to the mill

3. For agents or other middlemen:

- Name of the agent and/or middlemen
- Address of the agent and/or middlemen facility - at minimum the name of the village (Desa) or sub-district (Kecamatan) should be provided
- Area of operation (FFB sourcing) - at minimum the name of the village (Desa) or sub-district (Kecamatan) should be provided
- Volume supplied to the mill



Palm oil value chain

In this risk-based approach, independent outgrowers, smallholders, agents and middlemen only need to disclose the area or village where they grow or source their fruits. If suppliers source their fruits from villages that overlap protected areas such as national parks, wildlife reserves, etc they will be prioritized for in-depth traceability studies.

By the end of 2021, we traced **54% of our fruits to plantation**. We aim to continue increasing this percentage with a target to reach 100% traceability to plantation by 2025.

# RESPONSIBLE BUSINESS

## Supplier assessment and engagement

[103-2, 103-3]

We regularly engage with our suppliers on sustainability. Each year we conduct a supplier workshop to share the progress of our sustainability

journey, our updated expectations and to provide training. Due to the Covid-19 pandemic, workshops have been moved online. We are currently assessing if the workshop can be conducted online permanently.

### Permata Hijau Group conducted its first supplier workshop on sustainability

We conducted our first supplier workshop in March 2020. The aim of the workshop was to socialize Permata Hijau Group’s suppliers on the importance of sustainability and transparency as well as introduce our updated sustainability/ NDPE policy and supplier code.

The event was attended by more than 50 participants. Speakers from Cargill, CORE, PT. Sumber Tani Agung and PTPN V were invited to share what each company was doing to help

their suppliers achieve sustainability and their experiences implementing sustainability in their respective companies.

The workshop also included a technical session led by CORE to introduce suppliers to the traceability to plantation system including the many tools that they can utilize and the NDPE Implementation Reporting Framework (IRF). Participants were invited to conduct a mock filling of the IRF form.



Permata Hijau Group conducted its first supplier workshop in 2020

In addition to our supplier workshops, we conduct a Supplier Risk Assessment and Traceability Questionnaire each year which consists of a supplier self-assessment form and a traceability form. The supplier self-assessment form gives our suppliers the opportunity to share their progress on environmental, social, ethics and certification while the traceability forms provide a platform for our suppliers to identify, trace and declare their own suppliers. The questionnaire helps us identify high-risk suppliers who will be prioritized for monitoring, engagement and support.

Starting this year, we will begin a regular visit program for our high-risk suppliers whose supply shed overlap protected areas and who are lagging in traceability and sustainability. These visits will provide personalized socialization and training on our sustainability commitment as well as supplier and traceability questionnaire. If requested by suppliers, we also provide an in-depth walk-through on traceability to plantation. We will continue to engage with our high-risk suppliers until they achieve full traceability to plantation.

## RESPONSIBLE BUSINESS

### Promoting smallholder inclusiveness

[103-2, 103-3]

Smallholders play an important role in Permata Hijau Group's supply chain. 84% of the fruit processed in our palm oil mills are sourced from smallholders, a vast majority being independent smallholders. As such we are committed to building an inclusive and sustainable supply chain that welcomes both small and big smallholders.

Our commitment to smallholder sustainability is reflected by our efforts to educate and engage them on topics such as HCV conservation and monitoring, zero burning principles, no deforestation, chemical health and safety, traceability, ect during stakeholder consultations and traceability visits.

We also assist our smallholders by providing boiler ash and decanter solids which can be applied on plantations as organic fertilizer. For smallholders managing old plantations, we help them access government replanting funds. As part of our CSR program, we additionally provide select smallholders with high equality palm seedlings to help them replant or rehabilitate their plantations.

We aim to increase the reach and depth our smallholder engagement in the future by working with our suppliers to engage smallholders in their supply chains and providing further training on good agricultural practices.



# SUSTAINABILITY CERTIFICATIONS AND AWARDS

## MEMBERSHIP OF ASSOCIATIONS AND EXTERNAL INITIATIVES

[102-12, 102-13]



To ensure we remain on top of the latest sustainability developments in the sector, we to play an active role in prominent sustainability forums and associations. A list of our memberships and external initiatives which we subscribe to are provided below:



The Roundtable on Sustainable Palm Oil (RSPO) was established with the objective of promoting the growth and use of sustainable palm oil products. The initiative has more than 4,400 members spread over seven member categories including oil palm growers, oil palm processors and traders, consumer goods manufacturers, retailers, banks and investors, environmental NGOs, and social NGOs. The two standards provided by RSPO are:

- RSPO Principles and Criteria (P&C)
- RSPO Supply Chain Certifications (SCCS)

We became an RSPO member in 2006, achieved our first RSPO SCCS certification in 2014, and achieved our first RSPO P&C certification in 2021.

More information on our membership details and progress can be found on the [RSPO members page](#) on their website.



International Sustainability and Carbon Certification (ISCC) was established in 2010 to allow vegetable oil exporters to certify that their oils were compliant with European EU RED 2009 for use as renewable fuels.

The main defining feature of ISCC and other EU RED certification schemes is the heavy emphasis on carbon emissions. In order to be certified, the carbon footprint of the product must be 50% lower than the carbon footprint of the equivalent fossil fuel. We have maintained ISCC certification since 2015.

In addition to RSPO and ISCC, we also adopt principles, criteria and definitions from Indonesian Sustainable Palm Oil (ISPO) and High Carbon Stock Approach (HSCA) in our operations.



We are also members of industry associations including the Indonesian Oil Palm Grower Association (GAPKI), Indonesian Oleochemical Producer Association (APOLIN) and Indonesian Biofuel Association (APROBI). We also actively participate and endorse the Palm Oil Collaboration Group.



# SUSTAINABILITY CERTIFICATIONS AND AWARDS

We also participate in several environmental award and rating programs operated by the government and others in the private sector.



PROPER measures the environmental compliance of companies operating in Indonesia and rewards those whose initiative and innovation go beyond mere compliance. The program uses a color-coded rating to determine performance. A summary of PROPER ratings can be found on page 31.

We have consistently maintained PROPER blue rating indicating full compliance with Indonesian environmental laws and regulations.

In 2021, two of our subsidiaries: PT. Nagamas Palm Oil Lestari and PT. Victorindo Alamlestari were awarded PROPER HIJAU award.



The Industri Hijau Award recognizes companies that have implemented activities to reduce environmental impacts from their operations. Our business units have received several level 4 and level 5 Industry Hijau Awards over the years. In 2021, two of our subsidiaries PT. Nagamas Palm Oil Lestari and PT. Victorindo Alamlestari received the level 5 (highest-level) award from Industri Hijau while one received level 4 award.



Eco Vadis was founded in 2007 to provide the world's most-trusted sustainability ratings, enabling all businesses to reduce risk, drive performance, and improve environmental and social outcomes. Two of our business units participated in Eco Vadis rating where one received silver rating while the other received bronze rating.



SMK3 certification is the Indonesian health and safety certification roughly equivalent to ISO 45001: 2018. Most of our business units have achieved SMK3 certification. The achievement of SMK3 certification shows commitment towards safe working conditions for our workers. In 2021, we received Gold Flag rating (highest rating) for all our business units which participate in SMK3 certification.



# SUSTAINABILITY CERTIFICATIONS AND AWARDS

In addition, we are assessed and included in various sustainability scorecard ratings.



SPOTT is an online platform operated by the Zoological Society of London. SPOTT assesses commodity producers, processors and traders on their public disclosure regarding their organization, policies, and practices related to environmental, social and governance (ESG) issues.

In 2021, Permata Hijau Group scored 43.3% and was ranked 54th out of 100 participants.



FOREST 500 is an online ranking service which assesses the ESG performance of 500 most influential companies with regards to tropical deforestation, based on their exposure to forest-risk commodities.

In 2021, Permata Hijau Group obtained a score of 49 and was ranked 16th out of 97 agricultural and agribusiness companies.

### Permata Hijau Group’s subsidiaries win 2<sup>nd</sup> and 30<sup>th</sup> place at the 2021 Industri Hijau Award

The Industri Hijau Award was established by the Indonesian Ministry of Industry to reward companies which have implemented activities to reduce environmental impacts from their operations. It emphasizes minimizing natural resource use, waste generation and carbon emissions while encouraging the 4Rs (reduce, reuse, recycle and recovery). Industri Hijau also aims to promote sustainable industrial development that elevates environmental awareness and social welfare.

Companies are awarded a level from 1-5 based on their assessment score. A company is recognized as having a commitment to Industry Hijau principles if it scores at least 50% in each assessment category. Companies that score 90% or higher in each assessment category are recognized as having successfully applied Industry Hijau principles.

PT. Nagamas Palm Oil Lestari and PT. Victorindo Alam Lestari, subsidiaries of Permata Hijau Group received 2nd and 30th place respectively in the 2021 Industry Hijau Award from Kementerian

Perindustrian Republik Indonesia. The awards were presented in a ceremony to honour the 88 companies which qualified for level 5 of the Industri Hijau Award.

The award was the cumulation of our commitment to implement principles of sustainability in our operations including various programs to reduce energy consumption, carbon emission, water use and consumption in our estates, mills and plants.



# APPENDIX



## MATERIALITY AND STAKEHOLDER ENGAGEMENT

[102-21, 102-40, 102-43, 102-44]

Sustainability is a complex and multi-faceted topic. As such part of our approach to sustainability

involves engaging with stakeholders to better understand their interests and concerns to help us ensure we have looked at all relevant issues. We engage with our stakeholders through a number of channels. Our stakeholder engagements in 2021 are summarised in the table below.

Stakeholder	Engagement method and frequency	Topics and concerns raised	Permata Hijau Group's response to these topics/concerns
Customers	<ul style="list-style-type: none"> <li>Website</li> <li>Annual sustainability report</li> </ul>	<ul style="list-style-type: none"> <li>Our sustainability commitment, initiatives and progress</li> <li>Grievances lodged on our operations and/or suppliers</li> <li>Product quality and safety</li> </ul>	<ul style="list-style-type: none"> <li>Provide regular updates on the implementation of our sustainability policy</li> <li>Respond to grievances as per our grievance mechanism</li> <li>Certification against ISO 9001, ISO 14001, GMP, HACCP and other relevant certifications</li> </ul>
Employees	<ul style="list-style-type: none"> <li>Annual performance evaluation</li> <li>Annual employee survey</li> <li>OHSE committee meetings</li> </ul>	<ul style="list-style-type: none"> <li>Our policies, commitments and initiatives</li> <li>Career development</li> <li>OHS</li> </ul>	<ul style="list-style-type: none"> <li>Provide regular updates on our policies, commitments and progress</li> <li>Provide regular opportunities for advancement and promotion</li> <li>Ensure OHS systems and procedures are adequate and regularly updated</li> </ul>
Government and regulatory bodies	<ul style="list-style-type: none"> <li>Annual stakeholder consultation meeting</li> <li>Annual sustainability report</li> <li>CSR programmes</li> </ul>	<ul style="list-style-type: none"> <li>Compliance with applicable regulations and legislations</li> <li>Our sustainability commitment, initiatives and progress</li> </ul>	<ul style="list-style-type: none"> <li>Document compliance with regulations and legislations</li> <li>Provide regular updates on the implementation of our sustainability policy</li> </ul>
Local community	<ul style="list-style-type: none"> <li>Annual stakeholder consultation meeting</li> <li>CSR programmes</li> </ul>	<ul style="list-style-type: none"> <li>Our sustainability commitment, initiatives and progress</li> <li>Free, Prior and Informed Consent (FPIC)</li> <li>Fire and haze prevention</li> </ul>	<ul style="list-style-type: none"> <li>Socialize villagers on the importance of forest protection</li> <li>Prioritise employment opportunities to local communities</li> <li>Conduct CSR outreach programmes</li> <li>Conduct SEIAs</li> <li>Implement a FPIC policy</li> <li>Expand our fire monitoring and response system to include a fire free village program</li> </ul>
Non-governmental organizations (NGOs)	<ul style="list-style-type: none"> <li>Annual stakeholder consultation meeting</li> <li>Annual sustainability report</li> <li>CSR programmes</li> </ul>	<ul style="list-style-type: none"> <li>Our sustainability commitment, initiatives and progress</li> <li>Grievances lodged on our operations and/or suppliers</li> </ul>	<ul style="list-style-type: none"> <li>Provide regular updates on our policies, commitments and progress</li> <li>Respond to grievances as per our grievance mechanism</li> </ul>
Suppliers	<ul style="list-style-type: none"> <li>Annual supplier workshop</li> <li>Annual supplier risk assessment and traceability questionnaire</li> <li>Supplier code</li> <li>One-on-one communication (for high-risk suppliers)</li> </ul>	<ul style="list-style-type: none"> <li>Our sustainability policy and supplier code</li> <li>Traceability to plantation</li> <li>Grievances lodged on supplier's operations</li> </ul>	<ul style="list-style-type: none"> <li>Socialize suppliers on the importance of sustainability and transparency as well as our sustainability policy and supplier code</li> <li>Provide training and support on traceability questionnaire and NDPE IFR</li> <li>Respond to grievances as per our grievance mechanism</li> </ul>

# APPENDIX

## GRI INDEX

GRI Standard	GRI Disclosure Number	GRI Disclosure Title	Page reference
<b>General Disclosures</b>			
GRI 102: General Disclosures 2016	<b>Organizational Profile</b>		
	102-1	Name of the organization	04
	102-2	Activities, brands, products and services	04
	102-3	Location of headquarters	05
	102-6	Markets served	04
	102-7	Scale of the organization	05
	102-9	Supply chain	05
	102-12	External initiatives	51, 52
	102-13	Membership of association	51, 52
	<b>Strategy</b>		
	102-14	Statement from senior decision maker	02, 03
	102-15	Key impacts, risks and opportunities	13
	<b>Ethics and integrity</b>		
	102-16	Values, principles, standards, and norms of behavior	06
	102-17	Mechanisms for advice and concerns about ethics	09
	<b>Governance</b>		
	102-18	Governance structure	10
	102-19	Delegating authority	11
	102-20	Executive level responsibility for economic, environmental, and social topics	10, 11
	102-21	Consulting stakeholders on economic, environmental, and social topics	11
	102-26	Role of highest governance body in setting purpose, values and strategy	10
	102-32	Highest governance body's role in sustainability reporting	10
	<b>Stakeholder engagement</b>		
	102-40	List of stakeholder groups engaged	53
102-43	Approach to stakeholder engagement	53	
102-44	Key topics and concerns raised	53	





# APPENDIX

## GRI INDEX

GRI Standard	GRI Disclosure Number	GRI Disclosure Title	Page reference
<b>General Disclosures</b>			
GRI 102: General Disclosures 2016	<b>Reporting practice</b>		
	102-45	Entities included in the consolidated financial statement	01
	102-46	Defining report content and topics boundaries	01
	102-47	List of material topics	13
	102-50	Reporting period	01
	102-52	Reporting cycle	01
	102-53	Contact point for questions regarding the report	01
	102-54	Claims of reporting in accordance with the GRI Standards	01
	102-55	GRI content index	54-58
102-56	External assurance	01	
<b>General Disclosures</b>			
<b>Climate change</b>			
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundary	32
	103-2	The management approach and its components	32-35
	103-3	Evaluation of the management approach	32-35
GRI 305: Emissions 2016	305-1	Direct (Scope 1) GHG emissions	32
	305-2	Energy indirect (Scope 2) GHG emissions	32
	305-4	GHG emissions intensity	32, 33
	305-5	Reduction of GHG emissions	33
<b>Conservation of HVC areas and HCS forests</b>			
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundary	20
	103-2	The management approach and its components	20-25
	103-3	Evaluation of the management approach	20-25
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	23
	304-2	Significant impacts of activities, products, and services on biodiversity	23
	304-3	Habitats protected or restored	23
	304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations	23



# APPENDIX

## GRI INDEX

GRI Standard	GRI Disclosure Number	GRI Disclosure Title	Page reference
<b>Material topics</b>			
<b>Fire and haze prevention</b>			
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundary	20
	103-2	The management approach and its components	22
	103-3	Evaluation of the management approach	22
<b>Pest management and fertilizer use</b>			
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundary	26
	103-2	The management approach and its components	26
	103-3	Evaluation of the management approach	26
<b>Waste management</b>			
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundary	29
	103-2	The management approach and its components	29
	103-3	Evaluation of the management approach	29-31
GRI 306: Waste 2020	306-1	Waste generation and significant waste-related impacts	29
	306-2	Management of significant waste related impacts	29, 30
	306-3	Waste generated	31
	306-4	Waste diverted from disposal	31
	306-5	Waste diverted to disposal	31
<b>Water and effluents management</b>			
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundary	27
	103-2	The management approach and its components	27-28
	103-3	Evaluation of the management approach	27-28
GRI 303: Water and Effluents 2018	303-4	Water discharge	28
	305-5	Water consumption	27
<b>Community and smallholder livelihoods</b>			
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundary	36
	103-2	The management approach and its components	36-39
	103-3	Evaluation of the management approach	36-39
GRI 203: Indirect Economic Impacts 2016	203-1	Infrastructure investments and services supported	39
GRI 413: Local Communities 2016	413-1	Operations with local community engagement, impact assessments, and development programs	36

# APPENDIX

## GRI INDEX

GRI Standard	GRI Disclosure Number	GRI Disclosure Title	Page reference
<b>General Disclosures</b>			
<b>Human rights</b>			
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundary	40
	103-2	The management approach and its components	40
	103-3	Evaluation of the management approach	40
GRI 405: Diversity and Equal Opportunity 2016	405-1	Diversity of governance bodies and employees	40
<b>Employee health, safety and wellbeing</b>			
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundary	41
	103-2	The management approach and its components	41-43
	103-3	Evaluation of the management approach	41-43
GRI 403: Occupational Health and Safety 2016	403-1	Occupational health and safety management system	41
	403-2	Hazard identification, risk assessment, and incident investigation	41
	403-3	Occupational health services	43
	403-4	Worker participation, consultation, and communication on occupational health and safety	41
	403-5	Worker training on occupational health and safety	42
	403-6	Promotion of worker health	43
	403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	42
	403-9	Work-related injuries	41
<b>Human capital development</b>			
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundary	43
	103-2	The management approach and its components	43, 44
	103-3	Evaluation of the management approach	43, 44
GRI 401: Employment 2016	401-2	Benefits provided to full-time employees that are not provided to temporary or parttime employees	44
GRI 404: Training and Education 2016	404-2	Programs for upgrading employee skills and transition assistance programs	44
	404-3	Percentage of employees receiving regular performance and career development reviews	44

# APPENDIX

## GRI INDEX

GRI Standard	GRI Disclosure Number	GRI Disclosure Title	Page reference
<b>General Disclosures</b>			
<b>Corporate governance and ethics</b>			
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundary	45
	103-2	The management approach and its components	45
	103-3	Evaluation of the management approach	45
GRI 205: Anti-corruption 2016	205-3	Confirmed incidents of corruption and actions taken	45
<b>Product quality and safety</b>			
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundary	45
	103-2	The management approach and its components	45
	103-3	Evaluation of the management approach	45
GRI 416: Customer Health and Safety 2016	416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	45
<b>Supply chain traceability</b>			
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundary	46
	103-2	The management approach and its components	46
	103-3	Evaluation of the management approach	46, 47



# APPENDIX

## GLOSSARY OF TERMS

<b>Biological oxygen demand (BOD)</b>	A parameter used to measure water quality. It represents the amount of oxygen consumed by bacteria and other microorganisms while they decompose organic matter under aerobic (oxygen is present) conditions at a specified temperature.
<b>Carbon dioxide equivalent (CO<sub>2</sub>e)</b>	A standard unit of measure in GHG accounting. It represents the amount of CO <sub>2</sub> which would have the equivalent global warming impact for different GHGs.
<b>Chemical oxygen demand (COD)</b>	Another parameter used to measure water quality. It represents the amount of oxygen that must be present to oxidize chemical organic materials.
<b>Crude palm oil (CPO)</b>	The oil extracted from the pulp of FFB.
<b>Effluent</b>	Wastewater discharged to a natural body of water.
<b>Extraction rate</b>	The amount of oil (in percentage) recovered from FFB.
<b>Empty fruit bunches (EFB)</b>	What remains of FFB after the pulp has been removed for oil pressing.
<b>Fire danger rating (FDR)</b>	An internal rating for fire risk assessment depending on previous rain levels. It consists of four levels: Low, Medium, High, and Extreme.
<b>Fresh fruit bunches (FFB)</b>	The bunch of fruit harvested from palm oil trees. It is the raw material of palm oil.
<b>Free, prior and informed consent (FPIC)</b>	The principle that indigenous people and communities have the right to give and withdraw their consent to actions that affect their lands, territories and natural resources.
<b>Greenhouse gas (GHG)</b>	Gases in the atmosphere that trap heat thereby creating a greenhouse effect.
<b>High Carbon Stock Approach (HCSA)</b>	A methodology that distinguishes forest areas for protection from degraded lands with low carbon and biodiversity values that may be developed.
<b>High conservation value (HCV)</b>	Areas containing globally, regionally or nationally significant concentrations of biological, ecological, social or cultural values.
<b>High carbon stock (HCS)</b>	Forests which hold large stores of carbon and biodiversity, which are released and lost when these forests are cleared.
<b>International Sustainability and Carbon Certification (ISCC)</b>	A certification system for biomass and bioenergy. The main defining feature of ISCC is the emphasis on carbon emissions. In order to be certified, a products' carbon footprint must be 50% lower than its equivalent fossil fuel.
<b>International Union for Conservation of Nature's Red List (IUCN Red List)</b>	The world's most comprehensive inventory of the global extinction risk status of animal, fungus and plant species.
<b>Palm oil mill effluent (POME)</b>	Wastewater generated from palm oil milling activities.
<b>Peat</b>	The accumulation of partially decomposed organic matter in wetlands such as swamps, muskegs, bogs, fens, and moors. Peatlands are the largest natural terrestrial carbon store. They store more carbon than all other vegetation types.

# APPENDIX

## GLOSSARY OF TERMS

<b>Palm kernel oil</b>	The oil extracted from the kernel of FFB.
<b>Palm kernel shell (PKS)</b>	What remains of kernel after the pulp has been removed for oil pressing.
<b>Personal protective equipment (PPE)</b>	Equipment that protects the wearer against health and safety risks.
<b>Programme for Pollution Control, Evaluation and Rating (PROPER)</b>	A public national environmental disclosure initiative to promote compliance with existing regulations. Environmental performance of companies is mapped using a five-color grading scale.
<b>Rotterdam Convention</b>	A multilateral environmental agreement that covers pesticides and industrial chemicals that have been banned or severely restricted for health or environmental reasons.
<b>Roundtable on Sustainable Palm Oil (RSPO)</b>	A not-for-profit organization consisting of stakeholders from 7 sectors of the palm oil industry to develop and implement global environmental and social standards for sustainable palm oil.
<b>Smallholders</b>	Small-scale farmers who are not linked to any particular company or mill. 40% of Indonesian palm fruits are grown by smallholders.
<b>Stockholm Convention</b>	An international environmental treaty focused on eliminating or reducing the use of POPs. POPs are chemicals that toxic to humans and wildlife and remain intact in the environment for long periods eventually accumulating in the tissue of living organisms.
<b>World Health Organization (WHO) Class 1A and 1B</b>	A classification system created by WHO used to define the hazardousness of active ingredients in pesticides. 1A is extremely hazardous and 1B is highly hazardous.



**PERMATA HIJAU GROUP**

Jl. Iskandar Muda No. 107  
Medan, 20154, Indonesia

**Tel** +62-61-4577-777

**Fax** +62-61-4569-755

**Email** [Sustainability@permatagroup.com](mailto:Sustainability@permatagroup.com)

**Web** [www.permatagroup.com](http://www.permatagroup.com)