

A photograph of a white-bearded gibbon clinging to a tree trunk. The gibbon has dark brown fur, a black face, and a white beard. It is surrounded by green leaves and branches. The background is a clear blue sky.

UP

UNITED PLANTATIONS BERHAD

SUSTAINABILITY REPORT

2023

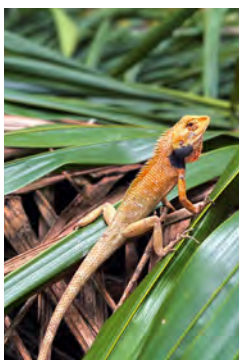
*The Bornean white-bearded gibbon (*Hylobates albibarbis*) is commonly seen with grey or dark brown fur, a black face, white beard and are tailless. It is an endangered species, and tend to live in small family groups enjoying their frugivorous diet.*



# Sustainability Report 2023

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## About This Report

United Plantations has always taken pride in its sustainable approach to all aspects of its operations and we are therefore pleased to present our 2023 Sustainability Report to interested stakeholders.

This Report covers our pursuit of sustainable value creation through good governance, and strong commitment towards environmental, economic, and social performance across all our operational and management activities within the UP Group including Subsidiaries in the form of our Refineries (Unitata and UniFuji), as well as our plantations and mills in Malaysia and Indonesia. This report, which represents a further step towards an integrated report, focuses primarily on updates and activities carried out within the financial year ended 31 December 2023, with comparable prior year statistics, where available and relevant. The Sustainability Report for 2023 will remain as part of our Annual Report.

There is no structural change in our Annual Report 2023. The structure and content for this report draws upon guidance from the enhanced sustainability requirements in the Main Market Listing Requirements, Bursa Malaysia's Sustainability Reporting Framework and Guides and the GRI Sustainability Reporting Guidelines. Our internal Sustainability Committee is responsible for officially coordinating with the various departments and subsidiaries in assessing and covering all key material sustainability matters within our Group.

As recommended by the enhanced sustainability requirements in the Main Market Listing Requirements, we have included in our Annual Report our Sustainability Framework which is aligned with the Group's philosophy and our focus areas which are in alignment with the United Nations Sustainability Development Goals (UN SDG). In preparation of this report, we have again engaged and considered the responses from both internal and external

stakeholders and performed a thorough internal review and assessment of key sustainability aspects and impacts which represents the most critical areas of our Group's business and operations and in this connection, we would like to thank all stakeholders for their valuable participation. This exercise resulted in arriving at 23 material sustainability matters at various significant levels. These are reflected in the materiality matrix included in this report.

As part of our sustainability processes and activities we will continue to strengthen our performance and disclosures to various stakeholders by monitoring our specific targets and key performance indicators, fostering close relationship with our stakeholders as well as harmonising material sustainability risks across the Group. We hope to provide our stakeholders with an overview of our approach and continuous progress in meeting our sustainability commitments. We have reported the information cited in this GRI Content Index for the period of 1st January 2023- 31st December 2023 with reference to the GRI Universal Standards 2021.

For more information on the GRI Content Index, please refer to pages 114- 116.

### External Assurance

Bursa Malaysia's Sustainability Reporting Guides and GRI recommends the use of external assurance, and we believe external assurance adds credibility and transparency to our sustainability reporting.

In this connection, we are pleased to inform our stakeholders that BSI has provided limited assurance over 10 selected Key Performance Indicators (KPI's) reported in our 2023 Sustainability Report thereby bringing additional value and credibility to our disclosure. Their opinion statement report is available on pages 112 - 113.



*Good water management practices are essential towards achieving high yields.*

Message From The CED



YBhg. Dato' Carl Bek-Nielsen, Chief Executive Director of UP.

I am pleased to present UP's 2023 Sustainability Report, in which we describe our Group's sustainability policies and how we are pursuing these in practice. UP continues to view sustainability as a key pillar of our Group's Strategy and we recognise its importance to our long-term success and well-being.

For generations, Environmental Responsibility, Social Awareness, Sustainability Governance and Economic Viability have been intertwined into the way we conduct business.

Nonetheless, we must not forget that our pledge to the highest sustainability standards is an ongoing commitment with no finishing line. We will therefore continue to align our business values, purpose and strategy with sustainability principles divided into four main areas, namely Environment, Social, Sustainability Governance and Marketplace.

Environment

As the world continues to face challenges relating to global warming, we are becoming increasingly aware that our presence on this earth has an impact on the environment. Over the past few years, we have closely followed and reported on the evolving narrative of global climate action, focusing particularly on the outcomes of the annual COP climate conferences.

The most recent, COP28, held in Dubai, marked what some would deem as progress towards a world attempting to transition away from fossil fuels. However, the agreement nevertheless fell short of a full phase-out of fossil fuels, thereby deflating the goal that many had hoped to achieve.

Furthermore, the world's first ever Global Stocktake, a comprehensive assessment of global climate action, revealed that current national commitments are insufficient to meet the Paris Agreement's goal of limiting the temperature rise to 1.5°C above pre-industrial levels. To achieve this target, global emissions need to be cut by 43% by 2030 compared to 2019 levels, which will not happen as current nationally determined contributions are projected to deliver less than a third of that.

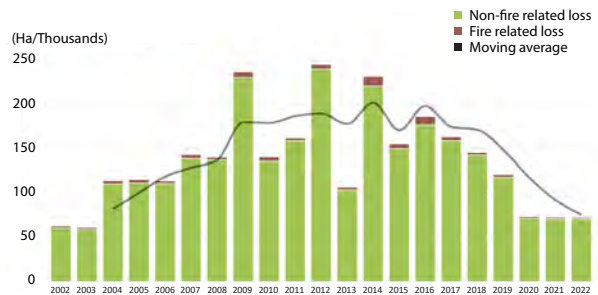
The agreement reached may therefore seem surprising, especially considering that about 70% of global CO2 (-eq) emissions continue to come from the burning of fossil fuels. Palm oil on the other hand, accounts for some 0.6% of global CO2 (-eq) emissions, (more than 20 times less than the livestock sector) yet continues from time to time to be singled out as the lightning rod for the public's anger on issues concerning deforestation and climate change.

While palm oil production has and still contributes to certain environmental concerns (and there are instances where environmental laws are disregarded by a few rogue industry players), it is important to approach these accusations with a comprehensive and objective lens. Sweeping statements based on the actions of a few is not a fair representation of the industry and the concerted efforts to make sustainable palm oil the norm by a very considerate portion of the producers today. Each of us must therefore sharpen our ability to distinguish factual data from the often sensational narrative, failing which we run the risk of being swayed by tales and scaremongering that do not align with the factual data.

Forests have indeed been cleared. Over the last 110 years, Malaysia has established close to 6 million hectares of oil palm plantations, but this contrasts significantly with the agricultural expansion in Brazil and Argentina, where over 15 million hectares have been dedicated to soy cultivation in just 10 years, and close to 3 million hectares of forest cleared globally every year for cattle farming.

In this context, Washington-based Global Forest Watch recently published a study showing that global tropical forest loss accelerated in 2022, less than 2 years after world leaders committed to end deforestation by 2030 at the COP26 climate talks in Glasgow. This is primarily caused by significant increases in primary forest loss within Brazil and the Democratic Republic of Congo, which are home to the world's most extensive tropical forests. Indonesia and Malaysia, on the other hand, both reversed the trend, with deforestation rates falling to near record-lows. In fact, primary forest loss fell by 64% between 2015-2017 and 2020-2022 in Indonesia, whilst Malaysia also saw rates falling by 57% over the same time frame.

Malaysia primary forest loss, 2002 - 2022



Source: World Resource Institute





The newly commissioned Green Electricity Plant, further displacing the use of fossil fuels.

This is a testimony to Government policies, corrective actions and stern corporate commitments to industry regulations such as the RSPO, MSPO and ISPO through which No Deforestation, No New Planting on Peat and No Exploitation (NDPE) pledges now cover most of the palm oil sector. Policymakers, particularly in the EU, should recognize such positive and proactive efforts taken by many different stakeholders to curtail forest loss and focus on the primary causes of deforestation while crafting new laws like the EU Deforestation Regulation (EUDR), to ensure that such policies effectively target the main contributors to global deforestation.

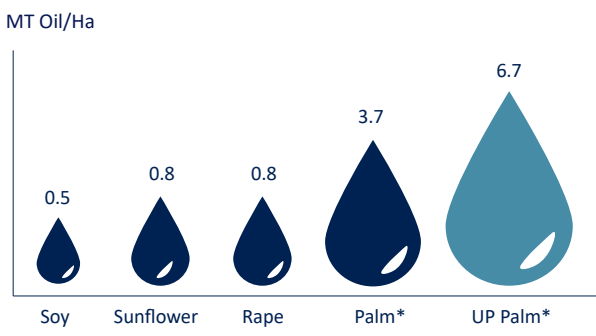
In this connection, it is important to once again be reminded that the palm oil industry today takes up approximately 0.5% of the world’s total agricultural area, yet accounts for about 35% of the global oils and fats production thereby cementing the oil palm’s unequalled efficiency in terms of producing large

quantities of edible oils and fats. Indeed, leading conservationist and NGOs have on several accounts acknowledged that alternate crops will require up to 8-10 times more land compared to the oil palm to produce the same quantity of oils and fats.

Producing more with less is a key aspect within the realm of sustainability as we confront a future marked by increasing populations resource scarcity. In UP, we strive to take ownership and believe in the importance of all stakeholders supporting certification standards like the RSPO, or other credible initiatives, to make sustainable palm oil the aspiration if not the ultimate-goal. This above all else should be our shared objective within the industry, be this in Southeast Asia, Africa, or Latin America to make a positive difference and achieve a more sustainable future for generations.

To that end, we must also acknowledge that in terms of sustainability vs. other crops and commodities, RSPO certified palm oil continues to take the lead and is today recognised for setting the highest agricultural standards internationally, well ahead of beef, soy, rapeseed, pulp and paper to name but a few.

The Oil Palm - A Highly Efficient Crop



Source: Oil World, 2024  
 \* Includes Crude Palm Oil and Palm Kernel Oil

Reducing our Carbon Footprint



The outcomes of COP28, though a step in the right direction, underline the immense challenges and vested interests that nations and businesses alike face in transitioning away from fossil fuels. To address the climate crisis effectively, it is therefore imperative that countries, businesses, and individuals now take ownership and work together to turn these agreements into concrete actions.



In line with our Group's commitment to environmental leadership, mitigation of our carbon footprint and Greenhouse Gas (GHG) emissions remain a top priority for UP, to which new initiatives and investments continue to be made. Since 2005, our company has been working closely with 2.0-LCA consultants from Denmark on developing comprehensive Life Cycle Assessment (LCA) studies, the first of which was finalised in 2008 thereby becoming the first LCA on palm oil ever. This pioneering study was fully compliant with and critically reviewed according to the international ISO 14040 and ISO 14044 standards for LCA. The latest update was finalized during February 2024 building on top of our previous studies.

In this connection, I am pleased to report that the summary of the LCA clearly demonstrates that UP has shown a 63% reduction in its GHG emissions per kg of palm oil produced from 2004 to 2023 when including indirect land use change (iLUC) and nature conservation, as well as scope 1, 2 and 3 emissions.

We have thereby already reached our latest goal of a 60% reduction (including iLUC and nature conservation) of the GHG emissions by 2025. In line with the spirit of taking ownership to accelerate the action in mitigating GHG emissions, the Board of UP remains committed to its target of reaching 66% reduction per kg of palm oil by 2030. This shall relentlessly be pursued through new innovations inspired by our strong collaboration and network in Scandinavia. Please refer to page 66 for more information on our carbon reducing initiatives.

To that end, new investments were made during 2023 to further expand our light railway network, which uses 1/10th of the fossil fuels compared to tractor/ lorry transportation when transporting one unit of Fresh Fruit Bunches from the fields to our 4 mills in Malaysia. The total length of our light railway network has expanded from 479km in 2015 to 600km as of 31 December 2023, thereby contributing significantly to reducing the use of fossil fuels and GHG emissions. In addition, considerable funds have also been invested in other environmental-friendly technologies during 2023, not least our new biogas electrification plant.

### Collaboration with Copenhagen Zoo



The COP28 conference also underscored the importance of linking climate action with nature conservation and the need to consider ecosystems, biodiversity, and carbon stores in climate action plans. In relation to this, conservation of jungle reserves and promoting biodiversity remain of vital importance to the UP Group, and it continues to be our view that conservation means development as much as it does conservation. All growers should strive towards reaching this balance, while also endeavouring to meet the objectives outlined in the United Nations Sustainable Development Goals (SDGs). This is the only sustainable and holistic approach that will help ensure that positive changes take place.

Herein, I am delighted that our partnership with Copenhagen Zoo, which was initiated in 2007 and officially established in 2010, continues to develop positively with

many success stories arising from the hard work, dedicated efforts, research, and fascinating studies undertaken to date.

The commitment and skills introduced by Copenhagen Zoo have been extremely valuable, not least from a conservation point of view. This has helped our Group operationalise one of the vital components of sustainability, namely building an in-house capacity, through our Biodiversity team, to manage conservation and nurture the approximately 8,290 Ha of jungle reserves under our Group's landbank.

Today, the team's responsibility extends beyond the establishment of wildlife sanctuaries, green corridors, and many other initiatives, as they play a pivotal role in operationalising conservation into sustainable agricultural practices implemented throughout our Group. Nevertheless, more can be done and there are still areas in need of greater attention, which will be a primary focus in 2024.

### Social Responsibility & Human Rights

Within the evolving narrative of sustainable palm oil, the focus of discussions and media coverage has expanded beyond just environmental concerns and deforestation. Growing concerns and risks pertaining to migrant workers and human rights continue to rock several industries in Malaysia, most notably the rubber glove industry, but also service, manufacturing and the palm oil sector who all rely on migrant workers. This is indeed a serious issue for Malaysia, and despite much talk, it is evident that more must be done to safeguard migrant workers during recruitment to prevent middlemen from abusing their inherent vulnerability through deception, thereby driving them into debt bondage.

In UP, Human Rights and Sustainability are non-negotiable principles, and we remain totally committed to our partnership with "Dignity in Work for All", a social rights NGO formerly known as Verité South East Asia, with whom we have been working closely since 2020 together with our customers Mars and Fuji Oil to identify and address any weaknesses within our operations.

Today, all recruitment is guided by our strengthened Ethical Recruitment Procedures, which are regularly witnessed and assessed by Dignity in Work for All as well as other NGOs and Human Rights Activists, and includes the Employer Pays Principle stating that no Guest Worker should pay for a job in UP. During the past year, much focus and efforts have been invested in operationalising and galvanizing this commitment, thereby further reducing human rights risks in our supply chain, specifically risks related to recruitment of Guest Workers.

At the end of the day, addressing forced labour and minimising recruitment risks is also about recognising and tackling the systemic issues that enable abuses. We therefore decided several years ago to cut out third-parties in both the sending and receiving countries, such as sub-agents and recruiting agencies in Malaysia, and instead invested in our own call-centre, which spread information to new candidates in their villages before they may be deceived by unscrupulous middlemen.



Whilst strengthening our processes going forward, we also acknowledge that reasonable remediation of past recruitment practices plays an additional role in alleviating the risk of forced labour in our operations. In addition to the more than 2,650 Guest Workers who have already been reimbursed for the recruitment fees paid to third parties in the past, we have also provided a goodwill payment to 235 of our locally recruited Guest Workers towards the hardship faced in relation to their previous recruitment journey and employer. Finally, we continue to invest time and resources in identifying eligible ex-Guest Workers, for whom reimbursement funds have been set aside in a sinking fund.

Strengthening human rights is about continuous improvement, and though we are not perfect, we are trying to do our part by taking ownership. However, despite our sincere efforts and investments, our internal and external verification audits still detect isolated incidences of exploitation by third-parties during the recruitment process of new Guest Workers. This tells us that strengthening human rights standards is a journey with no finishing line. We therefore remain open for constructive criticism and will continue to pursue further improvements through close collaboration with Dignity in Work for All, other independent human rights assessors and activists, as well as our customers in the spirit of shared responsibility.

### Safety

Since the emergence of COVID-19, we have highlighted this as a predominant safety concern to our Group, and extensively deliberated on our efforts to mitigate its impact and ensure the safety and well-being of our workers and their families.

As we move into 2024, the shadow of the pandemic has considerably receded in both Malaysia and Indonesia, although new cases did start to flare up towards the end of 2023. However, this increase in cases has not led to a significant rise in hospital admissions, as most cases have reportedly shown only mild symptoms.

Our focus therefore remains on adapting to the evolving nature of the pandemic by continuing to uphold rigorous health standards and being prepared to respond to any potential outbreaks. In this connection, all our hospital assistants from our Group Hospitals and clinics throughout our estates remain well-equipped and trained, ensuring prompt action if needed without any major disruptions or forced shutdowns to our operations.

Our employees have and will always be our core assets and a key pillar for the success and continued growth of our Group, and their welfare and rights as well as a safe and healthy workplace throughout our operations are of key importance.

Whilst it is pleasing that there have been no fatalities during 2023, I am compelled to place on record my disappointment with the fact that the number of accidents in our Group has gone up vis-à-vis 2022, one of the main reasons being the large number of new employees who have joined us since the borders re-opened.

Safety leadership and strategies targeting risk reduction continue to be a top priority for the Group, as we value the lives and well-being of our employees and their families,

contractors, visitors, and local communities throughout our operations. A higher degree of vigilance, coupled with a more systematic and disciplined approach, will therefore be galvanised through training programmes, “Reach and Teach” and “Reach and Remind” sessions and HIRARC programmes, and the frequency of impromptu safety audits across our mills, estates, and refineries be intensified as an integral part of our ongoing safety procedures. This is particularly important in relation to the many new inexperienced Guest Workers who have recently joined our Group.

In addition, we will also pursue new avenues for improvement to reduce the accident rate, as our common goal on safety must be, “one accident is one too many.” This will have management’s undivided attention until stern improvements are made, as we remain focused on our vision to be recognized as “second to none”.

To that end, our Safety Division, now totalling 5 safety officers, is briefing the Company’s Executive Committee Members on a regular basis providing an unfiltered status on the progress made, as well as any shortcomings encountered, which are addressed punctually.

### Community

UP is committed to doing our part for the global community and bringing about positive change to the lives of our employees, their families, and the surrounding communities, which have given so much to our Company over the last 118 years.

Amongst our initiatives, we engage and work closely with local communities to uplift their living standards and to offer business and employment opportunities to interested parties wherever possible, thereby contributing to the wealth, resources, and expertise of local economies. We are committed to taking ownership and striving to remediate any problems that may arise, both in and around the locations in which we operate. In this connection, we have continued to financially support numerous deserving cases and organisations throughout the year.

Furthermore, we will continue our various engagements with the smallholder societies in 2024, conducting smallholder field days, with the overall objective of knowledge sharing, so that the smallholder farmers can improve their yields, enhance sustainable agricultural practices, safety awareness, conservation, and thereby their livelihoods.

In Indonesia, we remain fully committed to the Plasma scheme and continue our positive progress in establishing additional areas that benefit farmers, families, and the neighbouring communities. Through respect and engagement with local communities and community leaders in Indonesia, we have seen positive developments in alleviating conflicts relating to land rights, which are handled in an amicable and transparent manner through proper grievance procedures, and in line with the spirit of the RSPO.

Improvements to maintain the highest possible welfare standards for our workforce and to ensure high standards of educational facilities provided for their children also continued throughout 2023. This includes the continuous upgrading of our housing facilities provided to our employees, be they



guest workers or local employees. To that end, a total revamp of the infrastructure has now been fully implemented on our newly acquired Tanarata Estate. With this construction of new, modern, and spacious houses with proper facilities, along with new sundry shops and other social amenities, Tanarata Estate thereby mirrors the standards present on our other Estates. We have also taken proactive measures to create conditions whereby Guest Workers can feel comfortable keeping their passports in newly provided safes within their own homes. This approach replaces the previous system of individual passport lockers in centralized locations with free access at all times.

### Governance & Certification

At UP, we believe in the core principle of good corporate citizenship, robust governance, and risk management. All our sustainability commitments are transparently operationalised and monitored through our governance structures and risk management policies, and we continue to strengthen this important focus area based on third party independent assessments, feedback from customers, partnerships, and other stakeholders. This commitment is evidenced by the fact that UP became the world's very first Roundtable on Sustainable Palm Oil (RSPO) certified oil palm producer back in 2008. Our commitment was further reinforced by obtaining the Malaysian Sustainable Palm Oil (MSPO) certification in 2018 and Indonesian Sustainable Palm Oil (ISPO) certification in 2019.

Today, we remain 100% committed to the RSPO, MSPO and ISPO certification standards, which are among the most robust agricultural standards globally, with clear commitments to No Deforestation, No New Planting on Peat, and No Exploitation (NDPE). Furthermore, reinforced protection of human and labour rights, gender equality, stronger alignment with the Core International Human Rights Treaties and relevant ILO Conventions are also key criteria in the evolving standards, and we continue to support further advancements that are reasonable, pragmatic, and based on a multi-stakeholder approach, in the spirit of shared responsibility.

We firmly believe in the importance of initiatives aimed at operationalising sustainability on the ground and thereby enable the industry to meet the ever-increasing consumer requirements shaping the landscape for tomorrow's demands. This is a necessary commitment to ensure that the industry remains relevant and credible, and something which compels Management to keep stimulating new progressive ideas, failing which, the positive momentum created by so many individuals in our Group over the last 118 years will diminish.

In connection with these evolving standards, we are pleased that all UP Mills and Estates are successfully certified against the latest RSPO P&C 2018.

On behalf of Management, I nevertheless want to acknowledge that more can and must be done. We therefore intend to continue working hard at further integrating and operationalizing sustainability into our DNA, so that it remains "built-in" and not "bolted-on".

To achieve this, the materiality assessment has once again been carried out in 2023, in close collaboration with our stakeholders, to gauge their views and expectations on various topics, thereby enabling us to identify and map the most relevant issues pertaining to our economic, environmental, and social risks and opportunities. This rewarding exercise

is fundamental to ensuring that expectations throughout the supply chain are aligned, thereby pushing in the same direction, as we continue on this shared sustainability journey.

### Marketplace

In UP, we are committed to the world's highest standards of sustainability, quality, food safety, and product traceability. This is key to open up market opportunities amongst reputable brand manufacturers and retailers globally who more than ever demand full traceability to ensure that the supply of palm oil they receive is safe as well as produced ethically.

We welcome this level of transparency and acknowledge that the trust between a brand and a consumer can only be built through actions and not through greenwashing or glossy brochures. Ultimately, our Group's behaviour is our brand and our licence to operate therefore depends on behaving well.

With UP being one of the most sustainable, efficient, and integrated medium sized plantation companies in the world, our two refineries, Unitata Bhd and UniFuji Sdn Bhd, are uniquely positioned to live up to this. By controlling all areas of the production, we can offer certified sustainable high-quality products with the lowest GHG footprints and contaminant levels in the world based on full transparency, traceability and the principle of responsible sourcing.

For our downstream operations, all our palm oil can be traced back to the various palm oil mills and plantations, whereas for palm kernel oil – a notoriously challenging area - we are now able to trace more than 90% of the oil which we use back to not only the palm kernel crushing plants and palm oil mills, but all the way to the plantation level. This is particularly important in relation to the implementation of the EU Deforestation Regulation, effective 1 January 2025, requiring full traceability and verification that no deforestation has taken place anywhere along the supply chain.

Whilst we believe that we have come a long way on our sustainability journey, we also acknowledge the many challenges ahead which we will have to meet as we continue our strive towards building long-term relationships with our customers, suppliers, business partners and other stakeholders in the global marketplace, in the spirit of shared responsibility. The points I have touched on above serve only as highlights to this report and will be further elaborated upon in the following pages (pages 34 to 118). Furthermore, additional information can be found under the sustainability section on our website, <https://www.unitedplantations.com/sustainability/>.

Finally, I would like to thank you for your interest in our sustainability efforts and hope that you will find our journey interesting. I would also like to thank our Board of Directors for their continuous support, guidance, and interest in this report as well as all our partners and stakeholders including NGOs for their active and valuable participation and input that continue to be of much value to our Group. With the continuous commitment by our Group and an active participation by all our stakeholders, I am confident that we will be able to face most challenges ahead of us as we keep moving forward with our sustainability commitments.



Dato' Carl Bek-Nielsen  
Chief Executive Director (CED)





*A dedicated tall palm harvester on Jendarata Estate walking between fields during the early morning sunrise.*







## Materiality

This report addresses key sustainability matters which have been identified after taking into consideration both the Group's view on significant environmental, economic, and social aspects, impacts, risks and opportunities which are vital to the success and continued growth of the Group, and the views and responses from our stakeholders on pressing material issues.

In identifying the material sustainability matters, and opportunities, we have drawn information from various internal and external sources of information which include the views of the Group Sustainability Reporting Team within our organisation, stakeholders, industry groups, standards recommended by global and industry specific reporting bodies, such as the Roundtable for Sustainable Palm Oil (RSPO) and the Global Reporting Initiative (GRI) and existing peer literature.

As a result of the abovementioned exercise and evaluation of the Group's Sustainability Risks and Opportunities, we have this year identified 23 key sustainability issues under four main headers, namely Environment, Social (Employees, Community), Sustainability Governance and Marketplace, which we have assessed as being of high concern to stakeholders and of high significance for our Group in 2023.

Data collected from various stakeholders are then analysed and used to create a materiality matrix which

also includes the assessment on the significance of the identified key sustainability matters and the prioritisation of stakeholders to the organisation.

The resulting Materiality Matrix is as shown on the following page. Material issues which have been identified are then assessed by the Sustainability Reporting Team to establish if there are policies and procedures in place to address and manage these issues, and if none, to ensure implementation plans are drawn up and presented to the management for follow up as part of the Group's sustainability commitment.

Quantifiable indicator data and targets are assigned where relevant and are communicated to our stakeholders via this Sustainability Report. The materiality assessment has been reviewed and endorsed by Executive Committee (EXCOM) of UP.

## United Nations Sustainable Development Goals (UN SDGs)

UP respects and recognises the importance of its role in this global initiative. As such, the Group has mapped the relevant SDGs with each materiality topic and identified seventeen (17) UN SDGs with their specific targets that are most relevant to its business operations as well as key concerned materiality topic highlighted by the stakeholders.











































For more information, please refer to our website, [www.unitedplantations.com/sustainability/](http://www.unitedplantations.com/sustainability/).



*The Iversen-Jeremy Diamond jungle reserve kept in a pristine condition in line with UP's commitment to environmental care.*

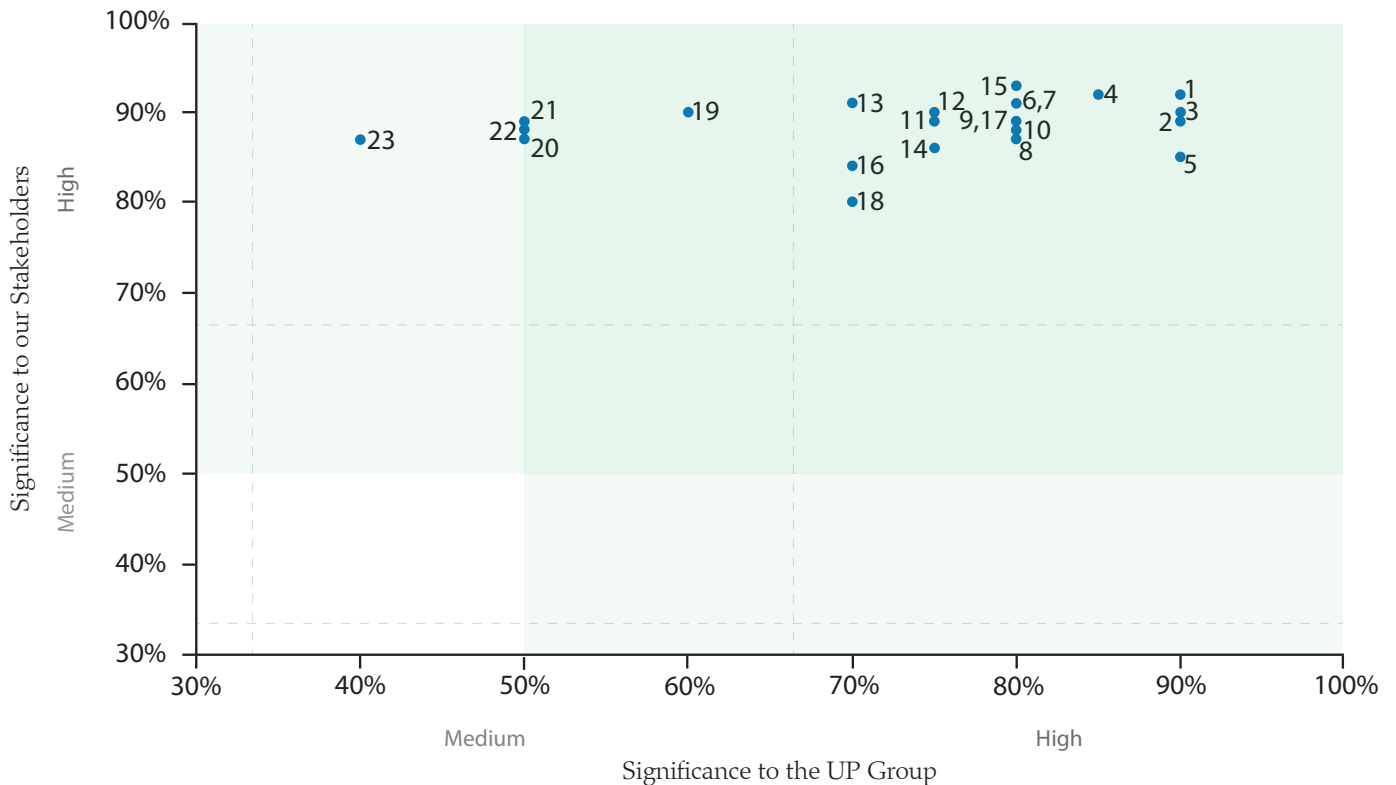


Summary of Materiality Matters

23 Key Sustainability Issues	Relevant UN SDGs*	UP supports UN SDGs
1. Human rights protection, child labour and fair & decent wages	1,8	  
2. Precautionary measures on COVID-19	3,9	 
3. Product Quality	12	
4. Occupational Safety & Health	3,9	 
5. Commodity Prices	12	
6. Social commitments and Amenities	2,4,8	  
7. Certifications for Food Safety, Sustainability and Others	12	
8. Biodiversity & Conservation	14,15,16,17	   
9. Deforestation/ High Carbon Stock	13	
10. No Exploitation-Free, Prior and Informed Consent	16	
11. Climate Change, GHG emissions, Discharges & Waste Management	7,9,13,16,17	    
12. Fire and Haze	13	
13. Code of Conduct, Governance and Anti-Corruption	8,16	 
14. Community Development and Welfare	3,4,8	  
15. Business Ethics and Compliance	16	
16. Smallholder and Plasma Development	2,12	 
17. Talent retention, Development and Training	4,5,8	  
18. Currency Fluctuation	-	
19. Grievance Resolution	16	
20. Peat Development	13	
21. Water Impacts	6,9	 
22. UP's Evaluation of Suppliers/ Contractors' Sustainability Commitment	12	
23. Pesticides and Chemical usage	12	

\*Stakeholder groups consist of shareholders, employees, customers/consumers, local communities/smallholders, government agencies/regulators, non-governmental organisations (NGO), palm oil industry group and suppliers/contractors.

Materiality Matrix



Stakeholders Engagement

At United Plantations, we recognise that stakeholder engagement, assessment and feedback are an integral part of our sustainability strategy and initiatives.

The stakeholder groups which are key to our operations and have significant influence over the impacts of our business are carefully identified and engaged at various platforms and intervals throughout the year. The stakeholder engagement process which includes a proactive and both formal and informal approach, is carried out to fully understand their sustainability concerns and issues with a view to ensure that their key interests are aligned with that of our Group.

We are continuously improving our stakeholder engagement approach which is now evolving into more tailored and targeted engagement sessions with our stakeholders. In this context, the following pages provide an overview of the efforts involved in our Group’s focus on stakeholder engagement.

Overview of Stakeholder Engagement

Stakeholders Groups	Specific stakeholders addressed	Type of engagement	Frequency	Areas of interest	Outcomes	Addressed by specific Material Sustainability Matters
Shareholders & Investors	Shareholders both in Malaysia and in Denmark	<ul style="list-style-type: none"> <li>Engagement surveys</li> <li>Annual General Meetings</li> <li>Analysts briefings</li> </ul>	<ul style="list-style-type: none"> <li>At least once a year</li> <li>Once a year</li> <li>Twice a year</li> </ul>	Deforestation, pesticides & chemical usage, Occupational Safety & Health (OSH), free, prior & informed consent (FPIC) and product quality	Good relationship with shareholders and positive reputation amongst investors constructive feedback	3, 7, 10, 14 & 17
Customers/ Consumers	Major consumer goods manufacturers, Refineries, and end consumers	<ul style="list-style-type: none"> <li>Engagement survey</li> <li>One-to-one meetings</li> <li>Visits to Estates, Mills and our Refineries</li> </ul>	<ul style="list-style-type: none"> <li>At least once a year</li> <li>Periodically</li> <li>Periodically</li> </ul>	GHG emissions, discharges & waste management, deforestation, high carbon stock, peat development, human & workers' rights, social welfare, OSH, product quality, food safety & sustainability certifications and supply chain	Better awareness of our Group's commitment to sustainability, and better understanding of our policies, culture and values	2, 3, 4, 8, 9, 10, 17, 18 & 19
Employees	Executives, staffs and workers	<ul style="list-style-type: none"> <li>Annual employee survey</li> <li>Group Sustainability Committee meetings</li> <li>Gender committee meetings</li> <li>Guest Workers Welfare Committee</li> <li>Occupational Safety &amp; Health Committee</li> <li>Internal trainings</li> </ul>	<ul style="list-style-type: none"> <li>Once a year</li> <li>Once a year</li> <li>Twice a year</li> <li>Six times a year</li> <li>Four times a year</li> <li>Periodically</li> </ul>	Human & workers' rights, social welfare, OSH, equal treatment, grievance resolution, product quality, food safety & sustainability certifications	Improved understanding of company policies and efforts taken to date inclusiveness in the management decision making	8, 9, 10, 11, 15, 17 & 18
Smallholders & Local Communities	Smallholders surrounding and near our operations in Malaysia and Indonesia	<ul style="list-style-type: none"> <li>Annual Smallholders' Field Day</li> <li>One-to-one communications</li> </ul>	<ul style="list-style-type: none"> <li>Once a year</li> <li>Periodically</li> </ul>	Biodiversity & conservation, pesticides & chemical usage, workers' rights. OSH, product quality and food safety & sustainability certifications	An opportunity to sustainably enhance the agricultural practices of smallholders, amicable solutions to grievances, better social relations with our Group	1, 7, 8, 10, 19 & 20
Government Agencies	DOSH, Labour Department, Indonesian Local Government, Indian High Commission	<ul style="list-style-type: none"> <li>Engagement Surveys</li> <li>One-to-one meetings</li> </ul>	<ul style="list-style-type: none"> <li>Periodically</li> <li>As and when necessary</li> </ul>	Pesticides & chemical usage, human & workers' rights social welfare, OSH, equal treatment. Code of ethics & governance, product quality, supply chain and evaluation of supplier/contractors' sustainability commitment	An opportunity to share our Group's commitment, and policies and procedures to sustainable operations	7, 8, 9, 10, 11, 12, 17, 19 & 20
Non-governmental organisations	SUHAKAM, TENAGANITA, AMESU, MAPA, NUPW	<ul style="list-style-type: none"> <li>One-on-one meetings</li> <li>Engagement surveys</li> <li>Direct correspondences via email and telephone conversation</li> </ul>	<ul style="list-style-type: none"> <li>As and when necessary</li> <li>Once a year</li> <li>As and when necessary</li> </ul>	Biodiversity & conservation, water impacts, pesticides & chemical usage, workers' rights, social welfare, code of ethics & governance, grievance resolution and product quality	Better understanding of NGO concerns and improved awareness of UP's sustainability commitments by the NGOs	1, 6, 7, 8, 9, 12, 15 & 17
Palm Oil Industry Groups	Neighbouring plantations and, MPOA, MPOC, MPOCC, RSPO	<ul style="list-style-type: none"> <li>Engagement surveys</li> </ul>	<ul style="list-style-type: none"> <li>Once a year</li> </ul>	GHG emissions, fire & haze, discharges & waste management, pesticides & chemical usage, human & workers' rights, OSH, product quality, food safety & sustainability certifications and commodity prices	Good relationship with the industry groups and knowledge sharing to enhance the sustainability of the industry	2, 5, 7, 8, 9, 10, 17, 18 & 21
Suppliers and Contractors	Suppliers of various inputs and key contractors within the Group	<ul style="list-style-type: none"> <li>Engagement surveys</li> <li>One-to-one meetings</li> </ul>	<ul style="list-style-type: none"> <li>Once a year</li> <li>Periodically</li> </ul>	Biodiversity & conservation, GHG emissions, discharges & waste management deforestation, high carbon stock, peat development, workers' rights, social welfare. OSH and product quality	Raised awareness of UP's sustainability commitments and business	1, 2, 3, 4, 8, 9 & 17



## Sustainability Framework

Since our foundation in 1906, United Plantations has been focusing on economic development combined with social and environmental care. Identifying and managing UP’s risks and opportunities are fundamental to our continued success and the core principles of our business activities, namely doing business sustainably combined with committing ourselves to a long- term perspective.

**Our Philosophy**

We strive towards being recognized as second to none within the plantation industry, producing high quality products, always focusing on the sustainability of our practices and our employees’ welfare whilst attaining acceptable returns for our shareholders.

**Focus Areas**

As an important step towards improving our sustainability profile within the economic, environmental and social areas of our business, we ensure that our various target groups of stakeholders are actively and effectively participating in our communication and consultation processes.

<b>Environment</b>	<b>Social</b>	<b>Governance</b>	<b>Marketplace</b>
We commit to being a leader within sustainable agricultural practices, and therefore strive towards reducing variables that impact the environment negatively.	We adhere to the fundamental Conventions of the ILO and the UN Declaration on Human Rights, the Rights of Indigenous Peoples and other core values, ratified by the countries in which we operate.	Strong risk management policies and procedures operationalised through effective sustainability governance in line with our core values are key for achieving long term success.	We are committed to providing high quality certified sustainable and traceable Palm Oil products and services to customers worldwide.
Biodiversity and Conservation	Human rights protection, child labour and fair & decent wages	Commodity Prices	Product Quality
Deforestation/ High Carbon Stock	Occupational Safety & Health	Code of Conduct, Governance and Anti-Corruption	Certifications for Food Safety, Sustainability and Others
Climate Change, GHG emissions, Discharges & Waste Management	Social commitments and Amenities	Business Ethics and Compliance	UP’s Evaluation of Suppliers/ Contractors’ Sustainability Commitment
Fire and Haze	No Exploitation, Free, Prior and Informed Consent (FPIC)	Currency Fluctuation	
Peat Development	Talent retention, Development		
Water Impacts	Grievance Resolution		
Pesticides and Chemical usage	Community Development and Welfare		
	Smallholder and Plasma Development		



Performance Scorecard

Our targets and commitments are what drives us to continuously improve. We subscribe to the mantra “what we measure, we can manage” and provide information on our progress of targets and achievements. Below are our key targets and progress to date:

Focus Areas	Targets	Current Status as of 2023	Material Matters
No forced or trafficked labour in our operations	We have evaluated the risks related to the payment of recruitment costs in our past practices. All Guest Workers as of 31 December 2021 have been reimbursed for the past recruitment costs.	We are collaborating with "Dignity in Work For All"(Verite) to conduct human rights due diligence annually. All gaps are addressed with an action plan submitted to "Dignity in Work For All" for verification.	Human & Workers' Rights
Live up to the UN Guiding Principles on Business And Human Rights & ILO Fair Recruitment Principles	No workers shall pay any cost related to recruitment to come and work in UP	Since 31 December 2021, we ensure that no Guest Worker shall pay any cost related to recruitment to come and work in UP. Independent verification is carried out within 4 months upon the arrival of new Guest Workers. This is ongoing and thorough investigation will be carried out if any red flags are detected.	Human & Workers' Rights
Retention of our Guest Workers' personal identity documents	Personal identity documents of all Guest Workers shall be kept at the Guest Workers' own accommodation.	We are in the midst of installing individual safe deposit boxes in the Guest Workers' own homes. Upon completion their passport will be kept here with free and full access.	Human & Workers' Rights
No work-related fatalities	Zero fatalities	Target achieved. Zero fatalities	Occupational Safety & Health
Reduce Lost Time Injury Frequency Rate (LTIFR) below 2014 levels i.e 12.27.	Introduce a behavioural safety approach (4.0)	Continuous Improvement (LTIFR 5.38). The effectiveness of safety trainings and monitoring will be strengthened in 2024.	Occupational Safety & Health
Measuring of GHG emissions for all palm oil operations.	Original target of 60% reduction from 2004 to 2025 achieved in 2021. New target for total GHG emissions (Scope 1,2 & 3): 66 % reduction by 2030 when compared to 2004 levels (with iLUC and nature conservation)	Total GHG emissions (Scope 1, 2 & 3): 1.36 kg CO <sub>2</sub> -eq/kg NBD Oil (63% lower compared to 2004 levels including iLUC and nature conservation)	Climate Change, GHG Emissions, Discharge & Waste Management
To supply electricity to the National Grid derived from the biogas plant at UIE Palm Oil Mill which began operations in 2010.	Increase the amount of electricity generated. Target: 8,000MWh by 2025.	In 2023, a total of 7,585MWh of electricity was generated from the biogas plant and sold to the grid which is similar to the quantum supplied in the previous year.	Climate Change, GHG Emissions, Discharge & Waste Management
Monitoring of deforestation and fire hot spots in our area as well as suppliers' concession.	Engage palmoil.io for monitoring of indirect suppliers' concessions i.e origin of our conventional CPKO.	Target achieved. We now subscribe to palmoil.io database for all direct and indirect suppliers in line with the EUDR requirements. In addition, we subscribe to Global Forest Watch and GeoRSPO as the monitoring tools.	Climate Change, GHG Emissions, Discharge & Waste Management
Water Footprint (domestic water consumption)	Reduction of 10% by 2025 from the average of 80 Gallons per capita per day.	Malaysian Operations: 79 gallons/capita /day  Indonesian Operations: 77 gallons/capita/day	Climate Change, GHG Emissions, Discharge & Waste Management
Water Footprint (Mill water consumption for processing)	Reduction of 10% by 2025 from the average of 1.6 MT water/ MT FFB.	Malaysian Operations: 1.7 MT water/MT FFB  Indonesian Operations: 1.2 MT water/MT FFB	Climate Change, GHG Emissions, Discharge & Waste Management
Traceability to Plantations (TTP) enable tracing of palm products to its origin i.e plantations, smallholders and dealers with indirect smallholders.	90% TTP by end of 2023; 95% TTP by mid of 2024 and a minimum of 98% TTP by end of 2024	The average TTP scores for the 85 mills (supply of conventional CPKO via KCP) is 90.84% as of 31 December 2023.	UP Evaluation of Suppliers' Sustainability Commitments
Malaysia & Indonesia FFB Yield Per Hectare	28.00 MT FFB/Ha	27.99 MT FFB/Ha (Target achieved)	Product Quality
Oil Extraction Rate	23.00%	21.82% (Target achieved)	
CPO Yield Per Hectare	6.50 MT CPO/Ha	6.11 MT CPO/Ha (Target achieved)	

Legend:  Progressing  
 Achieved





*Vigorous oil palm seedlings in a well maintained main-nursery.*



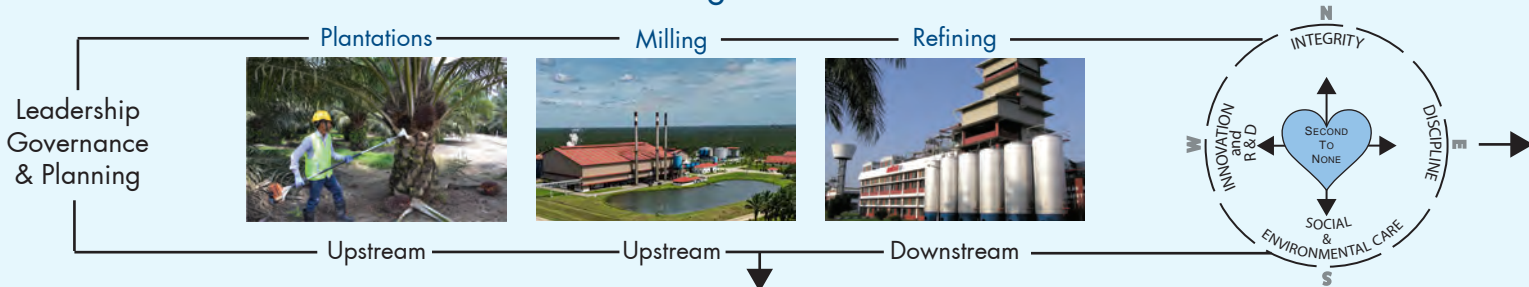
## Our Value Creation Model

We strive to remain a leader within responsible agriculture based on our core values of integrity, discipline, innovation and R&D combined with a dedicated focus on sustainability. Our value creation model enables us to focus on the resources we have available and how we can create value for our stakeholders over time through our integrated business activities. Through our integrated business, we support and contribute towards the United Nation Sustainable Development Goals (UNSDGs).

### Short, Medium and Long-term Business Resources (Input)

FINANCIAL RESOURCES	HUMAN RESOURCES	INTELLECTUAL RESOURCES	SOCIAL RESOURCES	MANUFACTURED RESOURCES	NATURAL RESOURCES
<p>Strong and stable financial position enabling investments</p> <p>Strong Balance Sheet with high borrowing capacity</p> <hr/> <p>MARKET CAP <b>RM7.41 billion</b> <small>(As at 31 December 2023)</small></p> <p>CASH AND SHORT TERM FUNDS <b>RM634 million</b></p> <p>DEBT/EQUITY RATIO <b>0.14</b></p>	<p>Dedicated and competent employees</p> <p>Succession planning and training</p> <p>Sustainability focus</p> <hr/> <p>EMPLOYEES <b>6,624</b></p>	<p>Vast experience and knowledge</p> <p>Innovation and R&amp;D capabilities</p> <p>Good agricultural practices and policies</p> <hr/> <p>SINCE <b>1906</b></p> <p>R&amp;D ESTABLISHED <b>1951</b></p>	<p>Key stakeholders including suppliers and international customers</p> <p>Good collaboration with local government institutions and surrounding communities</p> <hr/> <p>PLASMA <b>1,398 Ha</b></p> <p>COPENHAGEN ZOO COLLABORATION <b>Since 2010</b></p> <p>SOCIAL COMMITMENTS <b>RM22.5 million</b></p>	<p>Well-functioning palm oil mills and refineries integrated with estates</p> <p>Quality control and R&amp;D investment in place</p> <hr/> <p>REFINERIES <b>2</b></p> <p>PALM OIL MILLS <b>5</b></p> <p>BIOGAS PLANTS <b>5</b></p>	<p>Fertile and strategically located land bank</p> <p>Biomass availability</p> <p>Water availability through adjacent rivers</p> <hr/> <p>LAND BANK <b>62,513 Ha</b></p> <p>PLANTED AREA <b>50,876 Ha</b></p> <p>CONSERVATION <b>8,290 Ha</b></p>

### Our Integrated Business



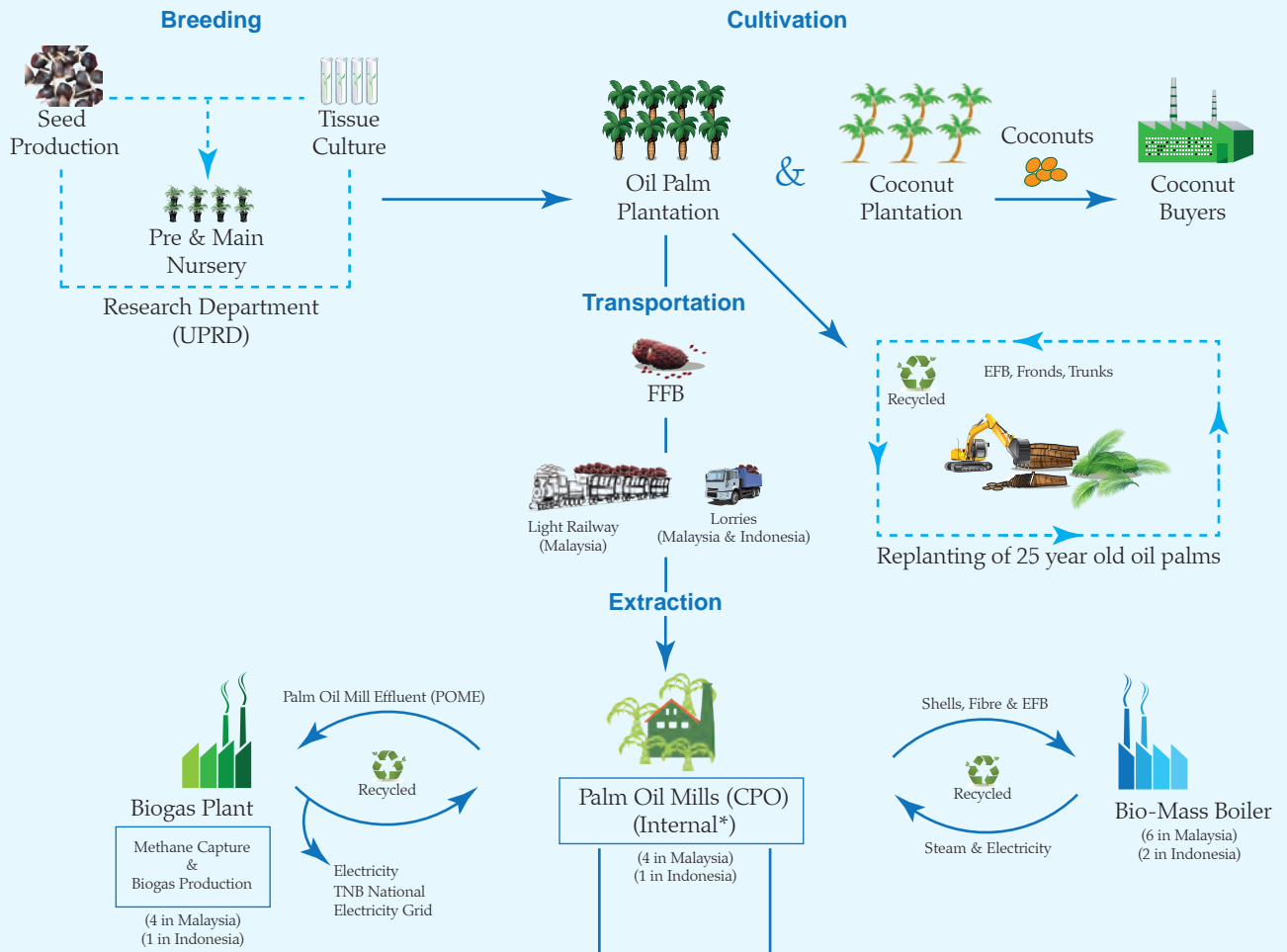
### Short, Medium and Long-term Business Resources (Output)

SHAREHOLDER VALUE	EMPLOYEE SATISFACTION AND SHARED VALUE	CERTIFIED SUSTAINABLE PALM OIL	BALANCE BETWEEN ECONOMY AND ECOLOGY	QUALITY PRODUCTS	GREEN HOUSE GAS EMISSIONS AND WASTE
<p>Value created through good performance</p> <p>Capital appreciation and sustainable dividends over time.</p> <hr/> <p>PROFIT AFTER TAX <b>711 million</b></p> <p>EARNING PER SHARE <b>171 sen</b></p> <p>DIVIDEND YIELD <b>10.67%</b></p>	<p>Safe and respectful work environment</p> <p>Good housing, medical &amp; education facilities</p> <p>Advancing the economic and social condition in the surrounding communities</p> <hr/> <p>SAFETY PERFORMANCE UP MALAYSIA : LTIFR - 5.38 UP INDONESIA : LTIFR - 115.20</p> <p>PLASMA FARMERS <b>853</b></p>	<p>Sustainability practices operationalised</p> <p>Increasing sales of certified sustainable products of high quality</p> <hr/> <p>RSPO CERTIFIED PALM OIL <b>250,000 MT</b></p> <p>RSPO CERTIFIED PALM KERNEL <b>50,000 MT</b></p> <p>RSPO CERTIFIED AREA <b>84%</b></p>	<p>Focus on R&amp;D and efficiency to optimise yields</p> <p>Preserving the environment through conservation efforts</p> <hr/> <p>FFB YIELD/Ha <b>27.99 MT</b></p> <p>OER <b>21.82%</b></p> <p>CPO YIELD/Ha <b>6.11 MT</b></p> <p>TOTAL ANIMAL SPECIES <b>506</b></p>	<p>Delivering premium quality products and services that are safe and based on a high level of responsibility</p> <hr/> <p>CERTIFICATION <b>ISO 9001, HACCP, HALAL, KOSHER, BRC, GMP, MeSTI, FDA, GMP +B2, MPCA, SEDEX, RSPO SCCS, MSPO SCS</b></p> <p>LOW CONTAMINANTS 3-MCPD &lt; 0.5 ppm GLYCIDYL &lt; 1.0 ppm</p>	<p>Key focus and investments in the circular economy where waste is converted to renewable energy.</p> <hr/> <p>REDUCTION OF GHG EMISSIONS SINCE 2004 (INCLUDING iLUC &amp; NATURE CONSERVATION) <b>63%</b></p> <p>GROUP BIOMASS UTILISATION RATE <b>99.6%</b></p>

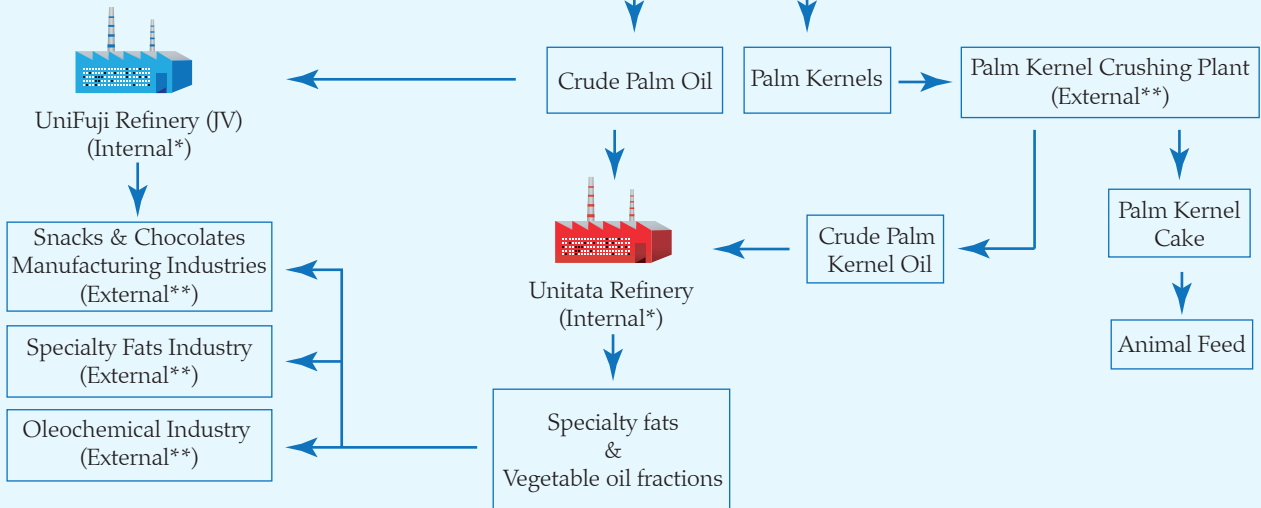


Creating Value Through UP's Integrated Business Activities

Upstream (Plantation Division)



Downstream (Manufacturing Division)



Internal\* : Within the UP Group.  
 External\*\* : Stakeholders, outside the UP Group.

Segmental Contribution 2023

UPSTREAM	DOWNSTREAM	OTHERS
<b>81.3%</b>	<b>19.4%</b>	<b>(0.7)%</b>
RM578 million	RM138 million	(RM5 million)

Environmental, Social and Sustainability Governance

The prominence of the Environmental, Social and Governance (ESG) methodology to identify industry leaders and laggards according to their exposure to risks is fast gaining support, requiring companies to provide a clear and concise position on how they demonstrate stewardship and create value for their stakeholders at all levels, both now and in the future.

At the same time, there is a growing demand for international businesses to move from a profit maximisation lens to a value optimisation lens, and from a short-term profit focus to a longer-term consideration of profits and impact to customers, employees, communities, and the environment.

At United Plantations, we welcome these developments and believe they align well with our philosophy of “striving towards being recognised as second to none within the plantation industry, producing high quality products, always focusing on the sustainability of our practices and our employees’ welfare, whilst attaining acceptable returns for our shareholders.”


To achieve this goal, mitigating ESG risks through dedicated sustainability governance is an integrated part of our pursuit of long-term value creation and is of utmost importance to ensure we remain relevant in sustainable global supply chains and thereby continue to catalyse positive developments.

In this respect, whilst we have always sought to lead by example and set the highest standards within the conditions of the day, we recognise that we can deliver even greater impact by partnering with subject matter experts and like-minded customers on this sustainability journey, in the spirit of shared responsibility. In the following sections, we first highlight our ongoing commitment to mitigating environmental risk through sustainable agricultural practices focused on responsible growth, reduced carbon footprints, and striking the right balance between conservation and development.


Secondly, we delve into the social and human rights aspects concerning our employees, communities, and the implementation of sustainable labour practices – a topic that has taken up much space in Malaysia as well as international news over the last few years.

Lastly, we gauge the relative importance of various sustainability issues for our stakeholder groups through our materiality assessment and discuss other matters pertaining to governance, such as governance structure, certifications, targets, and initiatives, as well as internal and external reporting standards. Off the back of the ESG framework, we then look towards the marketplace as the closing piece of our Sustainability Report, where we highlight our commitment to quality, traceability, food safety, and certification across our downstream refinery operations.


**Environmental, Social & Governance factors are an integrated part of UP’s pursuit of sustainable value creation**



**E**






**S**






**G**

**ENVIRONMENT**




- No Deforestation, No New Peat Development & No Exploitation
- Integrated biodiversity department and 8,290 Ha. jungle conservation
- GHG carbon footprints reduced by 63% per kg. palm oil since 2004

**SOCIAL**

- Setting the highest standards for employees and their families
- Free housing, utilities and schools
- Partnering for human rights leadership and strong labour practices in line with emerging global standards

**GOVERNANCE**

- Strong governance structures and robust risk management policies
- The World’s First RSPO certified palm oil producer in 2008
- Independent external verification of targets and achievements



Environment



UP is committed to being a leader in sustainable agricultural practices and is aware of the footprint it leaves on the environment and our Group therefore constantly strives towards reducing variables that negatively impact the environment. Since 2010, we have strictly adhered to No Deforestation and No New Development on Peat soils regardless of its depth and have focused on the reduction of GHG emissions, energy, water, and waste in line with the concept of the circular economy as a vital part of our environmental strategy..

No Deforestation and No New Planting on Peat

Global plantation development has contributed significantly to economic development and prosperity. However, deforestation and other unsustainable practices have many negative consequences for people and the environment, thus, our Group is therefore fully committed to protect forests, peatlands, and human and community rights.

As an important part of our sustainability journey, we work closely with other growers, suppliers, contractors, processors, NGOs, brand manufacturers and industry stakeholders to take part in transforming the industry, as well as creating further awareness on the importance of sustainable palm oil production.

In addition to our focus on continuous improvement to minimise waste and our overall carbon footprint we are committed to the Principles and Criteria of the RSPO, MSPO and ISPO. Our Group has through investments and a dedicated Group Sustainability Committee introduced policies to break the link between palm oil and deforestation.

Furthermore, we have strengthened our High Conservation Value (HCV) assessment by combining it with a High Carbon Stock (HCS) assessment and Land Use Change Analysis (LUCA) for new plantings in 2014. With this we strive to maintain an open and dynamic approach towards continuous improvements for the protection of peat soils, HCV, HCS and other fragile areas.

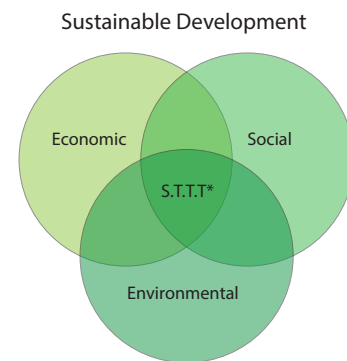
We conduct our operations under the best principles of agriculture and are committed through our more than 8,290Ha of conservation areas to promote biodiversity and protection of the natural environment within our Group's land banks.

Key milestones of our Environment and Biodiversity Policy are summarised below and we expect our employees, contractors, suppliers, trading partners and stakeholders to adhere to this policy too, thereby further enhancing sustainability within our supply chain based on transparency, traceability, and trust.

For more information, please see the sustainability section on our website.

Key environmental milestones achieved are as follows:

- Zero-burn policy (1989)
- No primary forest clearing policy (1990)
- No biodiesel production/supply policy (2003)
- Methane capturing facilities introduced (2006) and all mills equipped with methane capturing facilities (2018)
- HCV assessment introduced (2007)
- LCA on Palm Oil production completed in 2008 with annual updates since then
- No Deforestation, No new development on High Conservation Value (HCV) areas and No new development on peat soils regardless of its depth (2010)
- Total phase-out of Paraquat (2010)
- HCV combined with HCS assessments and LUCA for new plantings (2014)
- Total phase-out of Class 1A/1B chemicals (Monocrotophos/Methamidophos) (2020)



\*Sustainability through Transparency, Traceability & Trust

Environmental Commitments of the Group

	2023 (RM)	2022 (RM)	2021 (RM)	Grand Total (RM)
Environmentally Friendly Operational Activities	4,387,799	7,877,945	6,144,925	18,410,669
Environmentally Friendly Projects (Biogas, Biomass, others)	610,152	3,936,559	429,207	4,975,918
Biodiversity & Conservation (Forest reserve, Endangered Tree Species Projects, Collaboration with Copenhagen Zoo)	1,151,188	900,097	927,143	2,978,428
<b>Total</b>	<b>6,149,140</b>	<b>12,714,601</b>	<b>7,501,275</b>	<b>26,365,016</b>





*A spectacular view of one of our many jungle sanctuaries, which stands as a testimony of UP's commitment towards conservation. Conservation means development as much as it does protection of our environment.*



## Peat Developments

Since 2010, the Group has strictly adhered to No New Development on peatland, regardless of depth, whilst carefully managing pre-existing oil palm plantings on peat.

In Malaysia, the total peat area is 4,130Ha out of a total planted oil palm land bank of 37,507Ha, whereas in Indonesia, the total peat area is 280Ha, out of a total planted land bank of 8,720Ha. In total, peat therefore makes up approximately 9.54% of the total area planted with oil palms throughout our Group.

Our Research Team reassessed the peat area in our Indonesian estates, where significant areas of peat subsided over the years, and as a result, some of the peat area with high water table has been set-aside as peat rehabilitation area. This is in line with the latest peat inventory, which has been submitted to the RSPO Secretariat.

## New Planting Procedure (NPP) and Responsible Land Use Planning

The RSPO New Planting Procedure (NPP) consists of a set of assessments and verification activities to be conducted by growers and certification bodies (CB) prior to new oil palm development.

The intention is that new oil palm plantings must not negatively impact primary forest, HCV, HCS, fragile and marginal soils or local people's lands. UP subscribes to and supports this stance. It is not enough to set aside areas for conservation.

Conservation areas need to be patrolled in order to protect these areas from intruders and fires, so that the biodiversity can be truly conserved. In this regard, our BioD utilises the SMART system which is the world's most comprehensive and user-friendly conservation monitoring system.

The added advantage of using SMART is its statistical power that allows the BioD to compile and develop trendlines and other forms of analyses pertaining to the management and protection of conservation areas and species.

For more information on our HCV and HCS assessments, please refer to our website, [www.unitedplantations.com/sustainability/](http://www.unitedplantations.com/sustainability/).

## New EU Legislation on Deforestation

The European Union Deforestation Regulation (EUDR) was passed in June 2023 and comes into full effect from 30 December 2024. This regulation focuses on bringing more traceability and accountability to producers who

are exporting goods to the European Union and will hold companies liable for any human rights infringements, environmental issues and forced labour concerns in their supply chain.

This is done by enforcing 3 main portions of legislation via a cut off date for Deforestation (2021), compliance with national legislations, prerequisite of traceability, risk assessment and contingency plans as well as severe fines of up to 10% of the turnover in EU, with management being liable in person.

In Malaysia, forest cover now makes up 50% of the country's landbank whilst deforestation rates have gradually fallen to near record-lows over the last many years.

For the palm oil sector specifically, the landbank under cultivation remains stable in line with the cap on land allocation introduced by the Government, which is effectively helping prevent further expansions. Instead, focus has been shifted towards raising the industry's production by means of increasing yields and introducing new technologies.

With this, we firmly believe that Malaysia should be categorized as a low-risk country under the EUDR, and whilst there are still many unanswered questions in relation to the implementation of this new legislation, we welcome initiatives that aim to tackle the global challenge of deforestation.

However, such initiatives must be based on a balanced approach to ensure smallholder farmers are not excluded from global supply chains and that developing countries also have the right to meet their basic needs, and to have the opportunity to lead richer, more fulfilling lives.

In addition, any such initiatives must ensure that all agriculture related commodities are subject to the same rules, thereby operating on a level playing field without any form of discrimination.

In any case, we shall relentlessly continue our pursuit of sustainable value creation, by always aiming to set the highest sustainability standards within the conditions of the day.

To do so, we subscribe to not only Global Forest Watch and GeoRSPO for monitoring of deforestation in our own concessions, but also the internationally recognized real time satellite monitoring database, [palmoil.io](http://palmoil.io), with whom we have been collaborating since the 3rd quarter of 2023 to monitor our indirect suppliers.

This enables us to monitor deforestation activities in established plantations, at smallholders and at dealers with indirect supply from smallholders within a radius/proximity of 10km.



*A family of leopard cats captured on one of our camera traps on a rendezvous. Leopard cats are a natural component of biological control against rodents.*

#### Partnership, Biodiversity and Conservation



Conservation of jungle reserves and wildlife sanctuaries as well as promoting green corridors are examples of our commitment to the environment. To date, United Plantations has set aside 8,290Ha of land for conservation purposes representing approximately 13% of our total planted area in order to encourage biodiversity and wildlife on our estates. In Indonesia, UP has set approximately 44% of its land concession for the purpose of conservation.

Riparian reserves are maintained to preserve flora and fauna, provide wildlife corridors, ensure water quality and prevent erosion. In order to develop effective conservation strategies, we have established a series of collaborations and partnerships with experts within this field. One such partnership was initiated in 2007 with Copenhagen Zoo (CPH Zoo) and officially established on 1 October 2010, through a Memorandum of Understanding (MOU). It marked an important milestone for our target of producing certified sustainable palm oil in Indonesia and being able to document the environmental integrity of our Indonesian operations.

#### Biodiversity Department

In order to better manage our large conservation areas, UP set up its Biodiversity Department (BioD) in 2011 under the purview of Dr. Carl Traeholt, our Group's Chief Environmental Advisor.

The Biodiversity team consists of a Division Manager with solid natural resources management experiences, supported by five subject specialists and five field staff.

This is supplemented by additional contract-workers when needed. The team is responsible for mainstreaming environmental concerns into standard operational procedures and focus on activities primarily within the following areas:

- Biodiversity (Fauna and Flora)
- Habitat and Ecosystem
- Forestry and rehabilitation
- Hydrology and Limnology
- GIS and Mapping
- Integrated Pest Management
- RSPO and ISPO
- Protection and Monitoring
- Community Outreach

One of the key components in making the BioD a success was to develop the internal capacity to manage and conserve UP's ecological resources, and to make first-hand information about biodiversity assets easily available.

This is possible with the current BioD headed by Dr. Carl Traeholt, our Group's Chief Environmental Advisor and Mr. Muhd Silmi, Manager BioD and their team including essential topic specialists, such as a limnologist, a forester/botanist, zoologist, herpetologist and database officer. These subject specialists are supported by two chief rangers and a number of ranger assistants, as well as a native tree nursery manager.

#### Biodiversity Department's activities

Since 2011, the BioD has undertaken an impressive amount of activities in support of the company's commitment of producing sustainable palm oil and



conserving the natural environment. For example, the BioD has worked with leopard cats, *Prionailurus bengalensis*, as predator of rats to replace the environmentally detrimental chemical control.

The work with the Sumatra cobra (*Naja Sumatrana*) and king cobra (*Ophiophagus Hannah*), the world's largest venomous snake has not only produced some amazing results, it has also attracted one of the world's best known and respected herpetologists, Romolus Whitaker, who continues to grace UP/PT SSS and offer support and capacity building.

The BioD has also undertaken numerous camera trap surveys, bird and tree surveys to document the biodiversity within the company's conservation areas.

In addition, the BioD has recorded many of Borneo's endangered species to date, among them Asia's only great ape, the orangutan, *Pongo pygmaeus*.

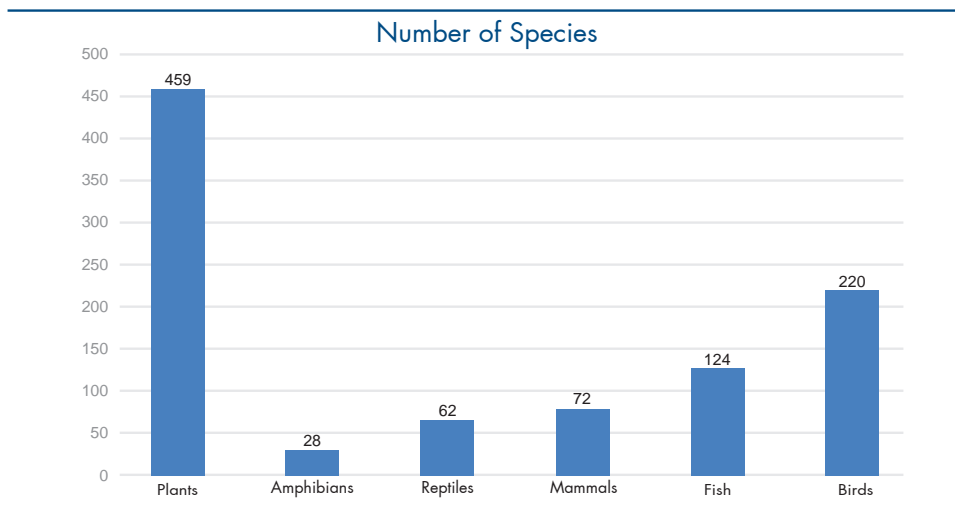
While these are exciting and inspiring stories about exotic species, the BioD is far more than that. An entire host of other activities commenced right from the modest beginning in 2011, including developing a GIS database that incorporates literally all the team's recorded data, be it from camera trap pictures, radio-

tracking locations, number of tree seeds collected, time and place of illegal logging or recovery of aquatic fauna. Most of these stories can be found on our website.

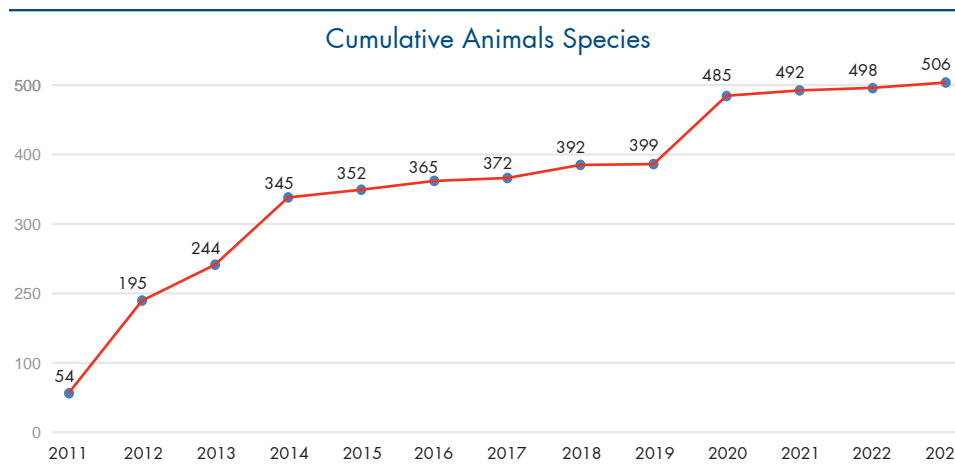
**Biodiversity activities during 2023 in PT SSS**

In 2023, all biodiversity activities were back on target after two years of COVID-19 limitations, and the BioD continued to work at normal capacity throughout the year. The team also attended national and international seminars and workshops that formed part of ongoing capacity building and knowledge sharing with the conservation community, academician, practitioners and government. This was also made possible due to uplifting travel restrictions from the COVID-19 outbreak.

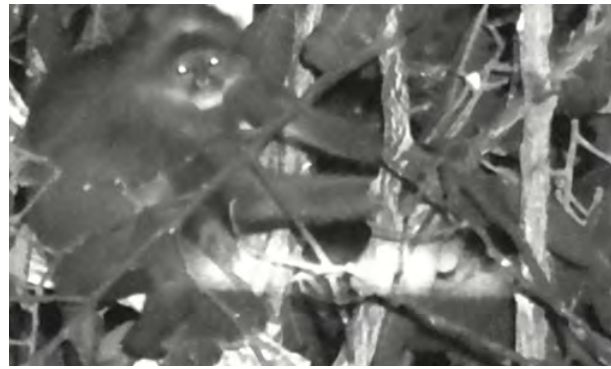
In 2023, the team added eight new species to PT SSS' species list, consisting of one reptile and seven bird species. To date, the BioD has recorded a total of 506 different vertebrate species of which 72 are mammals, 220 birds, 62 reptiles, 28 amphibians and 124 fish. In addition, 459 tree species have been recorded in PTSSS' conservation areas. The total number of species is expected to increase significantly in the future when more surveys are completed, and rehabilitation areas mature.



Vertebrate and plant species that have been recorded in PT SSS' conservation areas.



Cumulative number of vertebrates recorded in PT SSS' conservation areas.



Silvered leaf monkey (*Trachypithecus cristatus*) and Orangutan identified by thermal camera fitted to a drone in Kumai Estate, PT. Surya Sawit Sejati.

### The World's First Orangutan Survey Using Drone Fitted With Thermal Camera

The BioD team have already recorded baseline data regarding the distribution of orangutan. This has been undertaken through nest counts, camera trapping, and interviews of local residents. The past four years, the BioD team has also explored the opportunity of conducting orangutan survey using drone fitted with thermal camera.

The survey was carried out in Kumai Estate from January 29th to February 10th 2023. The survey was first of its kind and a representative of TNI Air Force Sutan Iskandar military airport, Pangkalan Bun, the Head of BKSDA Kalimantan Tengah and Head Section II of BKSDA participated in the survey to learn about new technology and, potentially, a more cost effective survey method. The survey was conducted in the evening when the orangutans are usually in nests. The BioD team successfully identified five orangutan including female, baby and juvenile, and adult male. In addition, the BioD team gained new insights into orangutan behaviour at night, and the method will be applied in all future orangutan population surveys and monitoring, in addition to line transects and camera trapping. The survey also detected other protected species such as long tailed macaque, langur, and southern pig tailed macaque.

The second drone survey was conducted from 6th to 12th November 2023, also in Kumai Estate. During the five-nights survey a total of 49 photos of orangutan were recorded that represented at least ten individual orangutans. This included four females and three babies

This survey proved very useful and enabled the BioD team to survey the entire Kumai Estate in one night. The spotting and identification of individual orangutans in their nests, as well as other protected species opens up opportunities for a number of exciting future conservation activities.

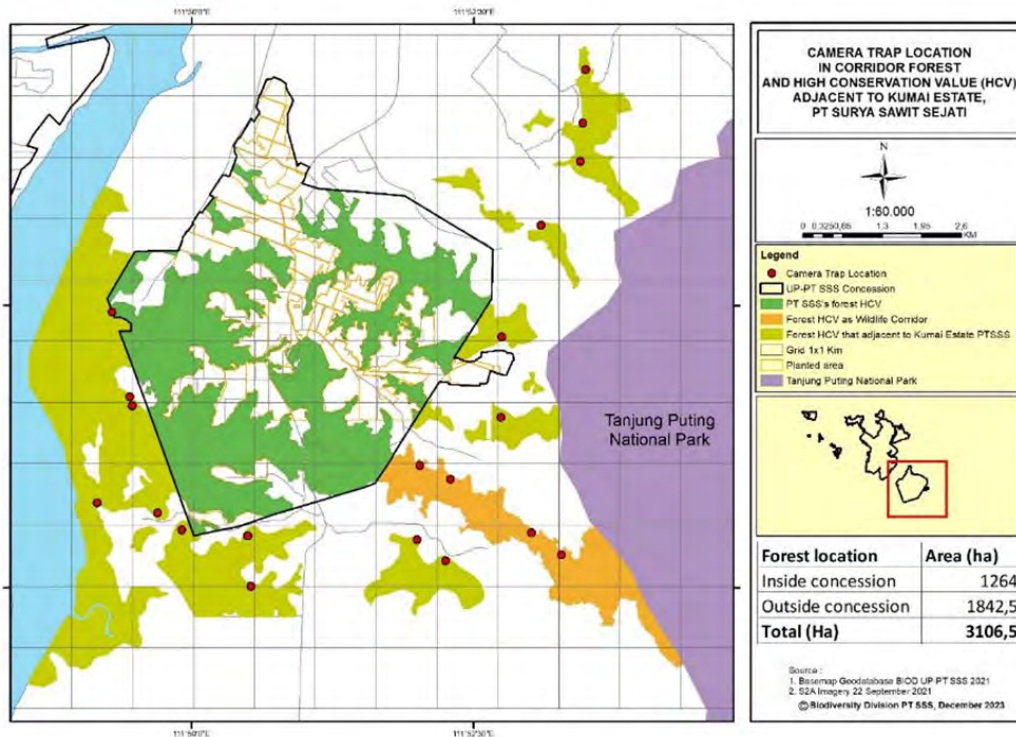
The survey also demonstrates that orangutans can live in relatively small forest patches in a landscape dominated by oil palms. The BioD team will strive towards enriching PT SSS' forest patches with additional food plants, and continue to collaborate with and advise the government to develop new policies and plans regarding orangutan conservation in fragmented landscapes dominated by oil palm and other plantations.

In addition, the BioD will work towards preserving a forest corridor that connects Kumai Estate with Tanjung Puting National Park, the largest orangutan park in the world, to allow a natural geneflow between PT SSS' conservation landscape and the national park.

### Wildlife Survey In The Forest Corridor Between Tanjung Puting National Park And Kumai Estate

The forest habitat connecting PT SSS' conservation areas with Tanjung Puting National Park (TPNP) forms the last existing ecological corridor preventing these two landscapes from being isolated from each other. Once this connection is severed, non-volant wildlife populations will be genetically isolated from each other, and become increasingly vulnerable to inbreeding depression. Therefore, it is critical that this forest tract be protected to allow for natural dispersal of genes across both TPNP and PT SSS. In a joint effort, the BioD team and BKSDA Central Kalimantan undertook a camera trap survey of the forest corridor which produced 398 pictures of animals belonging to 22 species. These include Sunda pangolin (*Manis javanica*), Orangutan (*Pongo pygmaeus*), Bornean sun bear (*Helarctos malayanus*), Pigtail macaque (*Macaca nemestrina*), Bornean Bearded Pig (*Sus barbatus*) and Bornean crestless fireback (*Lophura pyronota*). The survey revealed that this is indeed an important remaining forest that the company could try to protect permanently.





The landscape situation that showed the PT SSS HCV conservation areas and the HCV forest outside PT SSS concession that functions as a forest corridor.

Wildlife Species Recorded In The Forest Patches Surrounding Kumai Estate, PT Surya Sawit Sejati

Common name	Scientific name	IUCN status	PP 106/2018	Independent photo	Relative abundance (%)
Lesser mouse-deer	<i>Tragulus kanchil</i>	LC	V	112	28.14
Orangutan	<i>Pongo pygmaeus</i>	CR	V	53	13.32
Southern pig-tailed macaque	<i>Macaca nemestrina</i>	EN		52	13.07
Bearded pig	<i>Sus barbatus</i>	VU		38	9.55
Plantain squirrel	<i>Callosciurus notatus</i>	LC		36	9.05
Long-footed treeshrew	<i>Tupaia longipes</i>	LC		32	8.04
The three-striped ground squirrel	<i>Lariscus insignis</i>	LC		18	4.52
Sun bear	<i>Helarctos malayanus</i>	VU	V	14	3.52
Long-tailed Macaque	<i>Macaca fascicularis</i>	EN		8	2.01
Bornean Crestless Fireback	<i>Lophura pyronota</i>	EN		8	2.01
Sambar deer	<i>Rusa unicolor</i>	VU	V	6	1.51
Sunda scops owl	<i>Otus lempiji</i>	LC		3	0.75
Leopard cat	<i>Prionailurus bengalensis</i>	LC	V	3	0.75
Monitor lizard	<i>Varanus salvator</i>	LC		3	0.75
Malayan civet	<i>Viverra zangalunga</i>	LC		3	0.75
Sunda pangolin	<i>Manis javanica</i>	CR	V	2	0.50
Large treeshrew	<i>Tupaia tana</i>	LC		2	0.50
Short-toed coucal	<i>Centropus rectunguis</i>	LC	V	1	0.25
Common emerald dove	<i>Chalcophaps indica</i>	LC		1	0.25
Maroon leaf monkey	<i>Presbytis rubicunda</i>	VU	V	1	0.25
Crested serpent eagle	<i>Spilornis cheela</i>	LC		1	0.25
Silvered leaf monkey	<i>Trachypithecus cristatus</i>	VU	V	1	0.25

EN= Endangered, CR = Critically endangered, LC = Least concern, VU= Vulnerable, NT= Near threatened, DD= Data deficient

Whereas PTSSS has begun to encourage the government in protecting this remaining corridor, it remains a difficult challenge to obtain the necessary permits to assume management and conservation rights of the area. The forest corridor is located outside the PT SSS concession with a legal status of HPK and APL, which needs to go through a tedious process to convert into protection status. In 2023, the BioD

team continued to encourage the BKSDA Central Kalimantan to raise attention at the Head of and find a strategic way to conserve the forest corridor. On the 8th September 2023 the Head of BKSDA Central Kalimantan issued a letter No: S568/K.15/TU/KSA/09/2023 requesting BKSDA Central Kalimantan to support the protection of the corridor. The letter also recommended to all stakeholders to join in the





Photos from a tree climbing course in Sukau, Sabah, Malaysia.



Setup of camera trap in the field.

effort to protect the remaining forest fragments and refrain from activities like mining and palm oil plantation that can destroy the forest.

The letter from BKSDA is of critical importance to PTSSS, because the BioD team will effectively have the government support to do more work on the ground to ensure the forest corridor can be protected. In the process, PTSSS will scale up communication with the community who own the land in the forest corridor and try to convince them to maintain the land intact for biodiversity. The work will also require intensive communication and coordination with the government to pursue a long-term legal solution to the land status.

#### Tree Climbing Course In Sukau, Sabah, Malaysia

To increase team capacity to safely conducting biodiversity surveys in canopies, four staff from the BioD team, Mr. Silmi, Mr. Mahfud, Mr Suryadi and Mr. Luthfi participated in a tree climbing course in Sukau, Sabah Malaysia, from 15th to 18th February 2023. The training was led by the experienced, Mr. Jamiluddin Jami from Borneo Tree Climbing Academy (BTCA). All four BioD team members successfully passed the training

and examination for both level 1 and level 2 and were presented with tree climbing certificate, authorised by an accredited trainer from BTCA. In the future, using this training, the BioD team will begin to explore the secrets of biodiversity and wildlife ecology of arboreal species. The knowledge of understanding canopy biodiversity is critical for developing effective conservation management strategies.

#### Camera Trap Survey Of Wildlife In The Forest Canopy

Immediately after becoming certified tree-climbers, the BioD team setup several camera traps in the tree canopy in Pulau Cempedak, Lada Estate, to test the equipment and their newly acquired skills, as well as to prepare for a more extensive systematic canopy survey in Kumai Estate in 2024. The results turned out some positive surprises, including photos of orangutan feeding on wild Borneo mangoes. These photos of orangutans are also the first ever captured in Lada Estate using camera traps, despite the on-the-ground camara trap surveys which have been undertaken since 2014. In contrast to Runtu, Umpang and Kumai estates where the team has obtained many photos of orangutan, the species have remained elusive until this latest canopy survey.



A selection of photos captured from camera traps deployed in the canopy at Pulau Cempedak, Lada Estate.





The BioD team and teachers from junior high school conducted a joint education programme to encourage “Gen Z” students to care more about environment and conservation.



Apart from the positive survey outcome, the team was also satisfied that the capacity to climb large trees and deploy camera traps in the canopy has already revealed promising and interesting information.

### Conservation Communication With “Gen Z”

Apart from research and protecting conservation areas from illegal intruders and activities, it is important to share the common goals for conservation with the community surrounding the area.

The BioD team deliberately focused on “Generation Z” or colloquially known as Zoomers, because they constitute a new generation that will safeguard the environment and biodiversity in the near future.

It is critical that this generation understands the purpose of conservation and how proper management of biodiversity and ecological processes is critical to their own present and future livelihoods.

For the Gen Z programme, the BioD team collaborated with the Junior High School in SMP Negeri 2 Pangkalan Lada. Joint meetings with the school principal resulted in a conservation syllabus covering several topics critical to future practices:

- Environment and wildlife conservation
- Borneo jungle seed propagation and nursery
- Habitat rehabilitation and restoration,
- Impact of rehabilitation on biodiversity
- Wildlife survey and monitoring

In this important programme staff from PT SSS BioD team served as teachers or mentors for the students during the period from September–November 2023. This programme included both indoor and outdoor sessions, where a site visit to PT SSS conservation areas was used to demonstrate critical processes such as rehabilitation and wildlife monitoring. This programme was successful and may be replicated for new students in the future.

### Smart Patrolling

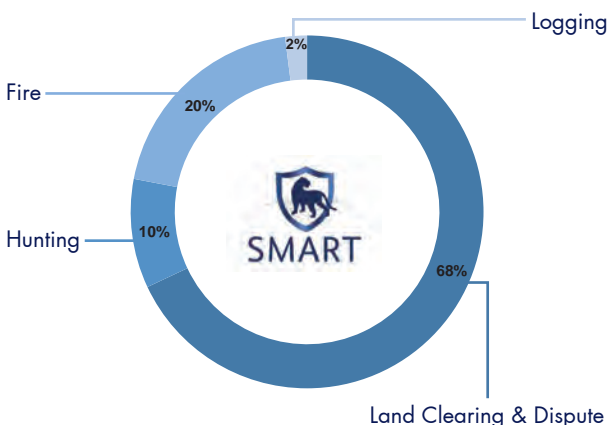
Protecting conservation areas is one of the BioD’s core activities. The aim is to prevent possible negative impact from illegal activities such as logging, hunting, fire, over fishing and land clearing. BioD continues to use the SMART system to store all records in a digital format that is also integrated with the team’s GIS-database. This means that monitoring activities and evaluating the effect of them is easy to access to improve quality of patrols. In 2023, the El Nino effect impacted most of the region. This caused extended dry seasons at PT SSS areas, and increasing wildfire risk. A total of eight fires were recorded in PT SSS in 2023, and some affected conservation areas.

All fires recorded started outside PT SSS concessions before it reached PT SSS. The BioD, estate and fire patrol teams worked together for extended hours, often into the night, to contain the fires. A combination of observation from estate towers and aerial observations by drone provided an effective combination as early warning to detect fires.

This teamwork resulted in controlling all fire outbreaks in PT SSS to the extent that none of the outbreaks caused significant negative impact to the PT SSS concessions.

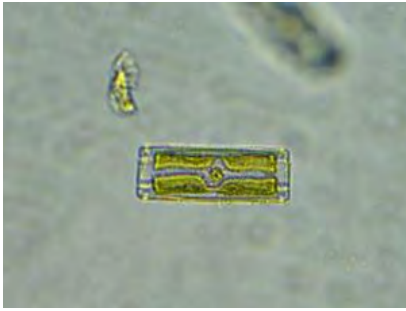
## SMART Patrol Report

(THREAT HCV REPORT 2023)



Threat	Activities
Logging	1
Land Clearing	35
Hunting	4
Fire	8
Fishing	0
Others	0

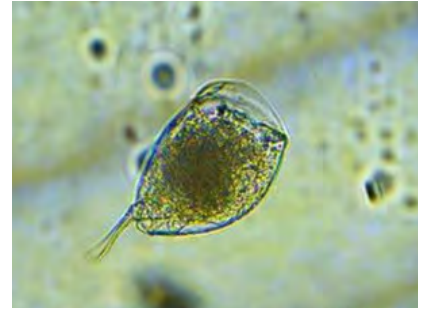
n=48



*Diatoma sp*



*Frustulia rhomboides*



*Lecane papuana*

Plankton forms an important part of the food web in river ecosystems. The three species illustrated above are collected from a stream in Kumai Estate.

### Water Quality Monitoring And The Plankton Diversity

Water is the most important natural resource on Earth that all known living organisms are dependent on. Therefore, the BioD Team affords water the highest priority and focuses on protecting watersheds and maintaining good water quality to support aquatic life as well as provide clean water to communities.

The BioD Team has continuously monitored the water quality in PT SSS' property to ensure actual water conditions in the water bodies across the estates remain as pristine as possible.

For this, the BioD Team focuses on aquatic micro organisms as indicators of water quality. Aquatic invertebrate samples are collected from streams and ponds located in the planted and conservation areas in Lada, Runtu, and Kumai estates. Sampling sites are fixed points and to date the BioD Team has recorded 104 Phytoplankton and 35 Zooplankton species.

Based on the plankton diversity from sampling in Kumai, Lada and Runtu estates the water condition in the rivers in and surrounding the estates fall into the "medium condition" category.

This means that the water is slightly polluted but showing signs of improving. The rehabilitation of riparian forest

along the streams in PTSSS is showing positive effects by minimising organic and inorganic pollution washout in all three estates.

### Bird Diversity In A Rehabilitation Area

Rehabilitation activities in Lada Estate has been ongoing since 2011. The first phase of habitat rehabilitation was to plant as many native trees in degraded areas as possible to recreate a natural canopy cover. The BioD Team assumed that a good tree diversity with extensive canopy cover will attract many wildlife species, since it provides shelter and foraging areas, particularly for understory birds and microbats.

To date, approximately 300 ha have undergone rehabilitation activities during which the BioD Team has planted ±192.110 native tree seedlings from 130 different tree species. Despite difficult conditions, an estimated 65% seedlings have survived and grow well today.

Concurrently with planting new trees, the BioD Team monitors biodiversity in the rehabilitation areas, and Lada Field 86, Div 2 is mainly used as a large experimental site. The understory bird diversity is a good indicator of habitat condition that also reflects the condition of the forest canopy. They prefer habitat with dense canopy cover and are often cryptic in nature and difficult to see, even when using binoculars. Therefore, mist-netting

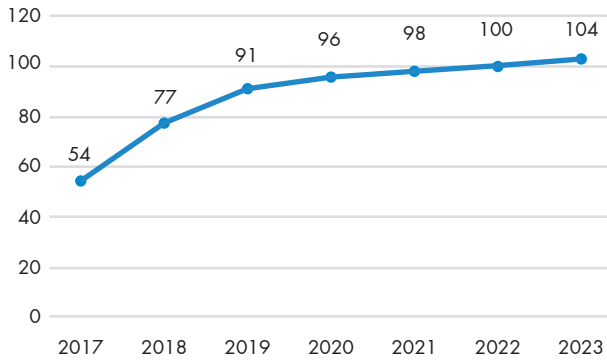
### Diversity Index in Kumai Estate

*Plankton diversity index used to evaluate the quality of water bodies.*

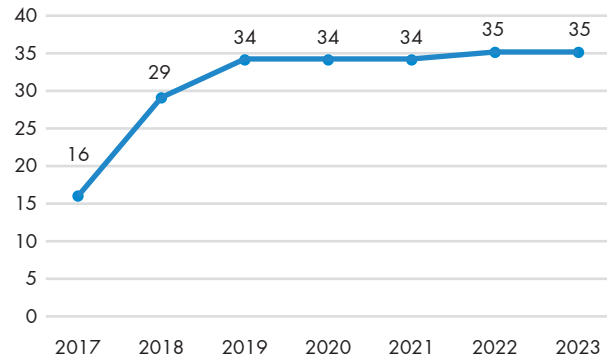




Cumulative Phytoplankton



Cumulative Zooplankton

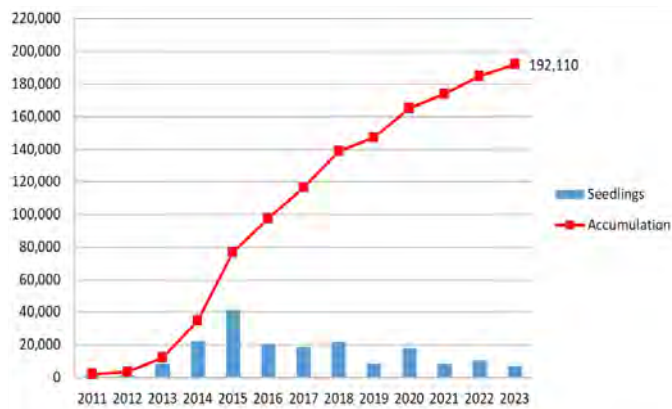


Base line data of plankton diversity in stream/river in Kumai, Lada and Runtu estate concession.

were used to capture birds in the area, in addition to direct observation. The bird monitoring began 4 years into the rehabilitation process, when the first planting activities were initiated. Subsequent monitoring reveals an increasing number of bird species throughout the years. From merely 13 species in 2015, the BioD Team

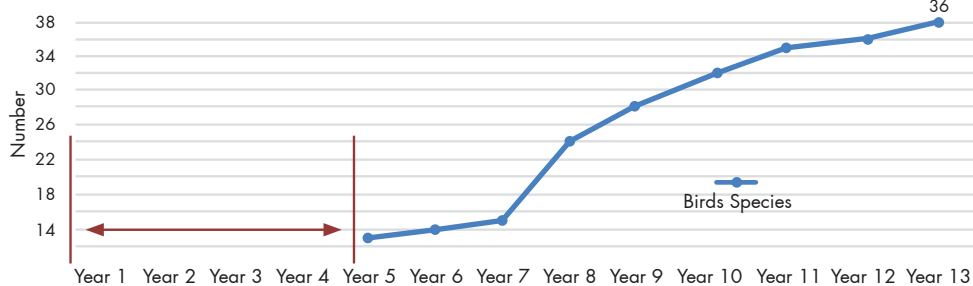
recorded 38 bird species in 2023. This is another testament to a successful rehabilitation process. It is expected that the bird diversity will continue to increase in tune with the increasing canopy height of Field 86. The next big milestone is when endangered and critically endangered birds begin to return to the area in the future.

Seedlings planted from 2011-2023



The number of tree seedlings planted in UP/PTSSS' rehabilitation areas between 2011 and 2023.

Cumulative Curve of Birds Species Recorded in Rehab Areas Period 2011-2023



The number of bird species has increased every year in Field 86 after rehabilitation. This is clear evidence that the rehabilitation process is having positive effect.



*An impressive False Gharial basking on a mud bank in Arut River, Central Kalimantan.*

### False Gharial Survey in Arut River

False Gharial, *Tomistoma schlegelii*, is a freshwater, mound nesting crocodylian with a distinctively long, narrow snout. This reptile native to Indonesia, Brunei, and Malaysia.

The false gharial is threatened with extinction throughout most of its range due to habitat loss arising from human activities like drainage of freshwater swamplands and clearance of surrounding rainforests or riparian zones. The species is also hunted for its skin and meat, and the eggs are often harvested for human consumption.

IUCN currently lists the False Gharial as Endangered (EN) on the IUCN Red List, because of the continued population decline across its range.

Therefore BioD, PTSSS has taken the initiative to undertake a comprehensive population survey of the species in the Arut River that forms the western boundary of PT SSS conservation areas in Runtu and Umpang estates, as well as in the swampy lakes that form part of the estates.

BioD have established permanent transect lines along a 32 km stretch of the Arut River that forms the boundary of PT SSS' conservation area.

Surveys are conducted at night using torches to spot for crocodile eyeshine in the water. The crocodiles' eyes reflect light that hits their eyes, making it relatively easy

to identify them for a trained observer. Surveys were undertaken every fifteen days from a wooden boat.

To limit noise as a possible deterrent, the BioD team float or paddle gentle downriver while spotting for crocodiles.

The surveys conducted from August to December 2023 revealed promising results with a total of 42 records of crocodile eyeshine and 11 records of direct sighting --- that is, when a team member could see parts or the full body of a False Gharial.

The information gathered from the 2023 survey will form part of our annual monitoring and future ecological research about the False Gharial.

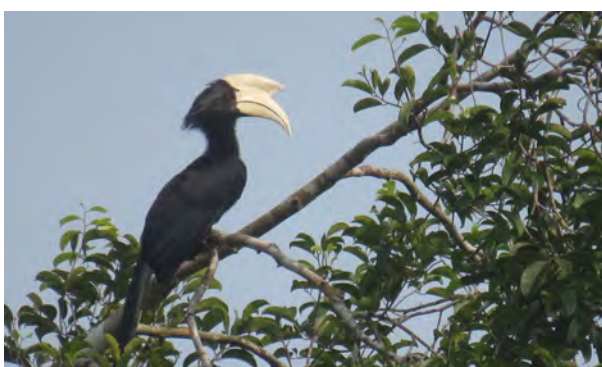
Furthermore, it will eventually form a critical part to the development of a conservation management plan together with BKSDA Kalimantan Tengah.

The BioD Team aims for greater success in the survey, hoping to provide further insights into the crocodile population on the Arut River.

*Carl Traeholt*  
 Dr. Carl Traeholt  
 UP Group Chief Environmental Advisor

and  
*Mu.*  
 Mr. Muhd Silmi  
 Manager Biodiversity Division





Various types of wildlife photographed by our BioD Department.





UIE's Kingham-Cooper tree reserve is a flagship reserve holding more than 250 species and 12,500 indigenous trees, today stands as a natural sanctuary for birds and other wildlife as well as provides a seed garden for future plantings.

#### Kingham-Cooper Lagoon Tree Reserve

Since 2008 UIE Estate has become an indigenous tree seed-garden pioneer which holds one of Malaysia's finest diverse collections of native jungle tree species.

The Kingham-Cooper Lagoon Tree Reserve was established in 2008 and is the flagship reserve holding over 250 species and 12,500 indigenous trees becoming the main gene bank (mother trees) for seed collection, propagation and distribution of saplings to other estates within our group.

This evolving sanctuary which surrounds the lagoon is stocked with varieties of fish, attracting fish eagles, Malayan Otter, Monitor Lizards, King Fishers, bee-eaters as well as a wide variety of smaller mammals. It has also become colonized by species of monkey namely the short and long tailed Macaques, and the spectacled leaf monkey. Our successful establishment of the various reserves, which are our precious gene bank of mother trees, have enabled us to collect a wide variety of seeds for further propagation at our UIE tree nursery.

During 2023 a total of 1,235 trees across 33 diverse family species were delivered from UIE for plantings by Sri Pelangi Estate, Alpha Bernam, and Jendarata Engineering Department which will add a wider biodiversity for landscaping. We are indebted to the memory of the late James Kingham (Malaysia's Tree Guru) for the generous contributions and encouragement in assisting the Group establish a legacy for future generations.

#### The Sungei Anak Macang Riparian Reserve

This 5.85-kilometre strip of land along the narrow boundary river covering an area of 11 hectares. It was planted up in 2020 and has been established with a wide variety of rare and endangered jungle trees sourced from the Kingham-Cooper Lagoon Tree Reserve.

#### The Iversen-Jeremy Diamond Jungle Reserve

With the acquisition of Lima Blas Estate from Socfin in 2004, UP also inherited a beautiful jungle reserve of almost 100 hectares, which has since been enriched with native jungle tree seedlings from the Kingham-Cooper Tree Reserve.

The estate's first manager during the establishment in 1928, Mr. Werner M. Iversen, played an instrumental role in safeguarding the jungle sanctuary and was known for setting new standards for social responsibility within the industry. Atypical of that time, he described effective management as working together under conditions of mutual trust and respect with the local workforce.

Many years later, the baton of preserving the jungle reserve was eventually passed on to Dato' Jeremy Derek Campbell Diamond, who retired from the UP Board of Directors in April 2023, after 22 years of loyal and dedicated service.

During his tenure as the Executive General Manager of Socfin, where he worked for 38 years prior to joining the UP Board, he also played a pivotal role in preserving the pristine jungle reserve, thereby allowing the natural habitat to thrive undisturbed. As he put it: *"Over the more than 20 years I visited Lima Blas with Comte de Ribes (Chairman of Socfin), I was asked each year if the jungle could be planted with oil palms. I always responded that the terrain was too steep and rocky. Gladly, this was always accepted"*.

More than 90 years after the establishment of UP's first jungle sanctuary, the Grut Sanctuary, in 1930, the renaming of the Lima Blas Jungle Reserve to the Iversen-Jeremy Diamond Jungle Reserve serves as a lasting tribute to their conservation efforts, in line with UP's commitment to social and environmental care.





A majestic jungle tree, Kelumpang (*Sterculia macrophylla*), at the Kingham-Cooper tree reserve, UIE.



Carbon Footprint Initiatives and Climate Action

In UP, we respect and recognise the importance of global initiatives to protect fragile ecosystems and combat climate change. Since 2005, UP has actively been pursuing means of identifying ways to reduce its Greenhouse Gas (GHG) emissions and with that its reliance on fossil fuels. At a global level, however, much more attention must be directed towards the adverse impacts of fossil fuel usage and minimising this as about 70% of all CO<sub>2</sub> (-eq) emissions continue to come from the burning of fossil fuels.

Palm oil, on the other hand, accounts for about 0.6% of the global CO<sub>2</sub> (-eq) emissions, which is much less than for instance the production of milk, pigs, and poultry, and about 22 times less than the livestock sector overall. Positive change can be made through individual accountability and collective action, and it is therefore important that we focus on a balanced approach where we all have to help minimise the impact of deforestation and greenhouse gas emissions. There must be a commensurate effort in reaching this goal and therefore things should be put in perspective and acknowledgement given to the fact that palm oil production is not a main driver of the global GHG emissions. In this connection, ongoing initiatives must be intensified to minimise the impact of not just agriculture but all activities that in one way or the other contribute to deforestation and global warming.

Life Cycle Assessment (LCA)

In 2006, following the completion of the world’s first peer reviewed Life Cycle Assessment (LCA) study on the “cradle to grave” production of 1 MT of refined palm oil, various areas were identified within our production chain, which could mitigate GHG emissions. Following that, UP finalised the world’s first comprehensive LCA in accordance with ISO 14040 and 14044 International Standards on palm oil in 2008, which subsequently underwent a critical panel review.

Since then, annual updates to this LCA have been carried out by 2.0-LCA Consultants led by Professor Jannick Schmidt from Aalborg, Denmark including the latest update undertaken for year 2023. The updated 2023 LCA model is based on the new EXIOBASE background database and the contributions from indirect land use change, peat emissions and nature conservation have been reviewed in light of new

the new data. These studies have indeed helped to identify additional areas in need of further improvement within our Group. It should be noted that the GHG emissions per kg palm oil calculated in this study cannot be compared with the results obtained with the GHG accounting tool PalmGHG, due to key methodological differences between the two models.

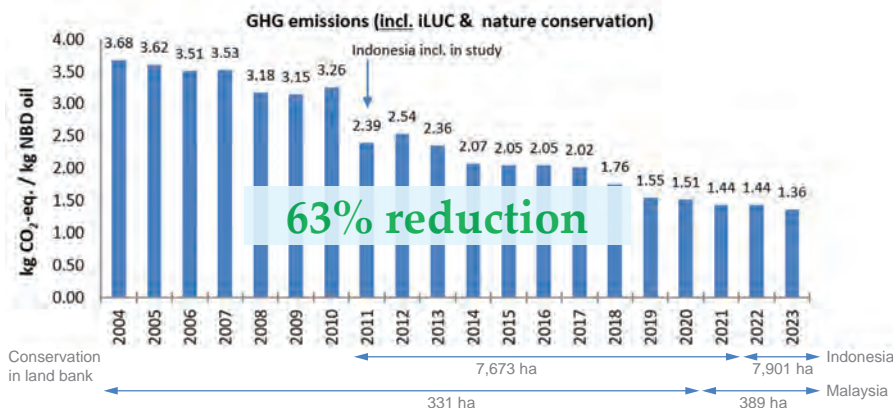
This effectively means that GHG emissions calculated in the LCA study are systematically higher compared to a similar calculation using the PalmGHG calculator, which adopts a different approach to deal with land use changes, nature conservation and the modelling of by-products. The PalmGHG calculator also ignores the emissions from the production of pesticides, and results are presented per kg crude oil, whereas the LCA results are presented per kg refined palm oil, and include scope 3 emissions.

Significant reduction in UP’s GHG emissions since 2004

Looking at the below time series of GHG emissions from palm oil at UP, it is most pleasing that we have again managed to reduce our footprint from 1.44 kg CO<sub>2</sub>-eq emissions per kg. NBD oil in 2022 to 1.36 kg CO<sub>2</sub>-eq emissions per kg NBD oil in 2023 including indirect land use change (iLUC) and nature conservation. This is equivalent to a reduction of 6%, which can mainly be attributed our investments in green technology. Moreover, this represents a substantial reduction in our GHG emissions of 63% vis-à-vis 2004, galvanising the fact that UP’s palm oil has a significantly lower carbon footprint when compared to average RSPO certified palm oil as well as Rapeseed and Sunflower oil produced in Europe as seen in the graph on the next page.

2030 Target

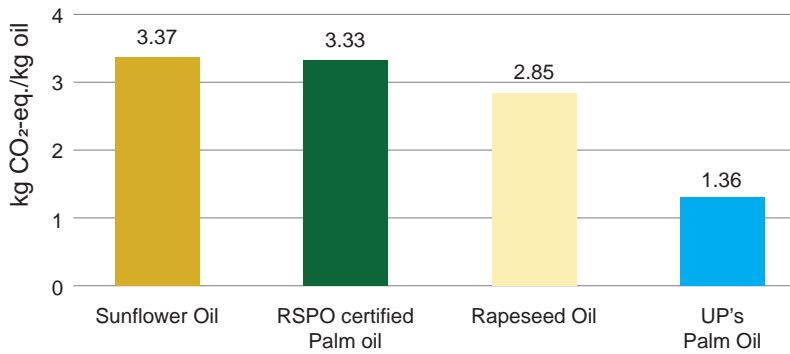
In 2021, we achieved our internal goal of reaching a 60% GHG emissions reduction per MT of refined palm oil produced by 2025 when compared to 2004 levels (with iLUC and nature conservation), four years ahead of time. However, in line with our Group’s commitment to environmental leadership, we acknowledge that even more can be done and we therefore set a new target of reaching a 66% reduction by 2030 when compared to 2004 levels (with iLUC and nature conservation). We shall relentlessly pursue to reach and exceed this through more initiatives and further investments over the next 7 years.



Time-series for NBD palm oil at United Plantations Berhad 2004-2023. Results include contributions from iLUC and off-setting from nature conservation.



### Comparison of Palm Oil Produced in United Plantations Against Average RSPO Certified Palm Oil and Other Oils



The 2023 GHG emissions from UP's palm oil production have been compared with industry averages of RSPO certified palm oil (Malaysia/Indonesia), rapeseed oil (Europe) and sunflower oil (Ukraine). The industry averages are based on Schmidt and De Rosa (2020) and Schmidt (2015).

#### Emissions Reductions & Biogas Plants

As a necessary element in our pursuit to combat climate change, significant investments have been made in promoting green energy starting with the Biomass Reciprocating Boiler cum Power Plant and the first Biogas Plants built and commissioned in 2006. These projects combined have since helped to significantly reduce our emissions of CO<sub>2</sub> by 70% and CH<sub>4</sub> by 80% at the respective operating units thereby paving the way for additional green investments.

For more information on our LCA assessment, please refer to our website, [www.unitedplantations.com/sustainability/](http://www.unitedplantations.com/sustainability/).

#### Biogas to Grid

Today, all of our mills are equipped with biogas plants, and the biogas generated from the palm oil mill effluent is mainly used in our own operations as is or after being converted to electricity. If this is not possible, which is the case at our UIE mill, it is sold as electricity to the grid or used as a substitute fuel in the mill boiler. In 2023, a total of 7,585 MWh of green electricity was generated from the UIE biogas plant and sold to the grid, which represents an increase of 14% compared to 2022.

#### Photovoltaic Cell Pilot Project

A pilot project was initiated in 2020 to evaluate the feasibility of photovoltaic cells to produce green electricity from sunlight to offset electricity consumption from the grid. Located on the roof of the Tissue Culture Laboratory, these cells generate about 525 kW/ day for the Tissue Culture Laboratory, with the unutilised electricity channelled to other laboratories in the Research Department. A total of 201MWh of renewable electricity was generated from these cells in 2023. In May 2023 additional photovoltaic cells were installed at the Tractor Pool which generated a further 189MWh of electricity over an eight month period.

In addition, a larger photovoltaic project was commissioned at the Unitata Refinery in May 2022, which generated 760 MWh of electricity throughout 2023. For the UP group a total of 1,150 MWh of renewable electricity was generated during the year.

#### Biomass Reciprocating Boilers

The first Biomass Reciprocating Boiler (BRB1) was successfully commissioned in 2006 to supply green steam to Jendarata Palm Oil Mill as well as the Unitata Refinery, thus playing a crucial role in reducing our fossil fuel consumption. Since then, the Company has built and commissioned another 7 biomass reciprocating boilers with the latest unit at UIE (M) installed in 2019.

#### Isokinetic Monitoring of Gaseous Emissions from the Palm Oil Mills

In conformance to the Department of Environment's stipulations as well as to monitor the quality of our gaseous emissions, flue gas compositions were regularly checked by certified assessors throughout 2023. In all Malaysian mills the average dust concentrations were below the limit of 0.15g/Nm<sup>3</sup> set by the Department of Environment as per the Environment Quality Act (Clean Air Regulations) 2014 and the Lada mill emissions is well within the 0.3g/Nm<sup>3</sup> set by the Peraturan Menteri Negara Lingkungan Hidup No 07 Tahun 2007 in Indonesia.

#### VORSEP Dust Collector System

The VORSEP dust collector system was first installed on our Biomass Reciprocating boiler at Ulu Basir Palm Oil Mill replacing the old conventional multi-cyclone dust collector system. The unit was commissioned in June 2015 followed by progressive installation of additional units in the rest of the mills. With the commissioning of the VORSEP system at UIE(M) mill in 2019 all of UP's palm oil mills are now fitted

Palm Oil Mill	Average Dust Concentration (g/Nm <sup>3</sup> )
Jendarata - BRB 1 & 2	0.117
Ulu Bernam - Boiler 1	0.126
Ulu Basir - Boiler 3	0.136
UIE - Boiler 3 & 4	0.113
Lada - Boiler 1 & 2	0.008

with the VORSEP dust collector system. These units were installed primarily to meet the DOE's Environmental Quality Act (Clean Air Regulation) 2014 which among others requires a cleaner emission standard from the boiler with the following conditions: -

- i) The dust concentration emitted from the stack should not be more than 0.150g/Nm<sup>3</sup>
- ii) The smoke should not exceed shade No. 1 on the Ringlemann chart and should be less than 20% opacity

**Palm Oil Mill Effluent (POME) and Palm Oil Refinery Effluent (PORE) Treatment**

Palm oil mill effluent and palm oil refinery effluent are treated to reduce their BOD and COD contents before they are discharged or may be used to irrigate the oil palm fields.

The quality of effluent is monitored monthly as shown below and reported to the respective Government authorities. With the implementation of Biogas plant and other initiatives to reduce the BOD and COD of the effluent, we aim to reduce the BOD and COD by 10% from the respective average of 550 and 2200 mg/L in 2021, by 2025.

Parameters (mg/L)		Malaysian Operations			Indonesian Operations		
		2023	2022	2021	2023	2022	2021
		BOD	301	466	594	883	453
COD	1513	2121	2615	2896	2068	2025	

In addition, we are commissioning a polishing plant to treat POME from the Optimill with the objective of reaching a BOD of <25ppm.

**Biomass utilisation and economic value**

In 2023, a total of 789,113 MT of biomass residues were generated through UP's various field and mill operations in Malaysia.

Almost all of the total biomass generated (99.6%) or 785,934 MT were utilised as organic mulch in the nurseries and fields or as fuel source, thereby enriching our soils and displacing the use of fossil fuels whilst enhancing the value the biomass generated.

Our Indonesian operations generated a total of 154,735 MT of biomass dry matter in 2023. Here too, a very high proportion of the biomass (154,253 MT or 99.7%) was utilised through recycling in the fields or as a green energy source.

Biomass utilisation is an important part of our nutrient recycling programme and in line with our Environment and Biodiversity Policy which demonstrates our commitments to minimize the chemical use, pesticides as well as fertilizers in our operations.

Similar commitments apply to our FFB suppliers whom we educate on Best Management Practices during our annual Smallholders' Field Day.

**Production and Level of Utilisation of Oil Palm Biomass Residues in UP in 2023**

Malaysian Operations (Dry Matter Basis)	Quantity Produced (MT)	Quantity Utilised (MT)	% Utilisation	Method of Utilisation
Trunks and fronds at replanting	123,493	123,493	100	Mulch
Pruned fronds	362,124	362,124	100	Mulch
Spent male flowers	34,820	34,820	100	Organic matter recycled on land
Fibre	78,233	78,233	100	Fuel & mulch in nursery
Shell	48,529	48,529	100	Fuel & mulch for polybag seedlings
POME	42,390	39,210	93	Biogas generation, nutrient source, field irrigation and base for organic fertiliser production
EFB	99,525	99,525	100	Mulch and Fuel
Total	789,114	785,934	-	-
Level of utilisation = 99.6%				

Indonesian Operations (Dry Matter Basis)	Quantity Produced (MT)	Quantity Utilised (MT)	% Utilisation	Method of Utilisation
Trunks and fronds at replanting	-	-	-	-
Pruned fronds	85,556	85,556	100	Mulch
Spent male flowers	8,227	8,227	100	Organic matter recycled on land
Fibre	19,286	19,286	100	Fuel & mulch in nursery
Shell	11,868	11,868	100	Fuel & mulch for polybag seedlings
POME	6,432	5,950	93	Biogas generation, nutrient source, field irrigation
EFB	23,366	23,366	100	Mulch and Fuel
Total	154,735	154,253	-	-
Level of utilisation = 99.7%				



## Fertilizer Equivalent and Monetary Value of Oil Palm Biomass Residues Recycled on Land in UP in 2023

### Malaysia Operations

Biomass Residues	Method of Utilisation	Quantity Utilised on Dry Basis (MT)	Fertiliser Equivalent (MT)			
			Urea	Rock Phosphate	Muriate of Potash	Kieserite
Trunks & fronds at replanting	mulch	123,493	1,544	519	1,986	947
Pruned fronds	mulch	362,124	8,164	2,656	6,905	4,520
Spent male flowers	organic matter	34,820	1,120	742	2,060	1,069
EFB	mulch	43,079	749	316	2,082	479
Digested POME	biogas generation & irrigation	39,210	1,364	863	2,144	1,568
<b>Total (MT)</b>		<b>602,726</b>	<b>12,941</b>	<b>5,096</b>	<b>15,177</b>	<b>8,583</b>
Monetary value (RM)			37,203,986	3,184,027	41,735,311	7,252,451
Total monetary value (RM)			89,375,775			

### Indonesia Operations - Lada and Runtu estates

Biomass Residues	Method of Utilisation	Quantity Utilised on Dry Basis (MT)	Fertiliser Equivalent (MT)			
			Urea	Rock Phosphate	Muriate of Potash	Kieserite
Trunks & fronds at replanting	mulch	-	-	-	-	-
Pruned fronds	mulch	85,556	1,929	627	1,631	1,068
Spent male flowers	organic matter	8,227	265	175	487	253
EFB	mulch	21,515	374	158	1,040	239
Digested POME	biogas generation & irrigation	5,950	207	131	325	238
<b>Total (MT)</b>		<b>121,248</b>	<b>2,775</b>	<b>1,091</b>	<b>3,483</b>	<b>1,798</b>
Monetary value (RM)			7,263,749	880,452	10,280,489	1,595,202
Total monetary value (RM)			20,019,892			

With our commitment to sustainability and good agricultural practices, the recycling of field and mill biomass residues back to the oil palm land remains a cornerstone in UP's field practices. These measures have been shown to maintain and even improve soil fertility in the long term beside enhancing palm growth and yield.

In 2023, the total organic matter recycled on land in UP amounted to 602,726 MT of dry matter which is equivalent to 349,581 MT of carbon. This corresponds to an annual recycling rate of 17 MT organic matter or 10 MT of carbon to each hectare of land, thereby replenishing the soil carbon stock which is a vital component of soil health.

Upon mineralisation, the organic residues release substantial quantities of previously locked plant nutrients to the soil which is available for palm uptake.

The fertiliser equivalent of the material recycled on land is of the order of 41,797 MT of NPKMg fertiliser which in itself has a monetary value of RM89.4 million based on the fertiliser prices in 2023.

For our Indonesian operations, a total of 121,248 MT of biomass was recycled back onto our plantation land. This is equivalent to enriching our soils with 70,324 MT of organic matter which on a hectare basis is akin to returning 15 MT organic matter or over 9 MT organic carbon to the land.

On the more sandy soils in Indonesia such inputs will improve long term soil health significantly as the soil carbon status built up over the years enriches soil fertility. The nutrient content in the recycled biomass is equivalent to 9,147 MT of inorganic NPKMg fertilisers, with a value equivalent to RM20.0 million at prevailing 2023 prices.

Triple rinsed plastic pesticide containers (MT)			
	2023	2022	2021
Malaysia operations	16.4	14.5	12.9
Indonesia operations	4.0	3.2	1.0

Spent lubricants (lit)			
	2023	2022	2021
Malaysia operations	47,691	45,801	38,712
Indonesia operations	5,415	2,900	5,060

Used batteries (pieces)			
	2023	2022	2021
Malaysia operations	183	142	68
Indonesia operations	0	0	0

Spent fuel filters (pieces)			
	2023	2022	2021
Malaysia operations	5,666	5,086	3,934
Indonesia operations	160	96	204

### Waste Management

To avoid contaminating the environment and prevent misuse of pesticide containers and other scheduled wastes we have been collecting and disposing of triple rinsed pesticide containers, spent lubricants, used batteries and spent fuel filters through certified waste managers.

The waste managers will either safely recycle these items or dispose of them in accordance with government regulations.

There is no deemed hazardous waste under the terms of Basel Convention Annex I, II, III and VIII, that were transported, imported, exported or treated.

### Climate Risk Assessment

In UP, we recognise the threat of climate change and its effect on the planet and livelihoods. Unpredictable and extreme weather patterns directly impact agriculture operations and are a risk to food production. This may have substantial financial or strategic impact on our business too.

We have therefore conducted an assessment in line with the guidelines by the Task Force on Climate-Related Financial Disclosures (TCFD) to identify risks, opportunities, and challenges across all our operations in Malaysia and Indonesia to build resilience for our business and mitigate climate change.

### Climate related transition risks, opportunities, challenges and processes to mitigate the risks

Types of transition risks	Risks	Opportunities	Challenges	Processes/Measures to Mitigate the Risks
<b>Current and emerging regulations</b> <ul style="list-style-type: none"> <li>Adhering to existing and new rules and regulations on emissions or climate change mitigations.</li> </ul>	Higher compliance costs (additional costs associated with carbon pricing, taxes imposed on fossil fuels, etc)  Failure to comply with new regulations which restrict emissions or promote climate-change adaptation.	Low carbon footprint operations will significantly reduce the operational costs arising from increasing carbon prices and the dependence on non-renewable fuels.	Significant investments needed to meet new requirements.	<ul style="list-style-type: none"> <li>Reducing dust emissions at palm oil mills to levels far below DOE requirements.</li> <li>New effluent treatment plants to treat waste- water down to the lowest possible industry levels.</li> <li>New polishing plant to further reduce the BOD of mill effluent after biogas capture to levels below and beyond current requirements.</li> </ul>
<b>Technology</b> <ul style="list-style-type: none"> <li>Innovative technologies to optimise production efficiency.</li> </ul>	New processing methods and technology lead to different waste output and environmental impact.  Increasing costs associated with conventional systems that are energy inefficient.	New innovative technology and circular economy solutions could bring about efficiency in energy usage and resilience in the use of natural resources.	High costs associated with the advancement of new technologies to reduce carbon footprints.  Availability of new proven technologies to continuously reduce carbon footprints.	<ul style="list-style-type: none"> <li>Investments in new steam- and biogas turbines, and solar panels to drastically reduce our consumption of fossil fuels.</li> <li>Actuator valves to preserve energy throughout our refineries</li> </ul>
<b>Market</b> <ul style="list-style-type: none"> <li>Increasing consumer awareness on climate change and expectations to manage climate-related impacts.</li> </ul>	Failure to comply with increasing customer expectations and requirements insofar as low carbon products are concerned.	A lower footprint could give access to markets and customers with strict carbon emissions regulations and requirements.	Reduced pool of compliant suppliers.  Reduced demand for commodities that fail to meet market expectations.	<ul style="list-style-type: none"> <li>Measuring our GHG footprint for refined palm oil incl. scope 3 emissions yearly, which in turn help our customers calculate their own scope 3 supply chain emissions.</li> </ul>
<b>Reputational</b> <ul style="list-style-type: none"> <li>Increased scrutiny from non-governmental organisations (NGOs) and consumers.</li> </ul>	Reputational risks as stakeholders are increasingly focusing on the companies' carbon footprint and plan to manage climate risks.	Improved environmental score and reputation could lead to new opportunities with conscious customers.	The industry as a whole must raise the bar or all companies risk being painted with the same brush regardless of individual efforts.	<ul style="list-style-type: none"> <li>Measuring our GHG footprint yearly through thorough all-encompassing LCA study factoring in both scope 1, 2 and 3 emissions.</li> </ul>

### Physical Risks

Types of physical risks	Risks	Opportunities	Challenges	Mitigation measures
<b>Acute</b> <ul style="list-style-type: none"> <li>Temperature change and increased frequency of extreme weather events such as floods and droughts.</li> </ul>	All our properties are in areas with relatively low acute weather risks, meaning that operational disruption due to such event taking place is relatively low.	Safeguard operations by ensuring that emergency response teams are prepared to deal with fire and flood during drought and flood seasons.	Peat areas possess high risk of fire outbreaks during drought seasons and maintaining adequate water levels is therefore crucial.	<ul style="list-style-type: none"> <li>The fire drills are conducted periodically to ensure the readiness of firefighting equipment and Emergency Response Team.</li> <li>Maintaining the water levels at 40-60cm from the ground level in the collection drains of peat areas.</li> </ul>
<b>Chronic</b> <ul style="list-style-type: none"> <li>Rising sea levels.</li> </ul>	We have some properties located close to the coast and there are risk related to the rising sea levels.	Develop mitigation plans to address the risk of rising levels, and identify alternative water sources and water retention facilities to increase operational resilience.	Significant cost associated with establishing additional water retention facilities.	<ul style="list-style-type: none"> <li>Rainwater capturing facilities available at all operational sites.</li> <li>Ensuring proper drainages are constructed prior to the replanting.</li> </ul>





Riparian reserves such as this mangrove forest on Lada Estate are important for flora and fauna conservation and the health of waterways.

UP is committed to continuously improve and operationalise the short-, medium- and long-term measures and strategies to minimise the identified climate risks. This goes hand in hand with our strategic focus on the “circular economy” concept of converting waste into renewable energy via innovations and investments in new technologies to reduce our GHG emissions.

The UP Group’s GHG emissions intensity baseline and target covering plantations, milling, and refining operations are assessed and monitored annually, and in line with the TCFD’s recommendations, we have also initiated our disclosure of GHG emissions for Scope 1, 2 and 3. For more information on our journey to reduce the company’s carbon footprint vis-à-vis our baseline monitoring in 2004, reduction trends and targets, please refer to page 66.

All strategies, programmes and developments related to the climate risk assessment are headed by the Chief Executive Director of UP and any significant resources required for related projects are subject to approval by the UP Board. The climate risks will be deliberated and reviewed as deemed necessary during the Group Sustainability Committee (GSC) Meeting. Lastly, climate change is also listed as an important indicator under our materiality assessment and the level of prioritisation is assessed annually based on feedback from our stakeholders.

#### Water Management

Water management is particularly important on acid sulphate and peat soils. These soils are fragile and if over drained, they will rapidly deteriorate. On acid sulphate soils, the water level should be maintained up to the jarosite layer, thereby submerging the pyrite (FeS<sub>2</sub>) and preventing it from oxidising to sulphuric acid, which can cause a steep drop in the soil pH.

#### Weirs for Moisture Conservation

To conserve moisture during dry periods, a series of weirs are constructed across the collection drains to hold back water and raise the water-table to within 50-75 cm from the surface. To regulate the height of the water table, wooden planks are slotted into the desired level. The density of weirs varies with the soil type, slope, rainfall and cropping system.

On average, one weir is provided for every 40 to 60 hectares or every 600-1000 meters along the collection drain. Assisted by the water gates at the discharge ends of the main drains, the weirs are very effective in minimising the adverse effects of the moisture stress. Our Research team is undertaking a Drainability Assessment in our peat areas which are due for replants in the next 5 years in accordance with RSPO Peat Drainability Guidance. This will help us better understand the hydrological characteristics of our peat areas.

#### Monitoring of Meteorological Parameters

Weather stations have been set up at strategically important locations throughout our Group. These provide a large amount of micro-climate information critical to, particularly, make accurate fire-risk predictions. Being able to predict the risk of fire allows the management in each estate to implement proactive measures, to prevent and minimise the risk of fire, as well as to be on high alert with firefighting equipment, in case of fire outbreak.

#### Water Impacts

UP fully appreciates that more can be done to preserve and protect water ways and manage the use of water throughout our organisation. In order to maximise the available water resources, United Plantations has since 1913 gone to great lengths to construct an extensive system of water gates, bunds, weirs, canals and drains hereby enabling us to harvest and optimise the usage of rain water.

In addition, leguminous cover crops are established in all our immature plantings to conserve moisture in the relatively open environment of immature plantings. In this context, it is important to mention that except for the nursery areas, none of UP’s planted areas under oil palms or coconuts are irrigated.

Indeed, all our areas are under rain-fed agriculture, thus making use of whatever water which comes naturally from above. We are continuously working to mitigate our water footprint related to mill waste, maintaining buffers along natural waterways, harvesting rainwater, frugal domestic water usage and judicious use of pesticides and weedicides.

The consumptive water use (evapotranspiration) ranges from 120-150 mm per month. To meet this requirement, the monthly rainfall should equal or preferably exceed this figure, failing which moisture stress would occur.

The rainfall in the UP Group ranges from 1,600 to 2,500 mm per year, with the average being 2,000 mm. Monthly distribution is reasonably uniform, but drought does occur when some estates receive less than 100 mm of rainfall over 2-4 months as experienced in past years. Weirs have been constructed across the collections drains to harvest rainfall and hold back water to raise the water table.

**Hydrology and Limnology**

Clean water is critical to sustain all kinds of life form on Earth. In rural Indonesia thousands of local residents are dependent on water supplies from lakes and rivers. Maintaining a clean and uninterrupted supply of water constitutes one of the most critical components in sustainable palm oil production.

The Biodiversity team has developed a “Hydrology map” and identified a number of permanent sites for sampling water quality. Using state-of-the-art equipment, the team measures and records organic, inorganic and physical pollution parameters in the field.

Potential trace elements and toxins are measured with a spectrophotometer in the laboratory. In the event of a sudden deterioration in water quality, the team will identify the source of pollution and initiate a process to rectify the problem.

This includes identifying any unusual organic contamination, usually due to empty fruit bunches that mistakenly have slid into a stream or if an unusual high level of inorganic contamination is detected, it is usually a result of excessive wash-out of fertilizer. Such information is communicated to the respective estate managers, allowing them to rectify a potential problem within a very short time period.

In our pursuit to conserve this depleting precious gift, every effort is being done to educate our residents to be frugal on water usage. Old water pipes, water tanks and faulty taps are being replaced from time to time to arrest leakages. In addition, by having various awareness programme on water and energy saving programmes, we aim to reduce our domestic water consumption by 10%

from the average of 80 gallons per capita per day in 2025. The domestic water is sourced from either Government supply or our own treated water from river or reservoir.

In 2023, domestic water consumption in Malaysia has seen some reduction while in our Indonesian operations water consumption is still much lower than two years ago as seen from the table below.

<b>Domestic Water Consumption</b> (gallons per capita per day)	2023	2022	2021
Malaysian operations	79 (0.36m <sup>3</sup> )	81 (0.37m <sup>3</sup> )	77 (0.35m <sup>3</sup> )
Indonesian operations	77 (0.35m <sup>3</sup> )	75 (0.34m <sup>3</sup> )	84 (0.38m <sup>3</sup> )

**Erosion Monitoring Plots**

To better understand the dynamics of soil, water and nutrient loss that can occur on our property, several erosion monitoring plots measuring 6m x 20m were set up in one of our estates on slightly sloping land under mature oil palm.

Thereafter the amount of soil loss, surface runoff and nutrient losses in each of these fractions are being closely monitored to determine the major routes of soil, water and nutrient loss. Such studies illuminate the areas of major loss through which mitigating measure can be developed to minimise the depletion of these vital natural resources.

**Rain Harvesting**

As part of our effort to conserve water resources and minimise wastage we have embarked on a programme to fit workers’ housing with tanks to store harvested rain water which is especially beneficial during periods of prolonged dry weather.

**Mill Water Consumption Rate**

We also monitor the water consumption for processing of FFBS and ensure optimum water consumption without unnecessary wastage. Any leakage in water supply will be repaired immediately. With this, we aim to reduce our mill water consumption by 10% in 2025 compared with the average of 1.6 MT water/MT FFB in 2020.

<b>Mill water consumption</b> (MT water/MT FFB processed)	2023	2022	2021
Malaysia operations	1.7	1.5	1.5
Indonesia operations	1.2	1.2	1.2

**Pesticides and Chemical Usage**

Conducting our operations under the best principles of agricultural management is a key priority for the UP Group to reduce chemical and pesticides usage thereby minimising the impact to the natural environment.

Furthermore, our employees’ safety is a top priority and in this connection all sprayers are trained extensively and are required to use full Personal Protective Equipment.



United Plantations Palm Oil (Malaysian Operations*)	Soybean**			Sunflower**		Rapeseed**
	2023	2022	2021			
Pesticides / Herbicides (kg per MT oil)	0.744	0.620	0.847	3.95	28	3.73

\*Includes palm oil+palm kernel oil (UP, 2021-2023 - Malaysian operations)  
 \*\*Data from FAO, 1996- Pesticide data for soybean and rapeseed updated in 2007/9 and 2010 respectively

United Plantations Palm Oil (Indonesian Operations*)	Soybean**			Sunflower**		Rapeseed**
	2023	2022	2021			
Pesticides / Herbicides (kg per MT oil)	0.336	0.273	0.257	3.95	28	3.73

\*Includes palm oil+palm kernel oil (UP, 2021-2023 - Indonesian operations)  
 \*\*Data from FAO, 1996- Pesticide data for soybean and rapeseed updated in 2007/9 and 2010 respectively

According to CropLife International, a global federation representing the plant science industry, 42% of crop production throughout the world is lost as a result of insects, plant diseases and weeds every year. Indeed, in the tropics crop losses can reach as high as 75%.

Careful use of pesticides can deliver substantial benefits for our society by increasing the availability of good quality and more affordably priced food products. However, pesticides are inherently dangerous and it is in everyone’s interest to minimise the risk they pose to people and the environment.

**Integrated Pest Management (IPM)**

According to FAO, IPM means a pest management system that in the context of the associated environment and the population dynamics of the pest species, utilizes all suitable techniques and methods in as compatible a manner as possible and maintains the pest population at levels below those causing economically unacceptable damage or loss.

UP has a strong commitment to Integrated Pest Management (IPM), and in line with the Principles and Criteria of the RSPO we are continuously working on reducing the usage of pesticides. This commitment towards continuous improvements has resulted in minimising the usage of pesticides in relation to other major oil seed crops, primarily through Good Agricultural Practices and improvement in planting materials.

Today, UP’s use of pesticide is 5-8 times lower per tonne of oil produced compared to Rapeseed and Soybean farmers and about 40-50 times lower compared to Sunflower growers.

**Establishing Beneficial Flowering Plants**

On the notion of IPM there has been a steady increase in the number of beneficial plants planted in our properties over the last few years to function as shelter and food source for the beneficial insects.

Flowering plants planted	Malaysia	Indonesia
<i>Cassia cobanensis</i>	42,351 planted	14,782 planted
<i>Tunera subulata/ulmifolia</i>	103,059 planted	89,941 planted
<i>Antigonon leptopus</i>	14,904 planted	97 planted
<i>Carambola sp</i>	3,554 planted	10 planted
<i>Others</i>	5,458 planted	8,634 planted
<b>Total</b>	<b>169,326 planted</b>	<b>113,464 planted</b>

Today a total of 282,790 broadleaf flowering plants have been planted in our Malaysian and Indonesian plantations to encourage parasite and predator activities which is a vital part of our IPM programme.

**Surveillance and Monitoring of Pest Outbreaks**

Regular surveillance and monitoring of pest outbreaks is key to minimising both the economic impact of pest and the environmental impacts from excessive use of pesticides. Treatment is therefore only carried out when the damage exceeds established critical thresholds.

Census gangs are deployed on each estate to survey the extent of pest infestation. This is coupled with regular aerial reconnaissance in order to track and pre-empt pest build-up thereby more effectively treating potential outbreaks.

**Use of Biological Pesticides and Pheromones**

First line treatment against leaf pests i.e. Nettle Caterpillar and Bagworm is biological treatment in the form of *Bacillus thuringiensis*. The use of pheromones to trap Rhinoceros Beetles and thereby reduce the dependency on chemical pesticides is also adopted on all estates.

Besides trapping out the beetles, pheromone traps also provide management with statistical information on the severity of the beetle problem and supplements the chemical spraying operations to minimise beetle damage.

Overpopulation of rats, beetles and various kinds of weeds can have profound negative impact on production yields. The UP Group attempts to minimise the usage of chemical control-agents where possible, and the BioD undertakes a number of research projects to maximise the usage of biological control agents where possible.

For example, the leopard cat (*Prionailurus bengalensis*) is one of the key-predators of rats and other small rodents, and preliminary studies on the effect of these cats as rat-controllers in a plantation landscape is ongoing.

The results have been very promising, and UP’s biodiversity team is currently exploring ways to enrich the habitat conditions for leopard cats, to maximise the population density and thereby reduce rat damage.

Apart from leopard cats, the team also records ecological parameters along with the effect on rat populations of other predators such as barn owls (*Tyto alba*), Spitting cobras (*Naja sumatrana*) and water monitor lizards (*Varanus v. salvator*).

## 5-Step Integrated Pest Management Programme approach taken to contain and/or control Bagworm outbreak.

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### 1) Integrated Pest Management

*E.g. planting of beneficial plants to enhance the natural parasitic and predator activities against bagworm. A total of 282,790 beneficial broadleaf flowering plants have been planted in Malaysia and Indonesia.*

### 2) On-going Monitoring

*Census gangs deployed on each estate to take frond samples in a pre-determined pattern throughout the estate. These fronds are subjected to insect counts and damage assessments by trained personnel.*

### 3) Aerial Surveillance

*Regular aerial reconnaissance is carried out to better detect, pre-empt and treat potential outbreaks.*

### 4) Use of biological control agents

*E.g. *Bacillus thuringiensis* as the first line of treatment against an outbreak.*

### 5) Final Resort

*As a final resort and only when Steps 1 to 4 have proven to be futile in containing or controlling the natural equilibrium between pest and beneficial predator, our trained personnel intervene with the specific treatment through trunk injection.*

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## Monocrotophos and Metamidophos phased out completely

In 2020, we successfully phased out monocrotophos and metamidophos, which was a key milestone for the UP Group. Concerted efforts to source and evaluate alternatives for the Class 1A insecticides, monocrotophos and metamidophos, have been ongoing since 2006 through our collaboration with several multinational chemical companies, amongst them Bayer and BASF (Germany), Syngenta (Switzerland), Cheminova (Denmark), Sumitomo (Japan), Rainbow Agrosiences (China) and UPL (India).

For years numerous insecticidal compounds were evaluated for bagworm control with our partners with no success in matching the efficacy of monocrotophos and metamidophos. However, more recently our Research Department was able to test new formulations of an existing insecticide that hitherto gave inconsistent bagworm control.

Through those years, it was established that with these new formulations of the existing insecticide we are able to have a commercially viable and effective alternative to monocrotophos and metamidophos with a Class II toxicity rating which is a much safer product.

As a result, we have since September 2020 successfully phased out the use of monocrotophos and metamidophos for trunk injection to control bagworm. This is a significant achievement as our plantations can thereby dispense with the use of WHO Class 1A or 1B pesticides for bagworm control and replace them with an equally effective but safer product.

Nonetheless, bagworm remains an endemic pest in Lower Perak and the Federal Government has gazetted this as a "Dangerous Pest" on 15 November 2013. It is an offence under the Plant Quarantine Act 1976 if this dangerous pest is left without any control and companies can be fined up to RM10,000. Outbreaks of bagworms

continue to occur in the properties neighbouring UP in the State of Perak, West Malaysia. This is of great concern as it is important that collaborated effort by the government authorities, neighbouring smallholders and other plantations are put in place to eradicate this serious pest. UP is working closely together with its neighbours as well as the authorities in the form of the Malaysian Palm Oil Board (MPOB) to achieve positive progress on this concerning issue.

UP has also extended as a service to the neighbouring plantations the use of its airstrips for aerial bagworm control and taking the plantation managers for aerial reconnaissance flights to monitor the extent of bagworm infestations in the region.

Overall, as can be seen in the table on the next page, the quantity of agrochemicals (fertilizer nutrients and pesticides/herbicides) per tonne of palm oil produced in UP over the last three years remain substantially lower than annual oilseed crops such as soybean, sunflower and rapeseed, which reflects of the resource utilisation efficiency of the oil palm.

The Pesticide usage in 2023 was higher than the 2022 level in Malaysia with more herbicide used in the immature areas and due to an increased need to control leaf pests in mature plantings. In our Indonesia operations, the markedly higher herbicide usage in 2023 was needed to clean up the ground due to heavy rainfall received in the previous year. The direct fossil fuel energy consumption per tonne oil produced in 2023 remained similar to 2022.

## Biological Control Agents to Substitute for Chemical Insecticides

Leaf eating pest outbreaks in immature oil palms will need to be treated with insecticides. The use of biological insecticides such as *Bacillus thuringiensis* is therefore encouraged at this young crop stage to minimise collateral damage on beneficial insects in the field as well as to reduce dependency on chemical insecticides.



## Agrochemical and Energy Inputs in the Cultivation of Oil Palm and Other Oilseed Crops

Input	Per tonne oil basis					
	Oil Palm*			Soybean**	Sunflower**	Rapeseed**
	2023	2022	2021			
Fertiliser nutrients						
Nitrogen (N-kg)	18	19	15	315	96	99
Phosphate (P <sub>2</sub> O <sub>5</sub> -kg)	8	9	9	77	72	42
Potash (K <sub>2</sub> O-kg)	43	45	43	NA	NA	NA
Magnesium (MgO-kg)	7	7	6	NA	NA	NA
Pesticides/Herbicides (kg)	0.744	0.620	0.847	3.95	28	3.73
Energy (GJ)	0.56	0.56	0.56	2.90	0.20	0.70

\* includes palm oil + palm kernel oil (UP, 2021-2023 - Malaysian Operations)

\*\* Data from FAO, 1996- Pesticide data for soybean and rapeseed updated in 2007/9 and 2010 respectively

Fortunately, we have not had any severe infestation in neither our Malaysian operations nor in Indonesia over the last several years, hence there has been no use of *Bacillus thuringiensis*.

Quantity (kg) of <i>Bacillus thuringiensis</i>	2023	2022	2021
Malaysia operations	0	0	0
Indonesia operations	0	0	0

### Mowing of Harvesters' Paths

Harvesters' paths are mowed to maintain a flora which is favourable to natural enemies of crop pests and to minimise erosion. For this reason, blanket weeding is discouraged, whereas soft weeds with shallow root system which do not grow to excessive heights are encouraged outside the weeded palm circles.

### Harnessing advances in pesticide technology to reduce herbicide inputs in mature oil palm

In the wet tropics, weed species rapidly cover the ground and compete with the palms for nutrients and water and interfere with field operations.

Consequently, herbicides are an important tool to keep the palm circles weed free. Of the total pesticides used in a mature field, herbicides will therefore account for more than half of the total pesticide load.

Thus, any improvement in the length of control for weeds will contribute significantly to a reduction in pesticide use for mature palms. Over the years, UP has actively cooperated with leading agrochemical manufacturers to evaluate a range of novel herbicidal compounds.

Arising from the close collaboration with Bayer CropScience, a new compound, Indaziflam, with long lasting weed control was extensively tested in our fields and was found to be able to slash the number of herbicide applications

from four rounds a year with the standard herbicide mix to two rounds a year with the Indaziflam combination. This confers the clear benefit of almost halving the herbicide input in a field and greatly improving labour productivity.

Whilst introduction of Indaziflam has contributed to reducing the overall herbicide usage per hectare in our Malaysian operations in 2023, the significantly higher 2023 rainfall in our Indonesian operations has necessitated an increase in herbicide spraying in the past year to manage ground conditions.

Herbicide usage (kg a.i./ha)	2023	2022	2021
Malaysia operations	3.85	3.27	4.68
Indonesia operations	1.85	1.46	1.33

### Calibration for Pesticide Application Equipment

The Company engages the services of equipment suppliers to regularly monitor the calibration of our pesticide application equipment to avoid application error (under and over applications) and to ensure the safety of our operators.

Furthermore, regular training and refresher courses are implemented, all of which are audited by the MSPO/ ISPO/ RSPO accredited auditors every year.

### Chemical Health Risk Assessment (CHRA)

In line with the Use and Standards of Exposure of Chemicals Hazardous to Health (USECHH) Regulations 2000, UP first appointed a certified assessor to conduct CHRA in 2004, for all chemicals utilized in the respective plantations, oil mills and refineries.

This is being reviewed every 5 years by the assessor as stipulated in the Regulations and annual medical health surveillance is conducted on all spray operators.



Rats eat both palm fruits and male flower in the oil palm fields and are considered one of the main pests in oil palm fields. Leopard cats (*Prionailurus bengalensis*) and Barn Owls (*Tyto alba*) significantly reduce rat population and usage of rodenticides.

### Biological pest control of rats

Rats thrive in the oil palm ecosystem with an abundance of food sources (palm shoots, fruit mesocarp, kernels, weevil grubs etc.) as well as plentiful harborage amongst the cutfrond heaps. The common rat species encountered in an oil palm field are the Malaysian wood rat (*Rattus tiomanicus*), the padi field rat (*Rattus argentiventer*) and the house rat (*Rattus rattus diardii*).

With its prolific reproductive rate, whereby a sexually mature female can conceive multiple times a year and produce an average of 8 pups in each litter, rat populations can mushroom if given the right condition resulting in high crop losses. Various researchers have estimated crop losses caused by rats feeding on fruit mesocarps to be able to reduce oil yields by 5 – 10% (Wood, 1976; Liau, 1990). Badly gnawed male and female inflorescences, as well as young palms killed by rat attacks further contribute to crop loss.

### Barn owls

The Barn owl is a much-loved countryside bird by oil palm planters as it predares on rats, resulting in major reduction of rodent damage. This bird is the best partner to growers due to its ability to adapt well to oil palm plantations. It survives on a staple diet of 99% rats, and it is estimated that a pair of barn owls together with its chicks consume about 800 to 1,000 rats per year.

The barn owls are medium sized (34-36cm) with long legs that have feathers all the way down to their grey toes. The owls have large, round heads without ear tufts and pale heart-shaped facial discs. The owls ingest the rat whole and use their digestive juices to dissolve the nutrients of the fleshy parts. The tougher indigestible parts such as the bones and skulls are regurgitated out.

Barn owl populations in tandem with preys' availability can be expanded in the plantation by construction of nesting boxes at vantage points – about 5 meters from the ground and shaded by the palms' canopies.

A zinc baffle or collar should be placed on the pole to prevent snakes etc. from predation of the owl's eggs and new born chicks. These boxes should be inspected regularly and repaired where necessary in order to optimise their occupancy.

At United Plantations, the barn owl is the first line of defence against this serious pest. Where owls cannot cope with the high rat population, first generation rat baits such as warfarin are employed to selectively bring down the population.

Warfarin baits are preferred as they are relatively safer to barn owls than second generation rat baits. Based on the low usage of rodenticides in the past years, we can infer that the barn owl programme has been fairly successful in keeping rats under control, augmented with rodenticide baiting in selected areas.

### Leopard cats

Since its formation in 2011, the Biodiversity Division in UP/PT SSS has recorded a surprising number of leopard cats, *Prionailurus bengalensis*, in the estates. The species is common throughout Southeast Asia in undisturbed as well as altered habitats.

They are common in some oil palm estates, however, little is understood about their role as rat predators in a plantation landscape although studies have shown that rats and mice constitute 93% of the leopard cat's mammalian diet (Rajaratnam et al., 2007). Field observations demonstrate a negative relationship between cat numbers and the rat population, with high abundance of cats associated with low rat numbers and vice versa (Silmi et al., 2013).

Barn Owl Data	2023	2022	2021
Total Boxes	2,785	2,765	2,707
Total Area Under Owl (Ha)	33,005	33,081	32,624
Box to land ratio in Scheme	11.85	11.96	12.05
% Occupancy in Scheme	42.55	46.65	45.33
Total Planted Area (Ha)	34,124	34,242	33,033
Box to land ratio over Total Planted Area	12.25	12.38	12.20
Rodenticide ai/planted Ha (kg/Ha)	0.0006	0.0002	0.006



Since 2015, nine individual leopard cats have been collared and continuously tracked for 23 months and aided by 40 camera traps set up in a 800m by 800m grid generated estimates of the cats' home-ranges and dispersal patterns. With at least 2-4 individuals/km<sup>2</sup> the leopard cat density in oil palm estates is much higher than in the conservation forest where the density is less than 1 individual/km<sup>2</sup>.

The cats are strictly nocturnal and prefer to hide and rest in thick bush, primarily consisting of sword-fern (*Nephrolepis sp*) during day-time, but forage both on the ground and in the palm canopy at night.

Some preliminary results conclude that leopard cats can feed, reproduce and thrive in palm oil estates, with a mean home range (95% MCP) for male leopard cats of 1.39 km<sup>2</sup> (n = 5; SD = 1.40 km<sup>2</sup> ) and a smaller mean home range of female cats of 1.26 km<sup>2</sup> (n = 4; SD = 0.36 km<sup>2</sup>).

In areas where rats constitute the main prey, leopard cats eat an average of 2-3 rats per day. Amphibians, snakes and birds are also on the menu.

With a body weight range of 2.5-4.0 kg leopard cats are expected to consume more food than the much lighter barn owl, a factor which may be favourable in its role as a rat control agent (Silmi et al.,2013). Our observations reveal that leopard cats can reproduce rapidly with some females giving birth to 4 cubs, with a reproduction cycle every five to six months.

**Fighting the Haze and Preventing Fires**

In UP, we do not use open burning/fire in new or ongoing operations for land preparation, land management, waste management, or for any other reason other than justified and documented cases of phytosanitary emergency.

**Zero Burning Policy**

In 2023, due to the prolonged drought season in Indonesia, we have encountered some fire incidents within the conservation area. It is most unfortunate that the fire spread fast into our planted area despite the various fire combat measures implemented. However, our Emergency Response Team (ERT) managed to put-off the fire on-time and patrolling was carried by our watchmen to ensure no fire outbreak in the area. Our ERT is well-trained and equipped with all necessary equipment, and periodic fire drills are conducted in all estates throughout our Group to ensure preparedness of the ERT. To further enhance the fire patrol in Indonesia where the areas are more prone to fire outbreak, four additional fire watch towers were constructed at strategic points and purchased additional six units of GPS devices.

On top of this, we are conducting a series of community workshops to educate our local communities about the environmental and social consequences of slash-and burn farming, as well as to promote alternative methods of land clearance. With this, our goal is total eradication of fire as a means to clear land by the local communities in the surrounding areas. This year thankfully there was no severe drought in Indonesia.

**Hectares Burnt in Fires**

	2023	2022	2021
Non Planted	25.74	0	0
Planted	0.05	0	0.05
Total	25.79	0	0.05

**Outer Ring Range of ≤500 m**

	2023	2022	2021
Outer ring ≤500 m (Ha)	0	0	0.004*

\*Community oil palm area neighbouring Lada



Fire patrols are conducted regularly in our Indonesian estates during the dry season.





*Ibu Seri Aminah our Mandore (field supervisor) at Umpang, PT SSS, ensuring that the important task of loose fruit collection has been done properly.*



Social

UP's founder, Aage Westenholz, who established our company in 1906, was known for setting the highest standards for the workforce, within the conditions of the day. This legacy remains a hallmark of the UP Group to this day, where we are as committed as ever towards providing the best social amenities for our employees and their families, as well as advancing the economic and social conditions in the surrounding communities.

Our Employees

The success and achievement of our Group is related to our employees, both past and present, who loyally through hard work, strong leadership, honesty and respect have committed themselves to serve and dedicate their career and livelihood at UP. We promote a working environment where there is mutual trust and respect and where everyone feels responsible for the performance and reputation of our group as "No One at the top is stronger than the pyramid of people who support him/her".

In this connection, it is most pleasing that UP has been recognised for our sustainable development solution initiatives being undertaken in Malaysia during the launch of The Malaysia Chapter of the UN Sustainable Development Solutions Network (UN-SDSN) in 2015. In the SDSN Malaysia Chapter, UP was identified as a "Business with a soul". This acknowledgement is indeed pleasing and indicates our commitment to being a leader

in economic, environmental and social sustainability. We recruit, employ and promote employees on the sole basis of the qualifications and abilities needed for the work to be performed and meritocracy is a hallmark of our Group. Our employees are the Groups' core assets, without which the success and stability of UP would not materialise. We are committed to diversity and have an equal employment opportunity policy.

Whilst we actively promote the employment of women at UP, we also recognise that some work on our plantations is potentially more suitable for men due to the heavy physical nature of the tasks. Male workers predominantly perform tasks such as harvesting fresh fruit bunches, crop collection and evacuation to the railway cages for transport to the mills, while women are assigned lighter work such as weeding, gardening and loose fruits collection. We provide crèches, playgroup classes and kindergartens at all operating sites to support our employees and their children.

Employees – Year 2021 to 2023

	2023	2022	2021
UP Bhd	4,832	4,513	4,217
Unitata Bhd. and UniFuji Sdn. Bhd.	304	305	291
PT SSS, Indonesia	1,488	1,563	1,227
Total	6,624	6,381	5,735

Summary of our Group's employees gender mix

	UP Indonesia (PT SSS)	UP Malaysia	UP Group
Percentage Female Employees	21.70%	9.44%	12.18%
Percentage Male Employees	78.30%	90.56%	87.82%

Category of Employees (Malaysian) as at 31 December 2023

Employee Classification	Gender Classification		Age Classification			Ethnic Classification				Total
	Male	Female	18-30	31-50	>50	Malay	Chinese	Indian	Others	
Sr Management	1	-	-	-	1	-	1	-	-	1
Executive	116	29	16	93	36	29	21	93	2	145
Staff	177	135	60	153	99	75	5	226	6	312
Workers	489	306	203	340	252	218	-	573	4	795
Total	783	470	279	586	388	322	27	892	12	1,253

Category of Employees (Other Nationalities) as at 31 December 2023

Employee Classification	Gender Classification		Age Classification			Ethnic Classification					Total
	Male	Female	18-30	31-50	>50	Others	Indonesia	Nepalese	Indian	Bangladeshi	
Sr Management	2	-	-	1	1	2	-	-	-	-	2
Executive	18	3	4	12	5	3	18	-	-	-	21
Staff	45	11	17	38	1	-	55	-	-	1	56
Workers - PT SSS	1,099	308	399	889	119	-	1,407	-	-	-	1,407
Guest Workers - Malaysia	3,870	15	1,285	2,524	76	-	527	8	734	2,616	3,885
Total	5,034	337	1,705	3,464	202	5	2,007	8	734	2,617	5,371

\* Danish, British and Japanese

Grand Total = 6,624



*Our CED briefing on UP's Plans & Goals to the management team.*

### Code of Conduct and Business Ethics

A key element of UP's sustainability framework is our Code of Conduct & Business Ethics. We implement responsible and ethical business policies and practices in all aspects of our operation. The Government of Malaysia, in line with its anti-corruption drive has announced the S17(A) MACC Amendment Act (2018) which came into force on 1 June 2020. To comply with this new enactment, the Code of Ethics & Governance Policy was reviewed and expanded to include all associated persons as defined under the Act.

The changes were made under the Business Integrity and Corruption section of this Policy as follows:

- UP has a zero-tolerance to fraud, bribery, and corruption and this applies to all dealings by our directors, employees, suppliers, consultants, agents and any persons associated with UP.
- UP as a responsible corporate citizen has been and shall continue to give scholarships and donations to deserving cases on the condition that this is not corruptly given as defined under Section 17 A(1) of the MACC Amendment Act 2018. However, UP has a general policy of not giving political contributions to any political parties or candidates.
- UP does not prohibit the giving of meals and gifts in the course of business dealings as long as these are of reasonable value, not in cash and are not corruptly given.

- Corruption and bribery risk assessments are done and adequate procedures have been put in place to minimise the exposure to the Group. This risk like all other identified risks shall be periodically assessed and reported in the Statement On Risk Management and Internal Control.
- Directors and officers have been sent for training to familiarise themselves with S17A MACC Amendment Act (2018), and in-house anti-bribery training has been and will continue to be conducted in all operating units. Associated persons like contractors, agents, consultants, suppliers with bribery risks have been made aware and undertaken to comply with this Policy.
- The Internal Audit Manager has been appointed as the competent person responsible for anti-corruption compliance matters and he is to report all his findings to the Chairman of the Audit Committee who is an independent director. The Chairman of the Audit Committee shall after deliberation at the Audit Committee report the findings to the Board.

In addition to the above, all directors and employees who are vested with approval authorities on purchasing or entering into trades are to declare in the Annual Conflict of Interest Statement their compliance with the section on Conflict of Interest under this Policy.



### Corruption Risk Assessment

The percentage of operations that underwent corruption risk assessments that covers all of our operations is as follows.

	2023	2022	2021
Percentage of operations that underwent corruption risk assessments	55% (11/20)	70% (14/20)	50% (10/20)
Percentage of employees trained on corruption related requirements (Code of Conduct and Business Ethics)	96% (including employees of coconut Estates)	76%	78%
Number of confirmed corruption incidents	0	0	0

### Human Rights

It is important to acknowledge that running a business today requires a greater level of transparency compared to before. What a few years ago may have been considered to be enough is no longer adequate. Companies therefore have a choice: To continue with the status quo and gradually move towards fossilization or to adapt to the changing business environment and consumer requirements shaping the landscape for tomorrow’s demand. In UP, we have chosen the latter option in accordance with our striving toward being recognized as second to none within the plantation industry.

Social care and strong emphasis on human rights for employees are increasingly seen as non-negotiable principles by global consumers worldwide. In line with our founding principle of setting the highest welfare standards, UP is fully committed to continuous human rights advancements, and we therefore engage closely with our customers and other stakeholders on new emerging standards and other requirements, in the spirit of shared responsibility.

### Human Rights Policy

Our Human Rights Policy provides the over-arching principles which we embed into our recruitment and standard operating procedures and systems to ensure that our human rights commitments are upheld and operationalised throughout all business functions.

We adhere to the fundamental elements of the International Labour Organization (ILO) Convention and the United Nations Declaration on Human Rights, the Rights of Indigenous Peoples and other core values as ratified by the countries in which we operate. We are also committed to the protection and advancement of human rights including prohibiting retaliation, intimidation, and harassment against Human Rights Defenders (HRD), whistleblowers, complainants, and community spokespersons, and we acknowledge and respect all universal human rights including prohibiting the use of child or forced labour in our operations.

In line with our continuous improvement approach, we are focusing on minimising risks of any human rights violations within our supply chain. Not least risk associated to forced labour, which is a critical yet complex area that is evolving rapidly and gaining significant international and local attention.

Indeed, according to the latest estimates by the ILO from September 2022, there are 50 million people globally in situations of modern slavery on any given day, either forced to work against their will or in a marriage that they were forced into. This translates to nearly one of every 150 people in the world.

Of this, forced labour accounts for 27.6 million, a number which has increased by 2.7 million over the last 5 years, and virtually touches all industries right from services, manufacturing and construction to agriculture and domestic work. In this regard, the ILO’s 11 forced labour indicators highlighted in the flywheel below, are important to help companies evaluate whether forced labour is taking place within their supply chains.

We recognise that it is of utmost importance to identify and address any such risks that may be present within our operations. It is our responsibility to mitigate the potential adverse impacts of these risks on our workers by ensuring that proper checks and balances are in place. This requires a strong implementation culture, systems as well as structures to assure that the risk mitigation initiatives are “built in” and not just “bolted on.”

Whilst UP is far from perfect, we dedicate a significant amount of management’s and the EXCOM’s time to keep ourselves abreast with the latest developments within this important field of forced labour.

In combination with a solid understanding of all our working environments and production processes this enables us to spot and thereby react on any warning signals before they materialise into systemic problems on the ground.

On 21 March 2022, Malaysia became the 58th country in the world, and the second ASEAN Member State to ratify the ILO Protocol of 2014 to the Forced Labour Convention, 1930 (No. 29). With this ratification, Malaysia commits to fight forced labour in all its forms, including human trafficking, and improving the access to legal remedies for victims of forced labour.

On top of this, the Ministry of Human Resources (MOHR) with the support of the ILO, have developed a National Action Plan on Forced Labour 2021-2025, which outlines the next 5 years’ course of action focusing on awareness, enforcement, labour migration as well as access to remedy and support services with the aim to eliminate forced labour in Malaysia by 2030. This is a testament to the government’s commitment to accelerate the efforts to eliminate forced labour, which we applaud and fully support in UP.

Nevertheless, more can be done and there are still areas in need of greater attention, which shall continue to be given our unwavering commitment and focus in 2024. One such area pertains to the retention of identify documents. In the past, each Guest Worker could choose to either utilize the centralized individual passport lockers provided by the Company or keep his/her passport in their own possession. Going forward, the centralized individual passport lockers system will be ceased, and each Guest Worker will be given an individual passport locker in their respective accommodation facilities. This is currently in progress.

More can also be done in terms of the three forced labour indicators that are directly related to the process of recruiting Guest Workers, i.e., deception and abuse of vulnerability leading to debt bondage, which will be covered in more detail in the next section on Ethical recruitment of Guest Workers.

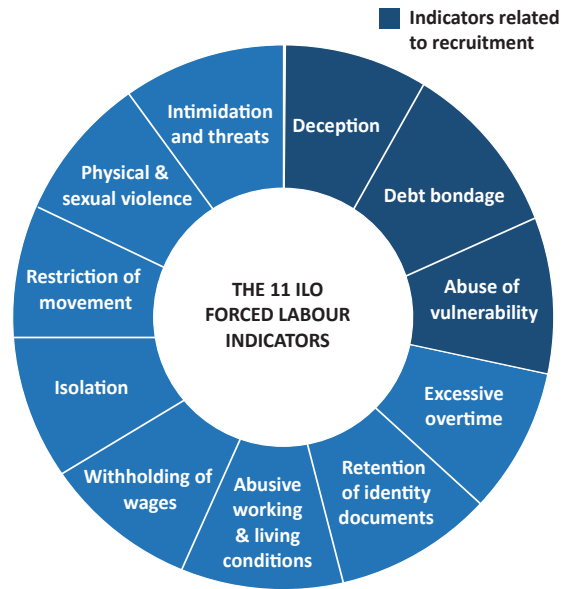
Strengthening human rights standards is a journey with no finishing line, and we remain totally committed to our partnership with “Dignity in Work for All”, a social rights NGO formerly known as Verité South East Asia, which began in 2020, and with whom we work closely to transparently address and improve human rights and safety gaps within our supply chain, in line with new emerging practices.

With partnerships and collaborations such as this, and through our “Reach and Teach, Reach and Remind” sessions which are carried out meticulously, we want to ensure a workplace that respects and promotes human rights for all regardless of religion, race, age, gender, nationality, or physical disability.

Please refer to our website, [www.unitedplantations.com/policies/](http://www.unitedplantations.com/policies/) for more details and information on our human rights policy.

**Ethical recruitment of Guest Workers**

The Malaysian Plantation sector remains reliant on Guest Workers, who provide about 80-85% of the industry’s labour requirement today. This is not at the expense of taking jobs away from local Malaysians as they prefer to work in urban cities and are just not interested in being employed as harvesters or to work with other field activities.




In UP, as of 31 December 2023, we have 4,449 Guest Workers – mainly from Bangladesh, India and Indonesia – whom we consider as guests, and they are vital partners in our business along with our local workers. In some of these countries, there are risks of systemic human rights abuses, which is an important topic that has escalated since 2021 through numerous reports and media articles, particularly on the corrupt practices of undisclosed middlemen as part of the Guest Workers’ recruitment process.

In light of this, it has become evident that more needs to be done to safeguard migrant workers during their recruitment to prevent such middlemen from abusing their inherent vulnerability through deception, thereby driving them into debt bondage. In combination with today’s improved understanding of forced labour risks and indicators, we agree to the growing consensus that more needs to be done to safeguard Guest Workers during their recruitment, from potentially becoming victims of deception, abuse of vulnerability and debt bondage.

**Reimbursement of retrospective recruitment costs**

In the absence of a widely accepted multi-stakeholder framework to address the abovementioned concerns and risks, we initiated an internal investigation and assessment of our own operations, which included





**Addressing the labor situation in the industry**

**Understanding principles and standards of fair labor**

**Recognizing violations, risk sources & root causes**

**Addressing & remediating core labor violations**

**Building Structures and Strengthening Systems**


**Partnership on Human Rights**





*Briefing given to our Guest Workers on the details of reimbursement cost related to recruitment expenses to our Guest workers.*

interviews with more than 300 Guest Workers. This investigation, which was carried out with “Dignity in Work for All”, was completed in January 2022 and established that our Guest Workers too had paid undisclosed recruitment fees to third parties in exchange for a job in UP. Consequently, we have strengthened our recruitment procedures, updated our Guest Workers Policy and introduced the Employer Pays Principle, effective 31 December 2021, stating that no Guest Worker should pay for a job in UP.

Whilst strengthening our policies going forward, we also acknowledge that reasonable remediation of past recruitment practices plays an additional role in alleviating the risk of forced labour in our operations. The investigation therefore also resulted in all active Guest Workers on 31 December 2021, recruited by UP from their respective home countries, receiving a full reimbursement payment for the undisclosed recruitment fees paid to third parties in the past. This payment was made on 5 December 2022, and amounted to RM 24.5 million in total. These initiatives have been discussed and worked on together with all our key customers, in the spirit of shared responsibility.

In addition, our 174 locally recruited Guest Workers have all been given RM3,000 as a goodwill payment towards the hardship faced in relation to their previous recruitment journey and employer. These are Guest Workers who fall under the Malaysian Government’s programme to legalize undocumented migrant workers, thereby giving them an opportunity to be employed by qualified employers subject to stringent conditions. UP has participated in this programme and paid all related recruitment fees and costs in line with our

Ethical Recruitment Guidelines. This has given them a second chance in the form of a job, free quality housing of high standards, social amenities as well as free water, electricity and medical coverage.

Finally, we continue to invest time and resources in identifying eligible ex-Guest Workers through our Outreach Programme, for whom reimbursement funds have been set aside in a sinking fund of RM4.38 million.

This is to cover the 635 Guest Workers who were active on 31 December 2021 but had left our Company (absconded, repatriated or on leave) before the payment was made on 5 December 2022. From this, a balance of 322 eligible ex-Guest Workers are yet to be reimbursed as of 31 December 2023.

Furthermore, there are also 166 locally-recruited ex-Guest Workers who have not yet been paid and are therefore included in the Outreach Programme.

We are attempting to identify all eligible ex-Guest Workers through our Outreach Programme, which have been extended until 30 June 2024 and contains the following activities that are verified by our internal audit team and an independent third party.:

1. Newspaper advertisement in the respective source countries.
2. Engagement with source countries’ Embassies and High Commissions
3. Identification and engagement through UP’s Call Centre via contact details obtained by Estate management or friends who are still in UP.

4. Engagement of individuals in the source countries to search for our eligible ex-Guest Workers in the villages, followed by authentication by an appointed legal professional before payments are made.
5. Engagement with an Independent Human Rights Activist to use his vast network to contact the eligible ex-Guest Workers

**Recruitment of new Guest Workers**

In 2023, UP recruited 803 new Guest Workers, of which 781 were recruited from the various source countries, and 22 were recruited locally through the Malaysian Government’s Recalibration Program. This has been guided by our strengthened Ethical Recruitment Procedures, which are regularly assessed by NGOs and Human Rights Activists, and explained in detail below.

Firstly, whether recruitment is facilitated by our Guest Worker Recommend Guest Worker program, or at the grassroots level via an Accredited Recruiting Agent (ARA) or Government bodies, we strive to ensure that all new Guest Workers are recruited in compliance with the ILO indicators of Forced Labour, as well as our Employer Pays Principle stating that no Guest Worker should pay for a job in UP.

Addressing forced labour and minimising recruitment risks is also about recognising and tackling the systemic issues that enable abuses. We have therefore decided to cut out several actors in both the sending and receiving countries, such as sub-agents as well as recruiting agencies in Malaysia, and instead spread information to new candidates in their villages through our In-House Call Centre to mitigate the risk of deception. In this connection, our Call Centre continues to play a crucial role as the first point of contact with new candidates.

The Call Centre staff who speak the candidates’ respective native languages clarify the overall recruitment process

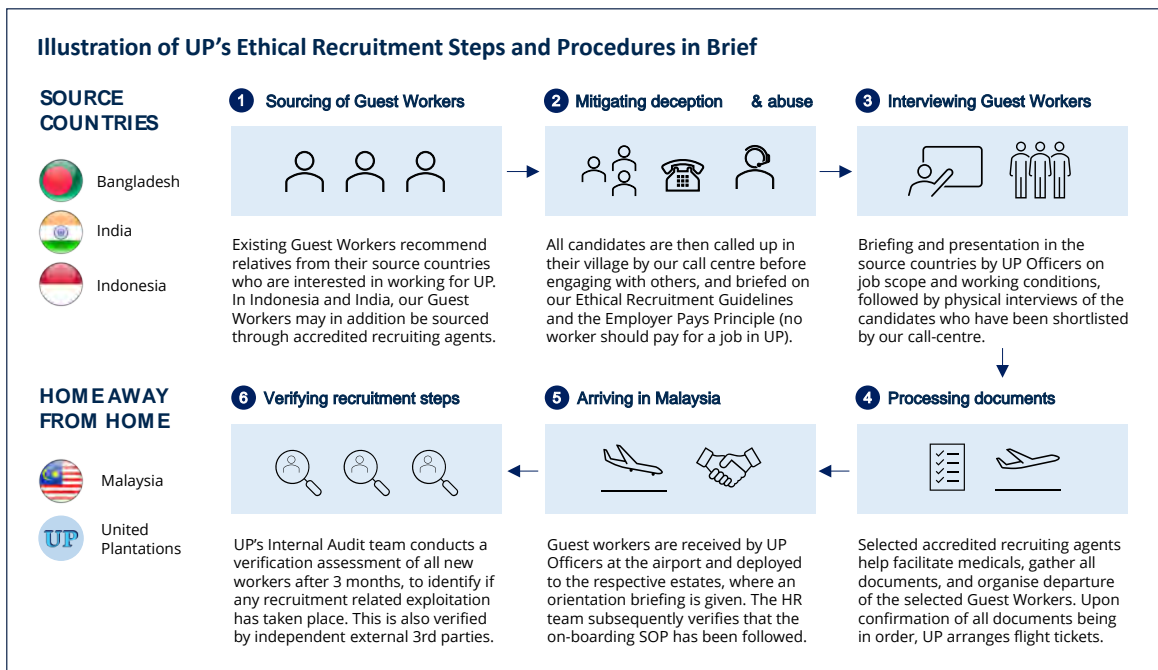
and terms of employment with UP to reduce the new candidates’ vulnerability and minimize the risk of deception.

In addition, the Call Centre helps to bridge the gap between the candidates in their villages and our Accredited Recruiting Agents located in the source countries’ larger cities. This is to address the fact that a big part of the problem often lies here, with middlemen in the rural villages often charging exorbitant fees to the village folks in exchange for a job.

The Call Centre has been operational for approximately two years, and many positive outcomes have emerged, as evidenced by the feedback from new Guest Workers, who, through clear communication and expectation setting, are informed about their rights, entitlements, and precautions from the outset.

During 2023, we have introduced several new steps to further strengthen our Ethical Recruitment Procedures and mitigate the vulnerability of the new candidates prior to their arrival at UP based on our improved understanding of forced labour risks and gaps identified along the recruitment process:

- A) Screening of the recommenders under the Guest Worker Recommend Guest Worker program to identify the most suitable candidates.
- B) Verification upon arrival in Malaysia by the HRSS team to ascertain that all new Guest Workers have been briefed by the Call Centre and indeed gone through all steps of our Ethical Recruitment Procedures.
- C) Each new Guest Worker is provided all relevant documents and information about his employment and recruitment journey in a dossier.
- D) Onboarding sessions are carried out for all new Guest Workers by the HRSS team to facilitate their





integration into the environment on our estates and to brief them again on their terms of employment, company policies, safety at work, grievance redressal mechanism and other aspects.

- E) Internal verification by the Internal Audit team 3 months after arrival to detect any red flags and mitigate the likelihood of debt bondage.
- F) In the event of any breach of our Ethical Recruitment Procedures, each case is thoroughly evaluated to determine accountability and remediation.

Additionally, training on due diligence and audit of recruitment agencies was carried out by a team of subject-matter experts from by “Dignity in Work for All”, including a joint assessment of an ARA in Indonesia to evaluate and monitor their performance and processes. Such assessment will be repeated in the coming year for ARAs in other source countries too.

Furthermore, we have initiated a close collaboration with Mr Jerald Joseph – an experienced independent Human Rights Consultant - in partnership with the social NGO North-South Initiative (NSI), to observe, evaluate and provide further guidance on our Ethical Recruitment Procedures in Malaysia as well as the source countries.

Through this collaboration, much time and effort have been spent during 2023 on evaluating our recruitment avenue in Bangladesh, where we continue to work closely with Bangladesh Overseas Employment and Services (BOESL).

BOESL, who is not related to the 25 recruitment agencies selected earlier between Malaysia and Bangladesh, is the only state-owned recruitment agency in Bangladesh, has a ‘no profit no loss’ strategy and works in a transparent manner. To verify this, the above independent assessors joined us for an interview process in Dhaka during the year to ensure that our procedures have indeed been in place and followed.

Overall, the key steps in our Ethical Recruitment Procedures are illustrated in page 84, and whilst this has increased the cost of recruiting new Guest Workers substantially, we are hopeful that all parties along our supply chain will acknowledge this added cost of doing business in the spirit of shared responsibility, thereby helping to minimize the risk of forced labour.

In 2024, we will continue to work closely with “Dignity in Work for All”, Mr. Jerald Joseph as well as NSI to diligently strengthen our recruitment and grievance redressal procedures even further.

**Whistleblower Policy**

We are committed to high standards of ethical, moral and legal business conduct, and with this policy we aim to provide an avenue for employees, that they will be protected from reprisals or victimisation for whistle blowing.

**Paying Fair Wages and Employees’ Benefits**

The average monthly earnings of our workers in Malaysia amount to RM2,523, which includes productivity incentives

and overtime. This is higher than the minimum monthly wage of RM1,500 rate set by the Malaysian Government from 1 May 2022. We practice gender equality policy on wages payment and remuneration for all our employees.

For our Indonesian operations, the average monthly earnings of the permanent workers amount to IDR3,820,271 which includes productivity incentives and overtime. The monthly minimum wage set by the Indonesian Government in 2023 was IDR3,352,983. The average earnings per worker per month are reflected in the table below.

Total Average Earnings per worker per month	2023	2022	2021
Malaysia operations – Mills and Plantations	RM2,523	RM2,698	RM2,204
Malaysia operations – Refineries	RM2,414	RM2,414	RM2,041
Indonesia operations - Permanent Workers	IDR3,820,271	IDR3,743,662	IDR3,459,936
Indonesia operations - Temporary Workers	IDR3,359,293	IDR3,547,633	IDR3,205,956

**Ratio of Basic Salary and Remuneration of Female Employees to Male Employees**

Region	Employee Category	Ratio
Malaysia operations	Executives	1:1.69
	Staff	1:1.28
	Workers	1: 1.14
Indonesia operations	Executives	1:1.40
	Staff	1:1.10
	Workers	1:1.37

*\*The salary and remuneration package varies based on the history of employment (length of service, performance, and designation).*

**Living Wage (LW) Assessment**

The RSPO Secretariat is in the process of commissioning benchmarks for Malaysia and Indonesia for the palm oil sector and will develop methods to calculate and/or define LW applicability for all palm oil producing countries in which RSPO members operate. In 2023, the RSPO Living Wage Working Group has changed the terminology of Decent Living Wage (DLW) to Living Wage (LW) with a stepwise approach. Each step of the Living Wage trajectory has assigned milestones and outcomes towards achieving a Living Wage payment to all workers in the sustainable palm oil sector.

In the past, UP has proactively worked with several large growers in the industry to engage Monash University for a fair and decent wage assessment and we will strive to commit our suppliers to live up to the payment of LW to their workers too. Until the national benchmark is established by the RSPO Secretariat, we are adhering to the applicable regulations in relation to the national minimum wages in the countries where we operate.

However, we are conducting the prevailing wage assessment as per the RSPO Prevailing Wage Calculation Guidance to understand and compare the benchmark of LW determined by the third-party assessment as mentioned above against the prevailing wage.



Guest workers make up 87 percent of our workforce and are a vital part of plantation operations in Malaysia today.

### Guest Workers Repatriation and Leave

With 87% of our workforce being Guest Workers, there is a frequent turnover of employees within our Group.

In this respect, we strongly promote freedom of movement, which can be seen in the table below.

Repatriation and Leave during the year	2023	Total number of guest workers (%)
Total number of guest workers	4449	100
Repatriation	355	8.0
Gone on leave	833	18.7
Gone on leave and returned	701	15.8
Gone on leave and didn't/couldn't return	132	3.0

During 2023, 355 guest workers were repatriated upon completion of their employment tenure. Another 833 guest workers went back on leave to their respective home countries of which 701 have returned.

### Freedom to form a Union

Our staff and workers have the right to form and become members of Labour Unions on a voluntary basis.

Through these Unions, they are free to carry out collective bargaining as permitted under Malaysia and Indonesia laws to promote this option.

We conduct regular briefings on our Human Rights Policy for all employees to raise awareness on this important Right.

UP Group (Malaysia)	2023	2022	2021
% of staff as members of All Malayan Estates Staff Union (AMESU)	75	74	74
% of workers as members of National Union of Plantations Workers (NUPW)	15	14	17
% of workers as members of Food Industry Employees' Union	37	49	52
UP Group (Indonesia)	2023	2022	2021
% of workers as members of Union*	11	9	5

\*In Indonesia, the union committee has been re-established and membership drive is in progress.

### Grievance Redressal Procedure

UP commits to the highest level of transparency while dealing with grievances from our stakeholders. All requests, complaints, grievances, consultations for internal stakeholders are lodged in a standard template called Stakeholders Logbook and shall be addressed in a timely manner.

Request and Grievances	Malaysian Operations	Indonesian Operations
Housing repair and maintenance issues	302 (20%)	67 (100%)
Request for leave/repatriation	1,188 (80%)	N/A for local Indonesian workers
Human rights violations	0	0
Corruption	0	0
Breaches of customer privacy and losses of customer data	0	0
Land dispute	0	0
Others	0	0



We will also be establishing an in-house helpline to deal with requests and grievances such as but not limited to the above aspects.

This will be done in collaboration with “Dignity in work for all” to strengthen our Grievance Redressal Procedures and evaluate the effectiveness of our consultation and communication process with our workers and other affected stakeholders.

For more information on the grievance redressal procedure for internal stakeholders, please refer to [www.unitedplantations.com/employees/#Grievance-Redressal-Procedure](http://www.unitedplantations.com/employees/#Grievance-Redressal-Procedure).

### Social Commitments and Social Amenities

UP is committed towards providing quality housing and social amenities and maintaining the highest possible welfare standards for the families of our workforce.

Improving and providing social amenities remains very much a hallmark within our Group, and continuous improvements were made during 2023 to provide our workforce with the best possible facilities which are significantly above the latest amendments to the Employees’ Minimum Standards of Housing, Accommodations and Amenities Act 1990.

For babies and young children, UP continues to provide and maintain crèches for child care thereby ensuring that employees are comfortable about their children while at work.

Today, our Group has 9 Primary Schools and 7 Kindergartens which are maintained by the Company, providing education for more than 500 children ranging from ages of 5 to 12 years. Bus subsidies for school children above the age of 12 years old are also provided for. Finally, places of worship, Group

Hospitals & Clinics, an Old Folks’ Home to care for the unwell, aged and the homeless as well as a fully operational Danish Bakery are also part of our care and commitment towards the wellbeing of our employees. In addition, 22 scholarships were granted to children of our employees during 2023 thereby enabling these students to pursue their tertiary studies. For more information of our social amenities, please refer to our website, [www.unitedplantations.com/sustainability/](http://www.unitedplantations.com/sustainability/)

### Training and Development

In UP, our human capital is the backbone of all our operations and to that end our “Reach and Teach & Reach and Remind” programmes are indispensable. Training schedules are therefore prepared for our employees annually in the respective Estates and other Departments to ensure that the various training modules are being carried out on a regular basis throughout the year.

Continuous efforts are also undertaken to educate and create awareness for the local workers and Guest Workers on Ethical Recruitment, Company Policies and Grievance Redressal Procedures. These trainings are done in the respective Guest Workers’ native languages to help them understand the content in a clearer manner, and carried out in conjunction with the morning muster at each Estate and Department. Additionally all workers are given a handout in their native language of the training.

This is monitored and verified by the HRSS team and also through external auditors during annual RSPO/ MSPO/ ISPO audits. At Staff and Executive levels, training is generally conducted on a group basis and these training modules cover Occupational Safety & Health, Human Rights, Best Agriculture & Management Practices, Industrial Laws and other relevant topics for our employees and stakeholders including our neighbouring communities.

Social Commitments of the Group	2023 RM	2022 RM	2021 RM	Grand Total RM
Hospital & Medicine for Employees, Dependents & Nearby Communities	4,371,488	3,004,886	2,828,114	10,204,488
Retirement Benevolent Fund *	1,025,283	915,963	486,202	2,427,448
Education, Welfare, Scholarships & Other	280,754	344,857	314,887	940,498
Bus Subsidy for School Children	211,065	228,372	88,312	527,749
External Donations	748,563	135,620	307,835	1,192,018
New Infrastructure-Road, TNB and Water-Supply for domestic use	289,462	129,800	197,401	616,663
Employee Housing	7,793,775	8,460,864	10,149,666	26,404,305
Infrastructure Projects, Buildings, Community Halls, Places of Worship	2,309,937	1,881,688	1,963,058	6,154,683
Provision of Social Amenities	5,463,124	5,918,837	6,109,270	17,491,231
<b>Total</b>	<b>22,493,451</b>	<b>21,020,886</b>	<b>22,444,745</b>	<b>65,959,083</b>

\* The above payments are in addition to the regulatory contributions by the Group to the Employees’ Provident Fund, Social Security Contributions and other benefits.

At the end of the day, the competence and skills of our Group’s employees are the main contributors to our operational success, and training programmes, conferences and seminars which are relevant to the Group’s businesses are therefore identified on an ongoing basis for which the Company allocates a dedicated training budget.

In 2023, the average training hours is 6.75 hours per employee per year.

**Occupational Safety and Health**

At UP we are committed to providing a safe and healthy workplace environment for our employees through the implementation of best preventive safety practices. These practices are monitored continuously based on the saying that “an ounce of prevention is worth a pound of cure”.

This is of paramount importance for all employees and our respective Managers/Head of departments who are responsible for implementing and complying with our OSHA policy.

Our Safety and Health Management system comprises of:

- Hazard Identification, Risk Assessment and Risk Control (HIRARC) conducted on all our operations to identify weak links and to raise the level of awareness of the risks before the occurrence of an accident.
- A well-planned occupational safety and health plan is established involving all the respective business units to ensure that UP’s safety programmes are carried out as planned.
- Impromptu safety audits in our mills, estates, research department and refineries are carried out by our competent safety and health officers to measure the level of compliance towards the safety management system.
- Our “Reach and Teach & Reach and Remind” training is an integral part of our behaviour-based safety program to create awareness while increasing the safety knowledge for our employees and to further inculcate a safety-oriented culture throughout all our respective business units.

- Quarterly safety meetings are carried out as a communication platform to discuss occupational safety and health matters with the participation of employers and employees from all levels.
- Occupational health services supplied through our two group hospitals and inhouse clinics at all respective estates to provide medical facilities for our employees under the guidance of visiting medical officer / occupational health doctors and assisted by hospital assistants.

Since 2020, we have established a dedicated safety division with five safety officers under the Human Resources, Sustainability and Safety (HRSS) Department to strengthen our commitment towards establishing a safe work environment.

In addition to this, we are appointing Safety and Health Coordinators throughout all our business units as an effort to reinforce safety management and to comply with the new amendment of the local workplace safety legislation, which has taken place in 2023.

With this, we are pleased to inform that there were no occupational related fatal accidents within our Malaysian and Indonesian operations in 2023.

The leading cause of accidents in 2023, involved harvesting operations accounting for about 36% (injury from thorn pricks, debris falling into eyes during harvesting and pruning, injury from stalk cutting, and buffalo related accidents) followed by commuting accidents, slip and falls cases, and accidents related to locomotives/cages.

Fatal Accident Rate (FAR per 1000 employees)

	2023	2022	2021
Malaysia operations	0	0	0
Indonesia operations	0	0	0.75

Lost Time Injury Frequency Rate (LTIFR per million hours worked)

	2023	2022	2021
Malaysia operations	5.38	4.13	5.02
Indonesia operations*	115.20	97.10	87.41

\*The differences of LTIFR between our Malaysian and Indonesian operations is due to 7.5 working hours per day for Malaysia while 7 working hours per day in Indonesia.

In addition to that, the OSHA of Indonesia stipulates that any accident regardless the manday lost shall be reported to JAMSOSTEK whereas OSHA of Malaysia stipulates that any accident with above 4 mandays lost shall be reported to DOSH/JKKP and SOCSO.





*The Agro-chemistry laboratory performs an important function in ensuring the quality of our fertiliser input.*

## Our Communities

Our business provides livelihood to families, small businesses and organisations in and around the plantations resulting in many people depending on our Group. Close bonds with our local communities are therefore a key priority to our organisation and we are committed to promoting socio-economic policies and progress in the local communities we operate in.

UP has an obligation to monitor and manage any impact our operations might have on these communities and at the same time ensure that they receive financial, social support enabling them to develop by creating jobs, paying taxes and doing business with local enterprises.

## Continuous Stakeholder Engagement

UP engages - both formally and informally - with various stakeholders in and around our areas of operation. This is a key aspect of sustainable development and all enquiries by stakeholders are recorded and monitored in order to resolve any ongoing issues.

## Grievance Resolution

Under our MSPO, ISPO and RSPO frameworks, we are obligated to deal with issues openly. The respective Principles and Criteria state the need for a commitment to transparency and that mutually agreed systems for dealing with complaints and grievances shall be in place and implemented.

This procedure ensures that local and other interested parties understand the communication and consultation process when raising any issues with UP.

UP accepts its responsibility as a corporate citizen and wants local communities to be aware and involved in

the communications and consultation methods it uses, thereby aiming to resolve grievances (including those originating from employees) through a consultative process. Any system must therefore resolve disputes in an effective, timely and appropriate manner that is open and transparent to any affected party.

Recognising the value and importance of communication and consultation in clearing up misunderstandings/ conflicts and or grievances or raising any issues with UP, the following procedure is adopted in an effective, timely and appropriate manner that is open and transparent to all affected parties.

## Procedures for Handling External Stakeholders' Issues

All requests, complaints, grievances and consultations for external stakeholders are lodged in a template called the Stakeholders Logbook. External stakeholders are considered to be Statutory Bodies, NGOs, Local Communities, Smallholders, Contractors, Third Party FFB Suppliers and Services Providers, whereas internal stakeholders are all employees of UP and their respective trade unions.

Alternatively, these enquiries/grievances can be submitted anonymously to the respective Estate Managers or Heads of Department or directly to the Company Secretary, in order to ensure the complainant does not face the risk of reprisal or intimidation. The complainant is free to appoint any independent legal and technical advisor as well as any individuals or groups to support them and/or act as observers, including a third-party mediator.

The Company Secretary of United Plantations Berhad is responsible for the handling of all external enquires and grievances against the Company. The Company Secretary's address is as follows:

## Social Commitments



**Education**

Today, our Group has 9 Primary Schools and 7 Kindergartens on its properties which are maintained by the Company, providing education for more than 500 children ranging from ages of 5 to 12 years from within and outside the plantations. Continuous improvements were made during 2023 to maintain the highest possible welfare standards for our workforce and ensure high standard educational facilities for the children. Scholarships are provided to needy children among the Indonesian villages in which we operate.



**Infrastructure investment and support**

We finance and provide services to improve rural communities' access to services and markets, as well as to create employment. Our initiatives include the construction, maintenance and renovation of roads, bridges, places of worship, and community facilities such as community halls, sports and cultural facilities.



**Estate Group Hospitals**

The Company operates two well-equipped estate group hospitals in Malaysia and Indonesia with trained resident Hospital Assistants supervised by a Medical Doctor. Medical services are open to our rural neighbours who in the past lacked access to basic healthcare and immunisation programmes.



The Company Secretary  
 United Plantations Berhad  
 Jendarata Estate  
 36009 Teluk Intan  
 Perak Darul Ridzuan, Malaysia  
 Tel : 05-6411411; Ext – 215,334  
 Fax: 05-6411876  
 Email; [up@unitedplantations.com](mailto:up@unitedplantations.com)

For further details on our grievance redressal procedures for external stakeholders, please refer to our website, [www.unitedplantations.com/sustainability/](http://www.unitedplantations.com/sustainability/).

### Land Disputes and Free, Prior and Informed Consent (FPIC)

We are committed towards the principles of Free, Prior and Informed Consent (FPIC) and adhere to these principles in all our negotiations and interactions with stakeholders prior to any development or acquisition of land.

In Indonesia, land disputes are inevitable and part of managing plantations in the country. To minimise land issues, free, prior and informed consent sessions with stakeholders are conducted as a vital part of sustainable plantation development.

UP has been involved with several thousand land deals with the local community and whilst most cases of disputes have been amicably resolved based on facts and full transparency in line with our Standard Operating Procedure (SOP) for Land Disputes Settlement as per FPIC.

We are pleased to inform that there is no pending land dispute case in our operations. All land dispute cases shall be addressed as per our Land Dispute Redressal Procedure.

For further details on or SOP for Land Disputes Settlement as per FPIC protocols, please refer to our website, [www.unitedplantations.com/sustainability/](http://www.unitedplantations.com/sustainability/).

### Landscape Approach

A landscape approach is all about having communities discuss and agree on various sustainability issues to provide an optimal balance between community, commercial and conservation interests.

At United Plantations, we recognise that community engagement, assessment and feedback are an integral part of our global sustainability strategy and initiatives. The community groups which are key to our operations and which have significant influence over the impacts of our business are carefully identified and engaged at various platforms and intervals throughout the year.

The community engagement process, which includes a proactive and both formal and informal approach, is carried out to fully understand their sustainability

concerns and issues with a view to ensuring that their key interests in these areas are aligned with that of our Group. Partnerships with the local communities are crucial to achieve success in Indonesia and it is therefore of utmost importance that the local communities also benefit from UP's development.

A Stakeholder meeting is held annually for all the business units within our operations to discuss and collate their feedback on the Social and Environment Impact Assessment (SEIA). This is reviewed annually with the participation of stakeholders.

For further details on our landscapes initiatives, please refer to our website, [www.unitedplantations.com/sustainability/](http://www.unitedplantations.com/sustainability/).

### Plasma Schemes and Smallholders

At our Indonesian Plantations, we are actively involved with a government project known as the Plasma Scheme, designed to assist smallholders to become independent plantation growers.

With this, the Indonesian Government's objective is to ensure the establishment of Plasma Projects equivalent to 20% of a Company's planted area.

Under the Plasma Scheme, UP helps smallholders develop their land, including land preparation, for cultivation of oil palms. Once developed, the plantation is managed by the Company for one cycle after which it will be handed over to the smallholder for self-management. During the first cycle, proceed from the Plasma-areas minus development cost, is paid to the farmers by the Company.

We expect the scheme to provide more opportunities for the smallholders and help alleviate poverty, and with this programme, we also hope to steer them away from illegal logging, as well as slash-and-burn activities that can have a huge negative impact on the environment. In the early years of plantations development, before the oil palm trees reach maturity, the livelihood of smallholders is supported through employment by the Company.

Here, they typically work as employees on our plantations, while at the same time getting an understanding of oil palm cultivation and best management practices.

The Company provides the smallholders with sufficient resources and is committed to buying their FFB at government determined rates. To assist them further, we also provide vital training on plantations management practices and financial arrangements.

As of 31 December 2023, 1,377.08Ha of Plasma have been developed for 853 Plasma Scheme smallholders and another approximately 150 Ha is expected to be provided and developed for the communities surrounding the Company's properties in 2024.



*The Jendarata Junior Football Academy has been established in 2019 for employee's children between 5 to 12 years of age. The above picture is taken from one of the training sessions with some members of the Danish Gymnast team visiting UP during 2023.*

### Smallholders' Field Day

Oil palm smallholders have a critical role in helping us achieve our sustainability goals, as they are part of the supply chain providing an estimated 40% to 50% of the world's palm oil production. As part of our Company's involvement, UP continuously engages with smallholders on an annual basis.

In view of the recurring wave of COVID-19 cases, the Smallholder's Field Day for 2023 was deferred however, we are planning to conduct the Smallholders' Field Day in the 2nd half of 2024.

During Smallholders' Field Days, we invite smallholders from local districts to visit our plantations to get a better understanding of good agricultural practices, sustainability initiatives and environmental protection. They are given training sessions in safe handling of pesticides with appropriate Personal Protective Equipment (PPE), effective use of pre-emergent herbicides for less chemical usage, integrated pest management (IPM) and mechanised harvesting in order to assist them with their agricultural interests.

Demonstrations on fire combat procedures are also carried out to further enhance the awareness of neighbouring smallholders. In case of fire incidences mainly due to El-Nino occurrences, they are informed to contact UP for emergency assistance.

Furthermore, we invite the Malaysian Palm Oil Board (MPOB) to provide a briefing on Good Agricultural Practices (GAP) as per their GAP Manual and MSPO certification for smallholders.

### Food Security

According to the Food and Agriculture Organization of the United Nations, food security is a situation that exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life.

In UP, we ensure that all of our Estates' sundry shops provide adequate supply of healthy food to our workers at a reasonable price.

Night markets are held in the Estate on a monthly basis where the workers have access to more varieties of sundry goods. In addition, rice and cooking oil are offered to our workers at a subsidized rate.

All workers are also provided with land at the back of their houses to plant vegetables and a dedicated area within the housing complex to be planted with fruit trees.

As far as local businesses are concerned, it is crucial for us to understand the impact of our operations on their livelihood.

In this connection, we conduct social and environment impact assessments with the participation of local communities and regular consultations regarding matters that affect both workers and local business owners.





*A range of social amenities to cater for the needs of our employees, stakeholders and surrounding communities.*

## Sustainability Governance

Robust governance and risk management are key to our core principles of being a good corporate citizen, doing business responsibly and committing to a long-term perspective. Having received the world's first RSPO certificate in 2008, we continue to raise the bar for RSPO certified palm oil, which is recognised for the highest agricultural standards internationally.

### Governance Structure

Strong risk management policies and procedures operationalised through effective sustainability governance in line with our core values are key for achieving long term success. The Board of Directors of UP is responsible for approving the direction and overall strategy for the UP Group and monitoring management's progress in connection with the financial objectives and strategic priorities. The Board receives a formal Sustainability Report at least once a year before it is reviewed and approved for release to the shareholders and public.

In relation to UP's overall sustainability objectives, targets and priorities, the Board of Directors has delegated the responsibility to the Executive Committee (EXCOM) headed by the Chief Executive Director (CED), Dato' Carl Bek-Nielsen. The Executive Committee reviews and approves UP's sustainability objectives and monitors progress and sustainability developments within the Group. The CED and EXCOM are assisted by the Group Sustainability Committee (GSC), which is chaired by the CED. There is also the

Group Sustainability Reporting Team (GSRT) headed by Mr. Martin Bek-Nielsen, Executive Director, Finance & Marketing and includes key personnel from Finance, Research, Human Resources, Sustainability and Safety, Share Registrar and Marketing Departments.

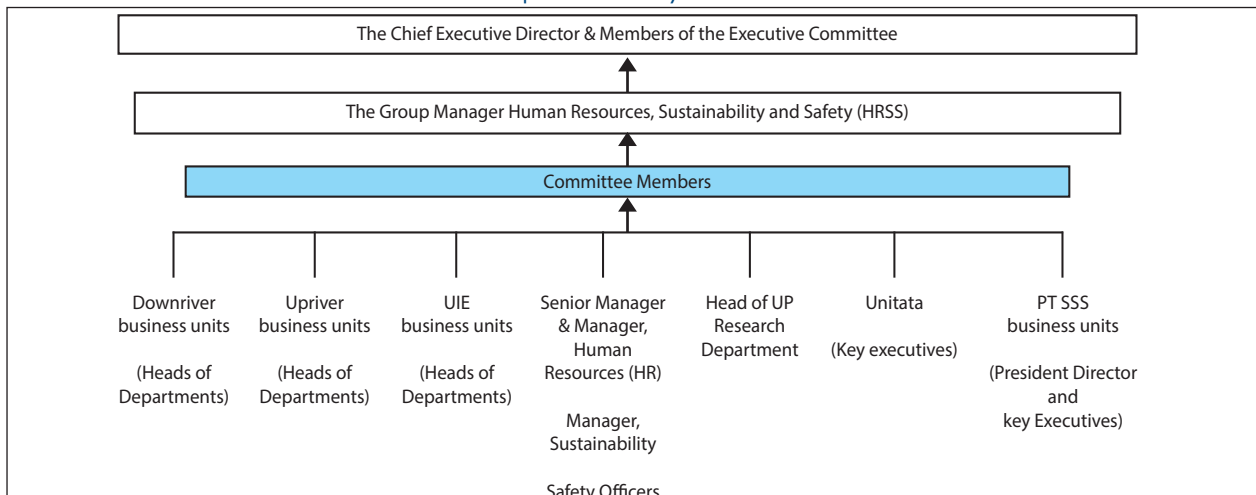
The GSRT collates all the information from the GSC, stakeholders' responses and prepares the Sustainability Report. Officially established in 2003, the GSC provides policy direction on strategic leadership on UP's Sustainability agenda, identifies our Group's most material issues in relation to risks and opportunities and monitors progress against targets set by the CED and EXCOM on a bi-annual basis.

Since the Sustainability Report became mandatory in 2016, Mr. Martin Bek-Nielsen has been briefing the Board, CED and EXCOM on the work of the GSRT and sustainability issues at every official meeting held. Sustainability is also a key aspect in the Group's Risk Management Structure which assesses various sustainability issues and developments in its annual Risk Assessment and Management process.

### Sustainability Governance Management Structure

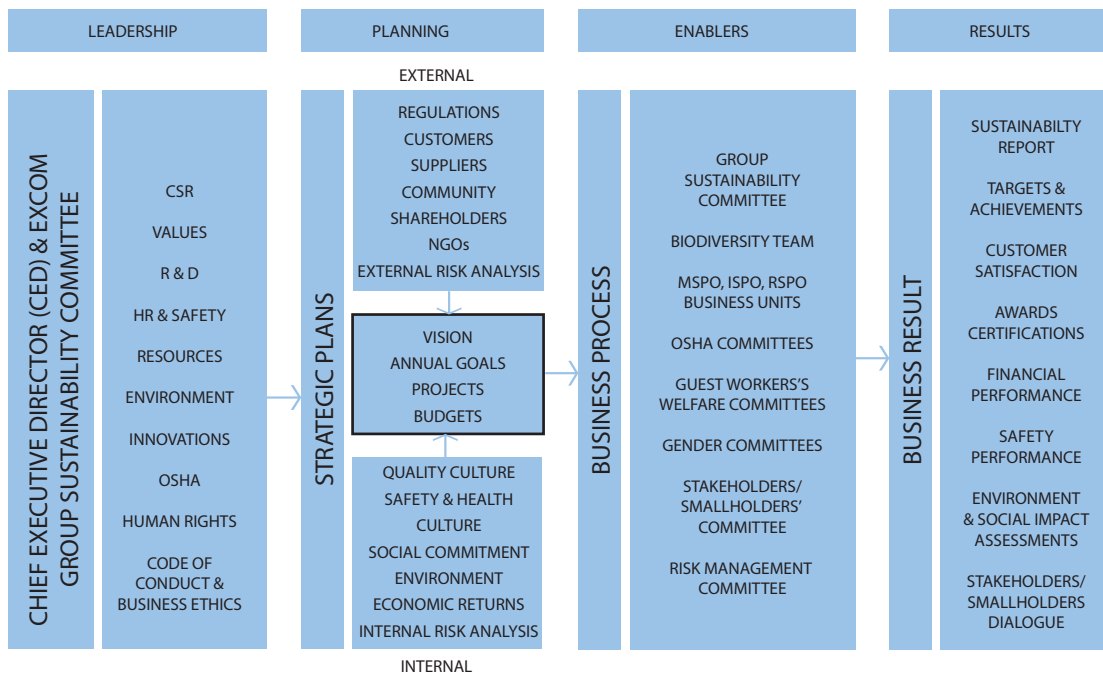


### Group Sustainability Committee





Group Sustainability Systems Framework (GSSF)



UP's Group Sustainability Systems Framework (GSSF) is the system through which its commitment to environment and sustainable development including social and occupational safety & health matters are formalised. It is based on four key focus areas as follows:

**Leadership** of the Group Sustainability Committee is at the highest level of the company and is spearheaded by the Chief Executive Director Dato' Carl Bek-Nielsen. This committee provides policy directions on environment and sustainable development, occupational safety and health, allocation of resources and communications.

**Planning** encompassing external and internal needs that are formulated through the company's vision, policies, goals, projects, budgets and risk analysis.

**Enablers** are various sub-committees and teams that ensure the adoption of environment and operational practices that are in line with current best practices and policies.

The MSPO, ISPO and RSPO business units and the various sub-committees are enablers of the GSSF and ensure that the environmental and operational policies are implemented. They are guided amongst others by the MSPO, ISPO and RSPO's Principles and Criteria and the following Manuals and SOP's:

- 1) MSPO, ISPO and RSPO Principles and Criteria

- 2) Field Management Manual
- 3) Standard Operating Procedures – Oil palm field practices
- 4) Standard Operating Procedures – Palm Oil Mill operations
- 5) Occupational Safety and Health and HIRARC Manual
- 6) Environment & Social Impact Assessments and its Management & Monitoring Plans
- 7) High Conservation Value, High Carbon Stock Assessments and its Management & Monitoring Plans
- 8) ISO9001:2015, HACCP and Quality Manual for our Refineries

**Results** are measured through customer satisfaction, safety performance, financial performance, environment protection and management and certifications.

The Group's Internal Audit Department, together with the Group's HRSS Department carry out audits on various sustainability issues and areas throughout the year to ensure compliance to the Group's sustainability policies and procedures.

## Awards and Recognitions

Under the Plantations Sectoral category, UP was awarded the following awards by The Edge Billion Ringgit Club 2023, for companies below RM10 Billion Market Capitalisation.

- Highest return on equity (ROE) over three years, for the third consecutive year,
- Best CR Initiatives,

Furthermore, we are pleased to inform that UP also received the following awards and recognitions:

- No. 3 ranking in the SPOTT ESG transparency assessment 2023 of 100 palm oil producers, processors, and traders globally (No. 1 in Malaysia).
- ISCC certification for the point of origin of our refineries (Unitata and UniFuji)
- myGAP certification for our coconut Estates (Jendarata, Kuala Bernam and Sungei Bernam)

## Sustainability Certifications

### Roundtable on Sustainable Palm Oil (RSPO) Certification

Whilst UP has focused on responsible agricultural production for generations, our formal journey towards being recognised as a certified producer of sustainable palm oil commenced in September 2003 when we were audited by ProForest and became the world's first audited producer and processor of

sustainability produced palm oil in accordance with the Swiss supermarket chain, Migros' principles and criteria on sustainable palm oil.

Following that, UP was one of the initial signatories to the RSPO in 2004 and part of the stakeholders group involved in developing the principles and criteria to define sustainable palm oil.

Our entire landbank of oil palm plantations in Malaysia were then successfully certified in accordance with the RSPO Principles and Criteria on 26 August 2008 whereby we became the world's first producer of certified sustainable palm oil.

This capability of supplying sustainably certified, traceable, and high-quality palm oil and palm kernel oil is an important part of our commitment to customers.

Our total RSPO certified and traceable quantity available based on own production was approximately 250,000MT of palm oil and 50,000MT of palm kernels in 2023 for our Malaysian and Indonesian operations.

For our Indonesian operations, UP/PT SSS have successfully obtained the RSPO certificate for the entire HGU area of 6,717.62 Ha in December 2019. HGU refers to the certificate on land cultivation rights title issued by the Government of Indonesia.

The Time Bound Plan for the balance uncertified non-HGU areas will be in tandem with the issuance of HGU certificates by the Government of Indonesia which is expected to be obtained by 2025.



Under the Plantations Sectoral category, UP was awarded - Highest return on equity (ROE) over three years, for a third straight year and Best CR Initiatives (Below RM10 Billion market Capitalisation) by the Edge Billion Ringgit Club.



For our Plasma scheme smallholders, the full certification is expected latest by 2025 subject to the issuance of individual land certificates by the local government.

Today, all our estates and mills in Malaysia are fully certified against the new RSPO Principles and Criteria 2018 (Malaysian National Interpretation 2019) which demonstrates a stringent compliance with No Deforestation, No New Planting on Peat regardless its Depth and No Exploitation of Workers and Local Communities (NDPE).

### Supply outpacing RSPO certified demand

Whilst it is commendable that approximately 20% of the world production of palm oil is now certified by the RSPO, it is unfortunately a fact that the global uptake of RSPO certified palm oil was still only 64% in 2023, thereby outpacing demand. This sends a negative message to responsible growers worldwide regarding the effort they put into producing the sustainable palm oil, and discourages the uncertified growers to participate in the RSPO certification. The RSPO certified oil not purchased will still end up in the supply chain being sold as conventional palm oil.

In this context, it is most pleasing that the concept of commensurate effort/shared responsibility is incorporated within the new RSPO P&C 2018, but more attention needs to be given to further raising the uptake of certified sustainable RSPO Palm oil by the consumer goods manufacturers (CGMs) and retailers, whose level of ownership is still not up to mark. It is important for all RSPO members to step up and implement and operationalise the concept of “shared responsibility”, as sustainability is a collective mission, which requires critical individual changes.

To that end, UP is actively participating in the RSPO P&C 2023 Standards Review Task Force to improve auditability, applicability, and commitments to the concept of shared responsibility in the new standards, which are expected to be finalised by mid-2024.

This should not add extra layers on top of the current complex and stringent set of criteria, as this would risk derailing the overarching goal of raising both the floor and the ceiling insofar as sustainability is concerned.

### Malaysian Sustainable Palm Oil (MSPO) Certification

The Malaysian Sustainable Palm Oil (MSPO) standard is a national certification standard created by the Malaysian Government and developed with input from stakeholders in the palm oil industry.

Today, all of our mills and estates in Malaysia have successfully obtained the MSPO Certificates, and we

are in the midst of aligning our compliance towards the revised MSPO P&C 2022 in preparation for external audits in 2024 based on the revised timeline by MPOCC.

For the refineries, our Sustainability Team has initiated the preparation of sites and documentation in line with the new MSPO P&C for refineries which stipulates that all refineries in Malaysia shall be certified against the revised MSPO P&C 2022 by 2024.

### Indonesian Sustainable Palm Oil (ISPO) Certification

In Indonesia, the Government established a mandatory certification scheme in 2011 called the Indonesian Sustainable Palm Oil Principles & Criteria (ISPO) to ensure that all producers live up to certain standards.

We successfully obtained the ISPO initial certificate for the entire HGU area of 6,717.62 Ha in August 2019 and subsequent Annual Surveillance Assessments (ASA) are ongoing every year. In May 2024, we will undergo ISPO Re-certification (2nd cycle) for PTSSS.

### Sustainable Palm Oil Transparency Toolkit (SPOTT)

UP participates in the Sustainable Palm Oil Transparency Toolkit (SPOTT) assessment conducted by Zoological Society of London (ZSL), which scores tropical forestry, palm oil and natural rubber companies annually against over 100 sector-specific indicators to benchmark their progress over time.

By measuring the transparency of companies in public disclosures of best practices and sustainability commitments via the RSPO Annual Communication of Progress (ACOP), RSPO New Planting Procedures (NPP), Public Notifications, Company Annual/Sustainability Reports and Company Websites, the assessment aims at promoting industry transparency and accountability to drive the uptake and implementation of environmental, social and governance (ESG) best practices in high biodiversity impact sectors.

In 2023, UP took a great leap forward and was ranked as number one in Malaysia and number three of all hundred companies globally with an improved score of 95.2% for our efforts related to environmental, social and governance matters and transparency and public disclosure of our policies.

Whilst this is a pleasing achievement, we remain committed to engage and collaborate actively with the Zoological Society of London to further improve wherever possible.

For further details on SPOTT assessment for palm oil companies, please refer to SPOTT’s website, [www.spott.org/palm-oil/](http://www.spott.org/palm-oil/).





An array of Multi Stock Deodorisers at our Unitata refinery complex.



Marketplace

United Plantations is committed to the world’s highest standards of sustainability, quality, and product traceability, right from the agricultural source in our upstream plantation operations to the final products from our downstream refining activities. We aim for continuous improvements and work towards building long-term relationships through proactive discussions about sustainability, global trends, health and nutrition with customers, suppliers, business partners and other stakeholders in the global marketplace, in the spirit of shared responsibility.

The strive for the highest possible global food safety, sustainability, and quality standards starts from the very beginning of the UP Group’s integrated business activities. By controlling all areas of the production, we are able to comply with the strictest international requirements, offering high-quality sustainable products with the lowest carbon footprints and contaminant levels in the world.

Today, we operate two state-of-the-art palm oil refineries, Unitata Berhad and UniFuji Berhad, that are responsible for value-adding UP’s certified sustainable crude palm oil and crude palm kernel oil into high-quality processed products, which are shipped to our customers worldwide.

Unitata became the first integrated inland refinery in Malaysia in 1974 and has over the last 50 years become a well-recognised international supplier of specialty fats and vegetable oil fractions, not least due to our close collaboration with AAK, a world leader in specialty oils and fats.

UniFuji, our joint venture with Fuji Oil, was inaugurated in late 2018 and is the first refinery in the world to run completely fossil fuel-free by using renewable energy produced from biomass waste, and provide full traceability from seed to finished fractions, based on supply from UP, a perfect example of the circular economy.

Edible Oil Refining and Specialty Fats Production

Attention to quality, investment in production facilities and ongoing product development are priorities in order for Unitata and UniFuji to meet challenging and changing customer demands. In order to cater for the growing demand of high-quality products our refineries are equipped with automated manufacturing processes such as Neutralization, Bleaching, Deodorization, Fractionation, Interesterification, and Packaging of specialty fats and oils. Thorough process controls and a disciplined manufacturing culture help ensure that quality assurance is in place to comply with customer requirements.

Consumers today are placing an increased focus on safety and health in relation to food production, and demand transparent and traceable supply chains based on processes that reduce processing aids, water, energy and the overall GHG footprint. Furthermore, social care and strong emphasis on human rights for employees are increasingly seen as non-negotiable principles, as well as protection of fragile ecosystems including peat land and forests.

In UP and all our subsidiaries, we are committed to being a part of this positive change by providing the highest quality of certified sustainable and traceable palm oil products and services to customers worldwide.

Commitment to Quality



Our commitment to quality is an integral part of UP’s corporate culture, and it is our strong objective to deliver premium quality products that are safe and based on the highest standards and level of responsibility.

As part of this commitment, and to uphold Unitata and UniFuji as premium oil quality producers, much emphasis is therefore placed on quality assurance throughout the various stages in both refineries, to meet the statutory and legal requirements for the total satisfaction of our valued customers worldwide.

This is evidenced through our continuous investments in the latest process technology and sophisticated analytical equipment that provide accurate and timely controls to ensure customer satisfaction as well as high product quality and food safety.

Our quality focus starts from our Research Department and continues through every stage of our agricultural, milling, and downstream activities until the final product is delivered to our customers.

This is in line with our philosophy of:

**U**pholding the name and reputation of UP as a top producer of premium quality palm products.

**N**urturing a diligent work force who takes pride in contributing to the development of the Company.

**I**nitiating and innovating positive, progressive work ethics, methods and incorporating a winning culture.

**T**raining of personnel is the key to upgrading our skills and keeping in trend with the marketplace.

**E**nsuring that only high quality palm products are produced, to the satisfaction of our customers’ needs

**D**elivering decisive efforts in Research and Development to continuously improve our working methods, efficiency and product quality.

### Low 3-MCPD and Glycidyl Esters

3-MCPD and Glycidyl Esters are contaminants formed during the processing (refining) of edible oils and fats. This has become a topic of concern for vegetable oil refiners and consumers based on a report published by the European Food Safety Authority (EFSA) in May 2016, in which the EFSA Panel on Contaminants in the Food Chain (CONTAM Panel) published the results of its assessment of the safety of 3-MCPD and Glycidyl esters with respect to human health.

In line with our focus on sustaining and improving the production of high-quality products within our Group much attention is directed towards reducing contaminants in our supply chain. This dedicated focus enables us to produce refined palm oil with levels of 3-MCPD and Glycidyl Esters that are amongst the lowest in the industry. This is a testimony to more than 4 decades of research activities undertaken at our Unitata refinery combined with our Group's dedicated quality commitment within all parts of our supply chain.

### Low MOSH and MOAH

Of nearly equal repute in being a contaminant to final oils and fats is the new and emerging contaminant called Mineral Oil Hydrocarbons (MOH). It encompasses two main sub groups namely saturated hydrocarbons, generally present at a ratio of 80/20 with MOAH trailing behind MOSH.

MOSH is believed to accumulate in human tissue and cause adverse effects to the liver while MOAH, the

greater menace of the two, is reported to be genotoxic carcinogens and may cause damage to the DNA leading to cancer. Hitherto, there have been no binding threshold espoused by the EU. However, customers who once posited the ALARA approach (ALARA is for "As low As Reasonably Achievable") were prescient of legislation that likely would come into effect sooner.

In preparation for such legislations and concern over societal's wellbeing, the demand for targeted thresholds on MOSH-MOAH is being pursued by customers with increasing voracity for tighter commitments.

The inception of the task force on MOSH-MOAH in 2018 has played a pivotal role to this end by formalising sustainable mitigation plans.

Baseline presence of contaminants have been determined through our very own state of the art analytical laboratory and mitigation efforts for further reduction have been carried out successfully throughout the plantations, mills and the refineries.

As a result of the goal-directed quality controls and assessments, UP, Unitata and UniFuji are today able to meet the ever tightening threshold prerequisites for oils that will be used in a variety of food products, especially in the production of infant formula.

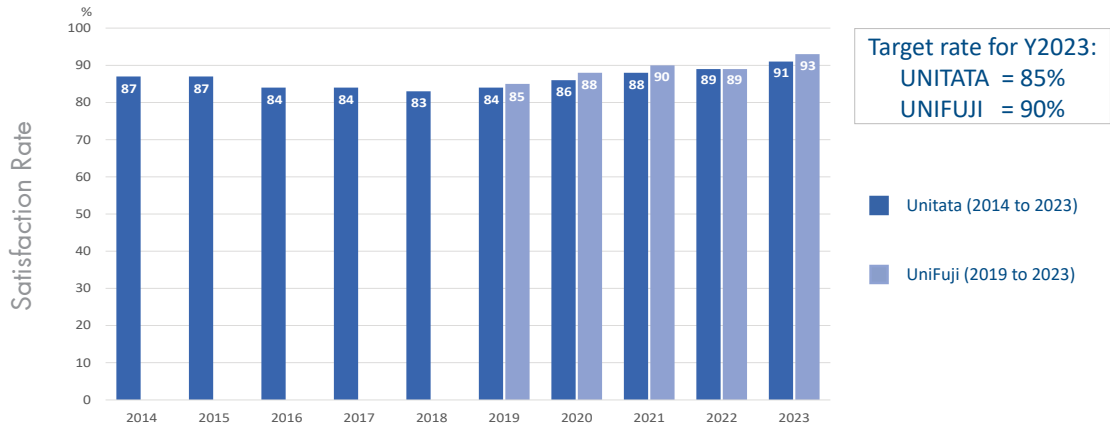
Overall, we aspire to be a wellspring of adaptive-competence when faced with new challenges, and hence, we are committed to further reducing the levels of novel contaminants that are detrimental to the human health.



*Commitment to quality – Product bottling under stringent hygienic conditions at one of our filling plants at Unitata.*



### Customer Satisfaction Survey



#### Customer Satisfaction

At Unitata and UniFuji, the annual customer satisfaction survey is used to measure how our finished products meet our customers’ expectations. This is an important measure in relation to our continuous improvement attitude and provides us with an important understanding of our service and collaboration with our customers based on their valuable feedback.

Through interactions with customers and other stakeholders, a deep understanding of this responsibility has been developed and provides a healthy avenue for continuous improvements in quality and food safety by minimizing risks throughout the supply chain. Furthermore, UP has gained much knowledge on market trends and have become more capable of responding to them.

The survey focuses on three key areas which are:

- (i) Product quality
- (ii) Service quality
- (iii) Delivery timeliness

The results are analysed and tabulated in an appropriate graphical form for presentation at the management review meetings as well as during the various certification audits throughout the year. Besides that, Unitata and UniFuji also adopt an on-going communication method with customers to keep them engaged with their products.

Regular communication with customers enables Unitata and UniFuji to develop products and provide the necessary service to ensure continuous customer satisfaction, which cannot be taken for granted in the competitive business of refining.



A visit from our long term valued customer, AAK, here represented by Ms. Susanne Jaspers, President Europe & Strategic Accounts and Mr. Bo Pedersen, Head of Strategic Accounts together with Mr. Martin Bek-Nielsen.

## Food Safety and Certifications

Our commitment to food safety for sustainable and consistent high-quality products is endorsed by relevant international certification bodies, and to keep up with the increasing demand for supply chain traceability and quality, both refineries have obtained numerous local and international certifications as follows:

### UNITATA:

ISO 9001, HACCP, Halal, Kosher, BRC, FDA, SEDEX, RSPO SCCS, MSPO SCCS, GMP, GMP+B2 Feed Safety, MeSTI, ISCC EU and MPCA.

### UNIFUJI:

ISO 9001, HACCP, Halal, Kosher, FSSC 22000, FDA, SEDEX, RSPO SCCS, MSPO SCCS, ISCC EU and MeSTI.

As a requirement for the above-mentioned certifications, Unitata and UniFuji are audited annually by the various certification bodies and by customers.

To improve and further strengthen our supply chain transparency, Unitata and UniFuji have been audited under SMETA (Sedex Members Ethical Trade Audit), a platform that encompasses four pillars of responsible practices, ie. Labour, Health and Safety, Environment and Business Ethics.

In addition, Unitata and UniFuji are continuously auditing and assessing our key suppliers of raw materials, packaging, and ingredients based on our established risk assessment procedures.

All packed products are traceable to their raw materials including additives and packaging materials via batch and code numbers printed on the labels, which meet the requirements of the Malaysian Food Act and the requirements of the respective export markets. Furthermore, Unitata and UniFuji have established and validated our process controls to consistently minimize the risk of contaminants and meet the highest food safety standards.

Both refineries also emphasize on the element of food defence as part of product security. This assures the protection of our products from malicious contamination, adulteration, or theft, and in this connection, relevant food safety training is of high priority for all employees in order to keep abreast with the increasingly demanding food safety requirements.

## MSPO and RSPO Supply Chain Certifications

In 2008, before the RSPO Supply Chain Certification was introduced, Unitata was the first company to ship refined RSPO certified segregated palm oil to customers worldwide. This was verified by independent surveyors. In December 2010, Unitata furthermore received its Supply Chain Certification and have since been able to handle and deliver first class certified sustainable

and segregated palm and palm kernel oil solutions to customers worldwide based on the RSPO supply chain traceability system.

UniFuji received its RSPO Supply Chain Certification in September 2018 and is therefore also able to deliver high quality certified and sustainable palm-based products under the segregated RSPO supply chain solution to all its customers.

The RSPO cooperates with the traceability service provider, UTZ who through the RSPO Trace system ensures that the necessary traceability is in place in order for proper certification of the palm and palm kernel oil that is used in the refining process.

The supply chain certification is the buyers' and consumers' guarantee that the palm oil or palm kernel oil used in the production of finished goods actually comes from the claimed RSPO source. This requires records to be kept to demonstrate that the volume of CPO or CPKO sold as sustainable oil does not exceed the amount produced by the upstream RSPO certified mills.

In November 2017, Unitata had its first verification audit by one of our key customers for supply of RSPO certified palm kernel oil materials. The audit, which was a full traceability audit on the origin of materials supplied by Unitata Bhd, was conducted independently by a third-party auditor appointed by the customer, who concluded that the material sourced by the customer is 100% traceable throughout the supply chain.

In addition to the RSPO certifications, Unitata and UniFuji successfully achieved the MSPO supply chain certification in 2023.

## Traceability

In the following section, we will be providing an overview on both our upstream (Plantations) and downstream (Refining) business activities in relation to our focus on improving traceability in our supply chain for the benefit of our global customers and stakeholders.

This entails our commitment to ensure that the certified sustainable palm oil and palm kernel oil used in the production of finished goods come from sustainable sources.

As an important part of UP's traceability focus, we strive to ensure that our supply chain (direct and indirect suppliers) live up to our Group's commitment towards the No Deforestation, No New Development on Peat and No Exploitation (NDPE) Policy.

This is in line with the increasing interest for certified sustainable and segregated palm oil as many global brand manufacturers have now committed to only use RSPO certified and segregated palm oil solutions.



## Upstream Traceability

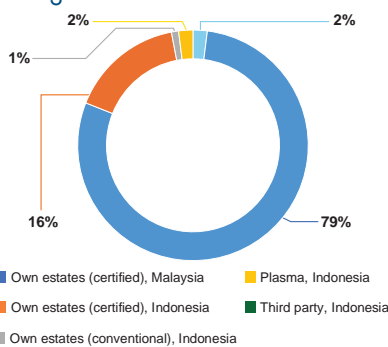
All CPO sourced in Malaysia is RSPO certified under the Supply Chain model of Identity Preserved (IP). In Indonesia, we have undergone RSPO certification for part of our plantations (with HGU certificates) and have successfully achieved RSPO certification for these areas in 2018. Currently the mill in Indonesia is RSPO certified under the Mass Balance Supply Chain model (MB).

Full certification and production of RSPO certified and segregated palm oil traceable to the mill and plantations is expected to be reached in 2025 for our Indonesian operations in tandem with the issuance of land use certificates by the local Government authority for our properties (Inti) and Plasma land.

In this connection, we are increasing awareness by retraining and carrying out audits within all operational areas of our Group. The results of these measures will be monitored and incorporated in our future reports or Company Website as part of our continuous improvement commitment.

UP's Mills	Percentage from own plantations (%)	Percentage from third party suppliers (%)	Traceable to plantations (%)
UIE	100	0	100
Jendarata	100	0	100
Ulu Bernam Optimill	100	0	100
Ulu Basir	100	0	100
Lada (PT SSS)	80.06	19.94	100

Origin of FFB Processed at UP Mills



The location of UP owned mills is tabulated below:

Name of Mills	GPS Coordinates	
	Latitude	Longitude
UIE	N 4°26'53"	E 100°43'11"
Jendarata	N 3°51'14"	E 100°58'06"
Ulu Bernam Optimill	N 3°46'19"	E 101°13'14"
Ulu Basir	N 3°43'28"	E 101°15'21"
Lada (PT SSS)	S 2°35'24"	E 111°46'16"

The location of third-party FFB suppliers for PT SSS is tabulated below:

Name of FFB Suppliers	GPS Coordinates	
	Latitude	Longitude
Koperasi Tani Bahagia	600918	9678406
Koperasi Karya Tunggal Jaya	589868	9728251
CV Inti Sawit Perkasa/ Bapak Iswanto	591276	9708506

As at 31 December 2023.

## Downstream Operations - Unitata

At Unitata we pride to be at the forefront of providing quality products to customer worldwide and have therefore made responsible sourcing and supply chain transformation a strategic priority.

One of Unitata's key commitments to its customers is to ensure that our finished products can be traced back to its origins, namely palm oil mills and further to the plantation level. This is particularly important in relation to the implementation of the EU Deforestation Regulation, effective 1 January 2025, requiring full traceability and verification that no deforestation has taken place anywhere along the supply chain.

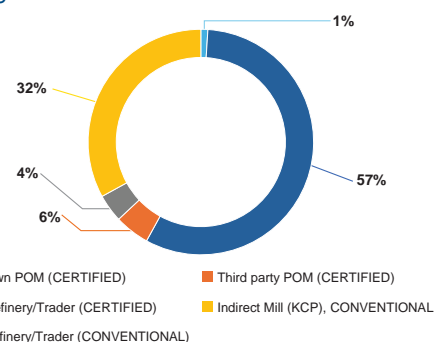
Unitata is currently in a favourable position to meet this growing demand due to the direct link with UP's supply of RSPO certified sustainable and segregated palm oil traceable to the plantations.

## Traceability

Traceability plays a vital role in ensuring sustainable palm oil production across the supply chain, and at Unitata we therefore remain committed to delivering responsible and sustainable agricultural products that safeguard the well-being of the people and planet.

The traceability of all our raw materials – CPO, CPKO, and PPO sourced during 2023 is summarised in the below chart:

Origin of raw material sourced at Unitata Bhd.



Origin of raw material sourced at Unitata Berhad. (%)

Own POM (Certified)	Third party POM (Certified)	Refinery/Trader (Certified)	Indirect Mill (KCP) (Conventional)	Refinery / Trader (Conventional)
57.25%	5.52%	3.70%	32.46%	1.08%

From this, it can be seen that the RSPO-certified percentage of all palm oil products handled/traded/ processed (tonnes) is 66.47% (57.25% + 5.52% + 3.70%).

The summary of the number of direct supplier mills supplying CPO and PK is tabulated below and shows a total of 6 mills, consisting of 4 of our own mills and 2 third party mills as at 31 December 2023.

Raw material	Number of supplying mills	Traceable to plantations	Numbers of supplying mills sourced from own plantations	Percentage sourced from own plantations
CPO	own mills (4)	100%	own mills (4)	100%
	third party mills (1)	100%	third party mills (1)	100%
PK	own mills (4)	100%	own mills (4)	100%
	third party mills (1)	100%	third party mills (1)	100%

All of the above own and third-party supplying mills are covering 100% from their own plantations.

All palm oil products in Unitata are sourced from direct and indirect supplier mills as well as plantations in Malaysia.

**Traceability To Plantation (TTP) for Conventional CPKO**

Our direct supplier mills for CSPO have been 100% traceable to plantations level since 2010, whereas our indirect supplier mills for CPKO via Kernel Crushing Plant (KCPs) have been 100% traceable to mill level since 2021.

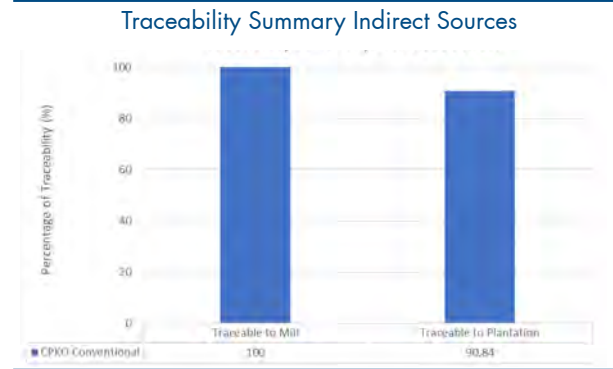
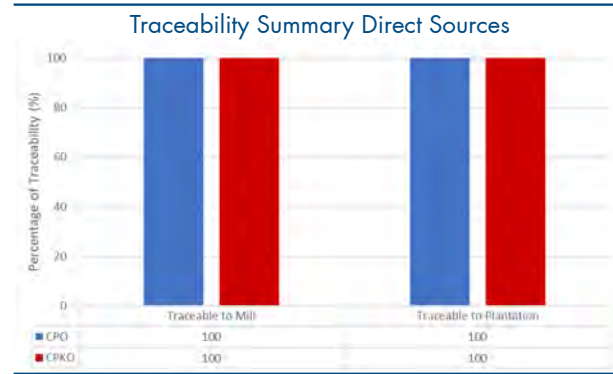
In this context, we have made a significant progress throughout the year towards achieving full traceability to the plantation level for CPKO. This has been done by engaging our KCPs to gather information on third-party indirect supplying mills including plantations, smallholders and dealers in preparation for the European Union Deforestation Regulation (EUDR) coming into effect on 1 January 2025. As of 31 December 2023, our TTP score stands at 90.84% for conventional CPKO. This has been externally verified by BSI.

There is no industry recognized nor standardized definition for ‘Traceable to Plantation’ as of yet. Our approach on TTP is based on a set of traceability indicators for suppliers.

Our TTP score for each mill is evaluated based on our internal prioritization of indicators i.e name of parent company, plantation name, GPS coordinates, status of

RSPO & MSPO certifications, address (up to village), estimated volume of FFB supply to mill and polygon (for the plantations and smallholders above 4 hectares) in the traceability exercise.

We target to achieve 95% TTP by mid of 2024 and a minimum of 98% TTP by end of 2024. Please see below for an overview of the TTP score card for CPO & CPKO from direct and indirect sources.

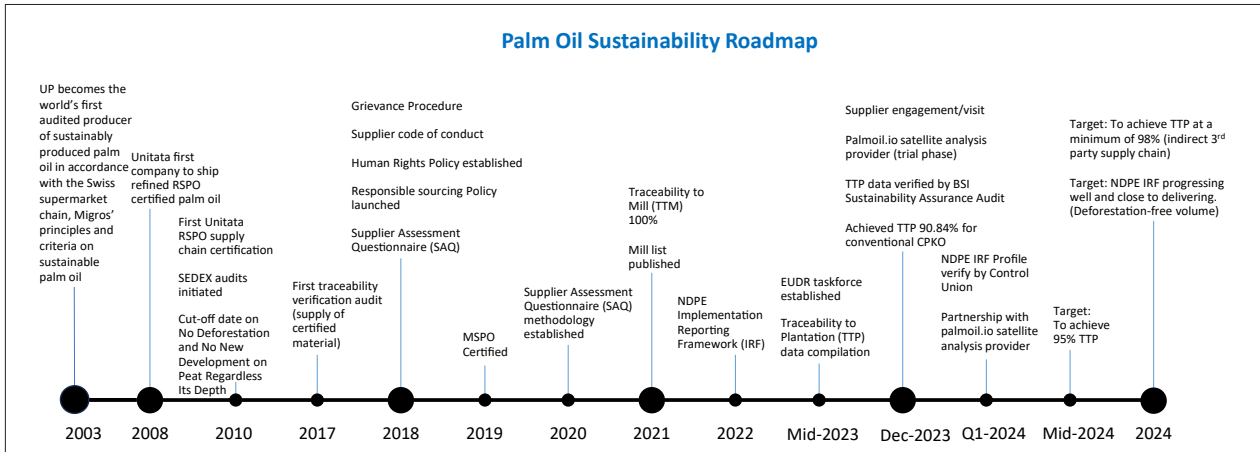


**NDPE Implementation Reporting Framework (NDPE IRF)**

NDPE IRF is a tool designed by the Palm Oil Collaboration Group (POCG) to measure companies progress towards No Deforestation, No Peat and No Exploitation (NDPE) commitments across the entire supply chain. Since 2022, UP (including Unitata and UniFuji) has been an active member of POCG, utilises the tool to track downstream supply chain’s progress on NDPE compliance and communicate to our stakeholders.

In this connection, NDPE IRF is increasingly relied upon by our customers as evidence that their supply chain complies with NDPE commitments and we anticipate to undergo third-party verification on NDPE IRF by the second quarter of 2024 to track our progress and milestones towards meeting NDPE commitments as well as to ensure a traceable and transparent sustainable palm oil supply chain, we have established a time-bound roadmap, which is illustrated on the following page.





Satellite Monitoring

In addition to our subscription to GeoRSPO, Starling and Global Forest Watch (GFW) on the monitoring of deforestation activities in our concessions, we are strongly committed to monitor deforestation activities in all of our direct and indirect suppliers too.

Since December 2023, we have initiated a collaboration with a third-party satellite monitoring database service provider, palmoil.io to proactively monitor deforestation and peatland development in our supplier’s operations.

This proactive approach goes beyond simply complying with industry standards, and with that we aim to ensure 100% of our palm oil volumes achieve “Delivering” status under the NDPE IRF by 2025, meaning absolutely no deforestation conversion in our supply chain.

Downstream Operations – UniFuji

UniFuji sources crude palm oil internally from UP, which ensures the availability of RSPO certified sustainable and traceable palm oil to produce value added palm fractions to our customers. The origin of the raw material sourced in 2023 can be summarized as per the table below.

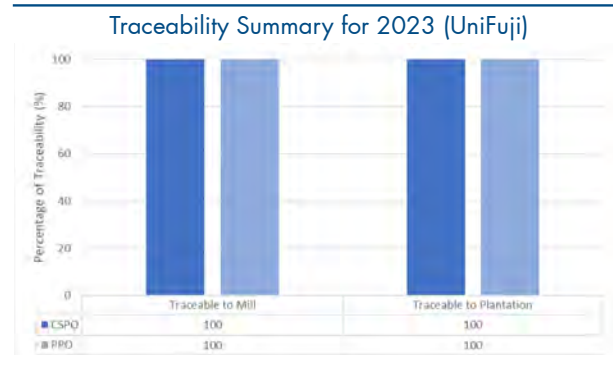
Direct Mill Suppliers:

Raw material	Number of supplying mills	Traceable to plantations	Numbers of supplying mills sourced from own plantations	Percentage sourced from own plantations
CPO	own mills (2)	100%	own mills (2)	100%

Indirect Mill Suppliers:

Raw material	Number of supplying mills	Traceable to plantations	Numbers of supplying mills sourced from own plantations	Percentage sourced from own plantations
PPO	9	100%	own mills (4)	92.55%

This can be further summarised and illustrated as follows:



Evaluation of Suppliers’ Sustainable Commitment

As a part of our sourcing policy and continuous improvement focus, we engage with suppliers to improve practices on the ground and strengthen our supply chain, thereby ensuring positive developments insofar as sustainable palm oil production is concerned.

As important step towards improving our sustainability credentials within the economic, environmental, and social areas of our business, we have invited our suppliers to join us on this journey.

With this we aim to improve sustainability in our supply chain and ensure that our suppliers join us on this journey through close collaboration. Our approach to engagement includes meetings, self-assessment questionnaires (SAQ), supplier audits, on-site verifications and follow-ups related to food safety as well as MSPO and RSPO certifications. At the same time, we also assist our suppliers in improving the scores of their SAQ to meet the commitment in our Responsible Palm Oil Sourcing Policy and Code of Conduct.

Proportion of spending on local suppliers

In UP, we are committed to support the local suppliers in our supply chain.

Year	2023	2022	2021
Proportion (%)	99.90	99.97	99.81

Upstream Suppliers Evaluation

In UP, we have developed a Self-Assessment Questionnaire (SAQ) to evaluate our third party FFB suppliers within the upstream business area. Based on this, we discuss findings and explain and promote on an annual basis our policies on health and safety, workers' rights as well as our expectations on their adherence to our Suppliers' Code of Conduct and Responsible Sourcing Policy.

Furthermore, we conduct site visits and trainings to improve good agricultural practices and promote sustainable palm oil policies and its implementation on the ground. The training sessions include emergency response to accidents (first aid), safe handling of pesticides with appropriate Personal Protective Equipment (PPE), effective use of pre-emergent herbicides to reduce chemical usage, and integrated pest management (IPM) and mechanized harvesting in order to assist them with their agricultural interests.

In addition, demonstrations of fire combat procedures are carried out to further enhance the awareness of neighbouring smallholders in case of a fire incidence and they are informed to contact UP for emergency assistance if required.

We also explain UP's company policies, specifically on our No Deforestation, No Peat and No Exploitation (NDPE) commitment as well as our suppliers code of conduct.

In 2023, we have conducted briefings and trainings for our third-party FFB suppliers including the Suppliers Code of Conduct, Self-Assessment Questionnaire (SAQ), Responsible Sourcing Policy and Best Management Practices.

Downstream Suppliers Evaluation

At Unitata and UniFuji, we have also developed a Self-Assessment Questionnaire (SAQ), which is used annually to engage with our suppliers. This enables us to understand the current status of suppliers and their commitments to our Responsible Palm Oil Sourcing Policy. Through this engagement, we categorize them as high risk, medium risk or low risk suppliers for further engagement.

The SAQ is sent directly to the below raw material suppliers:

Unitata	UniFuji
Crude Palm Oil	Crude Palm Oil
Crude Palm Kernel Oil	Processed Palm Oil
Processed Palm Oil	
Processed Palm Kernel Oil	

In the spirit of collaboration and transparency, our Responsible Palm Oil Sourcing Policy is discussed with the above suppliers to ensure that they live up to our policies and code of conduct across their entire operations in order to minimize and mitigate sustainability risks. If a supplier in our supply chain is categorized as high-risk based on the mentioned SAQ, we will conduct on-site assessments and engage with the supplier to agree to a reasonable time-

bound action plan including further engagement to improve their SAQ score and thereby meet our Responsible Palm Oil Sourcing Policy requirements and commitments.

In addition to the above, Unitata and UniFuji also carry out supplier audits on food safety and quality to evaluate risk materials, supplier's management systems, and to obtain their certificates to ascertain food safety and quality standards, as well as evaluate their hygiene and sanitation compliance.

In the event that any suppliers are found to be in violation or breach of the above policies or our Supplier Code of Conduct and thereby perceived as a high-risk supplier (self-assessment scores below 50%), UP/Unitata/UniFuji shall immediately request for corrective measures to be implemented with a 60 days time-bound action plan and further engagement to ensure that the supplier live up to our Responsible Palm Oil Sourcing Policy.

We will moreover, through dialogue and cooperation, encourage, and coach the supplier to implement the action plan by providing necessary support to see how challenges can be overcome and implemented. If a supplier is unable or unwilling to take the necessary actions to conform to the expectations outlined in our policy, UP/Unitata/UniFuji will as a last resort terminate the commercial relationship with the supplier.

Key elements and criteria of the suppliers assessments are as follows:

- a) Management system & Certifications
- b) Management Commitments
- c) Human Rights & Social Commitments
- d) Business Integrity Commitments
- e) Environmental Commitments
- f) Transparency & Traceability

The overview of suppliers that have been assessed as at 31 December 2023 is as follows:

Suppliers' Assessment	Upstream	Downstream (Unitata)	Downstream (UniFuji)
Total number of suppliers assessed	3	11	3
Percentage of suppliers assessed	100%	100%	100%
Low risk supplier	100%	100%	100%
Medium risk supplier	0%	0%	0%
High risk supplier	0%	0%	0%

Based on the above assessments, all our suppliers have lived up to our Responsible Palm Oil Sourcing Policy and Supplier Code of Conduct, and none of them have any significant negative environmental or social concern in their supply chain.



## Our Integrated Sustainable Value Chain

The UP Group’s commitment to the world’s highest standards of sustainability, quality, and product traceability is built into our DNA and forms the basis of our integrated value chain, from early R&D activities and seed production, to the final product. It is this commitment towards excellence across every aspect of the value chain that sets UP apart and enables us to produce the world’s finest palm oil with the world’s lowest footprint for our customers.

### R&D

Through our Research Department established in the early 1950s, much focus is directed towards improving yields of future generation oil palms and coconut palms to increase our land productivity

#### 1. Breeding



In our seed gardens, pollen from premium Pisifera palms are used to pollinate Deli Dura mother palms with high yield traits

#### 2. High yielding seeds



High yielding Tenera seeds are produced from carefully selected mother palms under stringent quality requirements

#### 3. Tissue culture



To increase our land productivity, we also complement traditional breeding with tissue culture & molecular technologies

### GROWTH

After 12 months in the nursery, the young seedlings are planted in the fields. The oil palm is then considered immature until fruit bunches are produced after about 30 months

#### 4. Seeds planted in pre-nursery



Germinated seeds hand-planted in polybags & gently nurtured in the pre-nursery for 3 months. Seedlings emerge after 1-2 weeks

#### 5. Main nursery growth spurt



Seedlings are transplanted into larger 20 kg. polybags at the main nursery, where they receive 9 months of meticulous care

#### 6. Immaculate field planting



Transfer of nursery seedlings to field, and manual planting in orderly and well-lined rows of about 143 oil palms per hectare

#### 7. Establishing cover crop



Leguminous cover crop is established in newly replanted fields to fixate nitrogen, suppress weeds, conserve moisture and reduce erosion



## POLLINATION

Oil palms have both male and female flowers and are pollinated through wind and insects. Each palm can produce about 12-14 fresh fruit bunches per year, each containing over thousand fruitlets

### 8. Insect pollination



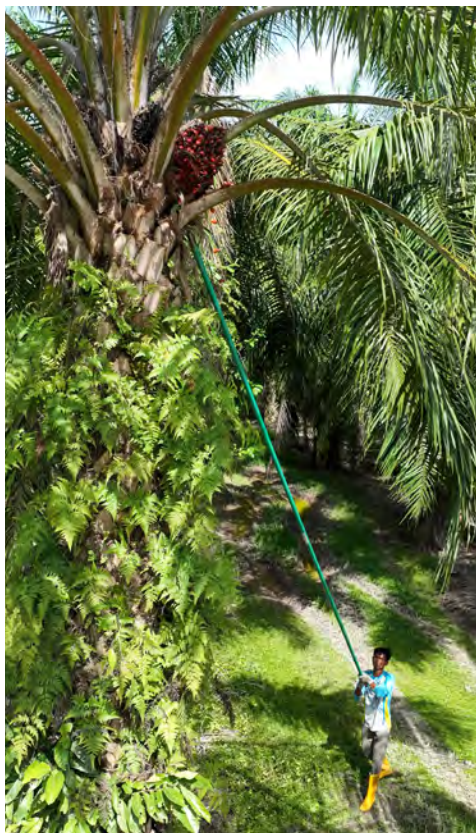
Oil palms are both wind & insect pollinated, the latter being efficiently handled by the pollinating weevil *Elaeidobius Kamerunicus*

### 9. Harvesting of fruit bunches



Efficiency is key to maintain low harvesting rounds, high yields, and to keep the fields healthy and productive for generations

### 10. Tall palm harvesting



Harvesting (and pruning) of tall oil palms sometimes exceeding 15 metres is a manual task requiring skilled workers

## HARVEST

The oil palm is a perennial crop, which must be attended to approximately every two weeks all year round. Timely harvesting intervals and fruit evacuation is crucial in order to achieve high yields and quality

### 11. Fruit bunch loading



Quick evacuation of fresh fruit bunches after harvesting ensures the highest quality for further processing at the palm oil mills

### 12. Gentle transport, low GHG footprints



UP's unique light Railway System facilitates an efficient, timely and gentle transport of fresh fruit bunches to the palm oil mill

### 13. Receiving fresh fruit bunches



Fresh fruit bunches are quality checked & railway wagons are weighted at the mill's weighbridge before further processing

## MILLING

The milling process and operations are targeted at extracting as much crude palm oil and palm kernels as possible from the incoming fruit bunches, which ideally are no more than a day old upon processing

### 14. Sterilisation



Quick processing ensures high oil quality. Cages enter directly into the sterilisers, where fruits are cooked under pressure

### 15. Digestion & screw pressing



At the screw press station, crude palm oil from cooked fruitlets is extracted and separated from shells, nuts and fibre



## PRODUCE

Whilst the extraction of crude palm oil and palm kernels often receives the most attention, it is also of great economical and environmental value to utilise all by-products

### 16. Palm fruit fractions



Crude palm oil (CPO) and palm kernels are extracted from the mill, and fibres, shells & empty bunches sent for further processing

### 17. Renewable energy



Fibres and shells sent to the biomass boiler for production of green steam & electricity, which is used at the oil mills & refineries

### 18. Renewable energy from effluent



Under anaerobic conditions in the biogas plant, microorganisms convert mill effluent into renewable energy thus reducing GHGs

## REFINING

Crude palm oil and other oils and fats are processed into value-added products by removing contaminants and other undesired traits, and undergoes processes like blending, fractionation and interesterification

### 19. Consistent incoming supply



High quality crude oils are checked on arrival and pumped into designated and secured storage tanks for further processing

### 20. Refining



As a first step towards meeting customer requirements, most of the free fatty acids are removed by refining the crude oil

### 21. Bleaching & deodorisation



Automated bleaching and deodorisation remove remaining free fatty acids, colour, odour and other undesired impurities

### 22. Quality control



Quality control is carried out throughout all stages to ensure the highest product quality and food safety for our customers

## PRODUCTS

Whether shipped in bulk or blended into packed specialty fat formulations, all products must strictly comply with the highest food safety and quality requirements before being shipped to customers worldwide

### 23. Product filling



Processed and refined oils are blended into specialty fats, and filled in automated filling lines under strict hygienic conditions

### 24. Delivery to customers



Bulk products are delivered in road tankers, ISO tanks or flexi-tanks, whereas packed goods are delivered in trucks or containers

This ESG Performance Data Table was generated from Bursa Malaysia’s ESG Reporting Platform, and is included in this Sustainability Report as mandated by Bursa Malaysia’s enhanced sustainability reporting requirements within the Main Market Listing Requirements.

Indicator	Measurement Unit	2023
<b>Bursa (Labour practices and standards)</b>		
Bursa C6(a) Total hours of training by employee category		
Management	Hours	48
Executive	Hours	2,544
Non-executive/Technical Staff	Hours	769
General Workers	Hours	30,636
Bursa C6(b) Percentage of employees that are contractors or temporary staff	Percentage	2.00
Bursa C6(c) Total number of employee turnover by employee category		
Management	Number	0
Executive	Number	3
Non-executive/Technical Staff	Number	4
General Workers	Number	608
Bursa C6(d) Number of substantiated complaints concerning human rights violations	Number	0
<b>Bursa (Health and safety)</b>		
Bursa C5(a) Number of work-related fatalities	Number	0
Bursa C5(b) Lost time incident rate ("LTIR")	Rate	0.85
Bursa C5(c) Number of employees trained on health and safety standards	Number	6,624
<b>Bursa (Community/Society)</b>		
Bursa C2(a) Total amount invested in the community where the target beneficiaries are external to the listed issuer	MYR	748,563.00
Bursa C2(b) Total number of beneficiaries of the investment in communities	Number	72
<b>Bursa (Diversity)</b>		
Bursa C3(a) Percentage of employees by gender and age group, for each employee category		
Age Group by Employee Category		
Management Under 30	Percentage	0.00
Management Between 30-50	Percentage	33.00
Management Above 50	Percentage	67.00
Executive Under 30	Percentage	12.00
Executive Between 30-50	Percentage	63.00
Executive Above 50	Percentage	25.00
Non-executive/Technical Staff Under 30	Percentage	21.00
Non-executive/Technical Staff Between 30-50	Percentage	52.00
Non-executive/Technical Staff Above 50	Percentage	57.00
General Workers Under 30	Percentage	31.00
General Workers Between 30-50	Percentage	62.00
General Workers Above 50	Percentage	7.00
Gender Group by Employee Category		
Management Male	Percentage	100.00
Management Female	Percentage	0.00
Executive Male	Percentage	81.00
Executive Female	Percentage	19.00
Non-executive/Technical Staff Male	Percentage	60.00
Non-executive/Technical Staff Female	Percentage	40.00
General Workers Male	Percentage	90.00
General Workers Female	Percentage	10.00
Bursa C3(b) Percentage of directors by gender and age group		
Male	Percentage	88.89
Female	Percentage	11.11
Under 30	Percentage	0.00
Between 30-50	Percentage	11.11
Above 50	Percentage	88.89
<b>Bursa (Energy management)</b>		
Bursa C4(a) Total energy consumption	Megawatt	0.16
<b>Bursa (Supply chain management)</b>		
Bursa C7(a) Proportion of spending on local suppliers	Percentage	99.90
<b>Bursa (Anti-corruption)</b>		
Bursa C1(a) Percentage of employees who have received training on anti-corruption by employee category		
Management	Percentage	96.00
Executive	Percentage	96.00
Non-executive/Technical Staff	Percentage	96.00
General Workers	Percentage	96.00
Bursa C1(b) Percentage of operations assessed for corruption-related risks	Percentage	55.00
Bursa C1(c) Confirmed incidents of corruption and action taken	Number	0
<b>Bursa (Water)</b>		
Bursa C9(a) Total volume of water used	Megalitres	987.564770
<b>Bursa (Data privacy and security)</b>		
Bursa C8(a) Number of substantiated complaints concerning breaches of customer privacy and losses of customer data	Number	0

Internal assurance External assurance No assurance (\*)Restated





Children of our employees playing at the housing area on Lada Estate, PT SSS, Indonesia.





## INDEPENDENT ASSURANCE OPINION STATEMENT



Statement No.: **SRA-MY 802424**

### United Plantations Berhad Sustainability Report 2023

The British Standards Institution is independent of United Plantations Berhad (hereafter referred to as "UP" in this statement) and has no financial interest in the operation of UP other than for the assessment and assurance of UP Sustainability Report 2023 (the "**Report**").

This independent assurance opinion statement has been prepared for UP solely for the purposes of assuring its statements relating to the Report, more particularly described in the Scope below. It was not prepared for any other purpose. The British Standards Institution will not, in providing this independent assurance opinion statement, accept or assume responsibility (legal or otherwise) or accept liability for or in connection with any other purpose for which it may be used, or towards any person by whom the independent assurance opinion statement may be read. This statement is intended to be used by stakeholders of UP.

This independent assurance opinion statement is prepared on the basis of review by the British Standards Institution of information presented to it by UP. The review does not extend beyond such information and is solely based on it. In performing such review, the British Standards Institution has assumed that all such information is complete and accurate.

Any queries that may arise by virtue of this independent assurance opinion statement or matters relating to it should be addressed to UP only.

#### Scope

The scope of engagement agreed upon with UP includes the following:

1. The assurance covers part of the Report and focuses on systems and activities of UP and its subsidiaries in the form of Refineries (Unitata and UniFuji) in Malaysia and Indonesia, which include plantations and mills and refineries for palm oil and palm kernel oil, during the period from 1<sup>st</sup> January 2023 to 31<sup>st</sup> December 2023 (the "**Reporting Year**"), for following sustainability subject matter.
  - Total average earnings per worker per month
  - Lost time injury frequency rate
  - Fatal accident rate
  - Mill water consumption in processing Fresh Fruit Bunches ("FFB")
  - Domestic water consumption
  - Traceability at refinery level (volume sourced and Traceability to Plantations)
  - Usage of pesticides / herbicides
  - Area planted on peat (hectarage as per the peat soil map from United Plantations Research Department ("UPRD"))
  - Percentage of suppliers (FFB, Crude Palm Oil ("CPO"), Crude Palm Kernel Oil ("CPKO") and processed palm oil) that has been self-assessed to the key elements of UP's Responsible Sourcing Policy
  - UP's Suppliers' engagement and assessment/programme to support suppliers (FFB, CPO, CPKO and processed palm oil)
2. Type 1 Moderate Level of Assurance in accordance with the AA1000 Assurance Standard v3 ("**AA1000AS v3**") evaluates the nature and extent of UP adherence to four reporting principles: Inclusivity, Materiality, Responsiveness and Impact. The specified sustainability performance information/data disclosed in the sustainability subject matter of the Report has been evaluated.

#### Opinion Statement

We conclude that the sustainability subject matter of the Report provides a fair view of UP's sustainability programmes and performance in the Reporting Year. We believe that the social and environmental performance indicators for the sustainability subject matter of the Report are fairly represented in the Report, in which UP's efforts to pursue sustainable development are widely recognized by its stakeholders.

Our work was carried out by a team of sustainability report assurers in accordance with the AA1000 Assurance standard v3, AA1000AS v3. We planned and performed this part of our work to obtain the necessary information and explanations. We considered UP has provided sufficient evidence during the assurance processes.

#### Methodology

Our work was designed to gather evidence on which our conclusion is based. We undertook the following activities:

- A top level review of issues raised by external parties that could be relevant to UP's policies to check on the appropriateness of statements made in the Report;
- Discussion with senior executives on UP's approach to stakeholder engagement. We had no direct contact with external stakeholders;
- Interview with staff involved in sustainability management, report preparation and provision of report information;
- Review of key organizational developments;



- Review of supporting evidence for claims made in the sustainability subject matter of the Report including raw data and supporting evidence of the sustainability information; and
- An assessment of UP's reporting and management processes concerning reporting against the principles of Inclusivity, Materiality, Responsiveness and Impact as described in the AA1000 AccountAbility Principles 2018 Standard ("AA1000AP (2018)").

## Conclusions

A detailed review against the AA1000AP (2018) Principles of Inclusivity, Materiality, Responsiveness and Impact is set out below.

## Inclusivity

The Report has reflected the fact that UP has engaged with its significant stakeholders through various channels such as procedures for handling complaints, grievance, and consultations; negotiations and interactions with stakeholders prior to any development or acquisition of land; stakeholder meeting; community engagement process; meetings, self-assessment questionnaires (SAQ), supplier audits, onsite verifications and follow-ups with suppliers; customer satisfaction survey and more.

UP's operation involves various methods of engaging its stakeholders on an on-going basis. The Report covers economic, social and environmental aspects of concern to its stakeholders with a fair level of disclosure. In our professional opinion, UP adheres to the principle of Inclusivity. Areas for enhancement of the Report were adopted by UP before the issuance of this opinion statement.

## Materiality

UP publishes sustainability information that enables its stakeholders to make informed judgments about UP's management and performance. In our professional opinion, the Report adheres to the principle of Materiality and identifies UP's material aspects by using appropriate methods of materiality analysis and demonstrating material issues in a matrix form. Areas for enhancement of the Report were adopted by UP before the issuance of this statement.

## Responsiveness

UP has implemented practices that respond to the expectations and perceptions of its stakeholders. These include sustainability reporting for both internal and external stakeholders. In our professional opinion, UP adheres to the principle of Responsiveness. Areas for enhancement of the Report were adopted by UP before the issuance of this statement.

## Impact

UP has established processes to understand, measure and evaluate its impacts in qualitative and quantitative way. These processes enable UP to assess its impact and disclose them in the sustainability subject matter of the Report. In our professional opinion, UP adheres to the principle of Impact. Areas for enhancement of the Report were adopted by UP before the issuance of this statement.

## Assurance Level

The Type 1 Moderate Level of Assurance provided in our review is defined by the scope and methodology described in this opinion statement.

## Responsibility & Limitations

It is the responsibility of the UP's senior management to ensure that the information being presented in the Report is accurate. The assurance is limited by information presented by UP. Our responsibility is to provide an independent assurance opinion statement to stakeholders giving our professional opinion based on the scope and methodology described.

## Competency and Independence

The assurance team was composed of lead assurors, who are experienced in the industrial sector, and trained in a range of sustainability, environmental and social standards including GRI G3, GRI G3.1, GRI G4, GRI Standards, AA1000, HKEX's ESG Reporting Guide, UNGC's Ten Principles, ISO 20121, ISO 14064, ISO 14001, OHSAS 18001, ISO 45001, ISO 9001, and ISO 10002, etc. British Standards Institution is a leading global standards and assessment body founded in 1901. The assurance is carried out in line with the BSI Fair Trading Code of Practice.

For and on behalf of BSI:



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Evelyn Chye, Managing Director BSI Malaysia

20 February 2024

Verifier of the Report:



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Mr. Aaron Chim  
Lead Assessor

GRI content index

<b>Statement of use</b>	United Plantations Berhad has reported the information cited in this GRI content index for the period of 1st January 2023 - 31st December 2023 with reference to the GRI Standards.
<b>GRI 1 used</b>	GRI 1: Foundation 2021

GRI STANDARD	DISCLOSURE	LOCATION
<b>GRI 2: General Disclosures 2021</b>	2-1 Organizational details	United Plantations in Brief, Page 2
	2-2 Entities included in the organization's sustainability reporting	About This Report, Page 34
	2-3 Reporting period, frequency and contact point	About This Report, Page 34
	2-4 Restatements of information	About This Report, Page 34 (There is no structural change in the Annual Report 2023)
	2-5 External assurance	About This Report, Page 34
	2-6 Activities, value chain and other business relationships	Creating Value Through UP's Integrated Business Activities, Page 48
	2-7 Employees	Our Employees, Page 79
	2-8 Workers who are not employees	Information unavailable,Nil
	2-9 Governance structure and composition	Sustainability Governance,Page 94
	2-10 Nomination and selection of the highest governance body	Corporate Governance Overview Statement, Page 120
	2-11 Chair of the highest governance body	Corporate Governance Overview Statement, Page 120
	2-12 Role of the highest governance body in overseeing the management of impacts	Corporate Governance Overview Statement, Page 120
	2-13 Delegation of responsibility for managing impacts	Sustainability Governance,Page 94
	2-14 Role of the highest governance body in sustainability reporting	Corporate Governance Overview Statement, Page 120
	2-15 Conflicts of interest	Corporate Governance Overview Statement, Page 120
	2-16 Communication of critical concerns	Sustainability Governance,Page 94
	2-17 Collective knowledge of the highest governance body	Corporate Governance Overview Statement, Page 120
	2-18 Evaluation of the performance of the highest governance body	Corporate Governance Overview Statement, Page 120
	2-19 Remuneration policies	Remuneration Committee - Statement on Corporate Governance Overview Statement, Page 120
	2-20 Process to determine remuneration	Remuneration Committee - Statement on Corporate Governance Overview Statement, Page 120
	2-21 Annual total compensation ratio	Confidentially constraints,Nil
	2-22 Statement on sustainable development strategy	Environment, Social and Sustainability Governance, Page 50
	2-23 Policy commitments	Environment, Social and Sustainability Governance, Page 50
	2-24 Embedding policy commitments	Environment, Social and Sustainability Governance, Page 50
	2-25 Processes to remediate negative impacts	Remuneration Committee - Statement on Corporate Governance, 120 - 125
	2-26 Mechanisms for seeking advice and raising concerns	"ESG Governance Environment Social (Employees, Community) Sustainability Governance Marketplace,46,47,50,73,86,91"
	2-27 Compliance with laws and regulations	Remuneration Committee - Statement on Corporate Governance Overview Statement, Page 120
	2-28 Membership associations	Procedure for Handling External Stakeholders' Issues, Page 86
	2-29 Approach to stakeholder engagement	Code of Ethics and Business Conduct,80
	2-30 Collective bargaining agreements	Profile of Directors, Page 10 - 12
<b>GRI 3: Material Topics 2021</b>	3-1 Process to determine material topics	Materiality, Page 42
	3-2 List of material topics	Materiality, Page 43
	3-3 Management of material topics	Materiality, Page 42
<b>GRI 201: Economic Performance 2016</b>	201-1 Direct economic value generated and distributed	Notes to the Financial Statement, Page 150
	201-2 Financial implications and other risks and opportunities due to climate change	Confidentially constraints,Nil
	201-3 Defined benefit plan obligations and other retirement plans	Notes to the Financial Statement, Page 193
	201-4 Financial assistance received from government	Confidentially constraints,Nil
<b>GRI 202: Market Presence 2016</b>	202-1 Ratios of standard entry level wage by gender compared to local minimum wage	"Paying Fair Wages and Employees' Benefits,Page 85"
	202-2 Proportion of senior management hired from the local community	Information unavailable,Nil
<b>GRI 203: Indirect Economic Impacts 2016</b>	203-1 Infrastructure investments and services supported	Social Commitments and Social Amenities, Page 87
	203-2 Significant indirect economic impacts	Information unavailable,Nil
<b>GRI 204: Procurement Practices 2016</b>	204-1 Proportion of spending on local suppliers	We endeavour to support local suppliers I the countries we operate in, which is Malaysia and Indonesia,Nil



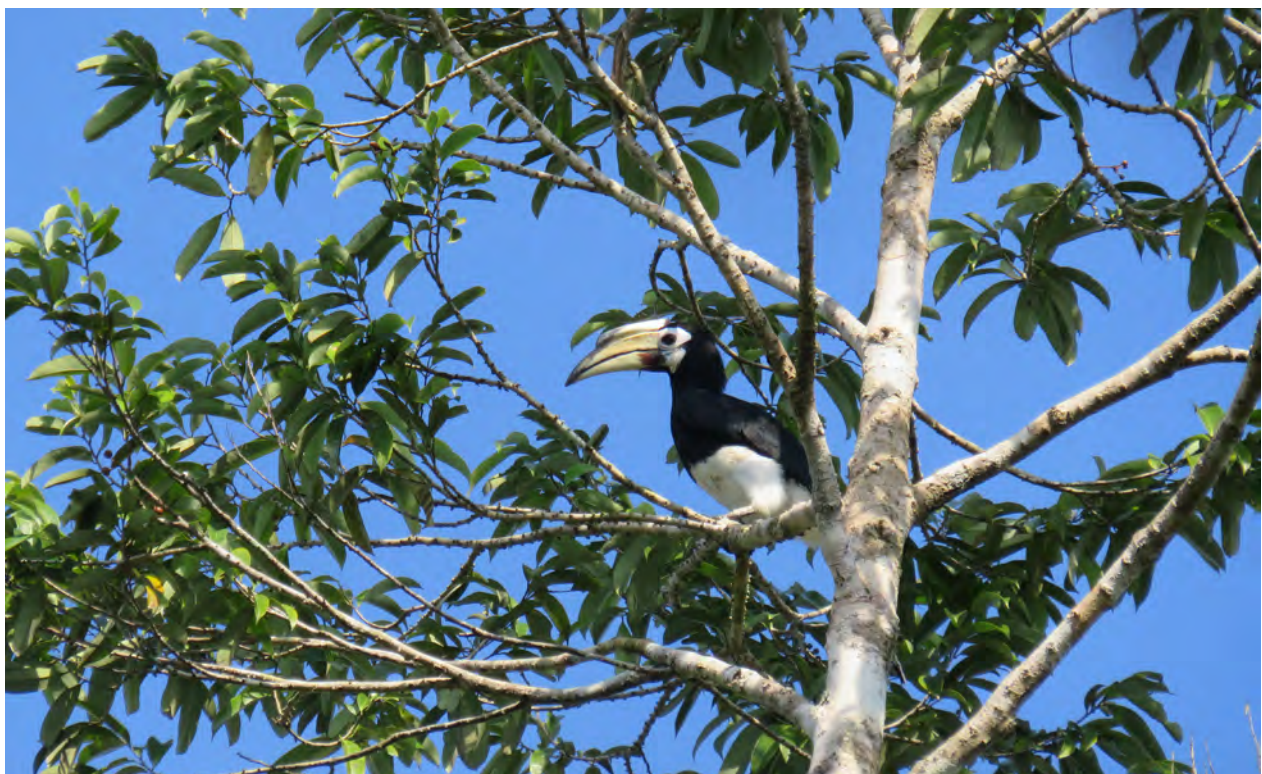
GRI STANDARD	DISCLOSURE	LOCATION
<b>GRI 205: Anti-corruption 2016</b>	205-1 Operations assessed for risks related to corruption	Internal Audit Function, Page 130
	205-2 Communication and training about anti-corruption policies and procedures	Internal Audit Function, Page 130
	205-3 Confirmed incidents of corruption and actions taken	Information unavailable,Nil
<b>GRI 206: Anti-competitive Behavior 2016</b>	206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	Information unavailable,Nil
<b>GRI 207: Tax 2019</b>	207-1 Approach to tax	Audit and Risk Committee Report, Page 129
	207-2 Tax governance, control, and risk management	Audit and Risk Committee Report, Page 129
	207-3 Stakeholder engagement and management of concerns related to tax	Information unavailable,Nil
	207-4 Country-by-country reporting	Information unavailable,Nil
<b>GRI 301: Materials 2016</b>	301-1 Materials used by weight or volume	Production and Level of Utilization of Oil Palm Biomass Residues in UP in 2023, Page 68
	301-2 Recycled input materials used	Fertilizer Equivalent of Oil Palm Biomass Residues Recycled on Land in UP in 2023, Page 69
	301-3 Reclaimed products and their packaging materials	Information unavailable,Nil
<b>GRI 302: Energy 2016</b>	302-1 Energy consumption within the organization	Biogas to Grid Project, Page 67
	302-2 Energy consumption outside of the organization	"Carbon Footprint Initiatives and Climate Action, Page 66 - 68"
	302-3 Energy intensity	"Carbon Footprint Initiatives and Climate Action, Page 66 - 68"
	302-4 Reduction of energy consumption	"Carbon Footprint Initiatives and Climate Action, Page 66 - 68"
	302-5 Reductions in energy requirements of products and services	"Carbon Footprint Initiatives and Climate Action, Page 66 - 68"
<b>GRI 303: Water and Effluents 2018</b>	303-1 Interactions with water as a shared resource	Water Impacts, Page 71 - 72
	303-2 Management of water discharge-related impacts	Water Impacts, Page 71 - 72
	303-3 Water withdrawal	Water Impacts, Page 71 - 72
	303-4 Water discharge	Water Impacts, Page 71 - 72
	303-5 Water consumption	Water Impacts, Page 71 - 72
<b>GRI 304: Biodiversity 2016</b>	304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	"Partnership, Biodiversity and Conservation, Page 54 - 62"
	304-2 Significant impacts of activities, products and services on biodiversity	"Partnership, Biodiversity and Conservation, Page 54 - 62"
	304-3 Habitats protected or restored	"Partnership, Biodiversity and Conservation,54 - 62"
	304-4 IUCN Red List species and national conservation list species with habitats in areas affected by operations	"Partnership, Biodiversity and Conservation, Page 54 - 62"
<b>GRI 305: Emissions 2016</b>	305-1 Direct (Scope 1) GHG emissions	"Carbon Footprint Initiatives and Climate Action, Page 66 - 68"
	305-2 Energy indirect (Scope 2) GHG emissions	"Carbon Footprint Initiatives and Climate Action, Page 66 - 68"
	305-3 Other indirect (Scope 3) GHG emissions	"Carbon Footprint Initiatives and Climate Action, Page 66 - 68"
	305-4 GHG emissions intensity	"Carbon Footprint Initiatives and Climate Action, Page 66 - 68"
	305-5 Reduction of GHG emissions	"Carbon Footprint Initiatives and Climate Action, Page 66 - 68"
	305-6 Emissions of ozone-depleting substances (ODS)	Not applicable,Nil
	305-7 Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	VORSEP Dust Collector System, Page 67
<b>GRI 306: Waste 2020</b>	306-1 Waste generation and significant waste-related impacts	Recycling of Pesticides Containers and Scheduled Wastes - Environment, Page 70
	306-2 Management of significant waste-related impacts	Information unavailable,Nil
	306-3 Waste generated	Waste Management, Page 70
	306-4 Waste diverted from disposal	Production and Level of Utilization of Oil Palm Biomass Residues in UP in 2023, Page 68
	306-5 Waste directed to disposal	Information unavailable,Nil
<b>GRI 308: Supplier Environmental Assessment 2016</b>	308-1 New suppliers that were screened using environmental criteria	Evaluation of Suppliers Sustainability Commitment, Page 105 - 106
	308-2 Negative environmental impacts in the supply chain and actions taken	Evaluation of Suppliers Sustainability Commitment, Page 105 - 106
<b>GRI 401: Employment 2016</b>	401-1 New employee hires and employee turnover	Our Employees, Page 79
	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	"Paying Fair Wages and Employees' Benefits,Page 85"
	401-3 Parental leave	Information unavailable,Nil

GRI STANDARD	DISCLOSURE	LOCATION
<b>GRI 402: Labor/Management Relations 2016</b>	402-1 Minimum notice periods regarding operational changes	Website: <a href="http://www.unitedplantations.com/employees/#Demographic-of-Employees">www.unitedplantations.com/employees/#Demographic-of-Employees</a>
<b>GRI 403: Occupational Health and Safety 2018</b>	403-1 Occupational health and safety management system	Occupational Safety and Health, Page 88
	403-2 Hazard identification, risk assessment, and incident investigation	Occupational Safety and Health, Page 88
	403-3 Occupational health services	Occupational Safety and Health, Page 88
	403-4 Worker participation, consultation, and communication on occupational health and safety	Occupational Safety and Health, Page 88
	403-5 Worker training on occupational health and safety	Occupational Safety and Health, Page 87
	403-6 Promotion of worker health	Occupational Safety and Health, Page 88
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Occupational Safety and Health, Page 88
	403-8 Workers covered by an occupational health and safety management system	Occupational Safety and Health, Page 87
	403-9 Work-related injuries	Occupational Safety and Health, Page 88
	403-10 Work-related ill health	Occupational Safety and Health, Page 88
<b>GRI 404: Training and Education 2016</b>	404-1 Average hours of training per year per employee	Information unavailable,Nil
	404-2 Programs for upgrading employee skills and transition assistance programs	Training and Development, Page 87
	404-3 Percentage of employees receiving regular performance and career development reviews	Information unavailable,Nil
<b>GRI 405: Diversity and Equal Opportunity 2016</b>	405-1 Diversity of governance bodies and employees	"Paying Fair Wages and Employees' Benefits,Page 85"
	405-2 Ratio of basic salary and remuneration of women to men	"Paying Fair Wages and Employees' Benefits,Page 85"
<b>GRI 406: Non-discrimination 2016</b>	406-1 Incidents of discrimination and corrective actions taken	"Paying Fair Wages and Employees' Benefits,Page 85"
<b>GRI 407: Freedom of Association and Collective Bargaining 2016</b>	407-1 Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	Evaluation of Suppliers Sustainability Commitment, Page 105 - 106
<b>GRI 408: Child Labor 2016</b>	408-1 Operations and suppliers at significant risk for incidents of child labor	Evaluation of Suppliers Sustainability Commitment, Page 105 - 106
<b>GRI 409: Forced or Compulsory Labor 2016</b>	409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor	Evaluation of Suppliers Sustainability Commitment, Page 105 - 106
<b>GRI 410: Security Practices 2016</b>	410-1 Security personnel trained in human rights policies or procedures	Training and Development, Page 87
<b>GRI 411: Rights of Indigenous Peoples 2016</b>	411-1 Incidents of violations involving rights of indigenous peoples	Not applicable,Nil
<b>GRI 413: Local Communities 2016</b>	413-1 Operations with local community engagement, impact assessments, and development programs	Land Disputes and FPIC, Page 91
	413-2 Operations with significant actual and potential negative impacts on local communities	Land Disputes and FPIC, Page 91
<b>GRI 414: Supplier Social Assessment 2016</b>	414-1 New suppliers that were screened using social criteria	Evaluation of Suppliers Sustainability Commitment, Page 105
	414-2 Negative social impacts in the supply chain and actions taken	Evaluation of Suppliers Sustainability Commitment, Page 105
<b>GRI 415: Public Policy 2016</b>	415-1 Political contributions	Confidentially constraints, Nil
<b>GRI 416: Customer Health and Safety 2016</b>	416-1 Assessment of the health and safety impacts of product and service categories	Food Safety and Certifications, Page 102
	416-2 Incidents of non-compliance concerning the health and safety impacts of products and services	Food Safety and Certifications, Page 102
<b>GRI 417: Marketing and Labelling 2016</b>	417-1 Requirements for product and service information and labelling	Food Safety and Certifications, Page 102
	417-2 Incidents of non-compliance concerning product and service information and labelling	Food Safety and Certifications, Page 102
	417-3 Incidents of non-compliance concerning marketing communications	Food Safety and Certifications, Page 102
<b>GRI 418: Customer Privacy 2016</b>	418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	Website: <a href="http://www.unitedplantations.com/wp-content/uploads/2020/03/Personal_Data_Protection_Policy.pdf">www.unitedplantations.com/wp-content/uploads/2020/03/Personal_Data_Protection_Policy.pdf</a>



Sustainability Accounting Standards Board (SASB) Standards Content Index

Topic	Metric	Category	Unit of Measure	Code
Greenhouse Gas Emissions	Gross global Scope 1 emissions	Quantitative	1.36 mt CO <sub>2</sub> eq Metric tons (t) CO <sub>2</sub> -e	FB-AG-110a.1
	Discussion of long- and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	Discussion and Analysis	Page 66, Greenhouse Gas Emissions	FB-AG-110a.2
	Fleet fuel consumed, percentage renewable	Quantitative	Not applicable	FB-AG-110a.3
Energy Management	Operational energy consumed	Quantitative	Not applicable	FB-AG-110a.3
Water Management	Total water withdrawn	Quantitative	987564.77 m <sup>3</sup>	FB-AG-140a.1
	Description of water management risks and discussion of strategies and practices to mitigate those risks	Discussion and Analysis	Page 70, Climate Risk Assessment	FB-AG-140a.2
	Number of incidents of non-compliance associated with water quality permits, standards and regulations	Quantitative	Nil	FB-AG-140a.3
Workforce Health & Safety	(1) Total recordable incident rate (TRIR), (2) fatality rate, and (3) near miss frequency rate (NMFR) for (a) direct employees and (b) seasonal and migrant employees	Quantitative	Malaysia LTIFR - 5.28 FAR - 0 Near miss - Nil  Indonesia LTIFR - 115.2 FAR - 0 Near miss - Nil	FB-AG-320a.1
Environmental & Social Impacts of Ingredient Supply Chain	Percentage of agricultural products sourced that are certified to a third-party environmental and/or social standard, and percentages by standard	Quantitative	100% RSPO, MSPO, ISPO certified	FB-AG-430a.1
	Suppliers' social and environmental responsibility audit (1) non-conformance rate and (2) associated corrective action rate for (a) major and (b) minor non-conformances	Quantitative	Page 105 - 106, Supplier Evaluation on Sustainable Commitment	FB-AG-430a.2
	Discussion of strategy to manage environmental and social risks arising from contract growing and commodity sourcing	Discussion and Analysis	Page 105 - 106, Supplier Evaluation on Sustainable Commitment	FB-AG-430a.3



An Oriental Pied Hornbill (*Anthracoceros Albirostris*) spotted resting atop a branch at one of our Indonesian properties.

## Glossary

Biodiversity (BioD)	The diversity (number and variety of species) of plant and animal life within a region.
Biological Oxygen Demand (BOD)	The amount of oxygen used when organic matter undergoes decomposition by micro-organisms. Testing for BOD is done to assess the amount of organic matter in water.
Carbon Footprint	A measure of the total amount of greenhouse gases, including carbon dioxide, methane and nitrous oxides, emitted directly or indirectly by an organisation, event, product or person.
Child Labour	According to the International Labour Organization (ILO) core labour standards, minimum age should not be less than 16 years old.
CO <sub>2</sub> Equivalents	Carbon dioxide equivalents (CO <sub>2</sub> eq) provide a universal standard of measurement against which the impacts of releasing (or avoiding the release of) different greenhouse gases can be evaluated.
Crude Palm Oil (CPO)	Oil produced from oil palm fruits in milling process.
Creating Shared Value (CSV)	A responsibility to manage our resources resourcefully and engage in activities that optimize return for shareholders and the society we operate in.
Deforestation	Defined by UP as direct human-induced conversion of forest to non-forests, with an exception for small scale low intensity subsistence conversion by indigenous peoples and forest dependent traditional communities (consistent with RSPO P & C as well as Indonesian laws, Environmental Impact Assessments (EIA) and High Conservation Value Assessment (HCV).
Effluents	Water discharged from one source into separate body of water, such as mill process water.
ERT	Emergency Response Team
Forced Labour	A person who is coerced to work under the threat of violence, intimidation, or undue stress of penalty.
Free, Prior and Informed Consent (FPIC)	The principle that a community has the right to give or withhold its consent to proposed projects that may affect the lands they customarily own, occupy or otherwise use.
Fresh Fruit Bunches (FFB)	Bunch harvested from the oil palm tree. The weight of the fruit bunch ranges between 10 kg to 40 kg depends on the size and age.
FDA	Food and Drug Administration
Global Reporting initiative (GRI)	A multi-stakeholder standard for sustainability reporting, providing guidance on determining report content and indicators.
Greenhouse Gas (GHG) emissions	Greenhouse gas or carbon emissions are gasses in an atmosphere that absorb and emit radiation within the thermal infrared range. This process is the fundamental cause of the greenhouse effect. The primary greenhouse gases in the Earth's atmosphere are water vapor, carbon dioxide, methane, nitrous oxide, and ozone.
HRSS	Human Resources Sustainability and Safety
High Conservation Value (HCV)	The concept of High Conservation Value Forests (HCVF) was first developed by the Forest Stewardship Council (FSC) in 1999 as their ninth principle. The FSC defined HCVF as forests of outstanding and critical importance due to their environmental, socio-economic and cultural biodiversity and landscape value.
High Carbon Stock (HCS)	The HCS Approach is a methodology to avoid deforestation in land development. The approach stratifies the vegetation on an area of land into different classes using analyses of satellite images and field plot measurements. Each vegetation class is validated through calibrating it with carbon stock estimates in the above-ground tree biomass.
Hak Guna Usaha(HGU)	The right to enjoy immovable property of another person with the obligation to pay the annual income to the landowner.
ILO (International Labour Organisation)	Is a tripartite world body representative of labour, management and government, and is an agency of the United Nations. It disseminates labour information and sets minimum international labour standards called "conventions", offered to member nations for adoption.
Integrated Pest management (IPM)	A pest management system that in context of the associated environment and the population dynamics of the pest species utilizes all suitable techniques and methods in as compatible a manner as possible and maintains the pest population at levels below those causing economically unacceptable damage and loss.
IUCN Red List	Based in Switzerland, the International Union for Conservation of Nature and Natural Resources (also known as The World Conservation Union) is an organisation involved in the preservation of natural resources. IUCN publishes the Red Data Book, which lists the endangered species of every nation.
Identity Preserved/ IP	Certified sustainable palm oil is physically separated from other certified and non-certified palm oil throughout the supply chain, i.e from the RSPO mill through to the end-user.
Oil Extraction Rate	The amount of oil extracted from oil palm fruit at a mill. Crude palm oil (CPO) is extracted from the flesh; palm kernel oil (PKO) from the nut.
Mass Balance	Certified sustainable palm oil and non-certified palm oil is mixed to avoid the cost of keeping the two quantities controlled. The mass balance system is constructed in such a way that volumes of RSPO certified products shipped will never exceed volumes received by the end-user.
Mature Oil Palm	After planting, the oil palm tree is classified as immature until fresh fruit bunches are produced, which is approximately 30 months later, whereupon the oil palm tree is classified as mature.
MOSH	Mineral Oil Saturated Hydrocarbons
MOAH	Mineral Oil Aromatic Hydrocarbons
Non-Governmental Organisation (NGO)	Is used in this report to refer to grassroots and campaigning organisations focused on environmental or social issues.
Palm oil mill effluent (POME)	By-product of processed fresh fruit bunch (FFB).
Peat	Peat is an accumulation of partially decayed vegetation matter. Peat forms in wetlands or peat lands, variously called bogs, moors, muskegs, pocosins, mires, and peat swamp forests.
Plasma schemes	A programme initiated by the Indonesian government to encourage the development of smallholders' plantations with the assistance and cooperation of plantation companies (the nucleus) which assist and support the surrounding community plantations (the plasma).
Palm Kernel (PK)	Seed of the oil palm fruit, which is processed to extract palm kernel oil and other by-products.
Roundtable on sustainable palm oil (RSPO)	A non-governmental multi-stakeholder organisation based in Kuala Lumpur, Malaysia. The organisation has developed a certification scheme for sustainable palm oil.
Social Impact Assessment	A process of analysing, monitoring and managing the intended and unintended, both positive and negative social consequences of planned interventions (policies, programs, plans, projects) and any social change processes invoked by the interventions. Its primary purpose is to bring about a more sustainable and equitable biophysical and human environment.
Segregated/ SG	Certified sustainable palm oil is physically separated from non-certified palm oil throughout the entire supply chain.
Stakeholders	Any group or individual who are affected by or can affect a company's operations.
Sustainability	A term expressing a long-term balance between social, economic and environmental objectives. Often linked to Sustainable Development which is defined as "Development that meets the need of current generations without compromising the needs of future generations"
Traceability	Traceability is the capability to track sustainable palm oil along the entire supply chain.
Toxicity	Toxicity measures the degree to which a substance is harmful to living organisms.