STRATEGIC FRAMEWORK

IOI is progressing on a clearly defined strategic road map to transform the Group into a high value-added, diversified palm-based products' producer, to increase resilience and competitiveness for the future. Our foundation is built on pillars of Sustainable Growth, Driving Innovations, Human Capital Development and Economies of Scale throughout our operations.

OUR PURPOSE

Committed to sustainable agriculture and innovative products.

WISION

Our Vision is to be a leading and sustainable Malaysian business corporation with global presence.

MISSION

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Our Mission is to achieve responsible and sustainable commercial success by addressing the interests of all our stakeholders, caring for the community and the environment, and adopting best practices to be globally competitive.

OUR GROUP'S FIVE-YEAR PLAN 2020-2024

3 STRATEGIC ENABLERS 5 STRATEGIC PRIORITIES		KEY METRICS	
1 ENABLER 1	Increase Yield	 Increase Plantation Oil Yields by 15% by 2024. Utilise Elite Clonal Palms in 50% of Our Replanting Materials. Target High Early Yields from Young Mature Palm Age. Ensure Proper Fertiliser Application to Increase Target Yields. 	
Human Capital Development & Culture	Optimise Workforce	 Reduce Workforce by More than 25% by 2024. Increase Plantation Workers' Productivity by 3% Every Year. Implement Mechanised Mainline Fresh Fruit Bunches Evacuation System in All Malaysian Estates by 2023. 	
ENABLER 2	Diversify Crops	 Plant 5,000 Hectares of Coconut and 200 Hectares of Durian, Equivalent to 4% of Our Malaysian Plantations. Plant Three Types of Fast-Growing and High Value Fruit Crops as Intercrop with Coconut. 	
Sustainability BINABLER 3 Technology &	Increase the Non-CPO Segment	 Derive Revenue from Oil Palm By-Products and Processing Waste. Commence Production of High-Performance Palm Wood Boards and Panels by Q3 of 2023. Establish Oil Palm Trunks ("OPT") Research and Development and Technology Transfer. Scale-Up Business and Establish a Leading Market Position in OPT Products. 	
Digitalisation	Grow the Oleochemical Segment	 Increase Oleochemical Segment's Sales Volume by 15%. Derive Energy, Cost and Operational Efficiency Savings of 6%. Improve the Oleochemical Segment's Profitability by 25%. 	

+ Refer to Strategic Enablers on pages 43-45 and Strategic Priorities on pages 46-51.

STRATEGIC ENABLERS



ENABLER 1 Human Capital Development & Culture

CONNECTION

Our Key Stakeholder Groups

Employees

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Shareholders & Investors

Our Six Capitals

Å Human

🚡 Financial

Social & Relationship

Intellectual

Our Risks

Business Resilience

Reliance on Manual Workers

IMPORTANCE FOR IOI

Human Capital Development and Culture is vital to the growth and productivity of the organisation. Our employees are an invaluable asset who facilitate business growth and drive organisational excellence. We are committed to developing a world-class company that is built upon the strengths of its people. In doing so, we continue to nurture, develop and engage our employees to gain and keep a competitive advantage for the organisation. It is crucial to equip our workforce with the required skills to deliver our five strategic priorities.

OUR APPROACH

- 1. Creating and sustaining a high-performing workforce.
- 2. Managing employer branding.
- 3. Enhancing human resource ("HR") digitalisation.

KEY INITIATIVES

- 1. Cultivate an operational excellence work culture and create a highly disciplined and competent workforce.
- 2. Enhance employees' experience through HR digitalisation.
- 3. Continuously nurture future IOI leaders.
- 4. Expand employees' capabilities through reskilling and upskilling their competencies.
- 5. Promote employees' empowerment and inclusion.
- 6. Enhance employee engagement and encourage workplace innovation.
- 7. Provide career advancement, offer competitive remuneration and enhance employee benefits.

KEY HIGHLIGHTS

- 1. Won the Best Malaysia Employers' Awards by World HRD Congress and the HR Excellence Awards by Human Resources Online.
- 2. Established a Talent Council policy, appointed Council Members and rolled out talent succession programme.
- 3. Organised IOI Well-being Series campaign.
- 4. Improved medical coverage for unionised employees.
- 5. Implemented employee engagement programme for plantation employees with the tagline "WE CARE".

WE Communicate; Aid & Assist; Rapport; Educate

- 6. Hosted festive engagement activities to promote team spirit.
- 7. Introduced Internal Transfer Policy for the Group and implemented two non-working Saturdays in a month for operating centre-based executives.
- 8. Conducted roadshows on combating forced labour and upholding human rights.
- 9. Extended the IOI Intranet platform to remote plantation operating centres.
- 10. Improved Learning Management System ("LMS") content and introduced departmental learning.
- 11. Rolled out Leadership Development Programmes for high-potential employees.
- 12. Revisited leadership purpose, values and team dynamics through a Senior Leaders' Retreat.

FOCUS FOR FY2024

- 1. Enhance succession planning practices through collaboration with departmental heads and training providers.
- 2. Conduct employee engagement survey to understand the pulse of employees.
- 3. Collaborate with various third-party providers to create awareness and improve employees' well-being.
- 4. Organise events to encourage employee engagement, team bonding and participation in charity works.

GROUP)VERVIEW

GOVERNANCE

ANNUAL REPORT 2023

STRATEGIC ENABLERS

2

ENABLER 2 Sustainability

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CONNECTION

Our Key Stakeholder Groups

Employees

Customers

Communities

Suppliers

Shareholders & Investors Industry Associations/ Civil Societies

Our Six Capitals

- Human
- 🐌 Natural
- 🔂 Financial
- Manufactured
- 🗞 Social & Relationship
- (*) Intellectual

Our Risks

RI Business Resilience New Trade Regulations

 Supply Chain Compliance
 Reliance on Manual Workers
 Environmental

Sustainability

Refer to our Sustainability Report 2023 for a detailed review.

IMPORTANCE FOR IOI

Our sustainability culture is firmly embedded within our organisation. We balance company growth and development with environmental protection and conservation as well safeguarding the well-being of both our employees and the communities that may be affected by our operations. This course of action is in alignment with our three pillars of sustainability (People, Planet, Prosperity) + Partnership, specifically strategic partnerships with relevant stakeholders. For long-term sustainable value creation and achieving sustainability excellence, we integrate the 7Rs of Circularity within all our operations and businesses.

OUR APPROACH

- 1. Aligning sustainability to key policies and IOI's five strategic priorities.
- 2. Establishing forward-looking sustainability goals and commitments.
- 3. Strengthening sustainability governance through stakeholder consultation, accountability and transparent reporting.
- 4. Establishing proper systems and processes to monitor progress, communicate actions and meet stakeholders' expectations.
- Embracing six of the 17 United Nations Sustainable Development Goals ("UN SDGs") which are most relevant to our businesses and operations.
- 6. Integrating the 7Rs of Circularity in our sustainability initiatives.
- 7. Integrating regenerative and precision agriculture within our plantations.
- 8. Benchmarking against industry leaders, fostering best practices and culture, and embracing green technology.

KEY INITIATIVES

- 1. Commit to implementing No Deforestation, No New Planting on Peat and No Social Exploitation ("NDPE"), Zero Burning Policy in our plantations.
- 2. Practise the highest level of transparency and inclusivity in stakeholder engagement.
- Continuously monitor all stages of the palm oil supply chain, including obtaining relevant certifications and complying with the required standards.
- 4. Protect High Conservation Value ("HCV") and High Carbon Stock ("HCS") areas within our operations.
- Progressively reduce greenhouse gas ("GHG") emissions from the operations and move towards our net zero target through the Group-wide Climate Change Action initiative ("CCAi").
- 6. Adopt and practise the 7Rs of Circularity especially in water and waste management within our operations and workplace.
- 7. Adopt and practise precision agriculture and regenerative agriculture methods in our estates.
- 8. Benchmark industry best practices through participation in voluntary Carbon Disclosure Project ("CDP"), Sustainability Policy Transparency Toolkit ("SPOTT"), Dow Jones Sustainability Indices ("DJSI"), etc.
- 9. Implement policies and guidelines that have been put in place to ensure no child or forced labour and protect human rights. 10. Progress work productivity with technology, women empowerment and quality education for children.

KEY HIGHLIGHTS

- 1. Made marked improvements in several Environmental, Social and Governance ("ESG") ratings and assessments* and won gold at The Edge Malaysia ESG Awards 2022. *Refer to our Highlights of the Year on page 12 for the full list.
- 2. Launched IOI Urban Garden initiative, led Group-wide International Women's Day celebration and conducted a panel discussion on IOI's Pathway to Net Zero.
- 3. Committed to Science Based Target initiative ("SBTi") Forest, Land and Agriculture ("FLAG") standards.
- 4. Continued reporting based on the Task Force on Climate-Related Financial Disclosures ("TCFD") and, this year, began reporting the financial investments related to GHG reduction.
- 5. Performed due diligence audits for recruitment agencies at the source country and provided IOI Mesra mobile application as another source of grievance channel for our workers.
- Signed a Transformation Concept commitment for achieving carbon dioxide ("CO₂") neutrality in IOI Oleo GmbH and verified CO₂ calculator according to international standard.
- Began implementing ISO 14064 GHG verification system in stages and monitoring key sustainability projects at our oleochemical manufacturing operations towards realising net zero GHG emissions for Scope 1, 2 and 3 by 2040.

FOCUS FOR FY2024

- 1. Digitalise sustainability data to enhance data accuracy, analytics and auditability.
- 2. Work alongside Roundtable on Sustainable Palm Oil ("RSPO") on the revision of the PalmGHG calculator.
- Continue to report GHG emissions following the recommendation of TCFD and International Sustainability Standards Board ("ISSB") as well as meet the requirements and reduction targets of SBTi FLAG.
- 4. Enhance biodiversity and ecosystem services through rehabilitation and regenerative agriculture.
- 5. Explore new technology and innovation for better energy efficiency in our operations.
- 6. Expand Workers Monitoring Programme by &Wider to Sabah.
- Implement key sustainability projects in our oleochemical operations that include new expansion of photovoltaic solar power systems in Penang and Johor, installation of a second cogeneration power plant in Penang, energy optimisation (heat recovery) projects and sludge dryer system.
- 8. Finalise the roll-out of Transformation Concept project for IOI Oleo GmbH in Germany.



IMPORTANCE FOR IOI

In the age of the Fourth Industrial Revolution ("IR4"), we are adopting more technological innovations to enhance our upstream and downstream operations. Our five strategic priorities are underpinned by technologies, from mechanisation equipment to digital tools and solutions. Digitalisation, automation, mechanisation and novel technologies enable us to execute our strategies more effectively and modernise our business to remain competitive and propel the organisation to the digital era.

OUR APPROACH

- 1. Ensuring the standardisation of business processes within our core business segments, drawing on various analytical and transactional capabilities of the SAP system to improve efficiencies.
- Providing savings in plantation operations' support services based on SAP system and other integrated digital solutions. Implement electronic salary payment and enhance mobile network connectivity in the estates.
- Adopting agricultural and manufacturing innovations and technologies.
- Enhancing our estates' operational efficiency with efficient cost and reducing dependency on manual workers through mechanisation
- Embedding digitalisation and automation in our oleochemical manufacturing processes in line with the IR4 aspiration.

KEY INITIATIVES

Upstream Digitalisation: 1.

- Ensure proper management and full utilisation of the SAP system. Explore robotic process automation a. ("RPA") and other digital solutions including business intelligence and data analytics.
- Enhance estates' operational efficiency and cost savings through the electronic plantation monitoring system ("ePMS") and e-wallet salary crediting system. Embark on more automation projects in upstream and downstream manufacturing.

Mechanisation:

a. Reduce worker dependency and increase workforce productivity in estates through mechanisation.

Downstream Digitalisation:

- Assess our prowess in IR4 adoption by conducting the IR4 readiness assessment.
- Strategise digitalisation and automation projects in line with IR4. b.
- Identify roll-out plans for IR4.

KEY HIGHLIGHTS 1.

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b.

- Upstream Digitalisation:
- Expanded SAP software functionality for mobility usage, reporting, cash requisition and integration with digitalisation for mill operations.
- Implemented SAP Business Planning and Consolidation for budget planning. b.
- Expanded more digitalisation with ePMS in alignment with mechanisation and operation direction.
- d. Explored the usage of cognitive technology and artificial intelligence ("AI") to improve efficiency and accuracy in operation
 - Implemented Internet of Things ("IoT") sensors in refinery/kernel crushing operations.
- Implementing the e-wallet salary crediting system in all our Malaysian plantation operating units. f
- Mechanised Mainline Fresh Fruit Bunches ("FFB") Evacuation System:
- Implemented at 96% of suitable estates across Malaysia as of FY2023.
 - Implemented infield collection system at 54% of potential hectarage in Malaysian estates and introduced to Indonesian estates.
- с. Introduced and implemented mechanical weed sprayer terrace for semi-mechanised upkeep at Paya Lang and Merchong Estates.

Downstream Digitalisation:

- Established unmanned weighbridge operation in new warehouse to improve efficiency and reduce manpower. b. Upgraded the automation system for a Medium-Chain Triglycerides ("MCT") production plant to a new Yokogawa system in IOI Oleo GmbH.
 - Installed a new Near-Infra Red ("NIR") online system in IOI Oleo GmbH.
- FOCUS FOR FY2024

Upstream Digitalisation: 1.

- Expand more functionality in RPA, SAP Fiori and SAP BW for smarter digitisation; expand IoT innovation in refinery and explore possible integration with SAP.
- b. Implement ESG Digital Platform Reporting
- c. Continue to implement Enterprise Resource Planning ("ERP") system for Indonesia's plantation operating units. Mechanisation:
- Expand the mechanised mainline FFB evacuation system and infield collection system to all potential areas in a. Sabah and Indonesia
- b. Progressively expand smaller upkeep machines for terrace area in Malaysian estates and upgrade the existing machines for greater efficiency.

Downstream Digitalisation:

- Upgrade the existing SAP system for oleochemical manufacturing plants in Malaysia. a.
 - Adopt advance warehouse automation and roll out a new sales planning tool. Finalise the MCT production efficiency and capacity increment project for IOI Oleo GmbH by the end of 2024.
- + Refer to Group Business Review on pages 64-75 for a detailed review of our digitalisation initiatives.

REPORT

ADDITIONAL NFORMATION

STRATEGIC PRIORITIES

To maintain our focus on sustainable value creation, we have identified five strategic priorities for 2020-2024.

This focused approach ensures that we are on track to deliver sustainable growth and provide our stakeholders with valuable returns over the short, medium and long-term time frame. We have a resource allocation plan in place to execute these strategic priorities based on the capital inputs identified in our business model on pages 26-27.

As we work towards achieving our 2020-2024 targets, we closely monitor the performance of each strategic focus area including its key activities which are benchmarked against Key Performance Indicators ("KPIs"), and activities planned for the future.

STRATEGIC PRIORITY 1



Increase Yield

Oil palm planting remains the most essential upstream activity in our integrated palm oil business model, which directly impacts the performance of our downstream manufacturing business.

We strive to achieve consistently high yield through improved planting materials, new replanting methods and increased efficiency in crop evacuation to optimise business returns, and maintain IOI's competitiveness locally and globally.

Refer to Group Business Review on Plantation on pages 64-69 for a detailed review.

CONNECTION

Our Key Stakeholder Groups



OUR KEY INITIATIVES

We aim to produce palm oil sustainably to meet our market demand.

- 1. **Improved Planting Materials**: Produce more high-yielding and superior clonal planting materials for high yields and high returns.
- 2. **Mechanisation:** Expand mechanisation projects and adopt best options throughout our operations to increase operational efficiency.
- 3. Agricultural and Field Management Practices: Employ best agricultural practices, improve field conditions and optimise land usage in our oil palm plantations.
- 4. **Digital Tools**: Employ digital tracking system throughout our plantation operations.
- 5. Fertilisation: Adopt a balanced nutrients approach and application to achieve the desired target yields.

ACHIEVEMENTS IN 2023

- We have planted elite high-yielding clonal palms from IOI Palm Biotech Sdn Bhd and superior third-generation hybrid palm seedlings from IOI Research Centre in suitable areas and terrains.
- Our Baturong Palm Oil Mill in Sabah recorded the highest average oil extraction rate ("OER") of 24.03% among all plantation companies in Malaysia as of FY2023.
- We have expanded our estate mechanisation projects and implemented block harvesting at about 96% of suitable estates whereby 80% of potential hectarage have been converted to mechanised mainline FFB evacuation system.
- We have implemented mini tractor grabber FFB infield collection system in eight suitable estates.
- We adhered to procedures and guidelines in our replanting efforts, managed pest and diseases through extensive research and development ("R&D") and implemented precision farming with timely fertiliser and weedicide applications.
- We improved land preparation and carried out soil ripping and pulverising of oil trunk chips for all oil palm and coconut replanting to minimise future infestation of *Ganoderma* and rhinoceros beetle.
- We pronouced early declaration to maturity in performing fields, performed scout harvesting monitoring from 24 months, carried out ablation and improved estates' road conditions.
- We utilised geographical information system ("GIS") technology, electronic plantation monitoring system ("ePMS") and drones to assess field performance, track yield and monitor our plantation.

PRIORITIES FOR 2024

Improved Planting Materials

- Utilise high-yielding clonal palms from IOI Palm Biotech for 50% of planting materials in field planting at suitable areas and terrains.
- 2. Release more third-generation hybrid palm seedlings from our conventional breeding programme of Deli dura and AVROS pisifera on the basis of better fresh fruit bunches ("FFB") production with more uniformity in growth and characteristics, and better oil extraction rate.
- 3. Conduct molecular and genome research to develop genomicsbased solutions for marker-assisted breeding and selection for longterm improvement of oil palm planting materials. Current projects include Low Height Increment Molecular Marker Development, Lipase Marker Testing and International Collaboration Oil Palm Genome Research Project known as Oil Palm Gene Express.
- 4. Identify more areas and terrains for planting high-yielding elite clonal palms.
- 5. Introduce new progenies of planting materials that will tolerate *Ganoderma* infection and explore *Virescens* oil palm to reduce the tendency of harvesting unripe bunches.

Mechanisation

- 1. Expand the mechanised mainline FFB evacuation system and infield collection system to all potential areas in Sabah and Indonesia.
- Develop new functions and designs of existing equipment to upgrade the machines for workers' operational comfort and improve productivity.

Agricultural and Field Management Practices

- 1. Expand best practices for replanting by adhering to standard operating procedures and good agricultural practice guidelines.
- 2. Perform pulverising for all replanting cycles to eradicate rhinoceros beetle, followed by soil ripping to minimise future *Ganoderma* infection.
- 3 R&D department will enhance advisory service in estates to manage pest and diseases and improve weed management systems.
- 4. Early declaration to maturity for performing fields and carry out scout harvesting 24 to 36 months from field planting for all immature areas.

Digital Tools

1. Utilise digital tools including GIS technology, ePMS and drones to assess field performance, yield-tracking and identification of progeny, and monitor our plantation.

Fertilisation

1. Implement precision applications through mechanisation and digital tracing for timely and balanced fertiliser applications.



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GOVERNANCE

STRATEGIC PRIORITY 2

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Optimise Workforce

The plantation industry is heavily dependent on manual workers. We seek to implement initiatives to modernise our upstream business.

With this, we can address the issue of worker shortage and reduce our dependency on manual and migrant workers in the long run.

OUR KEY INITIATIVES

We will optimise our plantation workforce by increasing land to worker ratio through implementation of various estate mechanisation and digitalisation programmes.

- 1. **Training**: Plan and improve training provision for estate personnel to improve productivity.
- 2. Harvesting Methods: Streamline estates' harvesting method and restructure harvesting work process.
- 3. Upgrade Mechanised Mainline FFB Evacuation System: Implement and expand the mechanised mainline FFB evacuation system.
- 4. Mechanisation: Mechanise infield FFB collection and expand the usage of mechanical cart and power barrow/crawler for harvesting. Utilise other motorised tools to increase operational efficiency.

ACHIEVEMENTS IN 2023

- We continued to provide training and briefing to our estates' personnel, and increased the number of skilled workers.
- We implemented the mechanised mainline FFB evacuation system at our estates in Malaysia and Indonesia.
- Our mechanised tools such as motorised palm cutter and power barrow have improved harvesting productivity, enabling workers to earn better wages and attracting more locals to work in the plantation.
- Our mechanical sprayer and fertiliser spreader have reduced manual worker dependency for upkeep work, while mechanical front loader has increased productivity of EFB/POME application.
- We conducted a Mechanisation Roadshow for estate personnel in Peninsular Malaysia.

Special Incentive for Harvesters

Our Six C

• We have allocated special incentives for harvesters based on their recorded working days.

PRIORITIES FOR 2024

Training

1. Provide training and briefing to estates' personnel.

Harvesting Methods

 Create more skilled workers with modified division of labour and usage of suitable machines.

Upgrade Mechanised Mainline FFB Evacuation System

- 1. Expand the mechanised mainline FFB evacuation system, utilising tractors with grabbers to load and unload FFB into bins.
- 2. Integrate the mechanised mainline FFB evacuation system with the mechanical assisted infield collection to assist estates for efficient crop evacuation.

Mechanisation

- 1. Expand the mechanised infield FFB evacuation by using mechanical cart/mini tractor grabber/crawler to collect infield FFB and deliver to the platform/bin.
- 2. Expand the use of motorised tools such as power barrow/crawler and motorised palm cutter to increase productivity and attract more locals to work in the plantation.
- 3. Explore new technologies such as mechanical fertiliser spreaders and herbicide applications with global positioning system ("GPS") technology and autonomous system.
- Explore the use of drones for pesticides application, especially in the nursery and immature planting areas. We aim to reduce workers' dependency for upkeep work.

New IOI/National Union of Plantation Workers ("NUPW") Collective Agreement ("CA")

1. Negotiate better terms and conditions for the workers in the new CA for 2023 onwards.

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Refer to Group Business Review on Plantation on pages 64-69 for a detailed review.

CONNECTION

Our Key Stakeholder Groups



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Our Risks & Opportunities

Our Material Matters

STRATEGIC PRIORITIES

STRATEGIC PRIORITY 3



Diversify Crops

Crop diversification brings a range of benefits. As part of our diversification strategy, we are exploring the potential of other higher value crops to be planted.

Diversifying our cropping operation will provide good returns and help limit our exposure to palm oil price volatility.

OUR KEY INITIATIVES

We aim to diversify our planting of crops from 99% reliance on oil palm to other higher value crops. Our broad initiatives are:

- Planting Materials: Identify and acquire planting materials for coconut, banana and pineapple cultivation.
- Coconut Breeding: Identify and acquire coconut germplasm material (dwarf, tall and hybrid) for coconut breeding.
- 3. Crop Cultivation: Implement best cultivation practices for coconut and other crops (durian, pineapple, avocado and banana). Introduce intercropping to multiply our productivity on a hectarage basis, as compared to monoculture of oil palm.
- 4. Land Utilisation: Optimise land utilisation for other crops.

ACHIEVEMENTS IN 2023

- We planted a total of 1,471 hectares ("ha") of coconuts, 303 ha of bananas, 47 ha of pineapples and 28 ha of durians as of FY2023.
- We have identified varieties of coconuts for future planting such as *Matag*, *Tacunan* and *Nias*.
- We have implemented online marketing orders and price offers.

PRIORITIES FOR 2024

Planting Materials

1. Source for good planting materials for coconut expansion.

Coconut Breeding

- 1. Produce varieties with desirable characteristics for propagation through mass selection and biotechnological techniques.
- 2. Refine existing self-pollination techniques to produce coconuts with better varieties, high yields and higher oil content.
- 3. Produce more *Matag* coconut.

Crop Cultivation

- 1. Expand cultivation of coconut, banana, pineapple and durian. Continue to identify higher value crops with high market demand.
- 2. Implement irrigation system for coconut.
- 3. Provide training to estates' personnel.
- 4. Plant avocado in Sagil Estate.
- 5. Apply new agricultural and digital technologies to improve yield and efficiency, and reduce the production cost.
- 6. Engage wholesalers and expand online marketing to market and promote the crops.

Land Utilisation

- 1. Identify more areas to be planted with other crops (coconut, durian, pineapple, avocado and banana).
- 2. Expand the banana intercropping with oil palm replanting programme at Bahau Estate and Kuala Jelei Estate.
- 3. Employ mechanisation and digitalisation tools to improve productivity and reduce dependency on manual workers.

CONNECTION









GOVERNANCE

STRATEGIC PRIORITY 4



Increase the Non-Crude Palm Oil ("CPO") Segment

Oil palm by-products such as oil palm trunks ("OPT") and empty fruit bunches ("EFB") are an ideal source for cellulose-based natural fibres. Oil palm processing waste such as palm oil mill effluent ("POME") and others are a good source of bio-based raw materials.

Globally, there is a growing consumer demand for environmentally-friendly products and a shift towards sustainable production.

The non-CPO segment acts as a stimulus to moderate the impact of palm oil price volatility and provide an added advantage to our overall diversification strategy.

OUR KEY INITIATIVES

We aim to convert oil palm by-products and processing waste into value-added products at a competitive cost. Below are some of the applications of oil palm by-products and processing waste which IOI is exploring:

OPT: Produce palm wood boards and panels which are high-performance timber equivalent.

EFB: Repurpose into value-added products such as biofuel, pulp and paper, and bio-fertiliser.

POME: Repurpose into bio-fertiliser.

ACHIEVEMENTS IN 2023

- We have completed the construction of IOI Palm Wood factory located at Segamat, Johor.
- We have installed Phase 1 of the machinery required to process OPT into engineered *OnCore*[®] palm wood, and commenced the testing and commissioning of the machinery, including the first trial of using OPT commercially.
- We have conducted a soft launch of *OnCore[®]* palm wood at the Malaysian Wood Exhibition.
- We have initiated the technology and operational expertise transfer from Europe to IOI Palm Wood Sdn Bhd.

PRIORITIES FOR 2024

OPT

- Complete the commissioning and performance trials of Phase 1 production for OnCore[®] palm wood.
- 2. Establish a loyal and dedicated customer base within Malaysia.
- 3. Initiate export sale of *OnCore*[®] palm wood by Q3 of FY2024.
- 4. Scale up production and operation by optimising the capacity potential of Phase 1.
- 5. Set up our research and development ("R&D") capability by establishing an excellence centre in OPT processing within IOI Palm Wood.
- 6. Embrace the Environmental, Social and Governance ("ESG") principles within the organisation and benefit from the opportunities of verifiable carbon capture.

EFB and POME

- 1. Conduct feasibility and marketability studies to assess and prioritise potential products.
- 2. Explore new conversion technologies.
- 3. Develop supporting infrastructures such as collection centres and processing or conversion plants.
- 4. Explore R&D collaborations and partnerships with technology partners, start-ups, research institutions and academia.



STRATEGIC PRIORITIES

STRATEGIC PRIORITY 5



Grow the Oleochemical Segment

In our integrated palm oil business model, the resource-based manufacturing segment helps to stabilise IOP's income during volatile CPO price cycles.

Therefore, our strategy focuses on expanding the downstream manufacturing capacity and exploring new high-margin oleo-derivative products and applications to generate profitable growth.

OUR KEY INITIATIVES

We aim to increase our oleochemical subsegment's revenue contribution through organic growth from the following initiatives:

- 1. **Expand Capacity:** Expand manufacturing capacity by expanding existing facilities and commissioning new manufacturing facilities respectively.
- 2. **Improve Efficiency**: Enhance cost efficiency through automation.
- 3. New Product Applications and Markets: Manufacture new products and formulations. Employ diversification strategy to enter and/ or capture new markets. Drive growth outside Europe into other regions.
- 4. Focus on High-Value Products: Realign business model to focus on high-margin products.

ACHIEVEMENTS IN 2023

Expand Capacity

- We have commissioned our latest fatty acid and glycerin plants which are yet to be capitalised due to the impacts of weak global economy resulting in overall drop of sales.
- We established local warehousing capability in the United States.
- We have commissioned a new soap noodles plant with less than 50% of energy consumption and minimal wastage.

Improve Efficiency

- We achieved reduction in waste disposal quantities by installing a sludge dryer at IOI Oleochemical Industries Berhad in Penang.
- We have commissioned new cooling water conditioning system for our Witten site at IOI Oleo GmbH in Germany which resulted in significant cost savings.

New Product Applications and Markets

• We introduced a new soap noodles product targeting developing countries.

Focus on High-Value Products

• We delivered core business growth and improved profitability by increasing price and focusing on high-margin products.

PRIORITIES FOR 2024

Expand Capacity

- 1. Debottleneck the Medium-Chain Triglycerides ("MCT") plant at IOI Oleochemical Industries Berhad in Penang to increase capacity by 50%.
- 2. Finalise the MCT plant capacity extension planning for IOI Oleo GmbH in Germany.

Improve Efficiency

- Expand new photovoltaic solar power systems in Penang and Johor, and install a second cogeneration power plant in Penang.
- 2. Conclude new wastewater disposal agreement in Witten, Germany.

New Product Applications and Markets

- 1. Capitalise on the switch of animal-based to palm-based fatty acids in Japan.
- 2. Increase premium customer segments such as pharmaceutical, cosmetic, food and feed.
- 3. Focus on populous markets such as India and China to increase soap noodles' sales volume and capture market share.
- Develop new products such as natural or preservative-free soap noodles and alternative lower cost soap noodles to increase product range.
- 5. Continue to expand business development into new regions of Middle East and African continents.
- 6. Launch new products, namely Polyglycerol ("PG") Esters for pharmaceutical and technical applications.

Focus on High-Value Products

- 1. Focus on high-margin products such as low 3-MCPD and specialty MCT.
- 2. Secure high-margin businesses in an increasingly competitive market environment.

GOVERNANCE

+ Refer to Group Business Review on

for a detailed review.

CONNECTION

Resource-Based Manufacturing on pages 70-75