

IOI'S PATHWAY TO NET-ZERO BY 2040

DRIVING NATURE POSITIVE IMPACTS

IOI Corporation Berhad (“IOI”) first embarked on our journey to reducing our greenhouse gas (“GHG”) emissions in 2019 through the introduction of the Climate Change Action initiative (“CCAi”). In 2021, IOI proceeded to adopt recommendations from the Task Force on Climate-Related Financial Disclosures (“TCFD”) around four thematic areas (Governance, Strategy, Risk Management, Metrics and Targets).

OUR GOVERNANCE

The Board Sustainability Committee has oversight over the strategy and development of the CCAi and reports directly to the Board.

STRATEGY

- To achieve Net-Zero carbon emissions, IOI is committed to continuously improve our climate change action plans by:
- Reducing our climate change impact by committing to achieve Net-Zero for carbon intensity by 2040
 - Promoting climate change action plans and practices through innovation, improved efficiency and support actions throughout the operations
 - Increasing the resilience of our business by managing risks and opportunities, forecasting climate scenarios for climate impact valuation, incorporating our 7Rs of Circularity, and practising Precision and Regenerative Agriculture

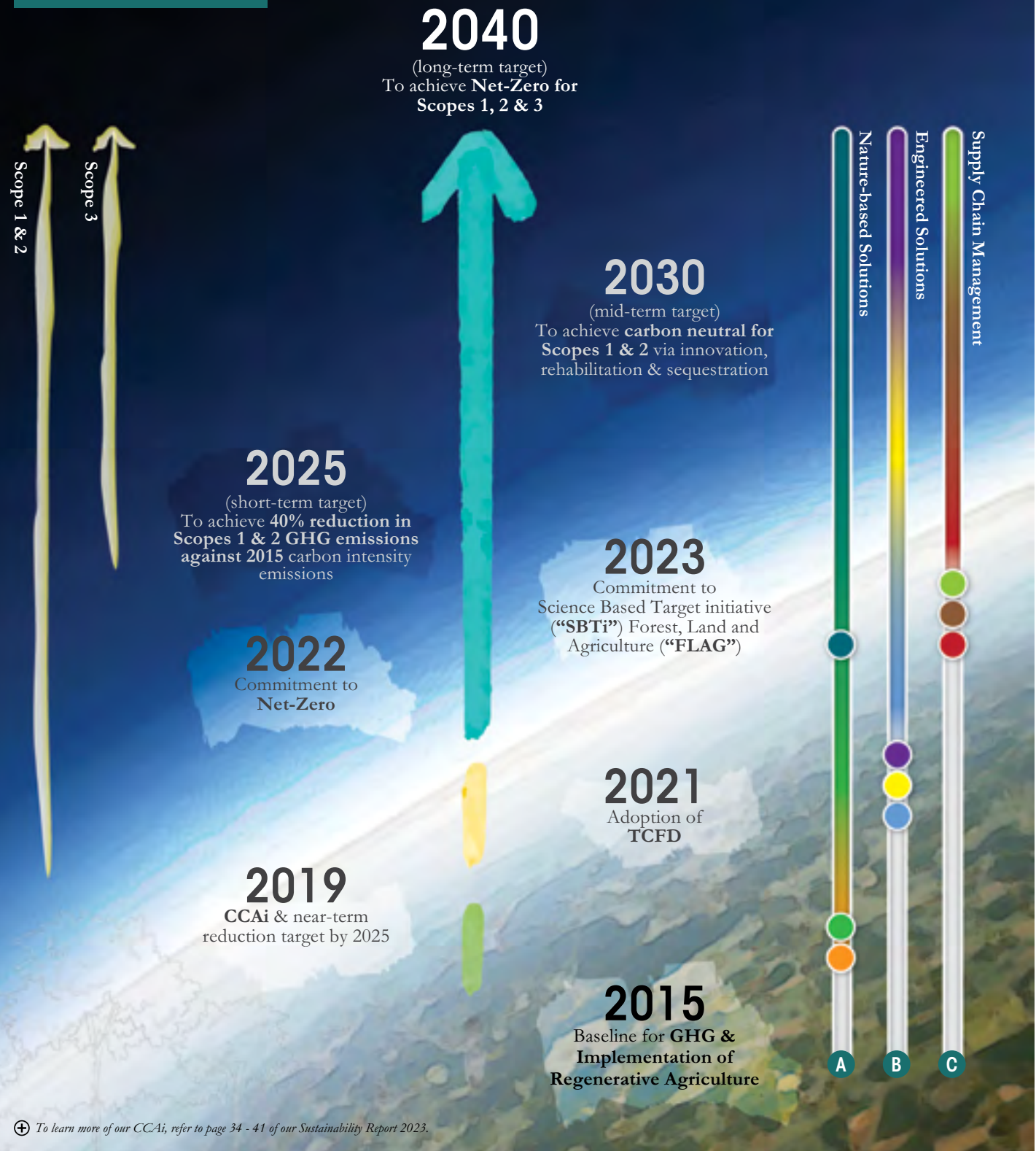
RISK MANAGEMENT

IOI conducted a quantitative Group-wide climate change assessment with an expert TCFD consultant to help identify our climate-related transition and physical risks.

- Actions to manage our climate-related risks and opportunities comprise of:
- GHG emissions reduction and removal including sequestration commitments as well as increasing productivity and energy efficiency
 - Managing GHG emissions from supply chain with introduction of climate-related procurement standards and principles
 - Adoption and application of technologies and new innovations to mitigate risks and create opportunities

A Nature-based Solutions	B Engineered Solutions	C Supply Chain Management
<ul style="list-style-type: none"> • No Deforestation, No New Planting on Peat, & No Social Exploitation (“NDPE”) • Reforestation, Rehabilitation & Protection of Conservation Areas • Enhance Biodiversity & Ecosystem 	<ul style="list-style-type: none"> • Technology & Innovation • Renewable Energy • 7Rs of Circularity 	<ul style="list-style-type: none"> • Supplier Awareness & Capacity Building • Climate-related Procurement Standards & Principles • Efficient Green Supplier Selection Process

METRICS AND TARGETS



CLIMATE CHANGE ACTION INITIATIVE (CCAI)

OUR OPERATION (SCOPE 1 & 2)

MANAGEMENT APPROACH

Climate and nature are deeply intertwined. As a result, any extreme climate events can cause detrimental impacts to our natural environment such as ecosystem degradation, spread of invasive species, loss of biodiversity, etc. Comprehending this nature related dependencies to our operation, IOI had introduced a **Climate Change Action initiative** (“CCAI”) since 2019 aiming to manage risks and explore opportunities arising from climate change. The CCAI is also in line with our 5 Strategic priorities, especially on improving our planting material to achieve high yield and crop diversification (see our achievements in AR 2023, pages 47, 49).

Our reporting on the CCAI is in alignment with the recommendations from the **Task Force on Climate-Related Financial Disclosures** (“TCFD”) and is structured around four thematic areas: governance, strategy, risk management, metrics and targets with reference to the International Sustainability Standards Board (“ISSB”) climate-related disclosures. Under double materiality assessment, climate change is identified as a sustainability risk that has a high financial impact after being reviewed using the Group’s Enterprise Risk Management (“ERM”) framework (see our ‘Materiality’ section at pages 26 - 27 for further detail).

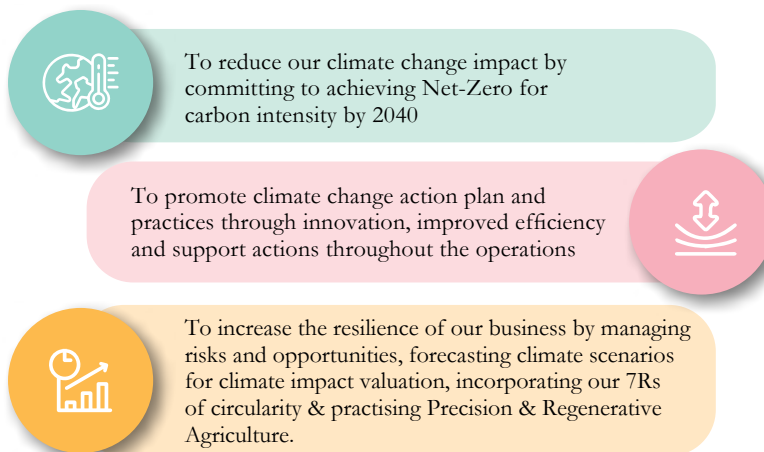
ACTIVITY DRIVEN APPROACH AND PERFORMANCE

Governance

The CCAI have direct Board oversight. As stated in our Sustainability Governance (see pages 22 - 23 in ASR 2023), the strategies and processes designed to manage sustainability-related risks and opportunities as well as its performance are discussed at the BSC. The chairman of the BSC, an Independent Non-Executive Director who is also our Climate Champion, together with 2 other Board members, ensure that all CCAI related activities are holistically integrated into the Group’s Strategy and Business Model. The implementation of the decisions made by the BSC and the monitoring of

Strategy

IOI Group’s strategy to combat climate change is developed around the following commitments:



Risk Management

IOI has conducted a quantitative group-wide climate-related transition and physical risks assessment modelling using different climate scenarios (i.e., RCP 2.6, RCP 4.5, RCP 8.5) until 2050. The assessment was conducted using specific data from IOI, international climate organisations and relevant third parties with an expert TCFD consultant. Out of the seven climate hazard indicators, IOI faces greatest exposure to heatwaves with some locations facing potential issues of water stress and sea level rise. Full detail on IOI’s climate-related risks assessments is reported in ASR 2021¹ (pages 30 - 31) and ASR 2022² (page 29).

⊕ See ASR 2021, pages 30-31 for IOI’s climate-related risks assessments.



CCAI-related performance at the operation level are overseen by the GSSC. A CCA Financial Disclosure Committee for this initiative was also formed to, among others, track, document, and monitor financial investments and performance in projects or activities related to climate change actions. Finally, to ensure accountability and group-wide implementation, the CCAI and related performance are part of the Key Performance Index (“KPI”) for the GMD, top management, and the rest of the organisation. As such, suitable remuneration would be awarded based on meeting or exceeding the KPI.

To enable IOI to develop resilient strategies and financial plans in a more holistic way, a group-wide quantitative climate-related risks assessment had been conducted in 2021 (refer to ASR 2021 & 2022 for details). These risk assessments enabled IOI to make climate impact valuations which is in alignment with TCFD recommendations.

IOI uses Internal Carbon Pricing (“ICP”) as a risk mitigation tool to prepare for climate related risks events such as resource availability, supply chain disruption, etc., and for planning decarbonising projects to mitigate our GHG emissions as we transition to a low-carbon economy. IOI has established an ICP shadow price which considers the effects of future regulations and cost related to all scopes of GHG emissions for the investments in our CCAI to mitigate GHG emissions across our operations and supply chains. The ICP was set for Plantations at RM 60/MT CO₂e and Resource-based manufacturing at RM 80/MT CO₂e for Malaysia and EUR30/MT CO₂e for our operating sites in Germany, respectively. Information on our financial investments regarding our decarbonisation activities are available in page 155 of Financial Section of our AR 2023.

¹ https://www.ioigroup.com/Content/IR/PDF/SR/2021_SR.pdf ² https://www.ioigroup.com/Content/IR/PDF/SR/2022_SR.pdf

Current and Emerging Opportunities

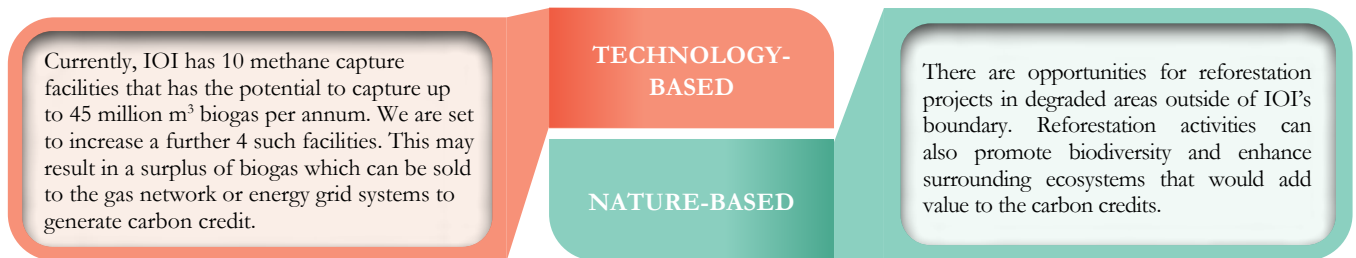
(A) Repurposing Oil Palm Trunk (“OPT”) into Premium Palm-Based Wood Products

IOI Palm Wood Sdn Bhd was established to commercially produce engineered wood panels sustainably from OPT waste. The idea of repurposing OPT waste into palm wood locks in the GHG which would otherwise be released into the atmosphere. Furthermore, the use of palm wood serves as substitute for traditional timber that would ease the pressure on harvesting natural forest, thus preserving habitats and ecosystems.

The IOI Palmwood manufacturing facility, a first in Malaysia utilising customised European technology of repurposing OPT, has the capacity of producing up to 80,000 m³ per annum of palm-based wood products. This premium product is commercially named “OnCore” and include premium grade kiln dried palm lumber, blockboards and palm wood panels. The OnCore products are produced with adherence to international quality and safety standards³. All OnCore products are treated to last for more than a decade which extends their role in GHG storage. The end-of-life OnCore products can also be upcycled or used as bioenergy that not only expands the circularity potential of this product but also further enhance the commercial potential of this whole venture.

(B) Voluntary Carbon Market

Carbon offsets are gaining traction as companies are seeking ways to neutralise their emissions due to the pressure especially from investors to act on climate change. The demand for carbon offsets would grow exponentially when options for abatement get exhausted in the coming decades. IOI foresee that there are opportunities for the company to participate in the voluntary carbon market (“VCM”). Our company can potentially create surplus carbon credits through technology- and nature-based solutions that can be traded on the VCM. Highlights of our potential carbon crediting projects are as follows:



Mitigation and Adaptation

One of our strategies of mitigation and adaptation for effective mitigation of GHG emissions as well as other pollutants within our operations involve the 7Rs of circularity. Our 7Rs of circularity involve the process of Rethink, Repurpose, Reduce, Reuse, Recycle, Repair and Recover and are fully embedded within IOI's operations as demonstrated in our Value Creation Model (pages 20 - 21). These 7Rs have helped to create closed-loop systems by improving waste management and resource efficiency and are enablers for IOI to align closely to UN SDG 12 “Responsible Consumption and Production”.

(A) PLANTATIONS

Generating Renewable Energy Using POME

Methane from palm oil mill effluent (“POME”) is one of the largest contributors of GHG emissions in our plantation operations. Recognising the impact of methane on climate change, our plantations have initiated the installation of methane capture facilities since 2013 to curb these emissions. To date, we have installed 10 methane captures plant that have the capacity to produce about 45 million m³ of biogas, with 4 more to be installed in the coming years. The repurposing of the biogas to be utilised for the boilers and for electricity generation using boiler burner and gas engine, respectively, allows IOI to reduce our dependency on non-renewable source of energy such as fossil fuels, especially diesels. This alternative fuel also meant that the biomass which was previously used to be burned in the boilers, can now be used for other purposes such as for mulching, fertiliser, activated carbon, etc. Currently, the utilisation of biogas in our mills is at 40%. This year, we generated around 38 million m³ of biogas but did not achieve its maximum capacity due to the malfunctioning of two of our large biogas plants. Maintenance work is ongoing for the two biogas plants to ensure we continue to maximise biogas generation in all our mills and procedure has been put in place to ensure that this sort of incidence will not re-occur.

³ <https://ioipalmwood.com/ProductOverview>

CLIMATE CHANGE ACTION INITIATIVE (CCAI)



Improving Planting Materials via Research

IOI Palm Biotech continues to develop better oil palm planting materials to increase yields through innovative Research and Development (“R&D”) programmes. This approach is necessary as one of the ways in which IOI approaches the issue of reduced land for agriculture. To date, our estates have planted 30%-50% clonal palms and achieved an oil extraction rates (“OER”) up to 23.5%. This achievement was the result of improved propagation protocol that was developed through 30 years of intensive and systematic R&D. Moving forward, IOI Palm Biotech team will intensify their work on molecular and genome R&D of our oil palm planting materials to further improve the oil palm’s resistance to extreme events (e.g., droughts, extreme heat, etc.).

Regenerative and Precision Agriculture

IOI implemented Precision Agriculture (“PA”) to ensure our oil palm trees receive the exact agricultural input they require to increase their yield while minimising wastage and environmental impacts. The PA practices work together with Regeneration Agriculture (“RA”) to enhance soil health, promote biodiversity as well as stabilise and give balance to the ecosystem to further support the health our crops and subsequent oil yields. Implementation of PA, coupled with RA practices can also result in GHG emissions reduction and sequestration within the plantations. For more details, refer to ‘Regenerative and Percision Agriculture’ section in pages 56 - 57.

⊕ See pages 56 - 57 on *Regenerative and Precision Agriculture*.

Mechanisation

Electrical Agriculture Machines (“EAM”) are actively being introduced to progressively replace our conventional fossil fuel-based machineries in our plantations. Electric mechanical carts were added to IOI Plantation’s EAM line this financial year to reduce reliance on fossil fuels in our operations while at the same time, improve workers’ productivity. The implementation progress of Mainline Evacuation system for in-field FFB evacuation has increased from last year’s 50% to 76%. This system is expected to be fully implemented by next year and would reduce the usage of fossil-based tractors and further improve efficiency in FFB evacuation. Mechanisation has also contributed to reducing GHG emissions through optimising the use of agrochemicals by using Geo-I Circle Sprayer. Mechanisation is not only helping to minimise our GHG emissions but also promoting climate justice in our operations (see page 63 for more detail).

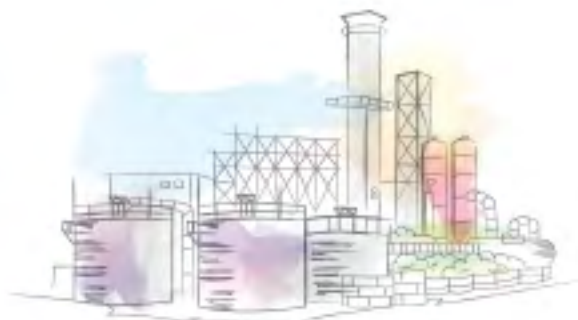


Electric Mechanical Cart: Assist in transporting and evacuation of FFB in the plantations

⊕ See page 63 on *Climate Social Justice*.

(B) RESOURCE-BASED MANUFACTURING

Refineries



Palm Kernel Shell
30% Lower Fuel
Consumption

Adoption of EMS
that worked with
RPO-OM

Improve Combustion Efficiency of
Empty Fruit Bunch (“EFB”)

IOI Refineries (“IOIEO” and “IOIPCEO”) are continuously upgrading their operations to reduce GHG emissions by implementing process change (focussing on automation and digitalisation), heat and steam recovery, and, installing new equipment. At IOIEO, the use of liquified natural gas (“LNG”) has resulted in 10% lower GHG emissions compared to diesel fuel usage. On top of that, enhancements were made to improve combustion efficiency of Empty Fruit Bunch (“EFB”) fibres and Palm Kernel Shell (“PKS”) that has resulted in 30% lower fuel consumption within its operation. IOIEO has reduced its power consumption by 40% through installation of LED lights and inverters as well as heat and steam recovery. The refinery also took further steps to reduce power consumption by adopting Energy Management System (“EMS”) and conduct regular meetings among its energy committee to discuss and review progress on energy saving projects. Similarly, IOIPCEO has also shown reduction on its energy consumption through the adoption of EMS that worked with Realtime Prod Organiser Operation Management (“RPO-OM”). Going forward, IOIPCEO will explore further the use of biomass and other renewable energy mechanism (e.g., virtual power purchase agreements, “VPPA”) to improve its energy efficiency.

Oleochemicals

IOI Oleo’s facilities in Malaysia are gearing towards optimising the use of green electricity through solar panels which are installed at the rooftops of offices, stores and factories. For our Oleochemicals facility in Prai, RPO-OM working in tandem with the EMS was implemented to assist in monitoring and reducing energy consumption. IOI Oleo is also planning to set up additional Combine Heat and Power Cogeneration (“Cogen”) and solar panels at our Prai facility that is estimated to reduce GHG emissions by up to 3%. To reduce the dependency on fossil fuel-based energy further, a second 6.5MW Cogen plant has been installed at our Pasir Gudang facility. Solar thermal had been also installed to reduce energy usage for water heating at the same facility. On top of that, IOI Oleo is also exploring the use of electrical boilers as well as renewable energy utilisation for its operation in the coming years.



Optimising the Usage of Green Electricity through Solar Panels

A New **6.5MW** Cogen Plant installed in Pasir Gudang

Metrics and Targets

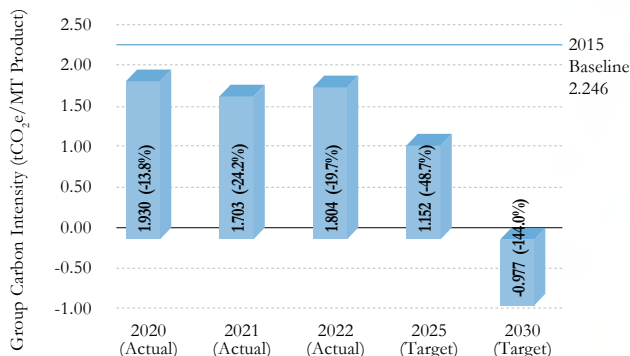
In the short-term basis, the Group carbon intensity is targeted to achieve more than 40% reduction (~4% reduction per annum) by 2025 based on our 2015 baseline. By 2030, our medium-term target is to achieve at least carbon neutral for Scopes 1 and 2 against our 2015 baseline. Specifically, this will be done through the adoption of improved low carbon technologies, enhancing rehabilitation and tree planting efforts in our conservation areas as well as accelerating our circularity activities. Long term, IOI targeted to achieve Net-Zero for Scopes 1, 2 and 3 by 2040 (Refer to Pathway to Net-Zero at pages 6 - 7).

⊕ See pages 6 - 7 for Pathway to Net-Zero.

(A) GROUP

Our Group carbon intensity is calculated using science based methodologies such as RSPO PalmGHG that is aligned with the GHG protocol as well as ISO 14064, an international standard developed by the International Organisation for Standardisation (“ISO”). As of FY2023, IOI’s group carbon intensity has reduced -19.7% compared to our baseline in 2015. This year, we missed our target of -28% due to the breakdown of 2 of our large methane captures. Otherwise, IOI should be on track to meet our mid-term 2025 target and expects to achieve our 2040’s Net-Zero target as we foresee higher removal and reductions of GHG emissions through our CCAi at both Plantation and Resource-based manufacturing business segments.

Group Carbon Intensity (tCO₂e/MT Product)



In line with our CCAi, IOI has formalised our commitment to the Science Based Target initiative in the Forest, Land and Agriculture sector (“SBTi FLAG”) on 6th March 2023. We are currently at the second stage of SBTi FLAG target setting: to develop and submit reduction targets for validation.

IOI committed to setting both short-term, medium-term as well as Net-Zero targets by 2040, in line with the SBTi FLAG requirements. Our commitment to the SBTi FLAG commitment also includes:

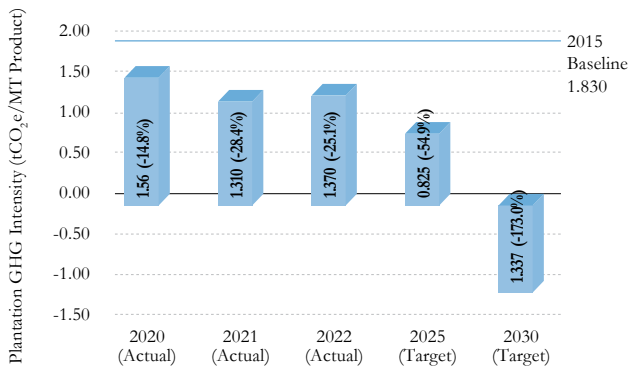
- All Land Use Change (“LUC”) since 1995 from a 2015 baseline year, in alignment with the Greenhouse Gas Protocol draft on Land Sector and Removals.
- Commitment to a Moratorium on no deforestation since 2016, which aligns with the Accountability Framework initiative (“AFI”) guidance.
- Commitment to No Deforestation, No New Planting on Peat, No Social Exploitation (“NDPE”) since 2016 and Zero Burning since 2014.

CLIMATE CHANGE ACTION INITIATIVE (CCAI)

(B) PLANTATION (ESTATE AND MILL)

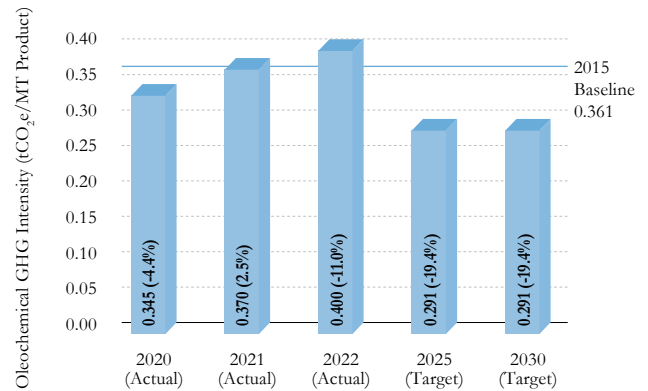
Carbon intensity for plantation in 2022 reduced by -25.1% in comparison to 2015 baseline. The reductions were slightly lower compared to last year due to the breakdown of our two large biogas plant. However, we expect to achieve higher reductions for Plantation when the biogas plants are up and running together with the revision on the PalmGHG calculation tool that is targeted to be completed by end of this year.

Plantation GHG Intensity (tCO₂e/MT Product)



Carbon intensity for Oleochemical was similar since 2020, which ranges between 0.345 to 0.400 tCO₂e/MT Product. Oleochemical's carbon intensity reduction was not significant in the past few years due to reduced operational volume and lack of low-carbon energy alternatives. However, the target of 0.291 tCO₂e/MT Product by 2025, while challenging due to a certain extent on market forces, can be achievable as Oleochemical has planned to accelerate their adoption of renewable energy (e.g., VPPA) and increase operation efficiency through digitalisation.

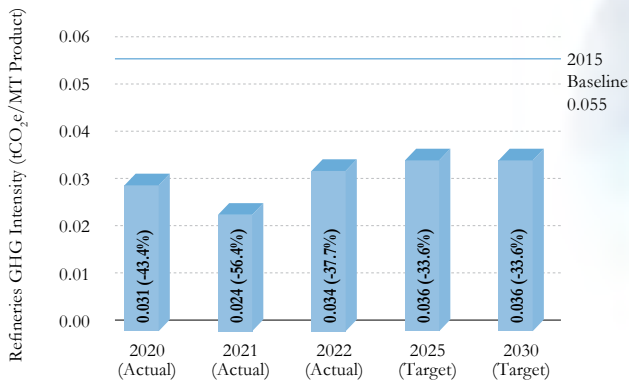
Oleochemical GHG Intensity (tCO₂e/MT Product)



(C) RESOURCE-BASED MANUFACTURING

In 2022, carbon intensity reduction for refineries is 37.7% in comparison to the 2015 baseline. The increase in carbon intensity from the previous financial year is mainly due to a drop in production volume this year. Our refineries are exploring further improvement in operation efficiency through digitalisation and modern technologies to further reduce their carbon intensity.

Refineries GHG Intensity (tCO₂e/MT Product)



CLIMATE CHANGE ACTION ENGAGEMENT PROGRAMMES

MANAGEMENT APPROACH

As part of IOI's overall stakeholder engagement activities, we continuously share and communicate our efforts, targets and expectations in combating climate change with our stakeholders. Constant engagement with our stakeholders as well as third party suppliers also enable us to understand their concerns and expectations as well as aid us in providing solutions to them when addressing the issue of climate change. In order to move forward together with our stakeholders in creating long-term positive solutions in battling climate change, we have included in our CCAi Programmes such events as the annually held Sustainability Consultation Forums ("SCF"), Panel Discussions, Webinars, etc.

ACTIVITY DRIVEN APPROACH AND PERFORMANCE

Panel Discussion on IOI's Pathway to Net-Zero

In conjunction with IOI's Earth month campaign, and in line with our CCAi, we organised a hybrid webinar that involved a Panel Discussion on IOI's Pathway to Net-Zero on 21st March 2023. The five members from IOI's Senior Management Team that were involved in the discussion to share our action plans and strategies towards Net-Zero by 2040 were from both the upstream and downstream operations, strategy, sustainability and green technology (utilising biomass - OPT). The panel discussion was moderated by Mr. Faizal Parish, Director of Global Environment Centre ("GEC"), with over 100 internal and external stakeholders attending both physically and virtually. The panel discussion aimed to create awareness regarding our Net-Zero journey and to promote transparency among relevant stakeholders especially our suppliers and customers as well as encourage collaboration among us in decarbonising the supply chain. During this inaugural Panel Discussion, we had also formally announced our commitment to the SBTi FLAG. The moderator of the panel then concluded the discussion with a remark that IOI's ambitious Net-Zero target by 2040 is extremely timely as it meets with the recent release of the Intergovernmental Panel on Climate Change ("IPCC") report, which underscores the urgency of taking more ambitious action to secure a liveable future for all.

Sustainability Consultation Forum ("SCF")

IOI first introduced SCF in 2021 as a platform to gather thoughts and views from our stakeholders to discuss on complicated sustainability issues (More information on SCF can be found in page 40). A climate related forum was conducted last year during the 2nd SCF involving Climate Change strategy and achieving Net-Zero (See ASR 2022 page 33 for detail). Finally, this year, our 3rd SCF was more focused towards Supply Chain Decarbonisation and Responsible Sourcing practices across IOI's Supply Chain.



IOI's senior management team in a discussion with stakeholders during the 2nd SCF.

CLIMATE CHANGE ACTION INITIATIVE (CCAI)

2nd SCF on Climate Change Strategy and Achieving Net-Zero

Our progress towards addressing gaps identified during the 2nd SCF is within the timeline suggested by our stakeholders (see Executive summary published on 21st November 2022 for more information¹). GHG emissions accounting and disclosure for our Plantation and Manufacturing operations are based on the PalmGHG (aligned to the GHG Protocol) and ISO 14064 methodology respectively. Currently we are involved with RSPO's PalmGHG Working Group to help review the PalmGHG calculator tool to reflect the current changes and advancement in GHG emissions data. Some of the changes proposed include taking into consideration, sequestration from palm 25 years and above, HCVs, other set aside conservation

areas, etc. Full review by the RSPO Palm GHG Revision Working Group is expected to be completed by end of 2023.

During the SCF we also discussed emissions reduction activities and initiatives for achieving Net-Zero as mentioned in the CCAi section (pages 34 - 45). For example, as part of our CCAi, IOI has collaborated with various partners on emissions reduction projects and regenerative agriculture such as Nestle on tree planting (i.e., ReLEAF), IDH-The Sustainable trade Initiative ("IDH") on biodiversity conservation and ecosystem enhancement projects (e.g., South Ketapang Landscape Initiative) and, Commonwealth Agricultural Bureaux International ("CABI") on soil microbial study to improve soil health. More details on our efforts in enhancing biodiversity and ecosystem and regenerative agriculture are reported in pages 53 - 57.

3rd SCF on Towards Supply Chain Decarbonisation and Responsible Sourcing Practices Across IOI's Supply Chain

As reported both in pages 6 - 7 of the 2023 ASR and SBTi dashboard², IOI has developed a time-bound emissions reduction roadmap aligning with the SBTi FLAG criteria for all Scopes. IOI is among the leading companies in Malaysia that has committed to SBTi FLAG under the Food Production-Agricultural production sector where our GHG emissions reduction targets are reported as intensity-based.

IOI is in preparation to conduct our 3rd SCF in August this year revolving around the theme Towards Supply Chain Decarbonisation and Responsible Sourcing practices across IOI's Supply Chain. This SCF will be facilitated by Robertsbridge to gather feedback and suggestions from experts and thought leaders, focussing on the topic of supply chain decarbonisation, as well as compliance with European Union Deforestation Regulations ("EUDR") and Human Rights Due Diligence ("HRDD") criteria across our supply chain.

Decarbonising the supply chain is a complex and challenging task. Hence, outcomes and learnings from this SCF would enable IOI to develop targeted plans and strategies to help our supply chains to reduce their GHG emissions. This in turn will enable IOI to achieve Net-Zero by 2040. On another topic relevant to our supply chain, we will develop action plans based on the key takeaways received during the SCF on the EU Deforestation regulations and the HRDD as well as how our supply chain will have to deal with these new requirements going forward. An executive summary will be published and shared in the following few months after this SCF.



Participants of our 3rd SCF

¹ https://www.ioigroup.com/Files/news/pdf/IOI%20SCF_Summary%20Report_Revised_ERM_21112022_r2.pdf

² <https://sciencebasedtargets.org/companies-taking-action#dashboard>

SUPPLY CHAIN (SCOPE 3)

MANAGEMENT APPROACH

IOI recognises the complexities involved in addressing the 15 categories within Scope 3. In IOI’s case, we have identified that the GHG emissions are mainly derived from the “Purchased goods and services” category, i.e., our supply chains. The need to understand Scope 3 was important to enable us to identify the risks and opportunities associated with decarbonising our supply chain especially in context of our Net-Zero by 2040 target. Thus, to avoid greenwashing, our approach in this matter has been very measured, systematic and with transparency. For example, we undertake to measure our supply chain GHG emissions (Scope 3) utilising methodologies such as the RSPO’s PalmGHG which is audited under RSPO’s certification process and aligned with the GHG Protocol as well as ISO 14064 whose standard is recognised globally and to disclose our information as recommended by reporting frameworks such as TCFD, ISSB, SBTi FLAG and AFI.

In addition, SBTi FLAG and AFI also recommended companies to disclose progress towards deforestation- and conversion-free supply chain because efforts to reduce deforestation can help to mitigate GHG emissions. This is very much in line with IOI’s own commitment to build traceable and transparent supply chains, whereby all our suppliers are required to be in compliant with the NDPE as contained in our SPOP. (For more details, refer to Responsible Sourcing and Traceability section in pages 42 - 45). Another way to aid our suppliers to embark with IOI’s Net-Zero journey, is for IOI to conduct awareness and capacity building programmes as well as engaging with them on possible collaborations to reduce their GHG emissions.

ACTIVITY DRIVEN APPROACH AND PERFORMANCE

Last year, IOI started to include reporting GHG emissions intensity for Scope 3. Our Scope 3 calculation for all business segments uses both average-data method and spend-based method based on the GHG Protocol, depending on data availability and categories relevant to our business. Scope 3 emissions intensity of our 2 business segments (Plantation & Resource-based Manufacturing) are as follows:

Business Segments	2020	2021	2022
Plantation (tCO ₂ e/MT Product)	0.16	0.2	0.2
Resource-based Manufacturing			
a) Refinery (tCO ₂ e/MT Product)	3.03	3.13	3.36
b) Oleochemical (tCO ₂ e/MT Product)	4.62	5.54	4.41
Group Total (tCO₂e/MT Product)	7.81	8.87	7.97

“ As a Group, 92% of our purchased goods and services were sourced locally, while 18% were sourced from our international suppliers. ”

As shown in the table, the highest contribution for Scope 3 emissions is from our Resource-based manufacturing business which encompass 98% of the Group’s total Scope 3. Among the Scope 3 fifteen categories, Category 1 - Purchased goods and services, was the highest, particularly for the purchase of palm oil and other corresponding processed products which represent about 94% of Resource-based Manufacturing’s Scope 3. For Plantation, the main contributing category in Scope 3 is also from Category 1. Among the purchased goods, agrochemicals are the main contributors of Scope 3. However, Scope 3 from the Plantation represent a small fraction of the Group’s total Scope 3, i.e., around 2%. As a Group, 92% of our purchased goods and services were sourced locally, while 18% were sourced from our international suppliers.

IOI is mindful that having a strong supply chain management framework is crucial to effectively manage and reduce our Scope 3. We envisage that the outcome from the 3rd SCF on “Towards Supply Chain Decarbonisation and Responsible Sourcing” would provide us with more insights on how to manage our Scope 3 and help contribute to IOI achieving Net-Zero by 2040.

RESPONSIBLE SOURCING AND TRACEABILITY



RESPONSIBLE SOURCING

MANAGEMENT APPROACH

IOI had long taken the crucial step of establishing a sustainable palm oil supply chain by committing and implementing NDPE together with a moratorium on deforestation since 2016. To ensure the success of this endeavour, we continuously monitor our suppliers towards delivering their NDPE commitment and support zero conversion of natural ecosystems. Apart from that, we also encourage our suppliers to provide their commitment towards rehabilitating their deforested land.

While continuing with our pledge to support our suppliers to address matters such as deforestation, peatland protection and human rights, we are also extending our know-how to our suppliers regarding climate change and its impact to our industry. Commencing this year, IOI and especially our responsible sourcing team have embarked on a new journey, drawing significant attention to the traceability of suppliers' Scope 3 emissions. This emphasis arises from the fact that Scope 3 emissions within the IOI supply chain also include 3rd party suppliers. IOI has taken the initiative to engage with these suppliers and provide guidance on their GHG emissions intensity and corresponding mitigation efforts to reduce them. Concurrently, we have initiated a supply chain mapping exercise on scope 3 emissions aimed at understanding the extent of GHG emissions intensity contribution from our suppliers.

On another front, the EUDR regulations have also drawn the attention of both the industry and the country. In response to this matter, IOI is focusing on strengthening the traceability to plantations and working to ensure optimum levels of assurance for the export of palm oil-based products to the EU market. IOI has taken an even further step by working towards having an NDPE Implementation Reporting Framework ("IRF") and Traceability to Plantations ("TTP") for 3rd party suppliers that progresses towards third party verification.

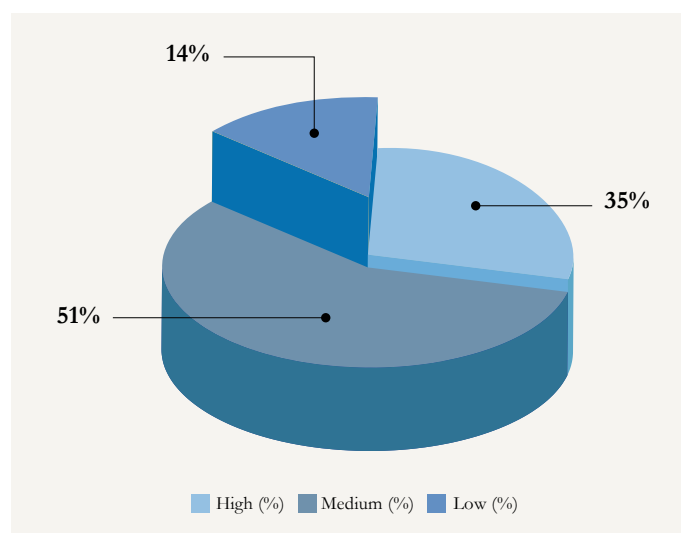
ACTIVITY DRIVEN APPROACH AND PERFORMANCE

IOI is fully aware of the risk associated with adverse findings related to supply chain issues and the reputational risk posed by suppliers' non-compliance with NDPE requirements. As such, we continue the proactive approach of engaging suppliers to ensure their compliance with IOI's policies and guidelines as well as improve our traceability scores.

Primarily, the IOI responsible sourcing team maintained our partnership with the Earthworm Foundation to utilise the Tools for Transformation ("T4T") for suppliers' self-assessment with the aim to communicate, identify, prevent and mitigate risks of potential NDPE violations. Some of the NDPE performance indicators assessed include forced labour conditions, suppliers reporting on deforestation, grievance mechanism, etc. In our latest T4T self-assessment, 95.78% of suppliers engaged reported having NDPE policy, signifying a large majority of our suppliers are aligned with IOI's policies and guidelines.

Alongside with providing avenues to understand suppliers' commitment on NDPE before charting suitable engagement programmes, the T4T also enables technical assistance to be given to suppliers on ways to address identified issues and gaps. These gaps include suppliers' lack of awareness and extent of their adherence regarding NDPE policies. As an example, for suppliers reported as "no NDPE commitments", they were found to actually have partial NDPE commitments when we engaged to rectify the issue. Other challenges are the significance of extending commitments to an additional layer of their FFB and Palm Kernel suppliers, etc.

IOI's approach to mapping our own and third-party suppliers is to classify our suppliers based on three main priority levels, namely high, medium and low, as shown in the Mill Prioritisation Profile below. Priority level has been classified based on evaluating each supplier by their traceability score (Refer to page 44 for the updated traceability scores), deforestation threat level, supplier engagement status, T4T's result – time bound action plan status, portion of supplying volume, etc. Based on the Prioritisation Profile, we aim to engage all the high priority suppliers to enhance their commitments towards IOI's Responsible Sourcing Guidelines within 3 years.



IOI Group Mill Prioritisation Profile as of June 2023 (Refer to IOI's Palm Oil Dashboard & Traceability)

Also on the basis of the prioritisation profile, IOI has taken stepwise approaches to improve overall NDPE and TTP compliance by mapping out the supply chain. Following that, we continuously implement supplier engagement programmes to raise awareness towards NDPE compliance, improving traceability scores, and develop stronger relationships with our suppliers. To ensure accountability, all engagement activities are being kept updated periodically on our Palm Oil Dashboard & Traceability webpages. Please refer to IOI's Palm Oil Dashboard and Traceability for more information (<https://www.ioigroup.com/sustainability/palm-oil-dashboard-traceability>).

Our responsible sourcing approaches always begin with establishing NDPE commitments with our suppliers, followed by encouraging the suppliers to be certified under MSPO and RSPO. These certification schemes ensure compliance with environmental, social, and labour rights standards as well as NDPE and traceability requirements. To date, 100% of our suppliers are MSPO certified and 23.26% of our suppliers are RSPO certified.

For Crude Palm Oil ("CPO"), 100% of our suppliers are MSPO certified while 38% of our suppliers are RSPO certified. For palm kernels ("PK"), all our suppliers are 100% MSPO certified while 18% of them are RSPO certified. We then engage with our suppliers to review the results of our compliance monitoring and the outcomes of personalised action plans generated from the T4T self-assessment. This step aims to enhance transparency, as well as social and environmental performance.

Examples of engagement with suppliers includes:

- 1 Supply Chain Mapping and Monitoring - Sungei Kahang POM, Meridian POM
- 2 Ethical Recruitment, Human Rights Due Diligence - UMB
- 3 Labour Transformation Programme - Kim Loong Sabah
- 4 Traceability to Plantation Pilot Engagement and NDPE Socialisation - Rompin POM, Rakyat Ketengah Perwira, Felcra Jayaputra.
- 5 NDPE Socialisation and Compliance - Taner R&D, Keningau and Toupos mills.

In addition, IOI utilises spatial data monitoring tools and services such as Starling to monitor the risk of deforestation and land use activities by our suppliers. The near real-time information provided by these tools offer accurate insights into deforestation-related activities, thus providing robust evidence for our engagement strategies and decisions. The same approach is applied through Palmoil.io and GFW Pro to access real-time data, ensuring a fire and deforestation-free supply chain. As part of our supplier engagement activities, we consistently emphasise the benefits and accessibility of satellite tracking technologies like GFW Pro.

All these efforts are helping us to be more well-prepared and compliant with EUDR requirements. The EU's Deforestation Regulation is significantly important to IOI, mainly due to the export of our palm oil-based products to Europe. The stringent regulations, especially regarding expectations for a deforestation-free supply chain and traceability, will however, pose a greater challenge for small producers exporting their products to Europe.



Regular updates on traceability progress through IOI's Palm Oil Dashboard

RESPONSIBLE SOURCING AND TRACEABILITY

TRACEABILITY

MANAGEMENT APPROACH

Another key aspect of a sustainable supply chain is traceability. Among the ways that we ensure traceability is by requiring our suppliers to disclose their location and ownership information. Being certified sustainable through mandatory government schemes like MSPO and ISPO or voluntary schemes like RSPO is one way to ensure traceability as these certifications require ownership and legality be disclosed. Our Responsible Sourcing team strives to further enhance traceability of our oil palm products to ensure that our additional commitments as stated in both our SPOP and Responsible Sourcing Guidelines documents are also socialised and adhered to through regular stakeholder engagements. This is essential to ensure compliance. In the event of non-compliance, IOI will work closely with suppliers to develop time-bound action plans aimed at increasing policy adherence. The traceability information collected is then published in IOI's Palm Oil Dashboard & Traceability¹. As mentioned in page 42, we have also begun tracking Scope 3 emissions from our suppliers in alignment with our goal to achieve Net-Zero GHG emissions intensity by 2040.



IOI's Responsible Sourcing team discussing traceability results with our suppliers



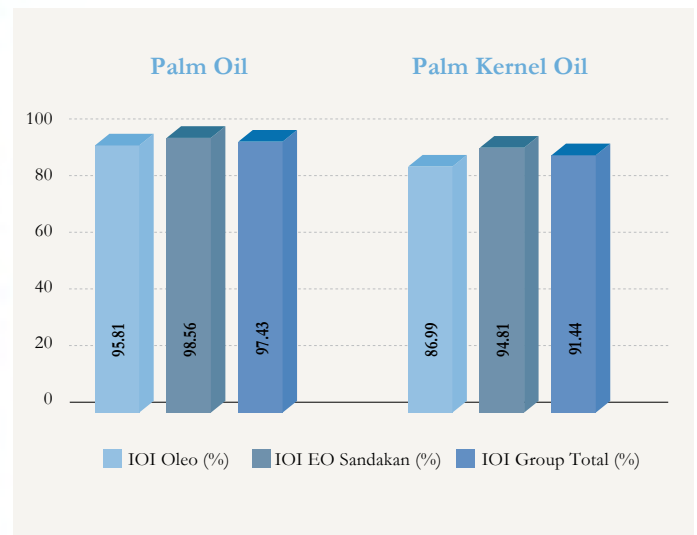
Stakeholder engagement to increase our supply chain traceability

ACTIVITY DRIVEN APPROACH AND PERFORMANCE

The ability to track and verify the origin of FFB or Palm Kernel source is typically referred as traceability. To improve our Traceability to Plantation (“TTP”) score, IOI has conducted TTP exercise in May 2023 with all our supplying mills and kernel crushers. An improved understanding of the importance of traceability among our suppliers has helped to facilitate the data collection process, resulting in greater traceability information that can boost buyers’ confidence in the oil products they are sourcing from us. In addition, 100% of our suppliers in Malaysia are MSPO certified, enabling us to easily verify their data. With their adherence to our policies and guidelines that include NDPE and ethical practices, this will enable our customers to have the required information to purchase our products with greater assurance.

As of June 2023, IOI has achieved 97.43% traceability for CPO and 91.44% for PKO. It has significantly improved over the prior financial year. By practising continuous supplier engagement initiatives and constant Traceability to Plantation exercise, IOI will continue to improve the traceability score.

Traceability scores and achievements from Dashboard are presented below:



IOI Group traceability info as of June 2023 (Refer to IOI's Palm Oil Dashboard & Traceability)

IOI's traceability score showed a significant improvement due to exemplary cooperation from the suppliers.

¹ <https://www.ioigroup.com/sustainability/palm-oil-dashboard-traceability>

Suppliers' Scope 3 Emissions

IOI is committed to achieving Net-Zero by 2040, encompassing Scopes 1, 2, and 3. As we are aware, Scope 3 emissions are mainly derived from supplier's Scope 1 & 2 emissions. Thus, recognising this connection, IOI has proactively embarked on strategic approaches to effectively address the supply chain Scope 3 emissions challenges.

Starting with Supply Chain Mapping, IOI has initiated the process of mapping the entire supply chain to identify all the stages, processes, and entities involved as per the 15 categories found in scope 3. This mapping exercise is crucial in understanding the extent of GHG emissions and the facilitates targeted for mitigation efforts. Moving on to GHG assessment, IOI is conducting a comprehensive GHG assessment to quantify emissions at each stage of the supply chain. This assessment provides valuable insights into the major emissions sources, enabling prioritisation and focused actions.

The next important step involves IOI actively engaging and creating awareness as well as conducting capacity building for the suppliers and the local communities about not only the importance of reducing GHG emissions but also about how to mitigate GHG emissions. Additionally, through this close engagement, we hope to collaborate with our suppliers to adopt sustainable and best practices, and share relevant data on emissions sources. By highlighting specific emissions sources, suppliers can then prioritise their mitigation efforts and allocate resources more effectively, by concentrating on areas such as renewable energy, transport optimisation, waste management, and many more.



Understanding our ground operations to identify GHG emissions reduction opportunities