



OUR PATH TO NET ZERO:

CHARTING A COURSE TO DECARBONISATION

MOVING FORWARD WITH YOU

Version 1.0

THANK YOU
FROM TOMORROW



ABOUT THIS DOCUMENT

This “Our Path to Net Zero: Charting a Course to Decarbonisation” Whitepaper (the Whitepaper) provides an overview of the approach and methodologies taken by CIMB Group Holdings Berhad (CIMB Group or the Group) to set our 2030 Net Zero targets (2030 Targets) and high-level transition strategies for selected highly carbon intensive sectors that apply to CIMB Group and all its operating entities in all geographies. The work detailed in this Whitepaper was completed with support from Oliver Wyman.

FEEDBACK

We welcome all feedback, ideas, and questions from stakeholders on this document. Please contact: **Luanne Sieh**, Group Chief Sustainability Officer, CIMB Group.

DISCLAIMER

- This Whitepaper is intended for informational purposes only.
- The information and opinions presented are gathered from sources deemed credible at time of publication. All information is subject to change without notice.
- Independent judgement should be exercised relating to the content of this Whitepaper. CIMB Group is not liable or responsible for your use or reliance on the contents of this Whitepaper.
- Any third-party opinions or views referenced in this Whitepaper should not be taken to represent the opinion or view of CIMB Group and any of its affiliates.

Executive Summary

Climate change is occurring at an unprecedented rate, resulting in devastating impacts that threaten lives and livelihoods globally, including in Southeast Asia (also known as ASEAN), one of the regions that is most vulnerable to the effects of climate change. The incidence of extreme weather events is increasing, and 2023 has seen the region ricochet between droughts, floods and record-breaking heatwaves. If global temperatures continue to rise at their current rate, ASEAN risks losing over 35% of its Gross Domestic Product (GDP) by 2050¹.

Conversely, a Net Zero future in ASEAN which is rich in renewable resources, holds the potential to deliver economic growth and resilience, poverty alleviation and job creation, as well as energy security and affordability alongside the positive environmental impacts. Urgent action is required to secure this future, as the window to address climate change continues to narrow. Since the landmark 2015 Paris Agreement, governments globally and in ASEAN have made increasingly ambitious commitments. Progress is evident in the pace of technological innovation including an increasing support in regulatory policies.

However, addressing climate change is not the responsibility of the public sector alone. Carbon-intensive industries in the region must step up and adopt readily available and increasingly cost-effective low carbon solutions. In addition, banks can accelerate this process by supporting businesses to embrace low carbon technologies and sustainable practices.

It is imperative that the path to a Net Zero future in Southeast Asia achieves a just transition compatible with inclusive growth in the largely emerging economies of the region. This involves navigating well acknowledged challenges specific to the region, such as dependence of economies on primary and extractive industries, the entrenched position of fossil fuels in the energy mix and the fragmented nature of agricultural production. A just transition requires bringing along the companies and communities who depend on these carbon-intensive activities for revenue and livelihood, to make the switch to sustainable alternatives or even drive new businesses that will underpin the Net Zero economy. Only then will Southeast Asia be able to establish a Net Zero future where the benefits are distributed equitably across society.

We aspire to be at the forefront of enabling a just transition in the markets we serve. We work closely with international and local working groups - including being a signatory to the Net Zero Banking Alliance (NZBA) - which allows us to share our experiences and adopt best practices and tools. In 2022, we were ranked in the top five banks globally (and top emerging market bank) for performance on sustainability in the World Benchmark Alliance (WBA) inaugural Financial System Benchmark and have won many Sustainable Finance awards² over the years, a testament to our continued commitment to providing innovative and market-relevant sustainable finance solutions.

Setting our 2030 Net Zero targets (2030 Targets) towards Net Zero by 2050 for the Palm Oil, Power, Coal and Cement sectors is an important milestone in our sustainability journey, putting us on the path to Net Zero financed emissions in these sectors by 2050. At time of publication, we are also developing targets for other carbon-intensive sectors of our portfolio, such as Oil & Gas and Real Estate, which are targeted for public release in 2024.

¹ Fabrice Renaud et al. (2021). Adaptation and resilience in ASEAN: Managing disaster risks from natural hazards, UK Government and UK-Singapore COP26 ASEAN Climate Policy Report Series.

² CIMB (2023). Our Awards.

In setting our 2030 Targets, we are mitigating the climate risks in our portfolio, and moving to establish our role in financing the activities that underpin the Net Zero economy of the future. More importantly, our plans to achieve these targets, as laid out in this Whitepaper, declare our clear intention to work closely with existing and new clients to develop, enable and accelerate their transition plans towards Net Zero. In supporting the success of our clients and their stakeholders, we are also securing ours.

In 2021, we were the first emerging market bank in the world to announce a commitment to exit coal by 2040, in line with a 1.5°C scenario, and we are the first Malaysian bank to commit to 2030 Targets in the Power and Cement sectors. Our target for the Palm Oil sector is the first globally for any bank, and we undertake it with conviction and optimism grounded in climate science, which has demonstrated that the adoption of sustainable practices, including halting deforestation, is effective in decarbonising the Palm Oil sector (see Section 4: Palm Oil Sector). To meet growing global demand, and with no readily available substitutes at similar cost, scale and efficiency³, sustainably produced palm oil will play an increasingly important role in achieving a Net Zero future. We are committed to working with our palm oil clients and other actors across the palm oil ecosystem to accelerate the adoption of sustainable practices and technologies.

Climate change is the existential crisis of our time and addressing it will require all parties to play their part in creating transformative change. At CIMB, we acknowledge the far-reaching impacts we have on the communities and clients we serve and are committed to using this influence for good. We have embedded sustainability into our decision-making process, and will continue to act with courage, conviction and in close partnership with our stakeholders to contribute to inclusive, equitable and sustainable development in ASEAN.

³ WWF (2015). Sustainable Sourcing Guide for Palm Oil Users: A practical handbook for US consumer goods and retail companies.

Contents

Executive Summary	0
1 Introduction	3
2 Summary of CIMB's 2030 Targets	7
3 Our Approach to Target Setting towards Net Zero	11
4 Palm Oil Sector	21
4.1 Summary of Our Targets	21
4.2 Industry Overview.....	23
4.3 CIMB's 2030 Target for the Palm Oil Sector	27
5 Power Sector	37
5.1 Summary of Our Targets	37
5.2 Industry Overview.....	37
5.3 CIMB's 2030 Target for the Power Sector	42
6 Coal Sector	47
6.1 Summary of Our Targets	47
6.2 Industry Overview.....	48
6.3 CIMB's 2030 Target for the Coal Sector	49
7 Cement Sector	53
7.1 Summary of Our Targets	53
7.2 Industry Overview.....	54
7.3 CIMB's 2030 Target for the Cement Sector	55
8 Taking Action	59
9 Glossary	61

1 Introduction

The urgency and criticality of addressing climate change cannot be overstated. The Earth's climate is shifting at an unprecedented rate, resulting in devastating impacts such as rising sea levels, heatwaves, flooding, droughts, and a growing frequency and unpredictability of extreme weather events. Southeast Asia, with its densely populated cities and large coastal areas, stands out as one of the regions most susceptible to the impacts of climate change. Many of its economic activities are closely tied to industries sensitive to climate change, such as agriculture, fishing and tourism. A combination of geographic, demographic and economic factors makes climate change a critical threat to lives and livelihoods across the region.

The landmark 2015 Paris Agreement commits countries to limit the level of temperature rise to within 1.5°C of pre-industrial levels, necessary to reduce severe and irreversible impacts of climate change. Since then, regulatory and technological conditions have become increasingly favourable to change. Governments across ASEAN have been raising the ambition of their commitments, and the maturity of low-emissions technologies such as solar photovoltaics (PV) and power generation from agricultural waste biomass, have enabled policy makers to adopt increasingly supportive actions. However, there is still much work to be done to align policies to commitments and to ensure they can be effectively implemented to achieve Net Zero emissions by 2050.

ASEAN countries vary widely in their economic, political and social profiles, from more developed markets such as Singapore, to emerging economies such as Indonesia and least developed countries such as Cambodia. Southeast Asia is experiencing rapid economic growth and industrialisation, and balancing the need for economic development with emissions reduction puts increasing pressure on the pace of Net Zero transformation and the adoption of sustainable technologies and practices. For many ASEAN member states, navigating the transition requires contending with a number of region-specific challenges. Many countries in the region still rely heavily on coal and other fossil fuels as a source of energy and have to navigate issues around stability and affordability in the transition to low carbon and renewable sources. In addition, the fossil fuel sector provides employment for an estimated four million people across Southeast Asia⁴.

Southeast Asia is also home to 15% of the world's tropical forests⁵, and sustainable land use practices and halting deforestation are key to achieving Net Zero. Land use change arising from deforestation is still one of the most significant sources of emissions in some ASEAN countries, while the forestry sector with its sequestration capacity remains a crucial lever for those countries to achieve their Nationally Determined Contributions (NDCs). Encouraging developments such as the establishment of permanent forests, and peatland moratorium, as well as supportive forest protection and management programmes have been put in place, notwithstanding practical challenges for effective implementation. These challenges must be addressed in the transition to Net Zero. Otherwise, existing socio-economic inequalities in the region may be exacerbated.

Beyond environmental sustainability, the pursuit of a Net Zero future holds significant benefits for ASEAN member states, including energy and food security, economic resilience and development, job creation and poverty alleviation. A just transition will require thoughtful navigation and balancing of environmental sustainability with socio-economic considerations, so that the benefits of Net Zero efforts can be distributed more equitably across societies.

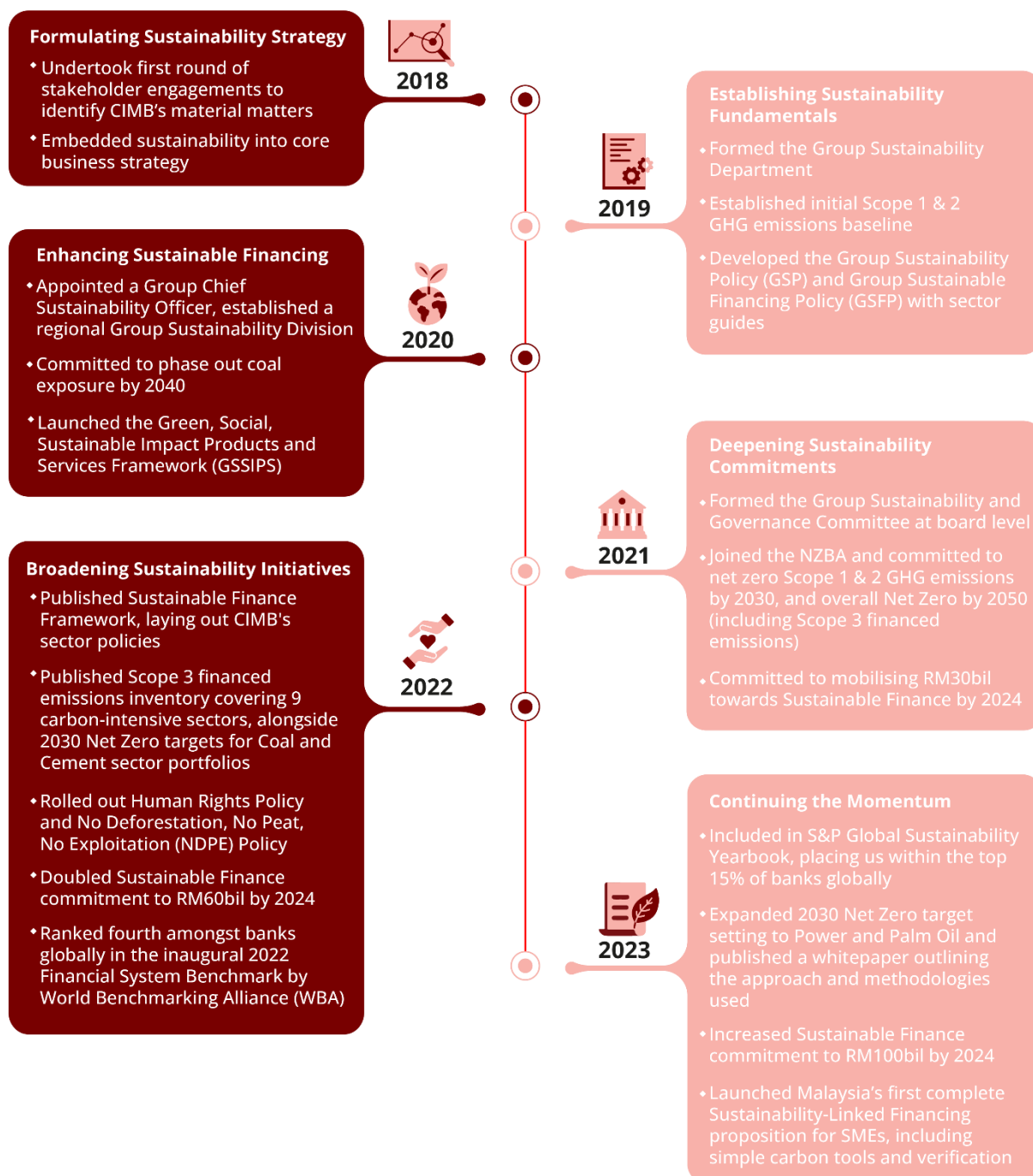
The window to address climate change is rapidly closing. In its sixth assessment, the Intergovernmental Panel on Climate Change (IPCC) has concluded that there is a more than 50%

4 IRENA (2023). Socio-economic footprint of the energy transition: Southeast Asia.

5 Estoque, R.C. et al. (2019). The future of Southeast Asia's forests. Nature Communications.

chance that global temperature rise will reach or surpass 1.5°C before 2040. All parties, including the public sector, businesses and financial institutions must step up to accelerate the adoption of viable solutions available to us now to secure a future that is safe and conducive to life.

CIMB Group's sustainability journey, guided by a set of robust public commitments, reflects our holistic approach to sustainability, from reducing our carbon footprint to supporting our clients' decarbonisation and making positive social impacts. We are dedicated to creating a more sustainable and responsible future collectively with others.



CIMB Group has completed Scope 3 financed emissions baselining for the nine sectors for four key operating markets (i.e., Malaysia, Indonesia, Singapore, and Thailand), which covers approximately 61% of the Group's total gross loans/ financing portfolio (as at 31 December 2021). In September 2022, CIMB announced our first set of 2030 Targets, beginning with the Thermal

Coal Mining and Cement sectors. With the expansion of target setting to the Palm Oil and Power sectors in this Whitepaper, we have now set 2030 Targets for sectors which approximately contribute around half of our financed emissions, even though these sectors represent less than 10% of the Group's total gross loan/financing coverage⁶. This marks a significant step up in our ambition and will reshape our financing approach and the way we engage with our clients.

Our objectives in establishing 2030 Targets

Play our part in delivering an equitable transition for ASEAN. We acknowledge the far-reaching impacts we have in our markets and to the organisations and the people we serve. For a region rich in renewable resources, a Net Zero future has the potential to deliver economic growth and job creation opportunities and increased food and energy security and resilience alongside its positive impacts on climate.

However, there is a real risk that transformative change, if not holistically considered, could exacerbate socio-economic inequalities in the region, where a population of 36 million people live below the poverty line⁷. In the region, micro, small and medium-sized enterprises (MSMEs) contribute to ~85% of employment and ~45% of GDP⁸. It is crucial that we support marginalised communities and MSMEs to ensure they are not left behind and excluded from the transition benefits. We are vested in supporting our communities to achieve an equitable transition to a Net Zero future, and to do so by calibrating our banking approach to support decarbonisation while also safeguarding and bolstering the region's capability to attain sustainable development and positive socio-economic outcomes.

Support our clients. Climate change readiness is quickly becoming a definitive criteria that organisations will be judged on. It is simply insufficient to view climate change as only a question of what an organisation's impact is on the environment. Organisations must now consider the impact of the environment and the climate transition on the resilience of their business and operations. At the same time, businesses must take climate adaptation actions to safeguard against impacts of increasingly frequent and severe weather events, sea-level rises and other climate consequences. More importantly, carbon-intensive industries are under increasing pressure to develop low carbon alternatives by adapting current businesses for the transition or in fact, developing new business models around transition-driven opportunities. Organisations that can define a compelling role in a Net Zero economy will emerge as winners in this radical and systemic transformation. Conversely, those unable to adapt will face risks of stranded assets and increasingly uneconomical businesses.

In setting our 2030 Targets, we are starting to differentiate between our clients on different stages of their decarbonisation journey, to better define how we can support them. For those leading in the transformation, we see an opportunity to innovate our financing and lending solutions to be fit for purpose in catalysing their transition activities and new businesses. For our clients who have not yet embarked on their sustainability journey or have not yet developed Net Zero plans, we aim to engage with them to increase the level of their ambition and to finance key enabling activities. We are committed to being an agent for change through active engagement and collaboration with our clients.

We acknowledge the entrenched position of fossil fuels in many of the markets that we serve and are convinced that our greatest impact lies in assisting our clients in decarbonising their businesses including through transition activities, rather than simply withdrawing from carbon intensive industries. However, we have also delineated clear boundaries to ensure our actions are

6 CIMB Group's Sustainability Report (2022). CIMB Group's Financed Emissions Inventory. Figures quoted are as at 31 December 2021.

7 UNDP (2017). ASEAN-China-UNDP: Financing Sustainable Development Goals in ASEAN.

8 The ASEAN Secretariat (2020). Development of Micro, Small, and Medium Enterprises in ASEAN.

aligned to the science that underpins the Net Zero transition. Our current financing prohibition for greenfield coal-fired power plants and thermal coal mining, or their expansions, and our No Deforestation, No Peat and No Exploitation (NDPE) policy, are examples of where we have drawn such boundaries.

Embed organisational capabilities. Similar to our clients, Net Zero is also a risk management imperative for us. We will require new capabilities to respond to the emerging threats from acute and prolonged climate driven physical risks as well as the threat of increasing regulatory and investor pressure and changing customer behaviours. Through the process of establishing our targets, we have taken a significant and foundational step in developing the right capabilities and strategies to navigate climate risks.

Grow with the transition. The Net Zero transition presents an unparalleled business opportunity for financial institutions. An estimated US\$1.5 trillion in cumulative investment is needed in the energy sector and the agriculture, forestry and other land use (AFOLU) sectors for ASEAN countries to fulfil their NDCs by 2030, including for renewable energy deployment, grid enhancement, accelerating nature-based solutions as well as building and scaling the carbon market. However, investments so far have fallen short at ~US\$ 5-6 billion per year⁹. The public sector will not be able to finance Net Zero alone, and broader capacity is required from banks to mobilise private investments towards viable low carbon technologies and sustainable practices, while also engaging closely with businesses to bring more projects up to bankable standards.

Our 2030 Targets provide a North Star to our financing, investment and capital raising activities, and allow us to align with and further accelerate the development of key growth areas in the transition.

⁹ Global Sustainability Innovation Centre (2023). Southeast Asia's Green Economy: Crack the Code.

2 Summary of CIMB's 2030 Targets

“CIMB strongly believes that a just transition must be compatible with positive economic, environmental and social outcomes. While this transition presents a myriad of opportunities for businesses to grow, rapid change may also exacerbate socio-economic inequalities in the region.

Balancing inclusive development with broader environmental sustainability goals lies at the heart of our approach, to ensure that the wider benefits of Net Zero efforts can be distributed equitably across society. With sustainability being a key priority under our Forward23+ strategic plan, CIMB will continue to actively catalyse and drive the adoption of environmentally and socially responsible practices across ASEAN.”

Dato' Abdul Rahman Ahmad

Group Chief Executive Officer/Executive Director, CIMB Group

Key Design Principles of our Target Setting towards Net Zero

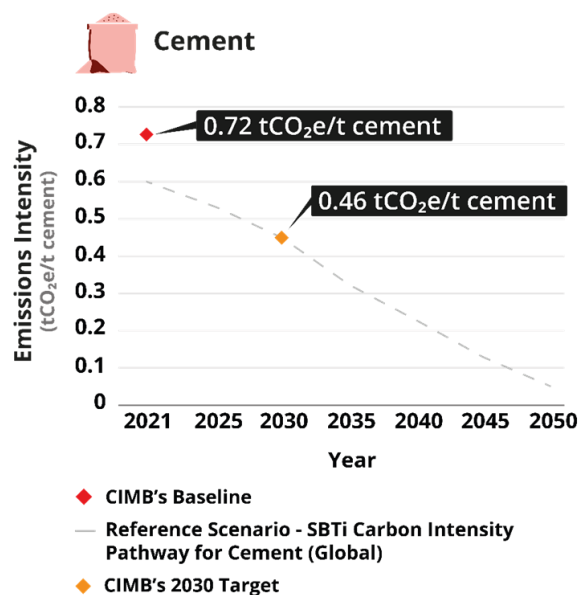
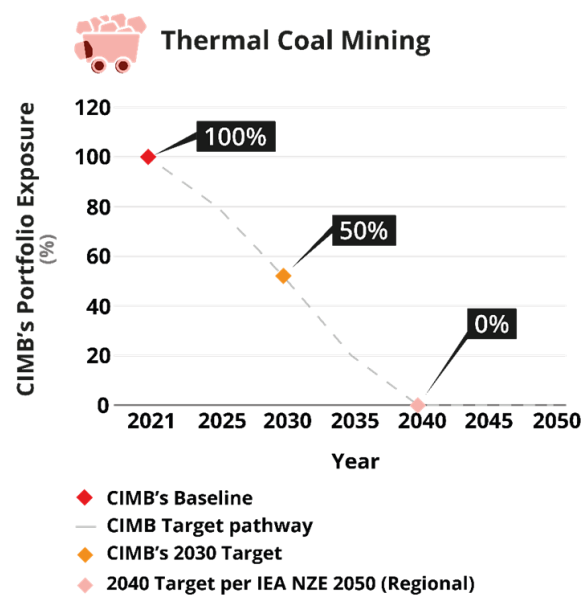
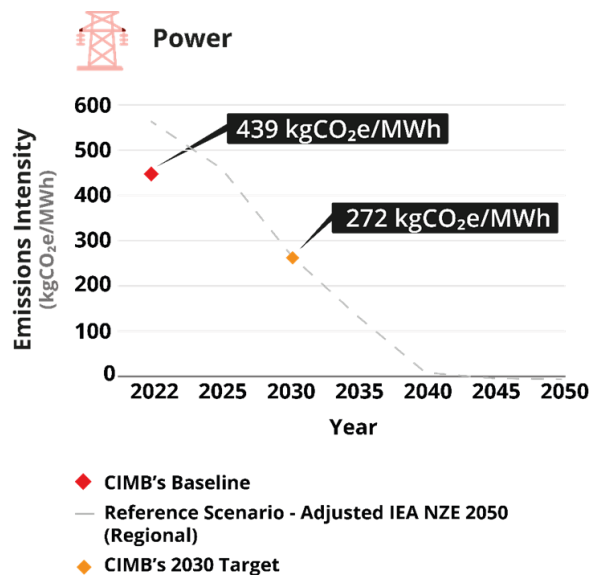
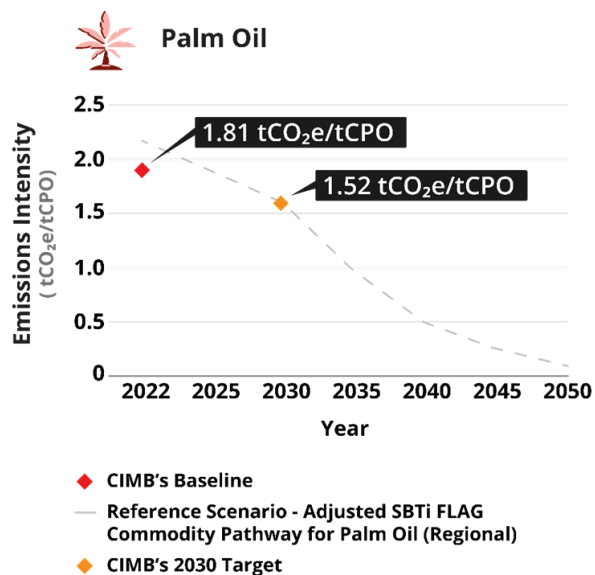
- **Aligned with a climate ambition of Net Zero by 2050:** Our 2030 Targets are consistent with decarbonisation trajectories towards Net Zero by 2050, which are required to keep global warming well below 1.5°C since before the industrial era. Science has demonstrated clearly that this is necessary to avert the worst impacts of climate change and preserve a liveable environment.
- **Catalysing urgent action:** Average global temperatures have risen by ~1.2°C since the 1800s and continue to rise¹⁰. Our 2030 Targets provide us with immediate impetus and accountability to take urgent action. We will also continue to set periodic goals in the longer term to ensure we make steady progress towards a Net Zero by 2050 outcome.
- **Anchored on a science-based approach:** We have ensured that our targets are credible and set based on scientifically robust and well accepted reference scenarios. While climate is an evolving science, we have chosen to act now based on best available knowledge. Where necessary, we will revisit our approach and targets as the science and reporting methodologies improve and scenarios adjust with the changing technological and regulatory context, or if relevant regional pathways are developed.
- **A just transition as an imperative:** ~90% of our revenue comes from emerging markets where environmental sustainability goals must be pursued in tandem with inclusive economic growth and social development and balanced against food and energy security as well as affordability. We have incorporated these considerations into our targets and reference scenarios by calibrating them to regional (and local) contexts where the science is available.
- **Achieving Net Zero in partnership with our clients:** Achieving a just transition requires active participation of carbon-intensive industries. As a financial institution, the most productive way we can enable the transition is by being a real partner to our clients, helping them with the task of decarbonisation, rather than shrinking away from our clients in hard-to-abate sectors.

¹⁰ IPCC, Masson-Delmotte, V., P. Zhai, H.-O. Pörtner, D. Roberts, J. Skea, P.R. Shukla, A. Pirani, W. Moufouma-Okia, C. Péan, R. Pidcock, S. Connors, J.B.R. Matthews, Y. Chen, X. Zhou, M.I. Gomis, E. Lonnoy, T. Maycock, M. Tignor, and T. Waterfield (eds.) (2018). Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty.

We also recognise the extremely crucial role that MSMEs play in our economy, contributing to ~45% of GDP in the region. As such, we are committed to continue our engagement and offer financing solutions such as our recently launched Sustainability-Linked Financing for SMEs, to support relevant clients to increase their ability to measure their emissions and implement decarbonisation plans.

- **Focused on impact:** Our work in charting the course of decarbonisation is an ongoing journey. We have focused our initial set of targets on the most material sectors, where we can create an impact to decarbonisation by tilting the economic equation in favour of sustainable practices and technologies. We have also prioritised sectors based on our exposure and financed emissions. We will continue to take this approach in the expansion of our target coverage. At time of publication, we are working on developing targets for our Oil & Gas and Real Estate sectors, which we plan to release in 2024. Within each sector, we have ensured that the scope of our targets covers the most significant sources of emissions in the value chain, and where we, and our clients, can have the ability to influence change.

Summary of our 2030 Targets towards Net Zero



Summary of key design decisions

	Sector			
	Palm Oil	Power	Thermal Coal Mining	Cement
Target Metric	Physical emissions intensity, i.e. tonne of CO ₂ equivalent per tonne of crude palm oil (tCO ₂ e/tCPO)	Physical emissions intensity, i.e. kg of CO ₂ equivalent per megawatt hour (kgCO ₂ e/MWh)	% of portfolio exposure	Physical emissions intensity, i.e. tonne of CO ₂ equivalent per tonne of cement (tCO ₂ e/t cement)
Parts of the Value Chain Included	<ul style="list-style-type: none"> Planting Milling 	Power generation	Thermal coal mining	Cement manufacturing
Client Emission Scopes Included	<ul style="list-style-type: none"> Scope 1 (including land use change related emissions and sequestration) and 2 of plantation, mill and integrated clients Scope 3 upstream (i.e. external sourcing of fresh fruit bunches) of integrated clients 	Scope 1 emissions of power generation clients (including electric utilities, power plants, independent power producers, renewable energy producers)	N/A	Scope 1 and 2 emissions of cement manufacturing clients
Asset Classes Included	<ul style="list-style-type: none"> Business loans/financing Investments held for sale or maturity including corporate bonds/sukuk and equities Facilitation of capital raising activities for clients including bonds/sukuk issuances and initial public offerings 			
Reference Scenario	Adjusted SBTi FLAG Commodity Pathway for Palm Oil (regional)	Adjusted IEA NZE 2050 (regional)	IEA NZE 2050 (regional)	SBTi Carbon Intensity Pathway for Cement (global)
Baseline	1.81 (as of 2022)	439 (as of 2022)	100% (as of 2021)	0.72 (as of 2021)
2030 Target	1.52	272	50%	0.46
Targeted Change	16% reduction	38% reduction	50% reduction	36% reduction
Net Zero Plan ¹	Align with reference scenario in 2030	Align with reference scenario in 2030	No exposure to thermal coal mining by 2040	Align with reference scenario in 2030

1. As 2030 approaches, we will set further interim targets towards achieving Net Zero by 2050

3 Our Approach to Target Setting towards Net Zero

We aim to be an effective enabler for a just transition in the region through supporting our clients in their decarbonisation journeys. Our targets are set to help to guide us towards this objective, taking into account the type of behavioural change that we can influence with our financing activities. We have considered these target setting design decisions on a sector-by-sector basis, taking care to align the implications they have in the real economy with the actions required to achieve a just transition.

Our sector prioritisation approach

CIMB has set 2030 emissions reduction targets for four priority sectors: Palm Oil, Power, Cement and Coal. Our targets are aligned to a Net Zero by 2050 trajectory, and we will continue to set periodic goals in the longer term to achieve a Net Zero by 2050 outcome. This is a firm demonstration of our desire to put our financing to work in the pursuit of Net Zero across all material sectors in our portfolio, and to meet our commitments and responsibility as a signatory to the Net-Zero Banking Alliance. At time of publication, we are actively exploring target setting for more sectors including Real Estate and Oil & Gas, which will be disclosed in 2024.

We have been guided by the following principles in our prioritisation of sectors for target setting:

- **Criticality for Net Zero:** Sectors with the most significant contribution to global GHG emissions. For instance, coal-fired power plants are responsible for a fifth of global GHG, more than any other single energy source while power generation is responsible for ~36% of global GHG emissions largely through the burning of fossil fuels in conventional power generation¹¹. The cement industry accounts for 7-8% of global GHG emissions¹², while that figure is 22% for agriculture and related land-use change emissions¹³. Decarbonisation is critical in all four of the sectors where we have set targets, and within our portfolio, these sectors approximately contribute around half of our financed emissions⁶.
- **Relevance to ASEAN and to CIMB:** Sectors that are economic pillars for ASEAN and material in the CIMB portfolio.
 - Palm oil is a major commodity in Southeast Asia, with >85% of total production originating from the region to serve global demand¹⁴. It forms the most significant portion of our agriculture portfolio and is a sector that has come under increasing global scrutiny and pressure to decarbonise. Hence, we have chosen to focus on palm oil for our current target setting efforts in agriculture.
 - The Power sector is one of the most critical enablers for the functioning of our economy and society. In ASEAN, power generation is still largely dependent on fossil fuels, including thermal coal, which is the most carbon-intensive among all fossil fuels. The energy transition will require a switch to low carbon and renewable alternatives while maintaining energy security and affordability.
 - The ASEAN region is rich in coal resources, with Indonesia a top five coal producer globally, and significant coal production also occurring in Vietnam, the Philippines

11 IEA (2023). Coal Market Update.

12 UNEP Global Environmental Alert Service (2010). Greening Cement Production has a Big Role to Play in Reducing Greenhouse Gas Emissions.

13 Anderson, C. et al. (2022). Forest, Land, and Agriculture Science Based Target-Setting Guidance.

14 FAOSTAT (2000-2021). Food and Agricultural Organization of the United Nations.

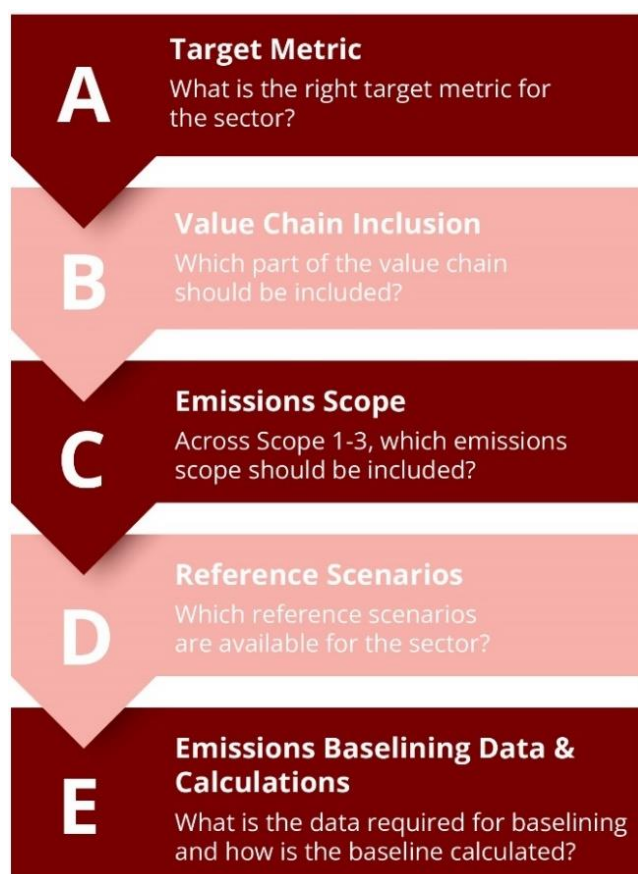
and Thailand. Coal mining not only contributes to energy security and affordability in many markets across the region, but it can also make up a significant percentage to provincial GDP due to its geographic concentration. For example, the International Labour Organisation (ILO) estimates that coal mining contributes 31.5% and 19% of GDP in the Indonesian provinces of East and South Kalimantan respectively. Mitigating socio-economic impacts on workers and surrounding communities, such as through diversification plans, is an important part of the transition away from thermal coal mining¹⁵.

- The Cement sector plays a vital role in infrastructure development, with production and consumption largely concentrated in Asia. Vietnam and Indonesia are among the top 10 producers of cement globally, while elsewhere in ASEAN, significant cement markets exist in Thailand, the Philippines and Malaysia. Our targets are focused on reducing the emissions intensity of cement production, enabling the sector to meet global demand while reducing emissions and supporting economic development in tandem with decarbonisation objectives.
- **Readiness of key decarbonisation enablers:** Of our priority sectors where we have set targets, the Palm Oil and Power sectors are where technology is rapidly maturing and becoming commercially viable, or where sustainable practices are increasingly economical and scalable, to enable emissions reductions in the near term. In the Cement sector, solutions such as clinker substitution and use of alternative fuels are gaining traction, while emerging technologies such as CCS are expected to unlock further decarbonisation in the longer term. In the transition, coal-fired power generation is substituted with low carbon and increasingly economical renewable sources, while socio-economic impacts to workers and communities dependent on the Coal sector, including in coal mining, must be mitigated through reskilling and redeployment efforts. Across all our priority sectors, we observe rapidly shifting regulatory policies and/or customer preferences, creating an increasingly supportive environment for decarbonisation, giving us a practical path forward to effect real change.
- **Availability of methodology and data:** Sectors that have developed science-based pathways, and where a foundational level of data readiness exists in our portfolio. In sectors where climate science and emissions reporting are more nascent, such as Palm Oil, we have prioritised the use of best available information in advance of having perfect data, to respond to the urgency of climate change and start being a catalyst for decarbonisation.

¹⁵ Global Energy Monitor, Ryan Driskell Tate, Dorothy Mei, Tiffany Means, and Satomi Sugaya (2023). A Scraping by: Global coal miners and the urgency of a just transition.

Key design decisions in our approach

For our target setting towards Net Zero across all our prioritised sectors, we have adopted a common approach with a series of five key design decisions at their core, with the key goal of driving real world decarbonisation outcomes.



Design Decision A: Target metric selection

With a projected GDP growth per annum of over 5%, ASEAN is set to become the fourth largest economy in the world by 2050¹⁶. A Net Zero future in Southeast Asia has the potential to foster economic resilience and deliver socio-economic benefits to communities throughout the predominantly emerging markets of the region. To achieve this, a just transition is required, which balances sustainability goals with societal and economic development. In many of our target sectors, this would mean increasing levels of activity and output to meet the growing demand in the region. As such, our sector targets in Palm Oil, Power and Cement are based on emission intensity metrics, which allow for social and economic development in tandem with decarbonisation objectives. We will actively facilitate our clients' ability to meet growing demand while simultaneously reducing emissions.

We have chosen to take a different approach to the Coal sector. The phase out of coal as a source of energy is critical to keeping global warming at below 1.5°C, and we have aligned our commitments with science-based pathways including the IEA's Net Zero Emissions by 2050 (NZE 2050), to phase out financing of thermal coal by 2040. We have set a target to reduce our exposure to thermal coal mining by 50% by 2030 and have put in place relevant financing prohibitions since 2021 to support the transition.

Design Decision B: Determining the value chain inclusion

Our targets cover large industries with complex and interconnected value chains, which involve multiple activities that contribute in different ways to the eventual outputs and the associated emissions. However, not all activities contribute equally to emissions and in our priority sectors, the most significant sources of emissions typically reside in a single or small number of activities within the value chain. While we finance a diverse profile of clients and activities across the value chain, we have ensured that our targets are focused on the most carbon-intensive activities, so that they are relevant and impactful.

We have also examined the value chain to determine where our sphere of influence lies over the emissions from these activities. In many cases, the companies involved in these carbon-intensive activities are also the key decision makers over what sustainable technologies or practices to adopt

¹⁶ ASEAN Secretariat (2021). ASEAN Development Outlook: Inclusive and Sustainable Development.

and the pace of adoption, through which they can steer the extent and pace of decarbonisation. For example, in the Power sector, the burning of fossil fuels for power generation is the most significant source of emissions, whereas emissions associated with transmission and distribution (T&D) and retail are low. Furthermore, pure T&D companies and retailers have little influence over the source of generation for the electricity they receive. Power generation companies, including large integrated companies, are hence the focus of our target for the Power sector, ensuring we strive to align our financing to the most significant emissions reduction potential through the activities that we finance.

While our initial set of targets focuses on the most relevant parts of the value chain, we will look to expand our scope of coverage in future. In the meantime, we will continue to work with companies engaging in activities across the value chain in our priority sectors, including where we have not set targets, to support their decarbonisation activities.

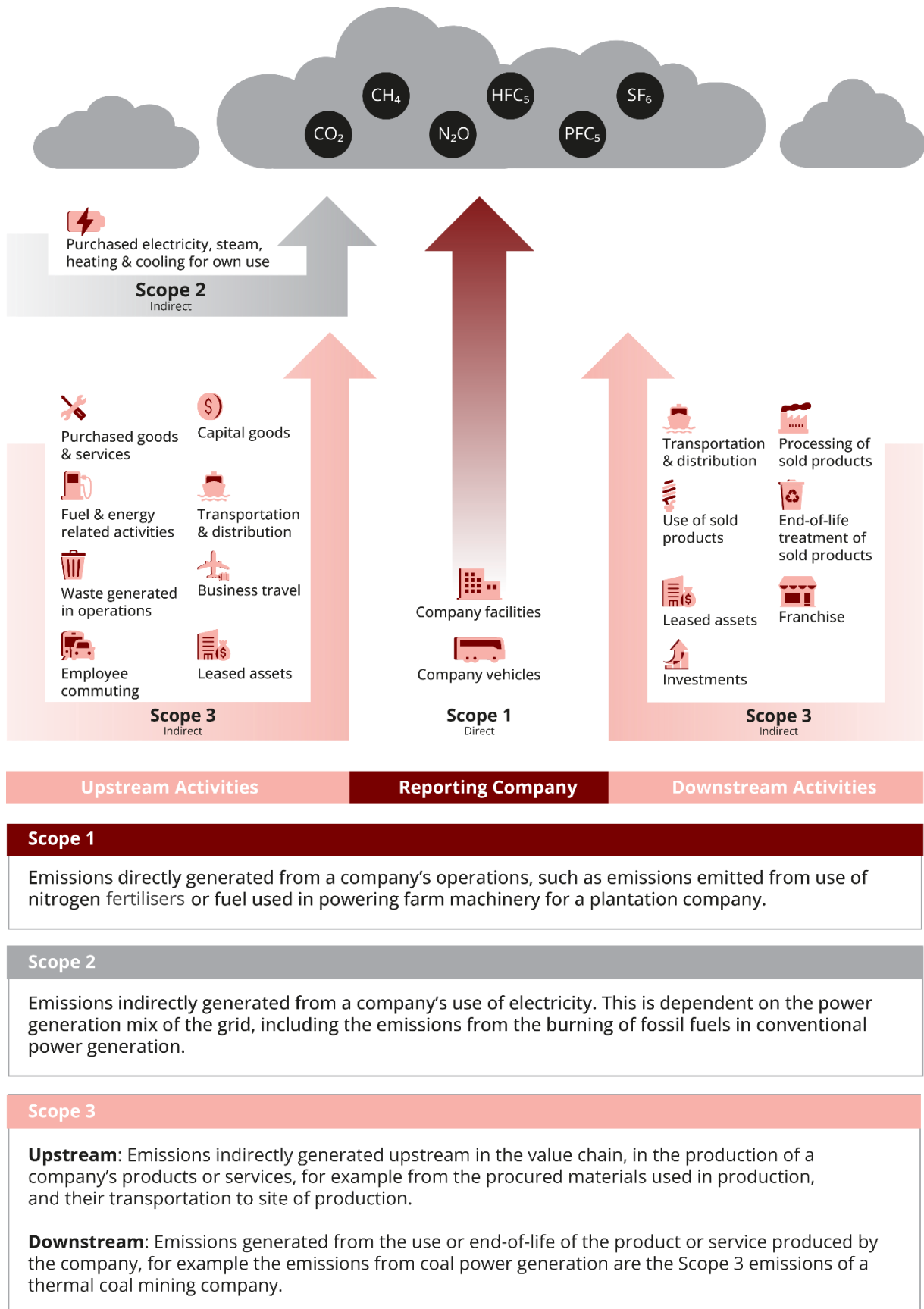
Design Decision C: Determining the emissions scope boundary

We establish the emissions scope boundary for our sector targets based on the most carbon intensive activities from the perspective of our clients in the focus areas of the sector value chains (as discussed under Design Decision B). Hence the emissions scope boundary will vary by sector and the part of the value chain that has been included.

For example, in our Palm Oil sector targets, we have included the Scope 1 and Scope 2 emissions of our plantation and mill clients. For our clients with integrated operations across plantations and mills, we have also included their Scope 3 Upstream emissions from the procurement of Fresh Fruit Bunches (FFB) from independent smallholders. This reflects the materiality of emissions arising from the establishment of planting areas, including areas used by independent smallholders in the cultivation of oil palm. With Scope 3 Upstream coverage included, we are minimising sources of leakage in the emissions accounting, and reflecting the need for smallholders to be included in the transition.

We tackle coal-related emissions in both our Coal and Power sector targets, with our financing prohibition policies applying to both greenfield thermal coal mining and coal-fired power plant (CFPP) development and expansion, while our Power sector emissions intensity reduction target also ensures we are focused on working with our clients to reduce their dependence on coal-fired power generation.

Figure 1 Definition of Scope 1, 2 and 3 Greenhouse Gas Emissions (adapted from Greenhouse Gas Protocol)



Design Decision D: Selecting an appropriate reference scenario

We have firmly anchored our 2030 Targets in line with Net Zero by 2050, by considering a range of economy-wide Integrated Assessment Models (IAMs) and sector-specific pathways which have been developed and maintained by research institutions and global industry organisations, and are aligned to limiting global warming to 1.5°C since the pre-industrial era. We have ensured that our reference scenarios are guided by science and have wide acceptance by climate scientists, regulators and industry.

Our selection of reference scenarios is done on a case-by-case basis for each sector. IAMs simulate emissions from all sectors and geographies and ensure they stay within the acceptable carbon budget required for decarbonisation. The IEA NZE examines the full spectrum of energy issues including oil, gas and coal supply and demand, renewable electricity technologies, electricity markets, energy efficiency and much more, to lay out cost effective and economically productive pathways to a Net Zero energy system. Therefore, we have anchored our Coal and Power sector targets to the IEA NZE to establish a consistent narrative across these energy-related sectors that are part of significantly overlapping ecosystems.

However, in the agricultural sectors including the Palm Oil sector, land use change related emissions are the most significant driver of emissions, with 80% of the mitigation potential of land use change emissions coming from halting deforestation¹⁷. Meanwhile, in the Cement sector, emissions from clinker production account for the bulk of emissions in the value chain, with a combination of CCUS technologies, clinker alternatives and fossil fuel substitution as the main emissions reduction drivers. Due to these unique factors, the rate at which these sectors can decarbonise may differ from the overall rate of decarbonisation possible by society as a whole. We have therefore chosen to anchor our reference pathways in the Palm Oil and Cement sectors on the commodity specific Science-Based Targets initiative (SBTi) pathways, as they are underpinned by these sector-specific and significant sources of emissions and drivers of decarbonisation.

We have also considered the characteristics of the region that we operate in and have sought to adopt a pathway that is most relevant to the markets that we operate in, to facilitate a just transition. For example, in the Power sector, while Southeast Asian governments are adopting increasingly supportive policies to accelerate renewable power generation, the pace of the transition is likely to be slower in the region due to our power system today containing more young coal-fired power plants (CFPPs) than in other regions, and the rapidly growing demand for power to support development. As such, we have incorporated these insights in our reference scenario to acknowledge the different starting points and shape of the transition arising from the unique circumstances of the region we serve.

Design Decision E: Establishing our baseline

In most of the markets and sectors that we operate in, detailed sustainability-related reporting remains a largely voluntary practice. However, there are positive developments on the horizon that are accelerating the coverage and quality of emissions reporting. The emergence of the International Financial Reporting Standards Climate-related Disclosures (IFRS S2) and its inclusion of Scope 3 reporting requirements, growing regulatory support for Taskforce on Climate-Related Financial Disclosures (TCFD) adoption in many jurisdictions across ASEAN, and the emerging government guidelines and infrastructure designed to assist private companies and SMEs in voluntary ESG reporting provide a positive environment for the state of emissions reporting in ASEAN to continue improving.

However, in advance of consistent and widespread emissions reporting, we have used a combination of sources to establish our baseline financed emissions. We prioritised directly reported data and bottom-up asset estimation, before falling back on sector and country proxies

¹⁷ Anderson, C. et al. (2022). Forest, Land, and Agriculture Science Based Target-Setting Guidance.

were required, in line with Partnership for Carbon Accounting Financials (PCAF) guidelines. Our data sources include:

- Company-reported emissions data, sourced directly from our clients' climate disclosures such as sustainability reports, and from established independent databases.
- Asset level information where relevant. For example, in the Power sector, established databases on power generation assets including capacity, operating status, and type of fuel used, enable us to better determine emissions at the power plant level. This allows us to more specifically identify the emissions associated with power generation, where aggregated data from company reporting may not.
- Proxies based on sector and country averages where data is unavailable. The proxies we have used are grounded in rigorous scientific literature. Where our baseline has a larger dependency on the use of proxies, such as in the Palm Oil sector, we have also consulted with some of our clients, standard setters, and other relevant organisations in the ecosystem, to ensure their acceptance and appropriate use.

Concurrently, we will also engage with our clients to improve the coverage and quality of reported data, allowing us to replace the use of proxies with more accurate information. We are cognisant that this may cause our baseline to fluctuate, and particularly in the Palm Oil sector where current reported data coverage is relatively lower compared to other sectors and have included a degree of conservatism in our use of proxies to account for expected movements as our clients expand the coverage of their reporting.

Our sectoral baseline for each sector is simply an aggregation of our client data across the sector. For the Palm Oil, Power and Cement sectors, our baseline emissions intensity is calculated through an exposure weighted average of our client's emissions intensities. For coal, as our target is simply to reduce and eventually phase out thermal coal financing by 2040, we have used 2021 exposures as our baseline and reduce our financing to 50% of our baseline level by 2030.

Defining our targets and charting a course to Net Zero

At the core of our targets is an aspiration to align our portfolio to the relevant reference scenario by 2030, and to continue to decarbonise in line with the reference pathway through to Net Zero in 2050. Our 2030 Targets provides us with the impetus to act now and do what we can, such as by directing our financing towards accelerating the adoption of commercially viable low-emissions technologies and practices. In the longer term, achieving Net Zero will require nascent technologies to reach commercial viability and scale, and we will ensure our financing remains supportive to these critical developments.

We have assessed the necessary levers required to get us to our targets in our priority sectors and ensure that we have a feasible and actionable plan to deliver on our ambition. The course to achieving our targets requires an activation of a variety of levers to shape our portfolio, including but not limited to:

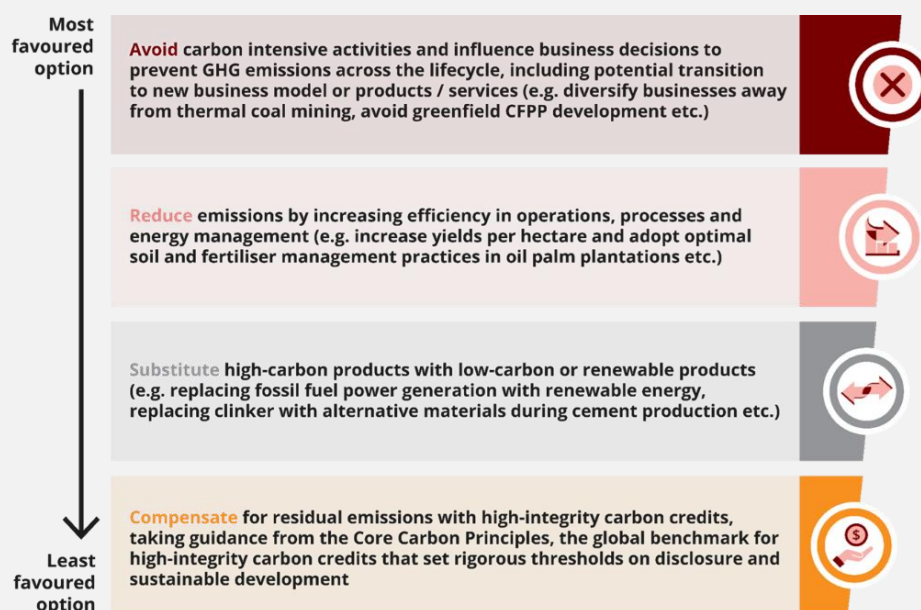
- Strict adherence to CIMB Group's current sustainability policies, such as our financing prohibition for greenfield coal-fired power plants and thermal coal mining projects and expansions, our NDPE policy and other sector expectations laid out in our financing policies¹⁸.
- Actively supporting our clients to deliver on their existing sustainability commitments by channeling financing to specific activities, while encouraging and enabling them to develop and achieve more ambitious¹⁷ decarbonisation goals and adopt more sustainable practices

¹⁸ CIMB (2023). Sustainable Finance Framework.

- Engaging our clients that have not yet set targets to develop and progress on a plan to deliver reductions in emissions intensity (or direct emissions, in line with our target metric).
- Where sustainability reporting is still nascent, encouraging our clients to improve the quality, consistency and coverage of their reporting.
- Reshaping our portfolio, by actively increasing our exposure to clients who share our decarbonisation philosophy, and to the low carbon or zero emissions alternatives required for the transition to a Net Zero world, such as renewable power and sustainable palm oil.
- Engaging other major supply chain actors in our portfolio to exert their influence, such as with our real estate developer clients in signaling and creating the necessary demand for more sustainably produced cement.
- Proactively working with policymakers and regulators including the central banks and industry networks in the regions we operate in, such as the Joint Committee on Climate Change (JC3), International Sustainability Standards Board (ISSB), as well as the CEO Action Network, to encourage alignment towards a Net Zero 2050 ambition to drive positive change as markets and technology mature, and regulatory environments.
- Continuously ratcheting up our policies in carbon intensive sectors to ensure they continue become more supportive.

The role of carbon credits

Our approach to supporting our clients in their decarbonisation journeys adheres to the Carbon Management Hierarchy (CMH)^[1], which was devised to assist companies in prioritising actions to minimise GHG emissions.



We support our clients to develop, implement and accelerate science-based and credible decarbonisation strategies towards Net Zero. In our priority sectors, our reference pathways have specified key levers to achieve Net Zero that involve avoidance, reduction, and substitution actions. Therefore, our primary objective is to encourage and facilitate our clients' efforts to take these critical actions, such as:

- In the Coal Sector, curtailing greenfield thermal coal mining and CFPP development, or expansions.
- In the Palm Oil and Cement Sectors, increasing production efficiency and/or decreasing carbon intensity per unit of production through adoption of sustainable practices and technologies.
- In the Power sector, substitution of carbon-intensive power generation with low carbon and renewable alternatives.

Additionally, high integrity carbon credits are an important part of the global solution to Net Zero, and companies can optionally adopt their use as part of a comprehensive decarbonisation strategy to compensate for hard-to-abate or unavoidable residual emissions and even to go beyond carbon neutrality. In the usage of carbon credits, we encourage our clients to take guidance from the Core Carbon Principles (CCPs)^[2], the global benchmark for high-integrity carbon credits, and to disclose the role of carbon credits in their decarbonisation strategy and progress in line with best practices.

^[1] [Institute of Environmental Management and Assessment \(2009\) GHG Management Hierarchy, a policy guide](#)

^[2] [The Integrity Council for the Voluntary Carbon Markets \(2022\), The Core Carbon Principles](#)

Beyond the activation of such levers, our ability to achieve our targets is ultimately contingent on the realisation of existing client and government commitments, and our progress towards our 2030 Targets may be non-linear. Therefore, we have been and will continue to engage with our clients, relevant policymakers, standard setters and industry bodies to actively contribute to the realisation

of these goals. Nonetheless, we are confident that our 2030 Targets are ambitious yet achievable, and that we have charted a concrete path to get there.

Monitoring and reporting on our progress

We will report on our progress towards these targets regularly as part of our sustainability disclosures. This includes updating our baselines and analysing the movements against previous years, to explain the progress we have made towards achieving our targets.

Climate science is dynamic and evolving at pace. There may be changes year-on-year including the emergence of new or updated climate scenarios, the development of more rigorous GHG accounting protocols and the establishment of more accurate benchmarks, which could lead to some volatility to our baseline emissions reporting and our reference pathways. Barring any major changes in the science and underlying data, we intend to maintain the consistency of our 2030 Targets in order to report on our progress with clarity. As we approach 2030, we will look to set new targets for every five years thereafter in line with NZBA guidelines.

4 Palm Oil Sector

4.1 Summary of Our Targets

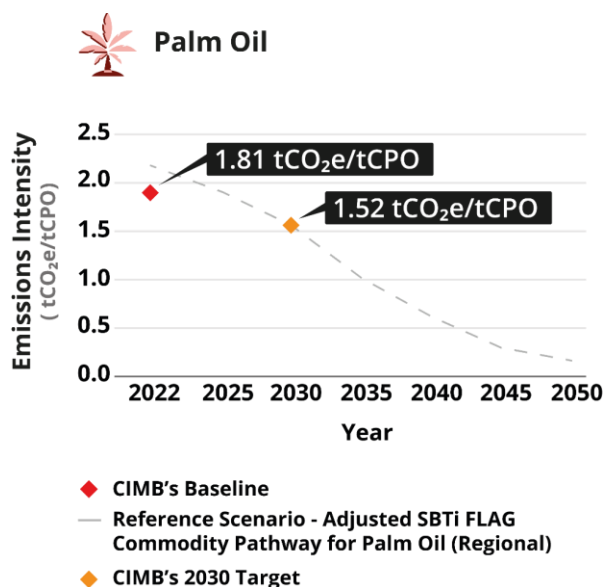
Sector Highlights

- Palm oil remains an indispensable commodity for demand markets globally that rely on its versatility and affordability in incorporating its various derivatives and fractions into a multitude of products. The market for palm oil will continue to grow, with no readily available substitutes available at similar scale, cost and efficiency. Palm oil's unique chemical properties are hard to replicate, and crucially, high yields per hectare make palm oil an efficient source of food and fuel, such that substitution will potentially result in land displacement impacts that are four to seven times for the cultivation of alternative oil crops.
- Palm oil is also a crucial commodity for producer nations. As a primary industry and a significant agricultural export, palm oil is directly responsible for between 3-5% of the GDP of Indonesia and Malaysia¹⁹. The production of palm oil is also responsible for the direct employment of over 4.3 million people across Indonesia and Malaysia, and more than 12 million others indirectly²⁰. This includes more than three million smallholder farmers in rural communities in the region, who depend on oil palm cultivation for their livelihoods, and who are responsible for >40% of palm oil production in the region²¹. A just transition must bring onboard this vulnerable population, safeguarding their livelihoods while increasing the propagation of sustainable practices.
- Palm oil can be produced sustainably while continuing to bring socio-economic benefits to the developing markets involved in its production. This includes halting deforestation and adopting a strict NDPE policy, which will minimise the addition of GHG emissions associated with new land use change and peat oxidation, while concurrently, historical land use change related emissions continue to amortise over time. Additionally, the adoption of more climate conscious growing and milling practices and technologies, and ensuring the protection of human rights of workers, smallholders and local communities, are vital components of achieving sustainable production.
- Governments, regulators, standard setters, industry bodies and players, as well as NGOs have made concerted efforts in the last two decades to improve the sustainability of palm oil production, and national and international certification schemes have proven to be crucial catalysts for change by establishing standards, providing guidance and verification for the sustainable production of palm oil. Continued progress will enable sustainable palm oil to be an important lever for decarbonisation, providing lower carbon alternatives for the broader food and fuel systems.
- As a bank providing financing to this crucial sector, we intend to play our part and work with our existing and new clients to encourage and facilitate their strategies towards more sustainable production. We will also engage with actors across the broader palm oil ecosystem to seek out opportunities for collaboration, to enable and accelerate the decarbonisation of the sector, while standing ready to provide the financing necessary to achieve it.

19 Indonesia: GAPKI (2021). Palm oil has irreplaceable role in Indonesian economy. Malaysia: Economic Planning Unit, Prime Minister's Department (2022) The Malaysian economy in figures.

20 RSPO (2022). Impact Report.

21 Meijaard et al. (2018). Oil Palm and Biodiversity, A situation analysis by the IUCN Oil Palm Task Force. IUCN Oil Palm Taskforce.



Scope

- Scope 1 (including land use change related emissions and sequestration) and 2 of plantation, mill and integrated clients
- Scope 3 upstream (i.e. external sourcing of fresh fruit bunches) of integrated clients

Decarbonisation Levers



- Strict adherence to CIMB's NDPE policy
- Support clients in Certified Sustainable Palm Oil (CSPO) qualifications, and in conjunction, improve emissions data reporting
- Onboard new CSPO clients, and support our existing clients to deliver and further accelerate emissions intensity reduction efforts
- Finance biogas plant installation at palm oil mills

CIMB's NDPE commitment for palm oil, forestry and timber plantation (including rubber) sectors

We incorporated No Deforestation, No Peat and No Exploitation (NDPE) commitments into our Group Sustainable Financing Policy in 2022. We require our clients to have an NDPE policy which includes commitments to:

- Conduct High Conservation Value (HCV) assessments to identify, protect and conserve HCV areas, prior to any new development;
- Prohibit any new cultivation on peatland;
- Obtain legal rights and respect the rights of indigenous peoples and affected communities to give or withhold free, prior and informed consent (FPIC);
- Uphold labour rights including no exploitation of workers or forced and child labour.

Processors including palm oil mills, are strongly encouraged to establish traceability systems for external crop suppliers, develop an assurance mechanism to ensure crops are sourced legally, and engage with external suppliers on their own NDPE requirements.

 <p>No Deforestation</p> <p>Avoiding deforestation when developing land for commodities or projects, as well as regulating burning, and promoting the reduction of GHG emissions on existing plantations</p>	 <p>No Development on Peat</p> <p>No new peatland developments and encouraging Best Management Practices on existing peat plantation, promoting restoration of peat wherever feasible</p>	 <p>No Exploitation</p> <p>No exploitation of workers and small-scale growers, seeking Free, Prior and Informed Consent from local communities, and demonstrating respect for human rights</p>
--	---	--

As an ASEAN-focused bank with our interests deeply rooted in the region, we aim to be an agent for change by supporting our clients in the Palm Oil sector in the transition to sustainable palm

oil. Our 2030 Target commits us to work with our clients to reduce the emissions intensity of our exposures in the sector at an average rate of 2% per annum, in order to achieve 16% reduction by 2030 in alignment with a Net Zero future.

“Transitioning to Net Zero requires a nature-positive economy, net positive corporate and just transition leadership. CIMB’s effort in setting a Net Zero target for the Palm Oil sector supported by “no deforestation” policy is an exemplar of tackling the twin climate change and biodiversity crises and with social equity considerations. We call upon financial institutions and corporations to set and act on science-based targets and transition plans to step up to the greatest responsibility of our time.”

WWF-Malaysia and WWF-Singapore

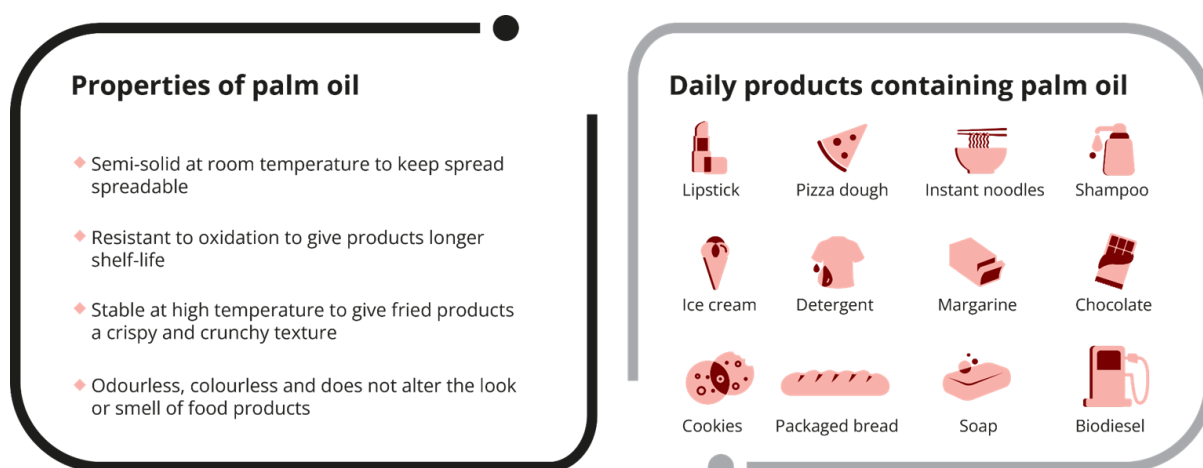
4.2 Industry Overview

Palm oil is one of the most widely consumed oils globally. It serves as an affordable cooking oil for communities all over the world and is highly versatile, with its numerous fractions and derivatives finding their way into a multitude of food, household, personal care and cosmetic products to satisfy growing global demand.

Due to its high calorific value, palm oil also serves as an important source of biofuel for producer nations, supporting them in their energy security and environmental sustainability objectives. The use of biofuels as a fossil-fuel based petroleum substitute is not dependent on new vehicle and engine technology and is therefore a practical and important lever for reducing reliance on fossil fuels in the transportation sector today. Countries such as Indonesia and Malaysia plan to continue raising the mandatory biodiesel blending mandates to accelerate the shift away from fossil fuels²².

Overall, demand for palm oil has tripled in the last 20 years²³ and growth is set to continue as population and income growth results in greater demand for food and non-food products.

Figure 2 Properties of palm oil and its various uses



22 Reuters (2022). Indonesia, Malaysia commit to biodiesel mandates despite higher prices.

23 FAOSTAT (2000-2021). Food and Agricultural Organization of the United Nations.

Southeast Asia is the largest producing region of palm oil, with Indonesia and Malaysia accounting for a combined >85% of the >70M metric tonnes of global annual Crude Palm Oil (CPO) production²³. As a primary industry and a significant agricultural export, palm oil is directly responsible for between 3-5% of the GDP of Indonesia and Malaysia²⁴.

Palm oil production is also responsible for the employment of over four million people across Indonesia and Malaysia, and more than 12 million others indirectly²⁵. This includes more than three million smallholder farmers in rural communities, who depend on oil palm cultivation for their livelihoods, and who are responsible for >40% of palm oil production in the region²⁵.

Oil Palm refers to the palm tree, whereas **Palm Oil** is the product produced from oil palm



CIMB Group's commitment to human rights

Palm oil plantations employ over four million people across the region, while the sector has also brought gainful employment to millions more including smallholders and others working on farms, mills and refineries²⁵. With the large numbers of people from vulnerable groups such as low-wage and foreign workers and indigenous groups involved, the risk of negative impacts to workers, local communities and their fundamental human rights is a key concern.

CIMB maintains a strict human rights policy adhering to internationally recognised laws and standards which outlines a comprehensive framework for identifying, preventing and mitigating human rights violations. In our financing activities, where clients fail to effectively address human rights risks, we institute corrective action plans within agreed timelines.

In July 2023, we collaborated with Earthworm Foundation to conduct training programmes on Human Rights management to provide additional support to our clients and vendors in managing their human rights risk.

To learn more on CIMB's commitments, refer to our human rights statement [here](#).

Rainforests and peatlands are large carbon sinks, and deforestation and peatland clearance in this region, primarily due to the expansion of agriculture including palm oil, mining activities and from illegal logging, have resulted in detrimental environmental and biodiversity impacts. Despite its ubiquity in food and household products, as well as the socio-economic benefits that oil palm cultivation brings to producer nations, palm oil has become a deeply controversial product, with negative associations globally and many food products bearing "no palm oil" labels. While the rate of primary forest loss in Malaysia and Indonesia has reduced to near record-low levels in recent years with supportive regulations, historical deforestation in the last two decades associated with oil palm cultivation has been a

subject of contention and continues to exert an impact on the emissions associated with palm oil production through land use change. In addition, social issues such as land conflicts and workers' rights have also contributed to the sector's negative associations, with companies facing increasing scrutiny on their labour practices and human rights protections for indigenous peoples and local communities.

At the same time, substitution with alternative oils is either impractical or inefficient. Direct substitution is difficult due to palm oil's unique chemical properties. Oil palm yields per hectare also makes palm oil an extremely efficient source of food and fuel, currently supplying >40% of the world's vegetable oil demand on just <10% of the total acreage of land used in vegetable oil

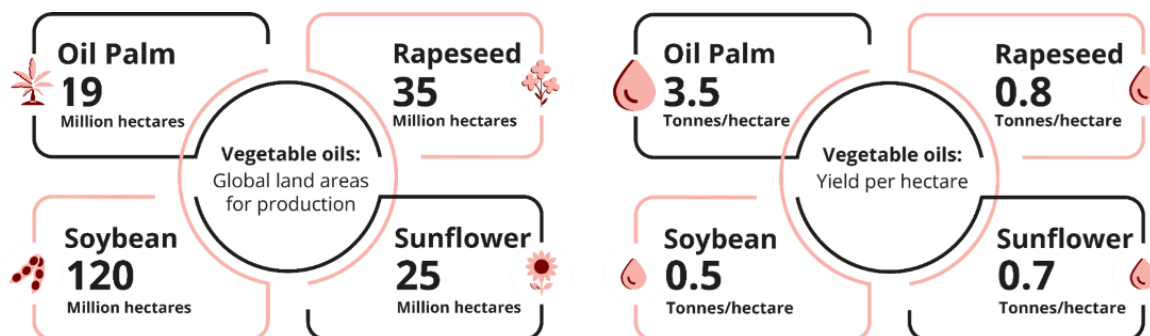
24 Indonesia: GAPKI (2021). Palm oil has irreplaceable role in Indonesian economy.

Malaysia: Economic Planning Unit, Prime Minister's Department (2022). The Malaysian economy in figures.

25 RSPO (2022). Impact Report.

production²⁶. Substitution will result in land displacement impacts that are four to seven times as large for the cultivation of alternative oil crops, further increasing GHG emissions and jeopardising biodiversity²¹.

Figure 3 Yields from palm oil versus other vegetable oils²⁷



The palm oil industry has made considerable progress on tackling these environmental and social issues, and continued support and momentum is required to drive further improvements. Oil palm producer nations have recognised the need for a shift to sustainable palm oil. Regulators across major producers in the region, NGOs and companies across the palm oil value chain including growers, producers, refiners and users have been laying the groundwork for the production of sustainable palm oil since the early 2000s.

The last decade has seen an acceleration in supportive regulations. Indonesia and Malaysia have declared moratoriums on the use of primary forest and peatland for oil palm cultivation. NDPE commitments have been adopted by a broad swathe of companies within the palm oil ecosystem. Serving as a crucial catalyst for change, national and international certification schemes have been established to set standards, provide guidance, and verify the sustainable production of palm oil. Certified Sustainable Palm Oil (CSPO) production under international and local certification schemes has increased, with 20% of total annual production being Roundtable on Sustainable Palm Oil (RSPO) certified²⁸. A total of 5.5 million hectares or >97% of the total oil palm planted areas in Malaysia have obtained Malaysian Sustainable Palm Oil (MSPO) certification²⁹. In Indonesia, 90% of the member companies of the Indonesian Palm Oil Association (GAPKI) have obtained the mandatory Indonesian Sustainable Palm Oil (ISPO) certification; ISPO is expanding mandatory coverage to include smallholders which is expected to help drive up overall national adoption rates from currently at ~30-40%³⁰.

26 Meijaard et al. (2018). Oil Palm and Biodiversity, A situation analysis by the IUCN Oil Palm Task Force. IUCN Oil Palm Taskforce.




27 WWF (2015). Sustainable Sourcing Guide for Palm Oil Users: A practical handbook for US consumer goods and retail companies.

28 RSPO (2022). Impact Report.

29 Business Today (28 Feb 2023). More than 97% of Oil Palm Planted Areas Are MSPO Certified.

30 GAPKI (2023). 90% Members of GAPKI Get ISPO Certificates.

Figure 4 Example of Standards for Certified Sustainable Palm Oil

	 Voluntary global standards	 Mandatory Malaysian standards <i>Since 2020</i>	 Mandatory Indonesian standards <i>By 2025 including all smallholders¹</i>
Primary forests & deforestation	<p>Land clearing since Nov 2018 should not damage HCVs or HCS forest</p> <p>HCVs and HCS forests in the managed area are identified and protected or enhanced</p>	<p>Comprehensive HCV, environmental and social impact assessments are undertaken prior to new plantings</p> <p>No conversion of natural forest, protected areas and HCV areas from Dec 2019</p>	<p>Original principle on 'protecting primary forests and land peats' has been changed to 'environmental management, natural resources and biodiversity' in 2020</p>
Peatland	<p>No new planting on peat after Nov 2018</p>	<p>New planting on peatland to be avoided unless permitted by local legislation</p>	<p>Focuses on the conservation of forests, peatland and HCV areas</p>
Free, prior and informed consent (FPIC) standards	<p>Requires that use of the land for oil palm does not diminish the legal, customary or user rights of other users without their FPIC</p>	<p>Requires customary rights to not be threatened or reduced; any conflict or land disputes shall be resolved in accordance with an FPIC process</p>	<p>No explicit reference to FPIC, though requires a company to settle land disputes in its permit area</p>
Workers rights	<p>Ensures workers' rights, health and safety including no forms of child, forced or trafficked labour are used</p>	<p>Ensures workers' rights, health and safety and that no forms of forced or trafficked labour are used</p>	<p>Ensures workers' occupational health and safety, worker welfare improvement and prohibits child labour</p>

1. ISPO has been mandatory for all oil palm companies since 2011 (and voluntary for smallholders), though biofuel producers were exempted temporarily from 2015-2020
 Source: RSPO, MSPO, ISPO

The rate of deforestation has slowed significantly to near record-low levels in Indonesia and Malaysia. Primary forest loss in Indonesia has reduced by 64% within the 2020-2022 period compared to 2015-2017. A similar comparison in Malaysia shows a 57% decline in deforestation, which remains low on an absolute basis and has declined from its recent peak of 200kHa average per year in 2014-2016, to level off at ~70kHa per year in the last three years³¹. Conservation efforts within oil palm concessions are also being undertaken in earnest, and cumulatively through 2021, RSPO members globally have set aside a total of 301kHa land for conservation³².

Additionally, leading plantation companies are starting to adopt precision technology to optimise fertiliser and other farming inputs, while the installation of biogas capture facilities in mills has

31 World Resources Institute (2022). Global Forest Review, Forest Pulse: The latest on the world's forests.

32 RSPO (2022). Impact Report.

helped to significantly reduce methane emission associated with palm oil production. In fact, most farming practices and technology required to significantly reduce the emissions intensity of CPO production are readily available, with studies demonstrating that a 35% reduction of emissions intensity from sustainable production is already achievable today³³.

While progress is evident and the challenge going forward is to continue scaling the adoption of sustainable production practices and increasing the proportion of CSPO in total palm oil production. Crucially, the transition must also bring onboard more than three million smallholders in the region who supply oil palm fresh fruit bunches (FFB) directly to the large integrated producers or indirectly through a complex chain of traders and independent mills. Smallholder inclusion has the potential to deliver higher incomes and improved access to finance and services for smallholders. However, due to a variety of challenges including complicated legal requirements and significant costs of certification, as well as the lack of expertise and training in sustainable practices, this segment poses a significant challenge to scaling up the production of CSPO. This will require commitment and accelerated efforts from regulators, NGOs, and companies across the palm oil value chain, to support smallholders within their sphere of influence to adopt the right practices.

4.3 CIMB's 2030 Target for the Palm Oil Sector

Design Decision A: Target metric selection

Demand for palm oil is expected to grow at a rate 3-5% per year, requiring an increase of at least 20M metric tonnes of production by 2030³⁴. This reflects the growing demand for products made of or containing palm oil such as food, household products, cosmetics and biofuels, with no readily available substitutes at similar cost, scale and efficiency. Consequently, we target a physical emissions intensity reduction, expressed in tonnes of CO₂ per tonne of Crude Palm Oil (tCO₂e/tCPO) reduction. Our goal is to support palm oil producers to continue to produce, or even producing more at a lower carbon intensity, and not to reduce our support to the sector.

Design Decision B & C: Value chain and emissions scope coverage

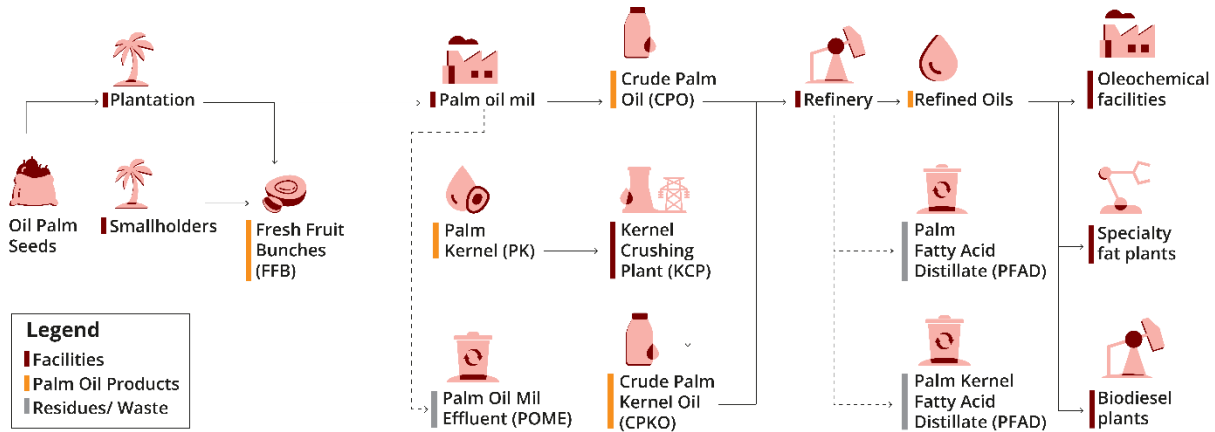
The production of palm oil begins in producing countries where oil palms are planted. Cultivation is undertaken by plantation companies and integrated players, as well as the more than three million smallholders in Malaysia and Indonesia who account for >40% of total palm oil production in the region³⁵. Oil palm trees begin bearing fruits 2-3 years post-planting, and remain productive up to ~25-30 years. FFB are harvested and delivered to a nearby mill within 24 hours. At the mill, CPO is produced from the FFB, alongside various by-product and waste streams including Palm Kernel (PK) and Palm Oil Mill Effluent (POME). PK is eventually crushed at a kernel mill to produce Crude Palm Kernel Oil (CPKO). Both CPO and CPKO are transported to different refineries around the world and treated to render them suitable for food production and other end uses.

33 Schmidt J & De Rosa M (2022) Life Cycle Assessment of Palm Oil at United Plantations Berhad 2021, Results for 2004-2021.

34 Kondalamahanty (2023). Supply vs sustainability a key challenge for palm oil industry, S&P Global Commodity Insights.

35 Solidaridad Network (2022). Palm Oil Barometer 2022: The inclusion of smallholder farmers in the value chain.

Figure 5 Palm Oil Value Chain³⁶



Upstream: Plantations & Smallholders

- FFB is produced by plantations and smallholders.
- Commercial plantations can extend over tens of thousands of hectares and tend to be part of large, integrated ventures.
- In addition, approximately >3M smallholders in the region produce FFB that are processed into >40% of CPO produced in the region.

Upstream: Mills

- FFB is transported to nearby mills where CPO and CPKO are extracted.
- Palm oil mills are typically part of large, integrated ventures and are supplied with FFB from owned plantations, scheme smallholders and independent smallholders.

Midstream & Downstream: Refinery & Processing

- CPO is transported to refineries for purification and removal of impurities.
- Refining process includes bleaching, deodorisation and fractionation.
- Refined oils are further processed downstream into edible oils, specialty fats and biodiesel.

Source of emissions & contribution to value chain emissions

- Land coverion
- Peat oxidation of palm
- Fertiliser use
- Field fuel use

~70-80%

- Methane from Palm Oil Mill Effluent (POME)
- Mill fuel consumption

~20-30%

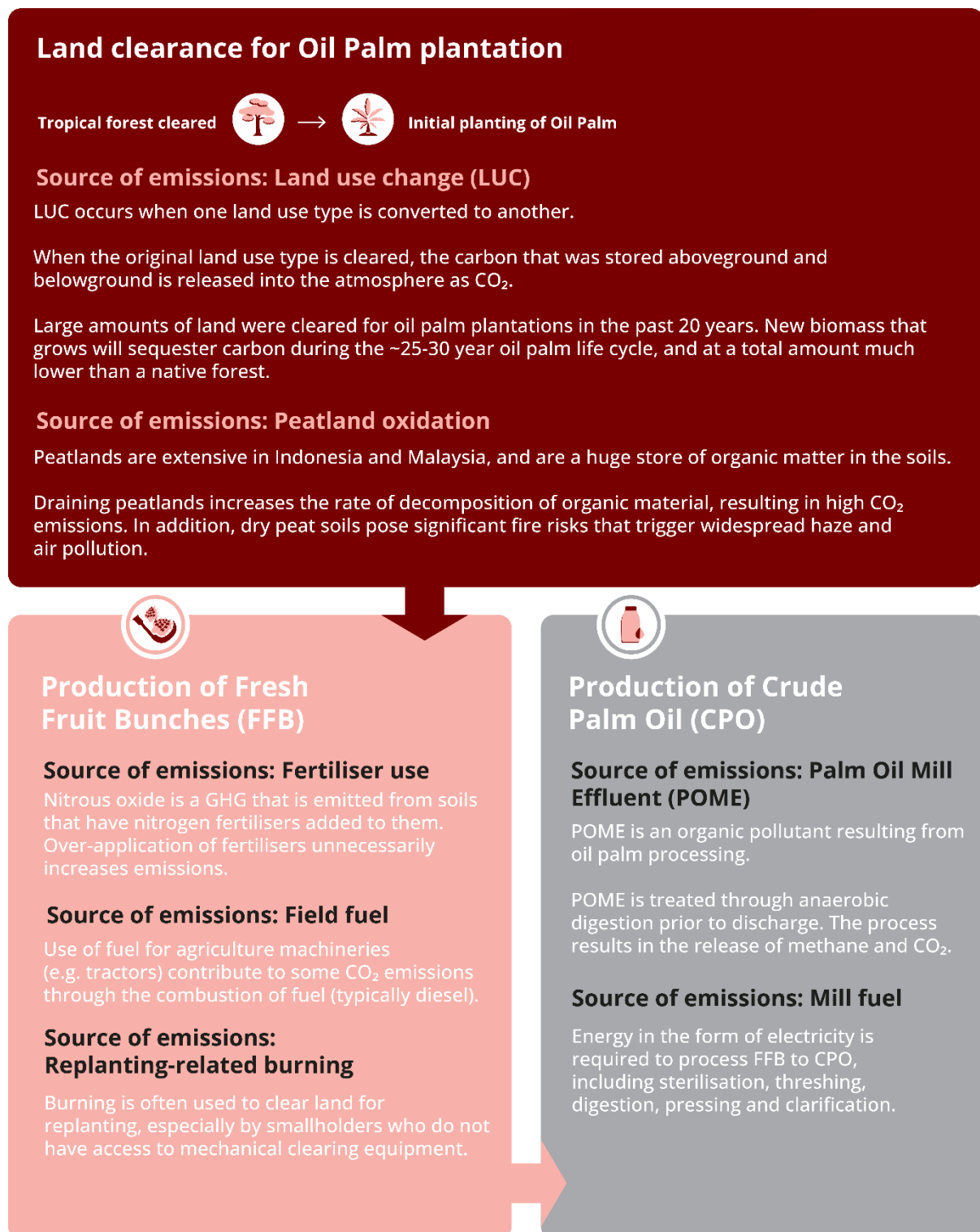
- Refinery / plants fuel consumption

~<5%

Due to recent historical and ongoing deforestation and cultivation on peatland, emissions from land use change and peatland oxidation account for the bulk of the lifetime emissions of palm oil production. Methane released by POME during the extraction of CPO at palm oil mills is another significant contributor. Together, plantations and mills are on average responsible for over 95% of gross GHG emissions associated with palm oil³⁶. Our target focuses on our clients who operate in this part of the value chain (plantations and mills), whose actions have the most substantial impact on the emissions intensity of palm oil.

36 Schmidt & De Rosa (2020). Certified palm oil reduces greenhouse gas emissions compared to non-certified. Journal of Cleaner Production.

Figure 6 Main sources of emissions from palm oil production



Land use change emissions and its accounting

Land use change occurs when one land use type is converted to another. When the original land use type is cleared, the carbon that was stored aboveground and belowground is released into the atmosphere as CO₂. When replaced with oil palm cultivation, the oil palm trees sequester carbon as they grow. As they have a lifecycle of ~25-30 years, oil palm can sequester significantly more carbon compared to annual oil seed crops such as soy and rapeseed.

The difference in carbon sequestration ability of the previous and current land use is the resulting net emissions from land use change. When oil palm plantations are established, the net land use change emissions varies significantly based on the previous land use. When established on grassland or other types of plantation land, oil palm plantations can theoretically lead to a negative net GHG emissions due to the sequestration of carbon in the oil palm crop. However, when established on forest and peat-lands, which are large carbon sinks, there will be significant net positive land use change emissions. This is illustrated in the table below:

Table 1: LUC emissions intensity based on land cover^[1]

Land cover cleared	Emissions intensity (tCO ₂ e/hectare)			
	Aboveground	Belowground	Soil	Total
Peat swamp	182	25	Not measured	207
Lowland forest	147	24	120	291
Rainforest	168	37	77	282
Grassland	6	8	Not measured	14
Oil Palm	20-60		Not measured	20-60

Deforestation and planting on peat are detrimental to both climate change and biodiversity, and must be halted. In addition to increasingly high sustainability standards of local palm oil certification schemes such as MSPO and ISPO (see Figure 4), other supportive policies in Malaysia include a cap on total land for oil palm cultivation at 6.5MHa, no more new planting in peatland areas and banning the conversion of forest reserve areas for oil palm cultivation. Indonesia has enacted a permanent forest and peatland moratorium. Progress is evident with the rate of deforestation slowing significantly to near record-low levels in Indonesia and Malaysia. Primary forest loss in Indonesia has reduced by 64% in the 2020-2022 period compared to 2015-2017. A similar comparison in Malaysia shows a 57% decline in deforestation, which remains low on an absolute basis and has declined from recent peak of 200kHa average per year in 2014-2016, to level off at ~70kHa per year in the last three years.

The GHG Protocol and other widely accepted carbon accounting standards amortise the impact of land use change emissions over a period of 20 years. Hence, only deforestation occurring in the last two decades will attract a land use change emissions accounting impact. The exponential growth of the palm oil industry to satisfy growing global demand is a relatively recent phenomenon as compared to other more established vegetable oils such as rapeseed and sunflower, and significant amounts of land were cleared for the expansion of oil palm plantations in the past 20 years. Strict adherence to NDPE commitments will ensure that the emissions intensity associated with palm oil sector will continue to decrease over time.

^[1] WWF (2022) *Measuring and Mitigating GHGs: Palm Oil*

For the purposes of our baselining and target setting, we have included

- Scope 1 and 2 emissions from plantation and milling clients in our portfolio. These are our clients' direct emissions from their own activities in planting and milling, and include emissions associated with land use change and peatland oxidation impacts, fertiliser and fuel use, as well

as from the treatment and discharge of POME. Aligned to guidelines from the main standards and common reporting practices, negative emissions resulting from the sequestration of carbon in oil palm biomass, as well as from reforestation projects and in any conservation areas managed and maintained by our clients are also included in the scope of our emissions coverage.

- Scope 3 upstream emissions of integrated palm oil companies from sourcing of CPO from independent suppliers. While Scope 3 upstream emissions reporting is challenging and still a nascent practice today, increasing momentum by regulators, standard setters and companies in developing traceability solutions demonstrate a growing appetite and commitment from producers to denote non deforestation in the supply chain, while increasing engagement with their suppliers, and ultimately propagating sustainable practices in their supply chain. Ultimately, our inclusion of Scope 3 upstream emissions reflects the growing influence our clients have over the independent mills, traders and smallholders in their supply chain, and the role that larger producers can play to ensure smallholders are not excluded from the transition.

Design Decision D: Selecting a reference scenario

CIMB has anchored our reference scenario on the Science-Based Targets Initiative (SBTi) Forests, Land and Agriculture (FLAG) emission intensity pathway specific to palm oil commodity³⁷, as it is the only credible and widely accepted science-based target specific to palm oil. The SBTi FLAG commodity pathway for palm oil is based on the key drivers of emissions intensity in plantation activities including land use change, peat oxidation, fertilizer, field fuel use and sequestration in palm biomass and conservation areas. The treatment and discharge of POME in palm oil mills is an additional significant source of GHG emissions not currently included in the SBTi FLAG pathway for palm oil. To account for it, we have scaled up the SBTi FLAG pathway for palm oil with emissions intensity associated with POME in line with scientific literature³⁸ (namely, Augmented SBTi FLAG Commodity Pathway for Palm Oil) while maintaining the same decarbonisation trajectory. This ensures that our reference scenario is consistent with our value chain coverage and covers >95% of the emissions intensity of palm oil.

Design Decision E: Establishing our baseline

Reporting standards continue to evolve with science, and a rigorous and comprehensive set of harmonised standards will emerge in the near to medium term, similar to the progress we have seen in other more mature sectors. However, the urgency of climate change and the significance of emissions from the Palm Oil sector creates an imperative to act now to accelerate decarbonisation of the industry. Hence, we have chosen to rely on best information available today, to begin playing our part. To measure the emissions from our portfolio, we have chosen to rely on multiple sources of data, in the following order of priority:

- **Company reported emissions from our clients' climate disclosures:** There is still a range of practices in the way different companies account for and disclose emissions, with best practice reporting adhering to all aspects of GHG protocol guidelines. However, we have observed a reasonably narrow level of distribution of reported emissions intensities within our clients' sustainability reporting. Based on this, we have proceeded with the assumptions that there is fundamental comparability in their accounting practices, and trust that our clients' sustainability reporting is the most holistic and accurate in capturing specific farming and milling practices that they have put in place
- **Calculated emissions from RSPO's PalmGHG Calculator:** Based on company inputs, and refreshed on a yearly basis through the mandatory Annual Communications of Progress

37 SBTi (2022).

38 Schmidt & De Rosa (2020): Certified palm oil reduces GHG emissions compared to non-certified, Journal of cleaner production.

(ACOP) reporting for all member clients. RSPO has designed the PalmGHG Calculator in accordance with globally accepted ISO Life Cycle Assessment (LCA) standards that allows members to estimate and monitor their net GHG emissions by providing detailed inputs including source of FFB, planted and conservation areas, POME treatments, farm and mill fuel usage etc.

- **Emissions intensity proxies anchored on SBTi and scientific studies:** Due to mandatory reporting required of all RSPO member clients, and voluntary reporting from a further number of non-RSPO member clients, proxies have only been adopted for the subset of our portfolio who are non-RSPO members and who do not voluntarily report their emissions. Our approach to proxy selection and application is as follows:
 - **Differentiates by producer country:** The proxies we have used are differentiated by producer country based on scientific data from the SBTi FLAG pathways. They are reflective of the pace of regulatory action and level of maturity of each market in adopting sustainable production practices.
 - **Incorporates methane emissions from POME:** In alignment with our reference scenario, proxies anchored on SBTi FLAG pathways are scaled up based on scientific studies to include mill effluent emissions.
 - **Conservatively assumes all clients without reported data produce only conventional palm oil:** Scientific literature on the emissions intensity of sustainable versus conventional palm oil is incorporated with the conservative assumption that all clients without company reported data produce only conventional palm oil, and no sustainable palm oil. Studies that exist currently only distinguish between the emissions intensity of RSPO versus non-RSPO certified palm oil, and we will look to incorporate further information on the emissions intensity reduction of other sustainability certifications as this information emerges, allowing us to more accurately reflect the emissions intensities of our clients who have been certified under other schemes.

In all the literature we have drawn from to develop our baselining methodology and proxies, we have chosen only to rely on science-based and credible literature. As reporting guidelines strengthen and our clients increase their reporting capabilities and scope, our confidence in our baseline measurements will continue to grow. In the meantime, we have relied on proxies from scientifically rigorous studies, which are widely accepted by the industry and several of our largest clients who are recognised industry leaders in sustainability.

At time of publication, GHG Protocol has been developing updated guidance for the Land Sector and Removals, which details how companies should account for and report GHG emissions and removals from land management, land use change, biogenic products, CO₂ removal technologies and related activities in GHG inventories. These guidelines are currently in the pilot stage and under consultation, and will be published in the near future. We expect these guidelines to help drive rigour and consistency in palm oil emissions reporting and will engage with our clients to encourage their adoption. While this may have an impact on our reference scenario and baseline reporting in the future, we welcome the increased clarity and harmonisation of reporting standards in the sector. Should the new GHG protocol result in significant shifts to our reference scenario, we will revisit our reference scenario and baselining approach, while engaging with our clients to encourage the adoption of the updated reporting standards.

Incorporation of Upstream Scope 3 emissions in our baseline

Traceability to plantation is an important focus for leading sustainable palm oil companies, and is an important first step to begin identifying and engaging with independent upstream suppliers and expanding the adoption of sustainable practices in their supply chain. It is also fundamental to enabling the inclusion of smallholders in the transition, thereby protecting and improving their livelihoods.

Traceability to plantation is a work in progress due to the challenging nature of FFB procurement from large numbers of independent smallholders and through complex and multi-nodal supply chains. Encouragingly, large integrated companies are setting targets to establish traceability to plantation, and increasing efforts to understand, report and improve on their emissions associated with FFB and CPO procured from independent traders and smallholders (their upstream Scope 3 emissions). Recent initiatives by MPOB and RSPO to develop reporting platforms supporting traceability, trade and deforestation-free certification, as well as the recently implemented EU Regulation on Deforestation-free Products (EUDR), will unlock further momentum in smallholder traceability.

Reporting on Scope 3 upstream emissions is still a nascent practice, and we will continue to engage with our clients and the broader palm oil ecosystem to find ways to facilitate its development. In the meantime, we have relied on our emissions intensity proxies associated with conventional palm oil production for Scope 3 emissions where reported data is absent.

Our Net Zero Approach in the Palm Oil Sector

We finance plantation and mill companies, and integrated players across the region, most significantly in Malaysia and Indonesia. Accordingly, our baseline and reference scenario reflect a blended average of emissions intensity across our markets. Our 2022 baseline financed emissions intensity in our palm oil portfolio is 1.81 tCO₂e/tCPO. This compares to the average of 2.12 tCO₂e/tCPO in our reference scenario, reflecting the higher average maturity of our clients in their sustainability journey compared to the average in the region.

Consistent with our approach in other sectors where we have adopted a physical emissions intensity target, such as the Power and Cement sectors, our target for our financed emissions in the Palm Oil sector is to reach alignment in 2030 with the reference pathway towards Net Zero. As such, CIMB is targeting a 16% reduction in emissions intensity from our 2022 baseline year.

The increasingly supportive regulatory environment, NDPE commitments and mandatory MSPO and ISPO certification underpinned by continued demand from buyers and civil society, as well as growing levels of public awareness and support, provide us with a degree of confidence around the ability to achieve our target emissions intensity reduction. In addition, the EUDR entered into force on 29 June 2023 and applicable from 30 December 2024 is expected to provide additional immediate impetus for the adoption of sustainable practices for companies looking to access the EU markets. Despite these positive developments, challenges exist around the effectiveness of policy implementation and enforcement, and we will not count solely on these passive levers to reach our targets.

Instead, we will adopt an active stance in managing our portfolio and engaging with our clients to deliver on our target emissions intensity reduction. Our strategy includes the following active levers:

- Strict adherence to our NDPE policy through our [Sustainable Financing Due Diligence Procedures](#) conducted concurrently with credit and capital raising deal approval processes

CIMB has rolled out our NDPE commitment in 2022 to selected high risk sectors including oil palm, where we require clients with new plantation to conduct HCV assessment and commit to conservation of primary forests and HCV areas (including peat) prior to land clearing. Clients who do not fully comply with the requirements will be issued with action plan(s) with yearly progress checks. In 2022, 48 clients were requested to commit to action plans, which included establishing or strengthening NDPE commitments and improving compliance with sustainability certification requirements.

- Facilitate clients in their pursuit of sustainable palm oil certifications such as MSPO, ISPO, RSPO and ISCC. This is part of our [Palm Oil Sector Guide](#) requirements that is applicable to clients involved in oil palm plantations and manufacture of palm oil and its products. Financing support offered includes (among others):
 - Initial certification cost for uncertified clients, or cost of increasing certification coverage across more units of production, including the costs of any HCV land remediation, and activities such as land and soil assessments that can help guide planting practices for improved yield.
 - Ongoing operational costs in maintaining certification, such as conservation and maintenance of forestland, peatland and riverbank areas within the concession, and tightened replanting procedural guidelines.
- Increase financing to clients to help them deliver on their existing commitments and to co-develop initiatives to accelerate emissions intensity reduction. Financing needs could include:
 - Investment into R&D on yield improvement, and the operational cost of implementing yield improvement initiatives, such as replanting programs and the use of more resilient seed varieties.
 - Technology to optimise other farming inputs, including precision technology for the application of fertilisers and pesticides investment into conservation research, partnerships and projects to improve environmental sustainability and biodiversity within oil palm landscapes.
 - Investment into innovative growing and milling practices and technologies to further reduce the emissions intensity of palm oil production, for example regenerative agriculture, R&D in further optimising the biological processing of POME etcetera.
- Increase financing and other forms of support to clients in relation to upskilling, improving sustainability practices, and increasing yields for upstream smallholders, with a focus on economic inclusion and improving livelihoods of vulnerable groups. This could include:
 - Investment in technology and boots-on-the-ground manpower to improve traceability across the end-to-end value chain for our integrated clients.
 - Investment into our client's engagement and training efforts with upstream smallholders to propagate sustainable farming practices and regenerative agriculture, reducing associated emissions and improving yields and financial outcomes for smallholder communities.
 - Broader collaboration with clients to support their smallholder programmes, for example through support from CIMB's Corporate Social Responsibility programmes.

- Specific financing of circular economy applications such as biogas capture and power plant installation, methane capture and storage for bioenergy production, and other sustainable uses of palm oil agricultural waste.
 - Installation of biogas capture facilities which can reduce emissions from POME by 90%. Additionally, biogas plant installations provide mills with an alternative power generation source for their own operations, as well as the potential to feed excess back to the grid where feasible. While this is economically viable for some mills today, especially larger capacity mills, penetration rates are low as some barriers still exist to increase its adoption, including long pay-off periods driven by a combination of significant capital outlay including for infrastructure required for grid connection, while returns are tied to energy potential of the POME and feed-in-tariff agreements³⁹. For mills in more remote locations, aggregation of POME or biogas is necessary for the production of bioenergy at commercial scale, with solutions and capital required for the attendant collection and storage of POME and biogas from mills dispersed across large distances. There is ample opportunity to provide ringfenced financing, especially with strengthening regulatory support and increasing collaboration between companies in the Palm Oil and Power sectors⁴⁰.
 - Support for palm oil players in cross-sector efforts to commercialise and scale up the use of POME and other agricultural waste in the manufacture of sustainable biofuels, such as renewable diesel and sustainable aviation fuel from POME, and biomethane and biomethanol production from POME biogas.
 - Zero-waste practices to supplement plantation and mill operations, such as usage of fibre and shell wastes as boiler fuel for mills, composting of Empty Fruit Bunches (EFB) for use as fertiliser. These practices have already been adopted by many large integrated palm oil companies and can continue to be propagated to smaller companies and independent smallholders.

“ I am delighted to learn that CIMB is embarking on pursuing a Net Zero target and plan for the Malaysian Palm Oil sector. This is indeed a noble ambition, as the financial sector ought to play its role in intensifying efforts to expedite progress towards Net Zero emissions.

In most plantation groups a very large percentage of direct GHG emissions arises from methane produced by mill effluent ponds. It is good to note that CIMB has green financing initiatives in place to assist palm oil mills in their own practices for positive outcomes in the long run. ”

M R Chandran

Chairman at IRGA Sdn Bhd/Advisor to RSPO

Additionally, we will engage our clients to support them in developing and/or improving their emissions reporting. This will bring increased transparency to our client emissions with reduced dependence on proxies, ensuring that clients’ practices, including adoption of sustainable methods or technologies, will be accurately reflected in their emissions reporting, and enable growing confidence in our baseline. This also includes continued expansion of client reporting to cover their upstream Scope 3 emissions, a nascent but growing practice.

39 Loh et. Al. (2020). The Future of Biogas in the Malaysian Palm Oil Industry: Why Need Methane Capture? Palm Oil Developments Journal, MPOB.

40 Pertamina News Room (2023). PGN Collaborates with Three Japanese Companies and PTPN to work on the Biomethane Project.

We will also extend engagement efforts beyond our clients, to the broader palm oil ecosystem in the region. Government plans are ambitious, as are the plans of our leading clients, and we remain dependent on their success to meet our targets. Therefore, we will actively engage with regulators, standard setters, NGOs and other key actors in the palm oil ecosystem and seek out opportunities for collaboration to enable and accelerate decarbonisation of the sector in the region, whilst playing our part by standing ready to provide the financing necessary to achieve it.

Future developments and dependencies

NDPE commitments are key in reducing net land use related emissions from oil palm plantations, and halting deforestation is necessary to prevent further land use change emissions and biodiversity loss. While MSPO and ISPO mandates in Malaysia and Indonesia are creating an increasingly supportive regulatory environment in two of the largest producer nations, and the EUDR provides additional impetus for palm oil companies looking to access EU markets, our emissions reductions are dependent on the rigour and effective implementation of these policies and standards. In addition, the continued development of economic signals for CSPO demand via incorporation of sustainability requirements into procurement policies of FMCG companies and other large end-users of palm oil world-wide is critical, as is the willingness of buyers and end consumers to contribute to the higher cost of certified palm oil, which include for example the cost of sustainability certification and audits, technology investments to increase traceability, and opportunity costs of setting aside HCV concession areas.

The transition requires bringing onboard more than three million smallholders in the region, and this segment is where the largest challenge to expanding the production of CSPO resides. The palm oil ecosystem of regulators, NGOs, producers and end-users must help expand the adoption of sustainable practices to smallholders within their sphere of influence, to bring smallholders onboard and deliver the social benefits of inclusion such as higher incomes from higher yields, and improved access to finance and services, alongside environmental sustainability, to this vulnerable group.

While the practices and technologies for CSPO production are largely developed and continue to improve, the data and reporting are still in flux, with the lack of a harmonised standard resulting in some variation between company reporting methodologies. We have chosen to set our targets on the best possible information available currently, a reflection of the urgency of climate change and the Palm Oil sector's contribution to GHG emissions, as well as our desire to be an agent for change in advance of harmonised standards and consistent reporting. We will continue to monitor the evolution of climate science with regards to the palm oil reference scenario and GHG reporting standards, and incorporate significant updates in our approach, and engage with our clients to support them to do likewise in their own sustainability reporting and decarbonisation plans. We welcome the shift to better reporting as a catalyst for accelerating the production of CSPO. In the pursuit of greater accuracy and transparency, our baseline emissions and reference scenario may be prone to fluctuations in the near-medium term as methodologies evolve and begin to harmonise, and we have built in some conservatism in our approach in anticipation of future improvements in reporting standards and increased adoption.

“ There are three touchpoints determining whether we can move in the right direction: (1) Government regulation, (2) the customers, major FMCG players of the world who are prioritizing change in this respect and (3) the financiers, which is where CIMB comes in.

If we can work together as a collective, including industry associations with a direct stake in this matter advocating for changes, we can move in this direction. ”

Datuk Helmy Othman Basha

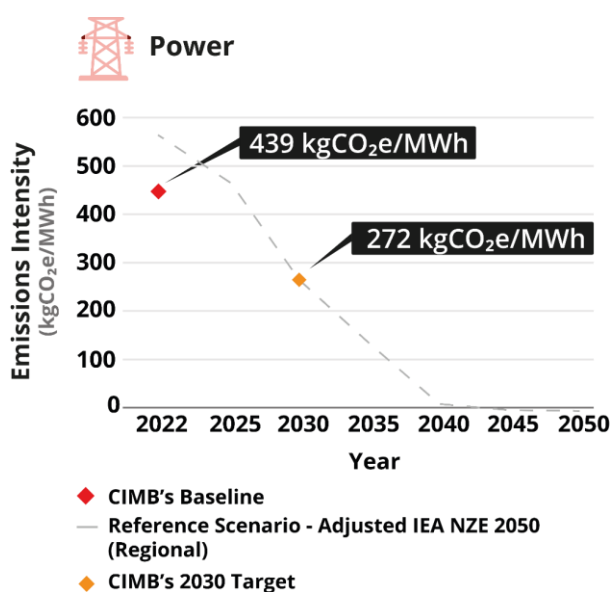
Group Managing Director for Sime Darby Plantation Bhd/Chairman of MPOB

5 Power Sector

5.1 Summary of Our Targets

Sector Highlights

- The Power sector will need to achieve Net Zero by 2040, ahead of other sectors, reflecting both its position as a dependency for other sectors, and the near-term viability of technologies (such as renewable power) for decarbonisation.
- As the Power sector decarbonises it will reduce Scope 2 emissions for other sectors, helping to keep exports from Southeast Asian economies internationally competitive by minimising the impact of carbon taxes from border adjustment mechanisms and maintaining demand from overseas purchasers planning to decarbonise their supply chains.
- Today, the dominance of fossil fuels in Southeast Asia’s power mix remains significantly higher than in Western markets. A just transition in Southeast Asia will require balancing environmental sustainability with economic reliance and socioeconomic development in the largely emerging economies in the region.
- The need for power generation in Southeast Asia is expected to grow by 50% in the next decade, as per capita electricity consumption in the region catches up to more developed economies, given its currently at 20% that in OECD countries. In addition, the energy transition will require carbon intensive fossil fuel power generation, such as CFPPs, to be replaced with low carbon or renewable alternatives, and a larger share of renewable energy to be integrated into the power generation mix.



Scope

Scope 1 emissions of power generation clients (including electric utilities, power plants, independent power producers, renewable energy producers)

Decarbonisation Levers

- Adherence to our commitments in the Coal sector and progressive enhancement of our Coal sector guide requirements towards a coal phase out by 2040
- Increasing the share of renewables financing in our portfolio
- Financing of CCUS technologies as a longer term post-2030 lever

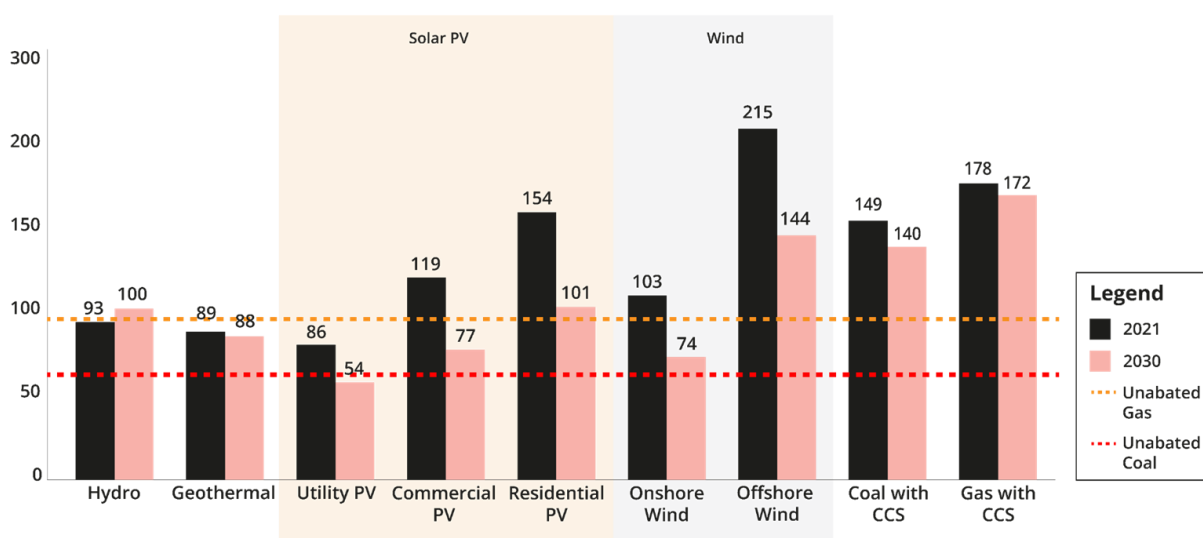
5.2 Industry Overview

The Power sector is the largest contributor to GHG emissions globally, responsible for 40% of total emissions, largely due to the burning of coal and natural gas in conventional power generation. At the same time, power demand is expected to grow from 24,700 TWh in 2021 to 2.5x to reach

60,000 TWh by 2050 under the IEA NZE scenario⁴¹, propelled by increasing populations and increasing consumption per capita, as well as the electrification of transportation and heavy industrial activities.

Across advanced economies, emerging markets and developing economies, the Power sector is the first energy sector required to achieve Net Zero, reflecting both its position as a dependency for other sectors, and the near-term viability of technologies (such as renewable power) for decarbonisation. Much of this technology is relatively mature and has already demonstrated commercial viability and scalability across multiple geographies. Renewable energy from sources such as wind, solar, and hydro power are already widespread, with significant policy support from governments globally. Costs of deployment have come down and continue to fall, making renewable energy among the cheapest sources of energy in the world.

Figure 7 Asia Pacific Average Levelised Cost of Electricity (LCOE) for Low Carbon Power Generation⁴² (US\$/MWh)



Many Southeast Asian governments have adopted policies to accelerate the production of, and access to, clean and affordable energy. However, the region must also navigate through several challenges in the transition, including meeting a steep growth in electricity demand, overcoming the dominance of fossil fuels in the generation mix today, including coal-fired power generation, and the relative youth of the coal-fired power plants compared to other markets. This will require Southeast Asia to almost triple current investments in renewables⁴³, and balancing sustainability with energy security and affordability will result in an energy transition that can vary in pace and shape across different countries.

In ASEAN, per capita annual electricity consumption is still only one-fifth that of OECD countries, and hence it is expected to rise by 50% in the next decade⁴³. This will require a dramatic increase in electricity generation to increase power generation capacity and energy security, in addition to replacing energy currently produced through the direct burning of fossil fuels with cleaner sources. In line with the principles of an equitable transition, the 2023 update to the IEA Net Zero Roadmap⁴⁴ highlights the need for advanced economies on aggregate to reach Net Zero in the Power sector by 2035, China to do so by 2040, and other emerging markets and developing economies to follow before 2045.

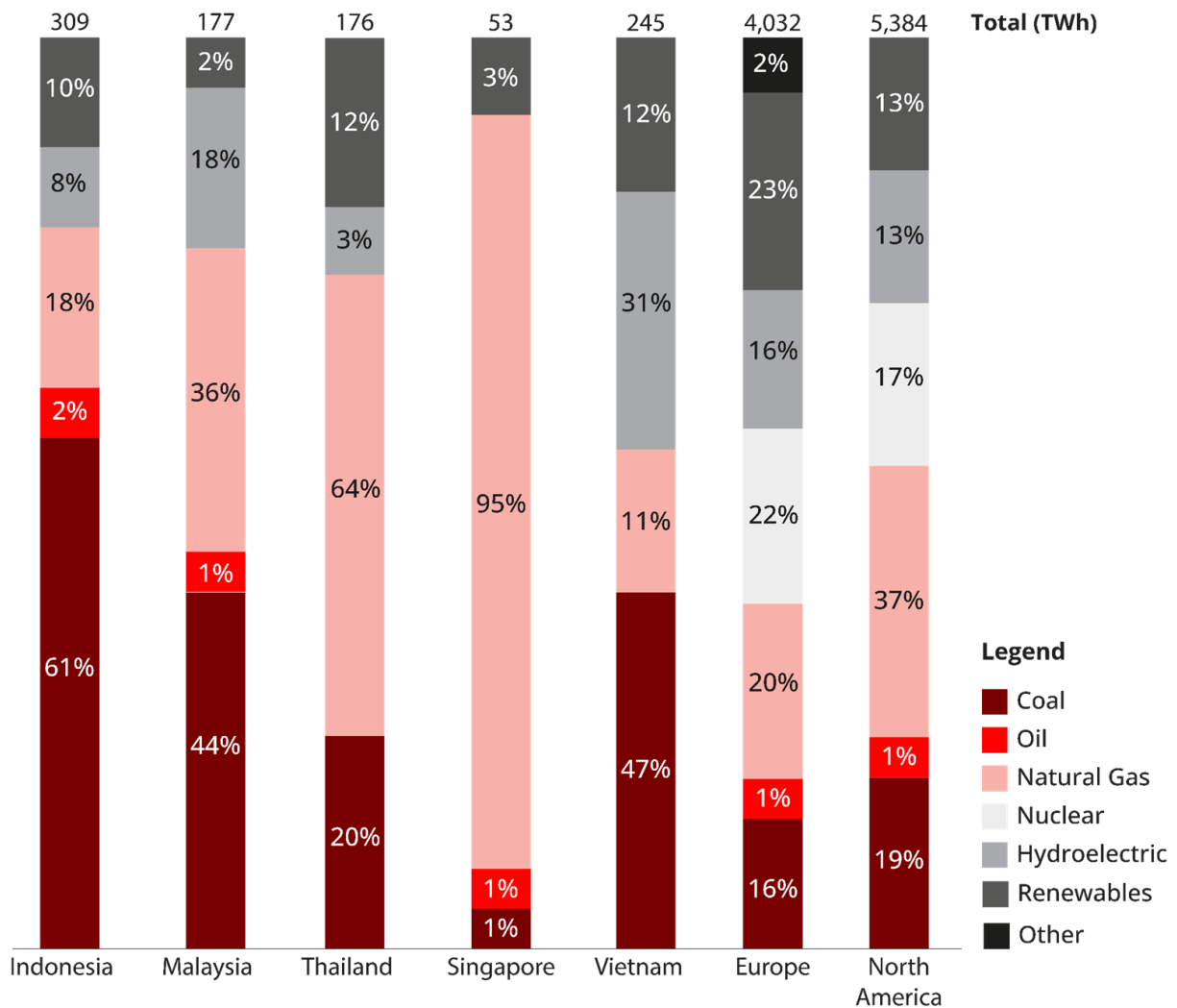
41 IEA (2022). World Energy Outlook 2022 (Revised Version November 2022).

42 Wood Mackenzie News Release (2022). Renewable power in Asia Pacific gains competitiveness amidst cost inflation.

43 IRENA & ACE (2022). Renewable Energy Outlook for ASEAN: Towards a regional energy transition (2nd edition).

44 IEA (2023) Net Zero Roadmap: A Global Pathway to Keep the 1.5°C Goal in Reach (2023 Update).

Figure 8 Power Generation Mix by Country (ASEAN versus Europe and North America), 2021⁴⁵



For decades, the abundance of coal, natural gas and oil in the region has enabled Southeast Asian nations to provide a stable and affordable source of power generation to industries and communities, serving as a crucial driving force behind economic growth. Power generation has nearly tripled in the last two decades, driven strongly by an increase in coal and gas fired generation. The dominance of fossil fuels in Southeast Asia’s power mix remains significantly higher than in Western markets. In addition, recent geopolitical tensions have resulted in high energy and food prices, which have been compounded by sustained inflationary pressures. This has shone a spotlight on the energy security vulnerabilities of the region, and their mechanisms in place to weather supply disruptions⁴⁶. Crucially, energy security and affordability will continue to remain priorities in the emerging economies of Southeast Asia as it navigates the energy transition.

It is critical to note that because the growth in power generating capacity in ASEAN has been relatively recent, this region has some of the youngest fossil fuel power plants in the world. As a typical coal-fired power plant has an average usable life of 50 years, this presents a challenge in the energy transition as retiring those plants early comes at an economic cost on top of the investment required in replacing them with renewable energy. These economic costs will be much larger in Southeast Asia than in developed markets, giving rise to real concerns that countries that

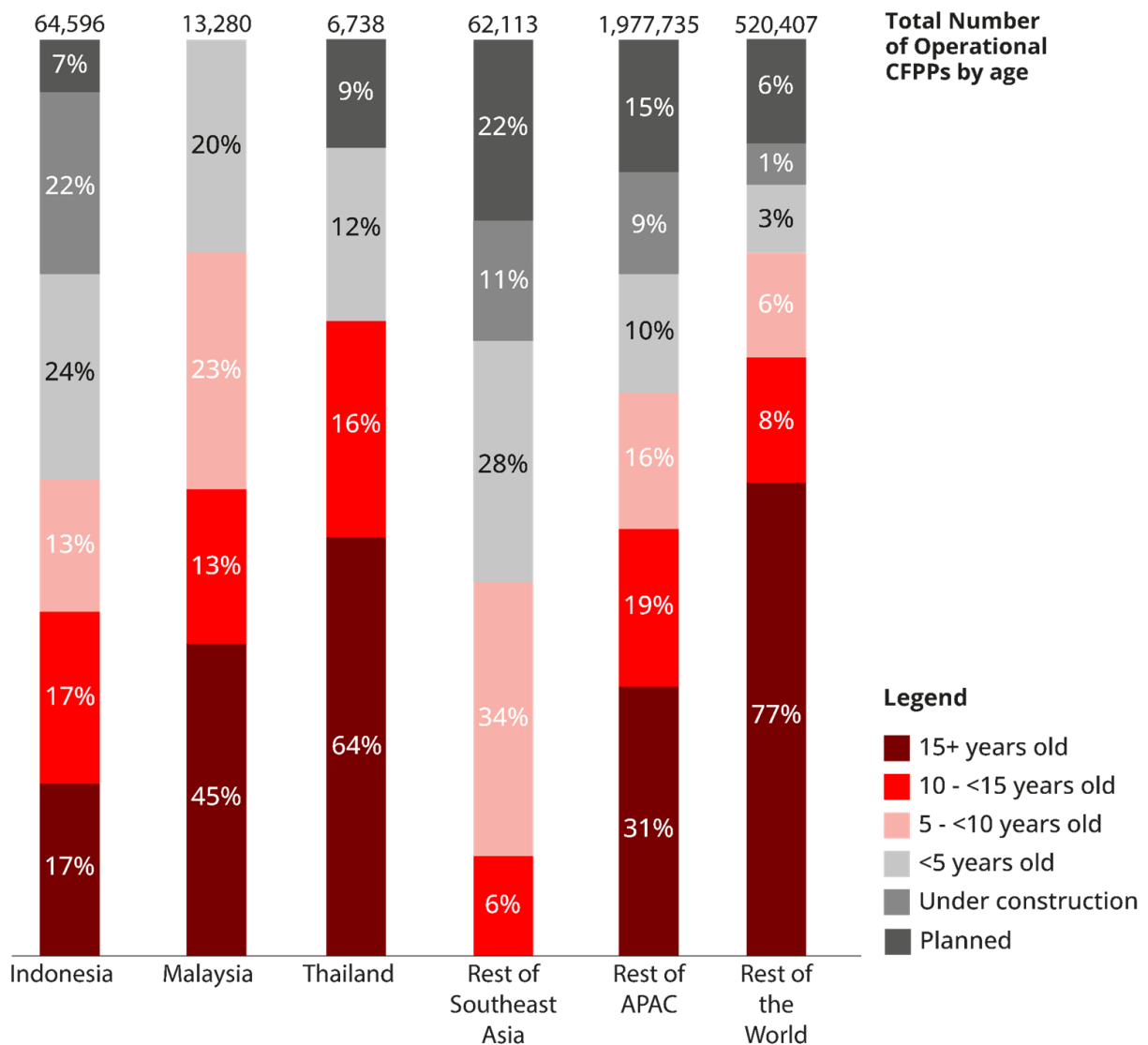
45 Singapore: Energy Market Authority (2023). Singapore Energy Statistics 2023.

All other countries: BP (2022). Statistical Review of World Energy 2022.

46 IEA (2022). Southeast Asia Energy Outlook 2022.

are the least able to bear the cost of transitioning their Power sectors may be the ones that will have to spend the most.

Figure 9 Age of CFPPs in Southeast Asia versus Other Markets⁴⁷



In addition to retiring fossil fuel plants, a significant acceleration of renewable power generation capacity is required. Across many Southeast Asian markets, ambition levels of commitments and energy policies have ramped up in the recent 2-3 years. On aggregate, these policies are expected to deliver an additional ~300 TWh and ~800TWh of renewable energy to the power generation mix by 2030 and 2050 respectively from the current <200TWh⁴⁸.

47 Global Energy Monitor Coal Plant Tracker (2023), Coal-fired power capacity by country. Global Energy Monitor.
 48 IEA (2022). Southeast Asia Energy Outlook 2022.

Figure 10 Energy policies from selected Southeast Asian markets

Country	Policies																		
Malaysia	<p>Low Carbon Nation Aspiration 2040</p> <ul style="list-style-type: none"> Percentage of Renewable energy in Total Primary Energy Supply (TPES): 17% in 2040, from 7.2% in 2018 Percentage of Coal in Installed Capacity to decrease to 18.6% in 2040, from 31.4% in 2018 <p>Malaysia's Energy Transition Plan</p> <ul style="list-style-type: none"> Target of 40% renewables in the power generation mix by 2035, up from previous target of 20% in 2025 Retire 7GW of coal fired capacity in 2033 at the end of their 25 year PPA. No plans for new coal plants 																		
Indonesia	<p>Long-term Paris Compatible Scenario (LCCP) Power Generation mix</p> <table border="1"> <thead> <tr> <th>Fuel type</th> <th>Coal</th> <th>Gas</th> <th>Oil</th> <th>Renewables</th> <th>Bioenergy with CSS</th> </tr> </thead> <tbody> <tr> <td>2021</td> <td>59%</td> <td>21%</td> <td>4%</td> <td>16%</td> <td>0%</td> </tr> <tr> <td>2050 (LCCP)</td> <td>38%</td> <td>10%</td> <td>0%</td> <td>43%</td> <td>8%</td> </tr> </tbody> </table> <p>Carbon intensity of power generation: 104 kgCO₂/MWh including provision for CCS in bioenergy and CFPPs</p>	Fuel type	Coal	Gas	Oil	Renewables	Bioenergy with CSS	2021	59%	21%	4%	16%	0%	2050 (LCCP)	38%	10%	0%	43%	8%
Fuel type	Coal	Gas	Oil	Renewables	Bioenergy with CSS														
2021	59%	21%	4%	16%	0%														
2050 (LCCP)	38%	10%	0%	43%	8%														
Thailand	<p>Long Term Low Greenhouse Gas Emission Strategy</p> <ul style="list-style-type: none"> 68% renewable electricity by 2040, 75% renewable electricity by 2050 Phase out of all coal power plants by 2050. All bioenergy plants fully equipped with BECCS 																		
Singapore	<p>Net Zero Emissions by 2050</p> <ul style="list-style-type: none"> Gas continues to be the dominant fuel in the medium term; near term efforts to increase energy efficiency Solar PV up to 3% and 10% of projected electricity demand by 2030 and 2050 respectively Import of renewable electricity through regional power grids, targeting 30% of electricity demand Low Carbon alternatives including green hydrogen strategies and CCUS in the long term (next 15-20 years) 																		

Currently, 15% of the energy in the region is delivered by hydropower, which continues to be responsible for the largest share of renewable electricity generation, and is expected to double by 2050. Solar PV and wind generation comprise less than 10% of total power generation currently, and will require accelerated development through the growth of both utility scale installations and distributed generation, requiring grid infrastructure upgrades. Solar PV and wind generation will also require storage infrastructure upgrades due to their intermittency, an issue that is less material for other renewable sources such as hydropower and geothermal power⁴⁸. In addition, renewable resources are unevenly

Hydropower – Largest source of low-carbon electricity^[1]

- It has been the backbone of low-carbon electricity generation, providing almost half of it worldwide today (hydropower's total capacity has risen by 70% over the last 20 years).
- Moving forward, given the flexibility of hydropower generation to adjust quickly to shifts in demand, it is a compelling option to support the integration of solar and wind.
- However, it is crucial to ensure hydropower projects adhere to strict guidelines and best practices to minimise sustainability risks while maximising social, economic and environmental advantages.

^[1]IEA (2021) [Hydropower Special Market Report](#)

distributed across complicated geographies, especially for archipelago nations like Indonesia and the Philippines, or deep rural areas found across Southeast Asia in places like Sarawak which are not connected by roads, let alone power grids, creating accessibility challenges for renewable electricity distribution to the many rural communities across the region.

Over the next decade of the transition, natural gas plays an important role in enabling the switch away from more carbon intensive fossil fuels such as coal and oil, meeting bulk generation needs and providing a stable baseload. Thereafter, and as the growth of renewable power generation accelerates, gas power generation peaks and as it evolves into an enabler of renewable power integration⁴⁸. The policies (refer to Figure 10) will enable the proportion of fossil fuels in the power generation mix to peak between 2030-2040, and in the longer term the incorporation of CCUS into remaining fossil fuel generation will help to further eliminate carbon emissions.

5.3 CIMB's 2030 Target for the Power Sector

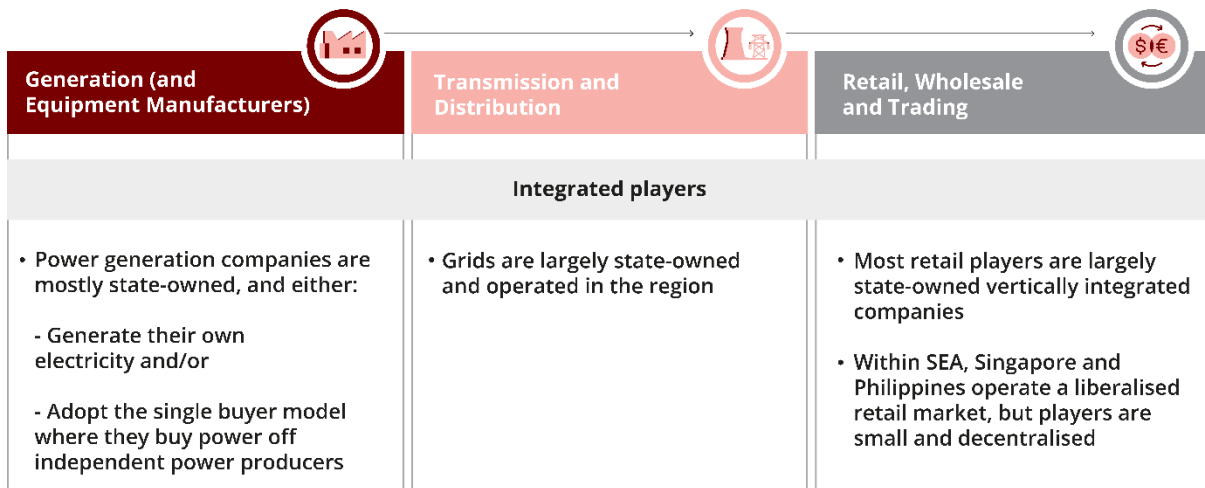
Design Decision A: Target metric selection

We have chosen a physical emissions intensity metric for our baselining and target-setting, where we measure the amount of CO₂ released per unit of electric energy generated. Specifically, we are measuring kgCO₂/MWh. This metric has been commonly adopted across the banking industry, as well as by Power sector companies themselves, consistent with the need to meet growing demand for power while reducing emissions through the substitution of fossil fuel generation with renewable power. With this metric we are incentivised both to reduce our support to higher emitting forms of conventional power generation and increase our support for clean energy production, both of which help to accelerate the energy transition.

Design Decision B & C: Value chain and emissions scope coverage

The power generation industry covers the generation of power through both conventional and renewable power plants, the transmission and distribution of that power through electric grids, as well as the retail, wholesale and trading of energy.

Figure 11 Power Sector Value Chain^{52,49}



Source of emissions & contributions to value chain emissions



CIMB's Power sector target focuses on the Scope 1 emissions from power generation. These are emissions directly made during the power generation process and largely arise from the burning of fossil fuels, leading to a great disparity between the Scope 1 emissions of fossil fuel burning power plants, which can emit hundreds of kilograms of CO₂ per MWh of power generated, and the Scope 1 emissions of renewable energy generation, which can be as low as zero. Scope 1 is the primary source of emissions across the Power sector value chain and is the area of focus for scientific pathways to Net Zero. Additionally, Power generation clients currently make up the majority of our exposure to the Power sector.

The transition to renewable power generation will require a significant increase in manufacturing capabilities for renewable power equipment such as solar PVs and wind turbines. At present, equipment manufacturers make up a very small portion of our total exposure and are not included in the target. However, we will look to increase the scope to include such companies in future iterations of the target.

Our current target excludes emissions from downstream activities in the power value chain from T&D and retailers. Direct emissions from T&D and retailers are limited, and there is a lack of data and suitable reference scenarios to inform a credible Net Zero ambition. In the longer term and as power generation shifts away from fossil fuels, downstream activities will start to increase in the significance of their contribution to the overall emissions from the Power sector. We aim to

49 Surana, K., Jordaan, S.M. (2019). The climate mitigation opportunity behind global power transmission and distribution. Nat. Clim. Chang.

engage with the power industry to develop plans towards Net Zero in these activities and will consider expanding our target coverage to cover more of the value chain at an appropriate time.

Design Decision D: Selecting a reference scenario

The IEA's Net Zero Emissions by 2050 (NZE) reference scenario from the 2023 Net Zero Roadmap⁵⁰ forms the core guidance for our Net Zero ambitions in the Power sector. Anchoring on the updated IEA NZE scenario ensures that our pathway trajectory is aligned to keeping global warming at below 1.5°C. We have chosen to adopt a science-based scenario with wide acceptance with companies across the Power sector, financial institutions, and policy makers alike, which increases the credibility of our pathway trajectory and targets.

The IEA NZE is a global scenario, while our power generation clients primarily operate assets in Southeast Asia where there is a higher percentage of fossil fuels in the power generation mix. We have therefore enhanced our reference pathway with regional insights from the IEA Sustainable Development Scenario (SDS) to better reflect the realities in this region, such as the high emissions intensity starting point, and to chart a pathway to Net Zero that is feasible and equitable, safeguarding energy security and affordability along the way.

Design Decision E: Establishing our baseline

Our power generation clients are largely players who build, own and operate a mixture of power generation assets across conventional and renewable energy sources. We provide general financing to our clients at the Group level, as well as a mix of general and project financing to their subsidiaries who focus on a specific portfolio of their power generation assets. To establish a strong linkage between our financing and its impact, we have constructed our baseline from the underlying power generation assets whose construction, operations, maintenance and retirement we finance. Through this, we are able to recognise the specific activities that we finance – for example, where we finance a renewables subsidiary of a diversified power company and are able to demonstrate that our funds are used only for renewables, we will include this as financing for renewable energy generation, rather than for the whole diversified power company.

By constructing our baseline from detailed asset-level data, rather than relying on directly reported emissions data from our clients, we have been able to achieve a high level of data coverage and incorporate rich information, providing us with a high degree of confidence in our baseline calculations.

Our Net Zero approach in the Power Sector

Our 2022 baseline financed emissions intensity in the Power sector is 439 kgCO₂e/MWh. Our starting position is slightly better relative to our reference scenario and we are targeting to reduce our emissions intensity in the Power sector to achieve an emissions intensity of 272 kgCO₂ e/MWh in 2030, and Net Zero by 2040. This is consistent with the 2023 updates to the IEA NZE scenario, ensuring alignment with the required decarbonisation for the world to remain below 1.5°C warming above pre-industrial levels.

This is an ambitious target, given the context of many of the markets we serve in Southeast Asia, where energy security and the continued growth of affordable electricity supply for the growing population are imperatives for continued socio-economic development. Current national climate pledges and our clients' existing decarbonisation commitments have become more ambitious in recent years and are constantly evolving. CIMB will actively steer our portfolio, and proactively direct financing towards lowering emissions in the Power sector. In order to achieve the full emissions intensity reduction required for our 2030 Target.

⁵⁰ IEA (2023). Net Zero Roadmap: A Global Pathway to Keep the 1.5 °C Goal in Reach.

Our strategy involves the following elements:

- Adherence to our existing commitments to cease financing of greenfield thermal coal mining and CFPPs, or expansion of such projects, and periodic ratcheting up of our Coal sector requirements as client and industry readiness improves.
- For our clients who have a high dependence on coal for power generation, we will work with them to facilitate and accelerate the transition to renewable and low carbon sources, including through official managed phase out programmes, to facilitate early retirement of unabated fossil fuel power plants. We are conscious that early power plant closures may carry the risk of potential negative impacts on employees and communities, and are committed to ensuring that in this event, our clients support retraining and reemployment of their affected workforces, and other dependent communities.
- Increase our portfolio exposure to new renewables financing. Southeast Asia's electricity demand is expected to triple from 2020 to 2050⁴⁸. This rapid rate of increase, driven by factors like electrification of transportation, heating and industrial activities, provides a significant driving force to our expectation for a significant increase in demand for renewables financing. To capture these opportunities, we will seek to actively skew our portfolio towards financing renewable power generation capacity by offering dedicated ringfenced facilities for renewable projects. In addition, the expansion of renewable power generation has brought new entrants to the market dedicated to equipment manufacturing for, and development and operation of, dedicated renewable energy asset and we will actively seek out financing opportunities with new clients in this segment.
- Financing CCUS and other enabling technologies. CCUS technologies are expected to take some time to mature and overcome technological barriers, such as increasing emissions capture rates and developing sufficiently scaled solutions for the utilisation or long-term storage of the captured CO₂, as well as the associated economic barriers to making these sufficiently affordable that CCUS is widely adopted. Given the current scale and stage of technological maturity of CCUS, the Group views it as a potentially significant lever after 2030.

CIMB's Coal Policy

- The phase out of coal powered generation is critical to keeping global warming at below 1.5°C. The IEA's NZE requires the ramp down of power generation from plants that burn low-quality grade coal (i.e. the most emissions intensive types of coal, such as lignite) worldwide by 2030, and the complete phase out of unabated coal generation by 2040 (i.e. coal-fired power plants that are not fitted with high-efficiency CCUS infrastructure).
- CIMB is fully committed to supporting the region's shift away from coal power generation. Since 2021, CIMB has ceased to provide new financing or capital raising for greenfield CFPPs and thermal coal mining, as well as expansion of such projects, regardless of country of operation. We are committed to phasing out coal exposure from our portfolio by 2040 in line with 1.5°C consistent climate scenarios (refer to section 6 for our targets in relation to thermal coal mining).
- We will actively engage with our clients who are dependent on coal power generation to develop transition plans towards renewable power or low carbon alternatives, and continue to refine and enhance our policies in line with our Net Zero target in the Power sector.

“CIMB is paving the way for Malaysian and ASEAN banks by setting cautious yet ambitious Net Zero targets in the Power sector, all while remaining cognisant of the growing power demand in emerging and developing markets serviced by the bank.

The first and important step in a financial institution’s portfolio decarbonisation journey is setting targets and implementation plans, and CIMB is leading the industry in that regard. Targets set the tone for the bank and the markets it serves, and signal the direction of travel for some technologies. Most importantly, it recognises the financial risk in the Power sector if decarbonisation is not taken seriously. ”

Christina Ng

Research Lead, Debt Markets for Asia Pacific, IEEFA

Future developments and dependencies

Our targets are highly dependent on supportive policy choices at the national and regional level. While the increasing level of ambition of national commitments is encouraging, realisation of commitments requires that these commitments are translated into detailed policies, such as changes to fossil fuel subsidies in the Power sector, and carbon taxes. These policies must continue to accelerate the large-scale development and deployment of renewable energy capacity in the region, and ensure that renewable generation is cost competitive to boost demand for it. Upgrades and expansion of supporting storage and other infrastructure must also be developed in tandem, while enhanced regional interconnectivity can help balance geographical supply and demand gaps.

Accelerating the phase out of coal-fired power plants in the region will be expensive, requiring specific financing solutions and partners that can bear the associated costs. We envisage the need for solutions like blended finance, as well as for donor funds from developed countries, philanthropic funds and other sources beyond governments in developing Southeast Asia who can both bear the cost and also focus on promoting the need for just transition.

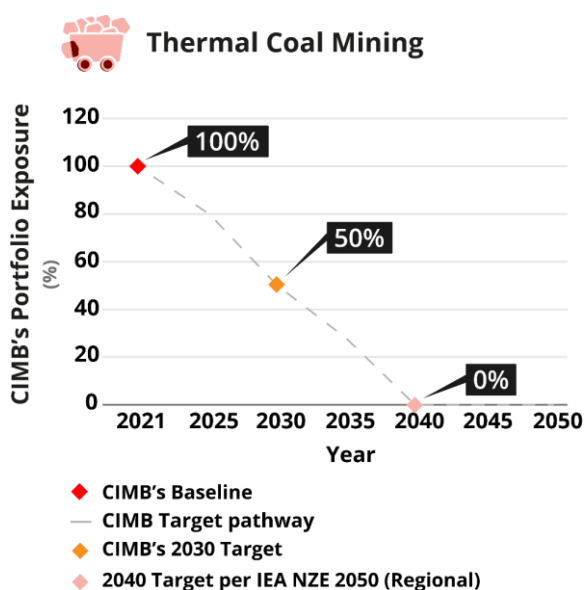
With a diversity of renewables across the region, Southeast Asia is well placed to integrate a large share of renewable energy into the power generation mix. The transition has already begun and will require balancing environmental sustainability with economic resilience and socioeconomic development in the largely emerging economies in the region. Our targets reflect the potential for change in the region, as well as the need to achieve this through a just transition.

6 Coal Sector

6.1 Summary of Our Targets

Sector Highlights

- Coal is an important fuel source globally, enabling stable and affordable baseload electricity generation, while contributing to access to electricity and economic growth. However, it is also one of the most carbon intensive fossil fuels, emitting three times more GHG than oil. Hence, there is an urgent need to phase out coal power generation to limit global warming to below 1.5°C. Ending new approvals of unabated coal plants, the early retirement and repurposing of coal-fired power plants (CFPP) are crucial actions for facilitating a decline in fossil fuel demand, while creating additional room for renewable energy to expand.
- Following the 2023 updates to the IEA NZE, the global demand for coal is expected to fall from 5,800 million tonnes of coal equivalent (Mtce) in 2022 to 3,250Mtce by 2030 and around 500Mtce by 2050. However, the scenario considers higher near-term use of coal that reflects the need for a more equitable pathway for emerging market and developing economies which dominate global coal use, as well as near term energy security concerns exacerbated by recent geopolitical tensions.
- Asia is responsible for more than 80% of global employment in the coal value chain. Many countries in ASEAN are still heavily dependent on coal for power, employment and economic development, and the inevitable phasing out of thermal coal may result in economic dislocations, impacting the vulnerable segments most. Financial institutions play a key role to encourage and enable just transition considerations and plans, to mitigate the socio-economic implications within coal mining regions, as well as broader energy security concerns.
- While thermal coal is being phased out for power generation, metallurgical coal will continue to play a crucial role in iron and steel production until new technologies become available.



Scope

Thermal coal mining clients

Decarbonisation Levers

- Implementation and progressive enhancement of our Coal sector guide
- Proactive client engagement to support clients' diversification plans and ensure relevant controls are in place to best manage the socio-economic impacts from wind downs

6.2 Industry Overview

Coal is the single largest source of both electricity generation and global CO₂ emissions. Nearly two-thirds of global coal production is used for electricity generation, with the industrial sector utilising another 30%⁵¹. In 2022, coal accounted for 36% of global energy related GHG emissions of 36.8 GtCO₂, increasing by 1.6% compared to the previous year⁵².

An essential driving force behind this is the projected increase in electricity demand, which is expected to rise by 25-30% to 2030⁵³ propelled by the electrification of critical sectors such as transportation, heating, and industrial activities. As these sectors increasingly rely on electricity, there is a pressing need to address potential challenges arising from electricity supply and demand imbalance, without which the world could see continued reliance on fossil fuels, thus impeding progress toward achieving Net Zero targets. To successfully navigate this evolving energy landscape and effectively reduce global reliance on thermal coal, a concerted effort is required to invest in and promote the adoption of cleaner and more sustainable sources of energy to replace coal-based power generation.

The IEA NZE foresees the end of unabated coal generation in developed economies by 2030, followed by a complete phase out by 2040 globally. Furthermore, in alignment with the expected decline in demand for thermal coal to reflect this scenario, no new thermal coal mines or extensions are required from 2021 onwards³¹.

In ASEAN countries, coal still plays an important role as one of the main sources of energy supply, accounting for 26% of total supply in 2020⁴⁸. However, this varies widely by country, with large coal producing countries such as Indonesia and Vietnam having a higher percentage of coal within their energy mix. The driver behind this higher dependence on coal is mainly due to resource availability, affordability and energy security (see Section 5.2). The end of new approvals for unabated CFPPs, as well as the re-purposing and early retirement of existing CFPPs, are crucial levers to facilitating the decline in fossil fuel power generation and creating additional room for the expansion of already mature and viable renewable power generation sources. However, it is worth highlighting that the economic cost of early retirement of CFPPs in ASEAN will be higher due to the relatively young age of CFPPs in the region⁵⁴.

The industrial sector accounts for 30% of coal consumed globally, through the use of coking coal in applications such as the manufacturing of steel, iron and cement. Unlike the Power sector, clean alternatives to coal in these key industrial applications are not yet commercially viable and scalable. Decarbonisation pathways for steelmaking have crucial dependencies on as yet immature green hydrogen and CCS technologies. Reflecting the longer-term nature of the transition, the IEA NZE requires a drop of only 30% in coking coal usage in 2030 compared to 2021 levels. This compares to the 50% decrease required for thermal coal usage within the same timeline⁵³.

It is acknowledged that the transition away from thermal coal could have significant socio-economic impacts if not carefully planned and managed, particularly in coal producing countries and regions. Coal mining accounts for 2-2.7% of GDP in Indonesia⁵⁵ and coal mine closures, if not appropriately managed could result in economic and social dislocation, especially in small, remote mining communities where the local economy depends on coal⁵⁶. For example, the ILO estimates that coal mining contributes 32% and 19% of GDP in the Indonesian provinces of East and South

51 IEA (2022). Coal in Net Zero Transitions.

52 IEA (2023). CO₂ Emissions in 2022.

53 IEA (2022). World Energy Outlook 2022.

54 Global Energy Monitor Coal Plant Tracker (2023). Coal-fired power capacity by country. Global Energy Monitor.

55 IESR (2020). Dynamics of Coal Transition in Indonesia: The Economic, Power, and Climate Perspectives.

56 World Bank, Ruppert Bulmer, Elizabeth; Pela, Kevwe; Eberhard-Ruiz, Andreas; Montoya, Jimena (2021). Global Perspective on Coal Jobs and Managing Labour Transition out of Coal: Key Issues and Policy Responses.

Kalimantan respectively. Furthermore, a managed transition away is also crucial to limit fugitive coal mine methane emissions that can continue to occur even decades after mine closure.

This highlights the importance of a balanced approach for the transition towards cleaner energy within the region, taking into consideration specific country needs and circumstances together with impacts on communities' livelihoods. Financial institutions play a key role to enable and encourage a just transition by supporting affected stakeholders to progressively pivot away from thermal coal, in a holistic manner, taking into consideration socioeconomic impacts.

6.3 CIMB's 2030 Target for the Coal Sector

CIMB's coal exit journey

In December 2020, we announced our commitment to phase out from coal by 2040. This was done in tandem with the roll out of our first Coal sector guide, which prohibits asset-level and general corporate financing of greenfield thermal coal mines and coal-fired power plants, as well as expansions.

Our commitment was further strengthened in September 2021, with the announcement of a 2030 Target to reduce 50% of thermal coal mining exposure (index base 100 from our 2021 baseline) by 2030. This was followed by the announcement of our coal transition plans in September 2022.

The IEA NZE scenario through to 2030 focuses largely on the Power sector, via the transition from unabated coal towards clean energy technologies which are proven and continue to become more economically competitive (see Section 5: Power Sector). Our Coal sector targets as laid out in this section of the Whitepaper are therefore focused on thermal coal mining activities, and serve to work hand-in-hand with our Power sector target to support the region's shift away from coal-fired power generation.

Due to the nascency of clean alternatives to coal required for decarbonising industrial applications, coking coal mining activities are currently excluded from our Coal sector targets. However, we will continue to engage with our clients involved in the production and end-use of coking coal to increase efficient use of materials and energy to drive near-term emissions reductions in industry.

Design Decision A: Target metric selection

We provide general financing to our thermal coal mining clients at the parent company or group level, and a mix of general and project financing to their subsidiaries who focus on providing services to coal related assets within the group. In addition to thermal coal miners, our clients in this sector include coal contractors who support coal mining operations, coal traders, and coal shipping players.

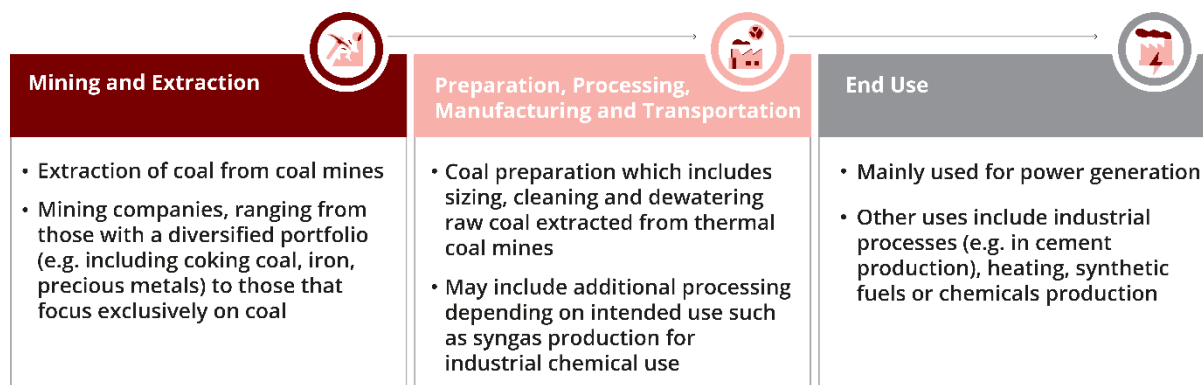
For the purposes of target setting, we include all clients who generate more than 5% of their annual revenue directly from thermal coal mining following NZBA's guidelines. Metallurgical or coking coal is excluded from the scope of this target as there are limited low-emission alternatives that are able to replace coking coal in the near future.

The metric selected is the financing and investment exposure to thermal coal mining clients, (value of exposure, index base 100 at baseline year of 2021). As CIMB's long-term target is to fully exit thermal coal by 2040, this metric allows for clearer monitoring and gauging of our overall performance towards achievement of that goal.

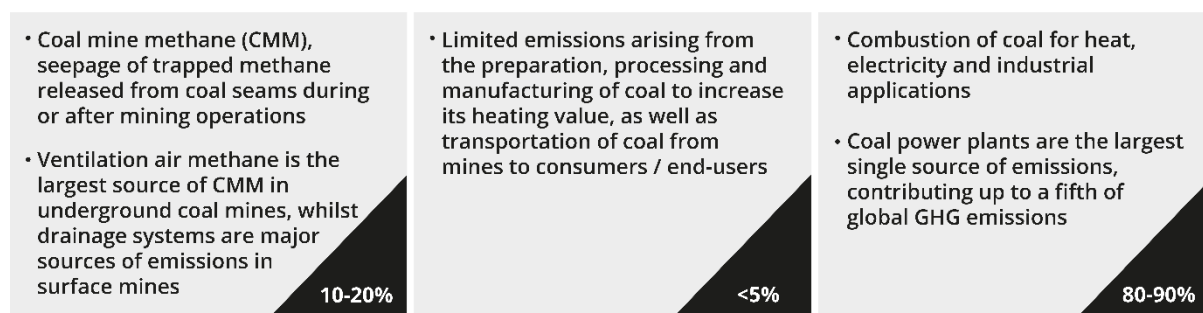
Design Decision B & C: Value chain and emission scope coverage

The production and distribution of thermal coal is simpler and contains fewer steps in comparison to other fossil fuels such as natural gas. The process starts with mining and extraction of the raw material, coal preparation and manufacturing to process the coal for the intended use, before being inventoried and transported to the market for final use as fuel for power generation.

Figure 12 Coal Sector Value Chain^{57,58}



Sources of emissions & contributions to value chain emissions



Within the thermal coal value chain, the majority of the emissions are emitted in the use stage of coal (i.e., coal power generation), which is covered under our Power sector emissions targets (see Section 5: Power Sector). However, we also focus on the segments of the value chain that are able to spur the entire sector into alignment, hence our focus on thermal coal mining.

As we are using a financial exposure metric for this sector, the emissions scope (i.e. GHG emissions scope 1, 2 or 3) will not be a relevant consideration for this target.

Design Decision D: Selecting a reference scenario

The IEA NZE scenario from the 2021 Net Zero Roadmap for the Global Energy Sector⁵⁹ underpins our net zero ambitions in the Coal sector. Anchoring on the IEA NZE scenario ensures that our pathway trajectory is aligned to a 1.5°C warming scenario, and has high credibility and wide acceptance among companies, financial institutions, and policy makers alike.

Our thermal coal target is also aligned to IEA NZE scenario where the Power sector will need to phase out unabated coal power generation by 2040, reducing demand for coal and putting an end to the need for new or lifetime extensions of thermal coal mines after 2021.

57 Biral & Malpass (2021). It's critical to tackle coal emissions.

58 IEA (2023). Global Methane Tracker 2023: Strategies to reduce emissions from coal supply.

59 IEA (2021). Net Zero by 2050: A Roadmap for the Global Energy Sector.

Design Decision E: Establishing our baseline

Our baseline includes the outstanding amount of financing to, and investment in, to thermal coal mining clients, within all regions where we operate. We had conducted our initial baselining for this sector in 2022, with data as of 31st December 2021, setting the index base at 100.

Exposure to coal-fired power generation (CFPG) clients is excluded from our Coal sector baseline, as it is covered separately as part of our baselining in the Power sector.

Coal mining and coal end use, most significantly in power generation, together account for more than 90% of GHG emissions across the coal value chain. Aligned to this, our focus on these main activities and the combination of our targets for the Coal sector and Power sector have the most material impact on our financed emissions in the Coal sector. Coal contractors who support coal mining operations, coal shippers and coal traders make up the remainder of our clients in the thermal coal value chain. However, their direct contribution to GHG emissions and level of influence is limited, and hence not currently included in our baseline. Nonetheless, we will continue to engage with them to take action to improve efficiencies and reduce methane seepage, in keeping with the spirit of our commitment to work closely with our clients towards decarbonisation.

Our Net Zero approach in the Coal Sector

By 2030, we aim to reduce our exposure to thermal coal mining clients by 50% compared to our baseline, which made up 80% of our 2021 exposure to the Coal sector excluding coal-fired power generation (these are captured separately in our Power sector baseline).

Similar to the Power sector, this is an ambitious target considering Southeast Asia's reliance on coal as an energy source and an important export commodity in countries which we operate in. A just transition requires not only the phase out of coal, but the unprecedented scale up of clean alternatives that can provide the same energy services securely and affordably. Given that 80% of the ~8.4 million people employed worldwide across the coal value chain are located in Asia⁶⁰, it is also crucial that the transition creates opportunities for coal-dependent people and communities in this part of the world, ensuring they are not left behind.

Our Coal sector targets provide us with a runway to work with our clients in the transition, while also drawing strict boundaries to ensure we are consistent with a Net Zero outcome. Our strategy involves the following elements:

- Strict adherence with prohibitions within our current Coal sector guide such as prohibitions on any forms of asset-level or general corporate financing including project financing and capital raising specified for greenfield thermal coal mines and Coal-Fired Power Plants (CFPP), including expansions.
- Periodically strengthening our Coal sector guide by expanding the scope of thermal coal related segments, prohibitions, mandatory requirements and introduction of specific thresholds on revenue and/or fuel mix from thermal coal, for both new and existing clients.
- Encouraging and supporting our clients to
 - Diversify and transition to other business activities outside of the thermal coal, particularly towards green and/or sustainable projects in line with our Green, Social and Sustainable Impact Products and Services (GSSIPS) Framework.

⁶⁰ IEA (2022). Coal In Net Zero Transitions, World Energy Outlook Special Report.

- Adopt necessary measures to mitigate socio-economic impacts on workers and surrounding communities due to their diversification and transition plans.

Future developments and dependencies

The transition of any sector to meet a Net Zero pathway is dependent on the collaboration and alignment of multiple stakeholders such as industry players, government bodies, and NGOs to establish a clear roadmap for transformation. Similarly, for the Coal sector, we recognise that our success relies on a number of factors including our clients' evolving commitments to decarbonise, as well as effective implementation and realisation of country policies, frameworks and commitments that would accelerate stakeholders to transition, including setting a price on carbon.

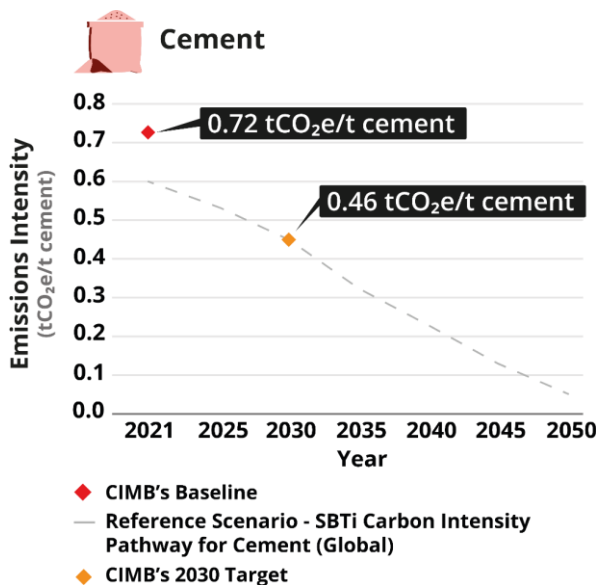
The development of scalable, cost-effective technologies that would allow this transition to happen on a larger scale is also crucial. CIMB remains committed to play our part by engaging, supporting and enabling our clients by providing the required support, be it directly through our GSSIPS offerings or advocacy work with key industry stakeholder.

7 Cement Sector

7.1 Summary of Our Targets

Sector Highlights

- The Cement sector plays an important role globally, and especially in the developing world, essential for socio-economic development. At the same time, the demand for cement is expected to grow continuously in the next decade.
- To meet the demand for sustainably produced cement and reach the required sector decarbonisation, cement players can adopt several changes in their production process including the use of alternative fuels to reduce the reliance on fossil fuels to heat kilns, as well as clinker substitution. There are also emerging technologies which will further reduce the amount of CO₂ emitted per tonne of cement produced, including the use of new raw materials, development of more efficient kilns, and application of CCS technologies.
- Our decarbonisation trajectory in the near-term will not be linear. We expect emissions reduction to be steeper towards the end of this decade as decarbonisation technologies further mature.
- The transition to a low carbon cement industry will be challenging, but also provides opportunities for financial institutions to support the transition. As a financial services provider, we can also play a role in stimulating a more conducive ecosystem for low carbon cement, such as with our clients in the Real Estate sector.



Scope

Scope 1 and 2 emissions of cement manufacturing clients

Decarbonisation Levers

- Encourage and support the adoption of technologies that reduce emissions
- Provide financing options that incentivise sector decarbonisation
- Influence our real estate clients to decarbonise to signal and create the demand for more sustainably produced cement
- Collaborate and engage with industry organisations, and regulatory conversations to contribute ideas on constructive sector decarbonisation efforts
- Selective onboarding of new cement clients with a clear transition plan aligned with Net Zero 2050

7.2 Industry Overview

Cement is an essential building material used to make concrete, which is the backbone of our homes, communities and infrastructure. The Cement sector plays a particularly important role in the developing world, creating opportunities which enable socio-economic development. Indonesia's Cement sector for instance contributes around 5% of the country's GDP and creates up to 1 million direct job opportunities⁶¹. The demand for cement is expected to grow continuously in the next decade, estimated at a CAGR of 5.1% (between 2022 to 2029) fueled by the rising population which increases the need for buildings⁶².

However, this is also one of the highest-emitting sectors, with the production of cement responsible for about 8% of global anthropogenic GHG emissions⁶³. This poses a major challenge for the sector, having to balance ways to meet its emission requirements while still meeting the growing demand for cement, particularly in developing nations.

In addition, cement decarbonisation in the Southeast Asia region is also essential due to the Carbon Border Adjustment Mechanism (CBAM), which will place carbon prices on exported cement based on its embedded emissions. To reduce the cement manufacturer's CBAM liability and maintain export competitiveness, cement manufacturers will need to invest in low carbon and sustainable cement production technologies.

To meet this demand for sustainably produced cement, various technologies can be utilised although certain limitations remain a hindrance. These include:

- **Substitution of Clinker:** Substituting clinker (responsible for roughly two-thirds of the sector's CO₂ emissions) with alternative materials such as fly ash, slag, and pozzolans, can reduce the clinker-to-cement ratio which would directly reduce CO₂ emissions during cement production. Fly ash and slag are by-products of coal-fired power plants and iron and steel production respectively, while pozzolans are natural substances that possess cement-like properties.
- **Carbon Capture and Storage (CCS):** The calcination process which creates clinker (the primary component of cement) is a significant contributor to the sector's CO₂ emissions, which can be captured and reused through the implementation of CCS technology. Despite its potential benefits, the widespread deployment of CCS faces several challenges that need to be addressed including its high cost, limited availability of storage sites and infrastructure readiness.
- **Improving Energy Efficiencies:** Electric kilns, pre-calcined raw materials, combustion process optimisation, heat recovery system adoption, improved insulation and maintenance are just some of the options available to reduce the emissions from energy use in the production process. Kiln electrification is one of the promising technologies which is being pilot-tested by several industry players, utilising electricity to heat raw materials, and making it more energy-efficient than traditional kilns powered by fossil

Cement industries of Southeast Asia



Vietnam, Indonesia, Thailand, the Philippines and Malaysia account for over 90% of the region's total cement production capacity, primarily dominated by a few large domestic players that are either privately-held or state-owned companies.

The average age of large cement players and technology used (mainly the kilns) in this region ranges between 20 to 25 years.

61 Asian Insiders (2022). The Cement Industry in Indonesia – Looking Ahead.

62 Fortune Business Insights (2023). Cement Market Size, Share & COVID-19 Impact Analysis, By Type, By Application, and Regional Forecast, 2023-2030.

63 Ellis, Badel, Chiang et al (2020). Proc. Natl Acad. Sci. USA 117.

fuels. As the power grid continues to decarbonise, electric kilns can further contribute to reducing the carbon footprint of the Cement sector.

- **Using Alternative Fuels:** Alternative fuels such as biomass, waste, and recycled materials are capable of heating kilns in cement plants. A new technology is currently being developed that employs green hydrogen as an alternative fuel. This option holds great potential for reducing emissions. However, green hydrogen is more expensive than fossil fuels and is not as widely available. Despite these challenges, the advantages of using green hydrogen in the cement industry are promising in long-term.

The transition to a low carbon cement industry is challenging due to the high cost of lower carbon technologies, dependency on multiple players in the industry's ecosystem including developers and end buyers, making coordinated efforts to transition to low carbon technologies difficult, as well as the risk of carbon leakage. The higher cost of low carbon cement could also translate into higher costs of buildings for end buyers, which could exacerbate current socio-economic issues, such as the need for more affordable homes.

These challenges, nevertheless, also create an opportunity for financial institutions to support the transition, including financing the construction of new low carbon cement plants, the retrofitting of existing plants, and the development of new low carbon cement technologies. Financial institutions could also offer financial products and services that support the transition to a low carbon cement industry, which can include green bonds/sukuk, sustainability-linked financing, or other sustainability-linked instruments. Financial services providers can also stimulate greater demand for green buildings and green homes through products such as green mortgages.

7.3 CIMB's 2030 Target for the Cement Sector

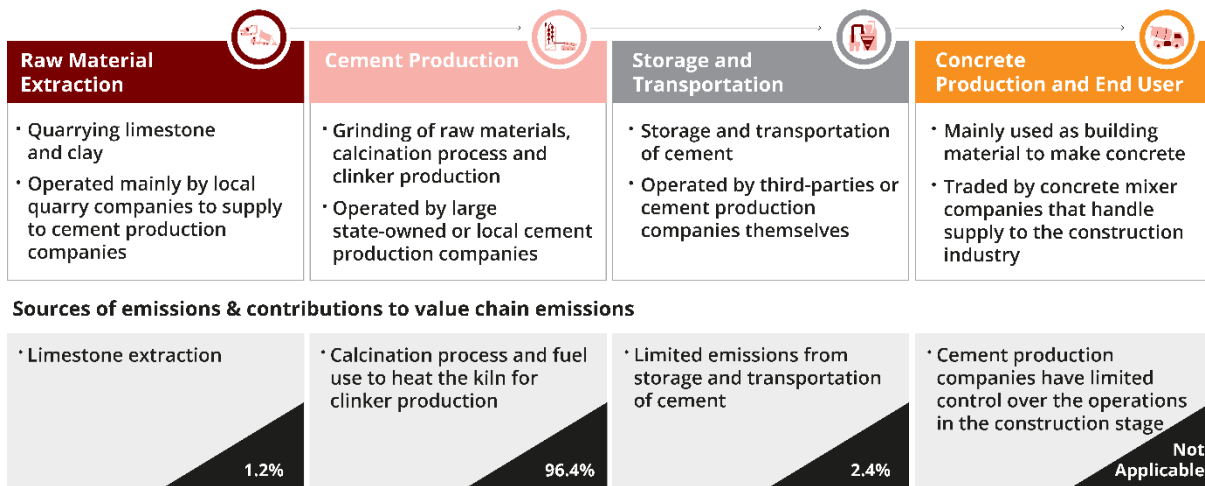
Design Decision A: Target metric selection

We have chosen physical emissions intensity as our metric for this sector, measured in tonnes of CO₂ equivalent per tonne of cement produced (tCO₂e/t cement produced), as it is a comprehensive, comparable, and policy-relevant metric. An emissions intensity metric serves to track the progress of the Cement sector in meeting its climate change goals, while continuing to meet growing demand. This metric will incentivise us to increase our exposure to less emission intensive players, encourage our clients in this sector to adopt lower emission technologies, and to increase our support for cleaner production, all of which will help to accelerate sector decarbonisation.

Design Decision B & C: Value chain and emissions scope coverage

Our target focuses on the cement manufacturing stage, where the majority of emissions occurs. This includes receipt of clinker feedstock (i.e. limestone clay, sand), preparation of components for processing, clinker production, milling and blending into cement, and storage of the finished cement.

Figure 13 Cement Sector Value Chain⁶⁴



The cement production process is a complex and energy-intensive process that begins with the grinding of raw materials into a fine powder. Raw materials are blended together and fed into a kiln, which is a long, rotating furnace heated to temperatures of up to 1,450°C. At this temperature, the raw materials react to form clinker, which is a hard, nodular material that is the main ingredient in cement. Two-thirds of the GHG emissions are process emissions caused by carbon released from the raw materials used during this stage, while the remaining CO₂ emissions are a result of fuel combustion. The clinker is cooled and ground into cement, with small amounts of additives, such as gypsum and limestone to improve its properties. Finally, the cement is stored and packaged for transportation and distribution⁶⁵.

We include Scope 1 and Scope 2 of our Cement sector clients in our calculation of physical emissions intensity. Data is relatively accessible and reasonably reflects the direct actions taken by Cement sector clients in decarbonising their production. We currently exclude Scope 3 emissions from the Cement sector value chain. Activities such as raw material extraction/ mining, downstream transportation, as well as distribution and use of sold products are excluded from the target as data is limited at this point of time. Additionally, at the point of target setting, there was no suitable reference scenario that included those activities to inform a credible Net Zero ambition. However, we will continue to engage with our clients within the Cement sector to develop plans towards Net Zero in these activities, and consider expanding our target coverage to the whole value chain in the future.

Design Decision D: Selecting a reference scenario

Our Cement sector emission intensity target was set using the SBTi Cement Target Setting Guidance – Sectoral Decarbonisation Approach (SDA), which refers to the global IEA Net Zero by 2050 (NZE) scenario. SBTi Cement Target Setting Guidance⁶⁴ provides a credible pathway to decarbonise the Cement sector in alignment with the 1.5°C warming scenario. It also has acceptance among companies across the Cement sector, financial institutions, and policymakers alike. We have adopted the global reference scenario due to the lack of available regional scenario at the point of target setting and will review our choice of reference scenario in the future should a more representative regional scenario be made available.

Design Decision E: Establishing our baseline

We assessed the emissions and production data availability and quality of reporting of our clients in the Cement sector to be relatively strong, especially among larger cement companies with multiple stakeholders requiring their public reporting to be assured. We have taken into

⁶⁴ McKinsey (2020). Laying the foundation for zero-carbon cement.

⁶⁵ The European Cement Association. The story of cement manufacture factsheet.

consideration Scope 1 and Scope 2 emissions, coupled with our financing attribution to these clients. This provides us with the financed emissions information for each of our Cement sector clients. Similarly, we have used the attribution factor to obtain the quantity of cement production attributed to us. The physical emissions intensity of our Cement sector portfolio is obtained by dividing the sum of financed emissions over the sum of attributed cement production.

Through the use of detailed company-level data, we have been able to achieve a high level of data coverage with rich information, providing us with a high degree of confidence in our baseline calculations.

Our Net Zero approach in the Cement Sector

Our 2021 baseline physical emissions intensity stands at 0.72 tCO₂e/t cement produced, higher than the IEA NZA average of approximately 0.6 tCO₂e/t cement produced. We will be working with our clients through various approaches to ensure our 2030 Target is achieved. As a positive starting point, almost all our Cement sector clients have a long-term Net Zero 2050 commitment, although not necessarily a near-term 2030 Target which aligns with IEA NZE 2050. Achieving the IEA's NZE 2050 global pathway (i.e. physical emissions intensity of 0.46 tCO₂e/t cement produced by 2030 and 0.03 tCO₂e/t cement produced by 2050) is possible, albeit highly challenging. Achieving the pathway will require substantial investments in new technologies, greater uptake of market in green cement products, making sure the green cement is affordable, significantly enhancing the efficiency of the cement production processes, as well as changes in the regulatory environment and change in end-user preferences.

The technology for reducing carbon emissions in cement production is developing at different rates in various regions. Although certain technologies for reducing Cement sector emissions, such as waste heat recovery systems and clinker substitution, are readily available, many more technologies, including CCS, electric kilns, and alternative fuels, are still in the early stages of development or are currently economically prohibitive to implement. As such, our assessment indicates that the pathway towards decarbonisation in the Cement sector, at least in the Southeast Asia region, will not be linear in the immediate future.

- We are committed to continuously engaging with our clients to provide the necessary support and financing for them to decarbonise their operations. Our strategy involves the following elements: Near-term approach to regularly engage with clients to set mid-term targets, and encourage the implementation of technologies that reduce emissions.
- Supporting our clients to meet their transition targets by financing their decarbonisation efforts.
- Continuously influencing our real estate clients to decarbonise, including in their supply chains, which will provide an indirect signal to upstream supply chain players, including the Cement sector to decarbonise. Similarly, we will collaborate closely with industry organisations and engage in regulatory conversations to contribute ideas and forms of support. We hope that engaging with peers, standard-setters and policymakers will help create a demand signal for the Cement sector to decarbonise both in the near- and long-term.
- Selectively onboarding Cement sector clients with a clear transition plan aligned with Net Zero 2050.

Future developments and dependencies

The ability of the Cement sector to decarbonise relies on several factors. The demand for green or eco cement is market-specific, and highly influences the level of decarbonisation in the Cement sector. Utilising energy-efficient technologies such as electric kilns can reduce emissions from

fossil fuel combustion (Scope 1). However, transitioning to electricity usage may lead to higher Scope 2 emissions, based on the carbon intensity of the local electricity supply. In addition, policies such as carbon pricing (either carbon tax or Emissions Trading Schemes) will catalyse the speed of adoption of technology, as this will create a price signal associated with higher carbon emissions. Thus, our ability to meet our portfolio emission target also relies on external factors that we strive to drive within our sphere of influence.

We will also constantly monitor the development of any regional decarbonisation pathways for the cement industry. We will also endeavour to update our Cement sector targets and plans in future as and when more information is made available, and as technologies mature.

8 Taking Action

Our targets published in this Whitepaper mark a significant milestone in our journey towards decarbonisation. They have equipped us with a concrete ambition for 2030, and the strategies required to take us there in four sectors that are key pillars of the ASEAN economy. Achieving our 2030 Targets will align us on the path towards Net Zero by 2050. Going forward, we will be focused on four key priorities:

Supporting our clients through a just transition: This is a core tenet of our ambition. We acknowledge the challenges in striving for a just transition compatible with economic growth and positive social outcomes. In setting our course to decarbonisation, we will embark on this journey together with our clients, engaging with them and providing financing support to enable and accelerate their own decarbonisation efforts, whilst helping to mitigate potential impacts to vulnerable individuals and communities to enable them to achieve a just transition. This journey is relevant to a broad swathe of our clients. Whether they are large corporates or SMEs, whether they operate in carbon-intensive industries or are involved in scaling up the new technologies required in a Net Zero future, we will be a partner to them by continuing to innovate our financing solutions and to increase our engagement to serve as catalysts for their transition. Ultimately, we will be able to realise our own decarbonisation ambition when we have impactfully helped our clients to realise theirs.

Driving change in partnership with broader ecosystems in the real economy: Decarbonisation needs to happen in the real economy. Beyond our role to leverage our balance sheet in serving as a spur to the innovation and wide-spread adoption of sustainable technologies and practices, we intend to actively engage with the various actors and stakeholders in the broader real economy ecosystems to drive change. Our target towards Net Zero for the Palm Oil sector, a global first, is our commitment to enabling the continued transformation of an important sector, to meet growing demand in a sustainable way. We will work in partnership with the many like-minded actors in the palm oil industry including regulators, standard setters, industry bodies and NGOs to help deliver on it. Likewise, in other carbon-intensive sectors where we have or plan to set targets, we will play our part and contribute to creating and scaling partnerships to deliver a just transition for the region.

Reviewing our progress and ensuring our targets stay relevant: We will measure our financed emissions on an annual basis, analyse our performance in these four priority sectors against our targets, and disclose our progress in our annual sustainability disclosures. To ensure we are able to communicate a clear message and consistent strategy to our clients and stakeholders, we will seek to maintain the stability of our 2030 Targets. However, we will monitor the developments in the four priority sectors and ensure any significant updates to climate science are incorporated into our approach. We will also ensure that our policies and targets remain relevant and suitably ambitious by calibrating them against the broader regulatory and technological environment. For example, should there be a sharp acceleration of supportive regulations towards low carbon solutions in the markets we operate in, we will look to ratchet up our policies accordingly.

Charting the next phase of our decarbonisation journey: Our targets published in this Whitepaper cover four sectors that contribute significantly to our financed emissions. Over time, we will continue to expand on our target-setting to cover other significant parts of the value chain in the four sectors, as well as other carbon-intensive sectors of our portfolio, potentially including those beyond our NZBA commitment. At time of publication, we have already begun that work in the Oil & Gas and Real Estate sectors. This will enable us to articulate our strategic direction to our stakeholders with clarity and provide better support for our clients in an increasing number of sectors, and more importantly, to broaden our ability to be an agent of change, as well as to fully

honour our commitment as a member of the NZBA. In addition, as we approach 2030 we will continue to set further targets at least once every 5 years to chart our course to Net Zero.

Continuing to develop and embed organisational capabilities and governance: As we shift focus from target-setting to implementation, we will continue to enhance our internal capabilities, including strengthening our governance structures and financing policies to integrate sustainability into what we do. We will also equip our people with the right knowledge, tools and incentives to achieve our targets and enable a just transition.

A Net Zero future has the potential to deliver inclusive growth and resilience alongside its positive impacts on climate. We remain steadfast in driving the sustainability agenda across the ASEAN region, and have taken an important step forward with our targets towards Net Zero. We invite our clients, investors and the broader community to work with us towards securing a sustainable future for the region.

9 Glossary

Abbreviation	Definition
AFOLU	Agriculture, forestry and other land use
ASEAN	Association of Southeast Asian Nations
BNM	Bank Negara Malaysia
CAGR	Compound Annual Growth Rate
CCS	Carbon capture and storage
CCUS	Carbon capture, usage and storage
CFPP	Coal-fired power plants
CMM	Coal mine methane
CO ₂	Carbon dioxide
CO ₂ e	Carbon dioxide equivalent
CPKO	Crude palm kernel oil
CPO	Crude palm oil
CSPO	Certified sustainable palm oil
EUDR	European Union Regulation on Deforestation-free Products
FFB	Fresh fruit bunches
FMCG	Fast moving consumer goods
FPIC	Free, prior and informed consent
GAKI	Indonesian Palm Oil Association
GDP	Gross domestic product
GHG	Greenhouse gases
GSSIPS	Green, Social, Sustainable Impact Products and Services
GVC	Greening Value Chain Programme, established under the Joint Committee on Climate Change
HCS	High carbon stock
HCV	High conservation value
IAM	Integrated Assessment Model
IEA	International Energy Agency
IEA NZE	International Energy Agency's Net-Zero Emissions by 2050 Scenario
IEEFA	Institute for Energy Economics and Financial Analysis
IFRS S2	International Financial Reporting Standards Climate-related Disclosures (S2)

ILO	International Labour Organisation
IPCC	Intergovernmental Panel on Climate Change
ISCC	International Sustainability and Carbon Certification
ISO	International Organization for Standardization
ISPO	Indonesia Sustainable Palm Oil certification scheme
LCA	Life-cycle assessment
LCOE	Levelised cost of electricity
LUC	Land use change
MAS	Monetary Authority of Singapore
MSME	Micro, Small & Medium sized Enterprises
MPOB	Malaysia Palm Oil Board
MSPO	Malaysian Sustainable Palm Oil certification scheme
NDC	Nationally Determined Contribution
NGO	Non-Governmental Organisation
NDPE	No Deforestation, No Peat, No Exploitation
NZBA	Net-Zero Banking Alliance
NZE 2050	Net Zero Emissions by 2050
PCAF	The Partnership for Carbon Accounting Financials
PK	Palm kernel
POME	Palm oil mill effluent
R&D	Research & development
RSPO	The Roundtable on Sustainable Palm Oil
SBTi	Science-Based Targets initiative
SBTi FLAG	Science-Based Targets initiative Forest, Land and Agriculture pathways
SDA	Sectoral decarbonisation approach
SDS	Sustainable Development Scenario
SME	Small & medium enterprises
Solar PV	Solar Photovoltaic
T&D	Transmission & Distribution
TCFD	Taskforce on Climate-related Financial Disclosures
WBA	World Benchmarking Alliance