## CLIMATE CHANGE: STRATEGY AND RISKS

The climate emergency poses a real and existential threat to humanity. Physical risks continue to worsen, with severe weather events now commonplace, and consecutive record-breaking annual temperatures. At the same time, regulatory pressures and market shifts are driving heighted transition risk, with investors demanding more transparency. On the other hand, new opportunities are emerging, and demand for sustainable finance has never been stronger.

As a financial services provider with a diverse financing portfolio and operating footprint across ASEAN, we are exposed to climate-related physical and transition risks. These could materially impact our performance and longer-term resilience in the form of credit risk, market risk and reputational risk, among others. Our physical ability to operate could also be impacted, and the safety of our employees put at risk. With the window to combat and adapt to climate change almost closed, it is appropriate and responsible to factor climate-related risk considerations into our business decisions.

### OUR CLIMATE JOURNEY

#### 2019

- Became signatory to the Collective Commitment to Climate Action (CCCA), aligning our portfolios to well-below 2, striving for 1.5 degrees Celsius.
- Participated in the UNEP FI Task Force on Climate-related Financial Disclosures (TCFD) Phase II Banking Programme.
- Joined the Joint Committee on Climate Change (JC3) co-chaired by Bank Negara Malaysia and Securities Commission to facilitate a smooth transition to a low-carbon financial landscape.

#### 2020

- Embedded physical and transition risks into the Group Risk Library.
- Committed to no financing of new thermal coal mines and coal-fired power plants, as well as expansions, and became the first banking group in ASEAN to commit to phasing out from coal by 2040.
- Developed the Green, Social, Sustainable Impact Products and Services (GSSIPS) Framework, including financing for climate risk mitigation and adaptation.
- Piloted the Bank Negara Malaysia Climate Change and Principle-based Taxonomy (CCPT) on selected financing facilities within the construction sector.
- Incorporated climate risk considerations as part of client and transaction-level Sustainability Due Diligence.

#### 2021

- Committed to net zero GHG Scope 1 and 2 emissions in our operations by 2030, and overall Net Zero GHG by 2050 (including scope 3 and financed emissions).
- Became signatory to the Net-Zero Banking Alliance (NZBA) and Partnership for Carbon Accounting Financials (PCAF).
- Piloted the Paris Agreement Capital Transition Assessment (PACTA) tool to measure portfolio alignment to various scenarios, and conducted a physical risk pilot in Malaysia.
- Committed to mobilise RM30 billion of sustainable finance by 2024, and embarked on the development of an internal tool to enable asset classification based on the GSSIPS Framework and CCPT.
- Became an official supporter of TCFD, and committed to fully align to TCFD recommendations by our 2023 report, as part of our CEO Action Network commitments.
- Co-led the development of the TCFD application guide by JC3, and joined the industry-led CCPT Implementation Group.

# GOVERNANCE AND RISK

## TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES

As an official supporter of the recommendations of the Financial Stability Board's Task Force on Climate-related Financial Disclosures (TCFD), we aim to fully align our climate-related disclosures with the TCFD recommendations by 2024.

Structured based on the TCFD core pillars of Governance, Strategy, Risk Management, and Metrics & Targets, this section on Climate Change: Strategy and Risks marks CIMB's first holistic endeavour to provide TCFD-aligned disclosures. Through this, we seek to provide our stakeholders, and in particular our investors and clients, with decision-useful and up-to-date information on our climate risks and performance. This disclosure also reinforces our commitment to achieve net zero GHG Scope 1 & 2 emissions in our operations by 2030 and overall Net Zero GHG by 2050 (including Scope 3 and financed emissions).

Consistent with TCFD, we apply the "double materiality" principle in our climate disclosures, to provide a holistic view of climate-related impacts on CIMB, as well as our impacts on the climate. Given the long-dated nature of climate risk, some level of assumptions and estimates are applied when determining the materiality of our climate disclosures. As such, we expect some climate-related disclosures provided in this report to change, evolve and advance over time as we continuously strengthen our internal climate capabilities, data and practices.

To reduce information redundancy, this section is to be read in conjunction with other parts of this report, where indicated. We have also included a TCFD Index on page 130 of this report for easy reference.

## GOVERNANCE

### BOARD AND MANAGEMENT OVERSIGHT

In the context of climate governance, the Board is responsible for overseeing the management of climate-related matters. The Board is assisted primarily by the GSGC, a board sub-committee which was established in 2021. The Board is also supported by BRCC on climate risk appetite setting and management practices, AC on ensuring adequate internal control against climate risks, and the GNRC on Board-level climate competency, among others. Refer to page 77 of this report for further details.

Chaired by the Group Chief Sustainability Officer and comprised of regional and cross-functional representatives, the GSC is responsible for formulating and monitoring, among others, the Group's climate change strategy, action plans, projects and initiatives, in line with the direction set by the GTC and the Board.

Key climate-related matters addressed at various board- and management-level committee meetings in 2021 included the following, which are discussed either as a standalone topic, or as part of a broader discourse on related topics:

- The Group's strengthened sustainability commitments including net zero targets and plan, and our GSSIPS commitments
- Appetite for and exposure to high sustainability risk sectors and clients
- Key sector requirements and policies, such as No Deforestation, No Peat, No Exploitation (NDPE) requirements
- The Group's Sustainability Risk Management Framework
- Updates on climate-related regulatory developments and trends
- Progress on ongoing and planned climate-related risk projects including CCPT implementation in Malaysia, scenario analysis pilot, and financed emissions baselining

| Board-Level Forums | Meeting frequency | Climate-related discussions |
|---|---|---|
| Group Board | Bi-monthly | 2 |
| Group Sustainability and Governance Committee | Quarterly | 1^ |
| Board Risk and Compliance Committee | Quarterly | 1 |
| Audit Committee | Quarterly | 1 |
| Group Nomination and Remuneration Committee | As required | 2 |

| Management-Level Forums | | |
|---|---|---|
| Group Transformation Committee | Monthly | 5 |
| Group Sustainability Council | Bi-monthly | 5 |

^ Only one meeting was held as the committee was only set up in September 2021.

## CLIMATE STRATEGY IMPLEMENTATION

At the working level, the Group Sustainability Division is responsible for driving the execution and implementation of group-wide climate measures, in collaboration with Business Units and Enablers. For instance, the Group Administration and Property Management team is responsible for reducing CIMB's operational impacts on the climate, and the vulnerability of our facilities to physical climate risks. Supported by Group Sustainability, the team drives reduction of our environmental footprint, including GHG from energy use, water and waste.

## BUILDING CLIMATE COMPETENCE

To build knowledge and capability, as well as to keep abreast with the developments and insights, Board members, senior management and project execution teams pursued various in-house training and external capacity building events in 2021, such as:

- NZBA Board briefing by Ms. Sarah Kemmitt, UNEP FI
- Global Summit of the Climate Governance Initiative (including the Malaysia Chapter)
- JC3's *FinanceforChange* flagship conference, which included sessions on COP26 and Private Finance; Environmental and Social Risk Management at Transaction Level; Resilient and Sustainable Portfolios; and TCFD
- JC3 Climate Change Workshops, including Climate-Related Disclosures; Climate Risk Management; and Climate Scenario Analysis
- CIMB's The Cooler Earth Sustainability Summit, which included sessions on Climate Action and Rethinking Value Creation; Fireside Chat: Can Board of Directors be Held Responsible for Contributing to Climate Change?; The Race Towards a Low Carbon Economy: Implications for Business; and Managing your Energy Use
- Internally-run training sessions including on CCPT; Deep Diving Coal; and Deep Diving Peat

## CLIMATE-RELATED KPIS

As part of our organisation-wide rollout of sustainability KPIs in 2021 (refer to page 78 of this report), several climate-focused KPIs were put in place based on our sustainability aspirations, as well as country and business priorities. These included:

- Reduction in Scope 1 and 2 GHG emission intensity
- Implementation of climate scenario analysis pilot projects
- Green financing, including renewable energy financing for small and medium-sized enterprise (SME) customers, and green mortgages and green vehicle financing for retail customers

Progress vis-à-vis these KPIs are monitored by Group Sustainability, with regular reporting to GSC, GTC and GSGC.

# GOVERNANCE AND RISK

## STRATEGY

As a business, our physical assets and operations are exposed to climate-related risks, in particular physical risks, such as those arising from extreme flooding. However, as a financial institution, our greater exposure by far is indirect, primarily through our transactions and dealings with our clients, through which we are exposed to various sectors and geographies. It is therefore prudent to assess these climate-related risks, which could have significant impact to our clients, our business and the broader economy, and to take climate change considerations into account when setting our business strategies and risk appetite.

### IDENTIFYING CLIMATE-RELATED RISKS

To better understand how climate-related transition and physical risks occur, how they are transmitted, and how they translate into financial risks to us, we conducted a high-level climate risk assessment in 2020. This was done in conjunction with the various Risk Centres of Excellence, to determine the potential impact of climate change on our business. This year, we added Operational Risk as an additional risk category due to risk drivers relating to natural disasters and operational changes made to comply with increasing climate-related regulations and to fulfil our climate ambitions.

| Sources of Risks | | Examples of Potential Transmission Channels |
|---|---|---|
| **Risk Category** | **Risk Drivers** | |
| **Transition Risk** arising in the process of adjustment towards a low-carbon economy | **Policy and Regulatory Changes** such as national net zero policies, carbon taxes, climate laws | *Lower corporate profitability (e.g. due to increase in production costs, reduced agricultural yields) and increased litigation* |
| | **Technology Shifts** such as new low carbon or carbon capture technologies and related price changes | *Corporate devaluation or premature asset write-downs (e.g. closure of coal-fired power plants due to lower cost of renewable energy)* |
| | **Investor Expectations** such as portfolio-level temperature goals and increasing standards to avoid greenwashing claims | *Rising public scrutiny on corporates' unsustainable behaviours and potential drastic loss of customers, impacting profitability* |
| | **Consumer Preferences** such as a move away from single-use items, and towards greener alternatives | *Reduced, or complete loss of, residential and commercial property values in high risk areas such as those in floodplains, and increase in prices of property in higher elevations*<br>*Lower household wealth and higher inflation (e.g. rising living costs due to carbon cost pass-through)* |
| **Physical Risk** arising in the event of increased severity and frequency of climate change induced events | **Acute Drivers** such as heatwaves, wildfires, extreme rainfall and flooding, and droughts | *Operational disruptions resulting in income loss (e.g. supply chain disruption, damaged machineries due to floods, heat stress and related deaths at workplaces)* |
| | **Chronic Drivers** such as sea level rises, sustained hot temperature, reduced rainfall, shifting seasons, and longer-term shifts in climate patterns | *Higher government spending to adapt to climate change or lower revenue due to lower tax contributions from corporates* |

| Potential Financial Risks to CIMB | | |
|---|---|---|
| **Risk Types** | **Impacts** | **Time Horizon** |
| **Credit Risk** | • Impact on repayment capacity of customers, leading to a possible increase in default rates<br>• Impact on collateral value due to stranding of climate misaligned assets | M L |
| **Market Risk** | • High volatility and potential abrupt decline in the value of climate-incompatible securities underwritten or held by CIMB | M L |
| **Liquidity and Funding Risk** | • Inability of CIMB's customers to repay their facilities as contracted, which in turn affects the Group's cashflow requirements<br>• Significant withdrawals of deposits from customers to fund capital expenditures in low-carbon technology or to recover from damages caused by extreme events | M L |
| **Reputational Risk** | • Reputational repercussions due to CIMB's financing of carbon-intensive sectors such as coal<br>• Poor stakeholder confidence in CIMB's sustainability efforts and ability to manage our exposure to climate-related risks | S M L |
| **Operational Risk** | • Disruption to operations and damage to CIMB's physical assets (e.g. branches) due to rising frequency and impact of natural disasters such as floods<br>• Changes to internal policies and procedures to ensure compliance with new regulations around climate change<br>• Higher OPEX and CAPEX required to meet the Group's net zero ambition | S M L |
| **Strategic Risk** | • Losing competitiveness, market share and attractiveness to investors due to inability to shift away from financing brown to green | M L |
| **Enterprise-wide Risk (Capital Risk)** | • Inadequate capital to cater for climate-related risks, which may result in the inability to absorb losses, maintain public confidence and support the competitive growth of the business | M L |

**Note:** S denotes "Short Term" of less than 1 year; M denotes "Medium Term" of 1 to 5 years; L denotes "Long Term" of more than 5 years. The timeframes of S, M and L are defined based on the standard practice in the market. We intend to align the timeframes based on the average life of our portfolios as well as regulatory guidance in the future.

# GOVERNANCE AND RISK

## IDENTIFYING CLIMATE-RELATED OPPORTUNITIES

There is global consensus that significant financial flows must be deployed to tackle the climate crisis, both for mitigation and for adaptation. Research commissioned by the United Nations High Level Climate Action Champions concluded that the private sector could deliver 70% of the total investments needed to meet the global Net Zero goal and keep 1.5°C within reach. The formation of private sector-led Glasgow Financial Alliance for Net Zero (GFANZ) at COP26, with a pledge of US$130 trillion will provide greater impetus for climate finance, particularly in emerging and developing economies.

In this region, we are seeing more climate-supporting transactions, as well as new developments such as the ASEAN Catalytic Green Finance Facility by the Asian Development Bank. According to research by Ernst and Young, ASEAN markets registered an exponential growth in sustainable bonds (185% CAGR) and sukuk (278% CAGR) between 2016 and 2020.

We seek to identify and seize various climate finance opportunities, to make a positive impact, and to increase our share of wallet in future-proof and emerging sectors. Guided by our GSSIPS Framework and our RM30 billion sustainable finance target by 2024, we aim to deploy more capital towards climate supporting areas such as Renewable & Clean Energy, Energy Efficiency, Green Buildings, and Climate Adaptation, among others. We also seek to facilitate more climate-related capital raising through equities and bonds, and facilitate more green investments and deposits. For more details, refer to pages 57 to 60 on our green and climate-related GSSIPS progress achieved in 2021.

## OUR 2050 NET ZERO COMMITMENT

In 2021, we stepped up our climate pledge, by targeting to achieve net zero GHG Scope 1 and 2 emissions in our operations by 2030 and committing to overall Net Zero GHG emissions by 2050 (including scope 3 and financed emissions).

As a financial institution, the vast majority of our greenhouse gas emissions come from Scope 3 emissions, notably in the form of "financed emissions". Considered as a Category 15 item of Scope 3 activities in the GHG Protocol, financed emissions are from financing of clients and investments that are attributable to us. The remainder of this section focuses on our plan with respect to Scope 3 financed emissions. Refer to pages 25 to 27 for information on Scope 1 and 2 related strategies and performance.

**Illustration of a Bank's GHG Emissions Profile**


Source: CDP (2021)

Achieving Net Zero in our Scope 3 emissions means that our attributed exposure to clients' emissions must be at least balanced by the same amount of carbon sequestration in our overall portfolio. Given that 2050 is less than 30 years away, and the portfolio shifts that this will necessitate, we must already begin the transition and transformation in the way we finance.

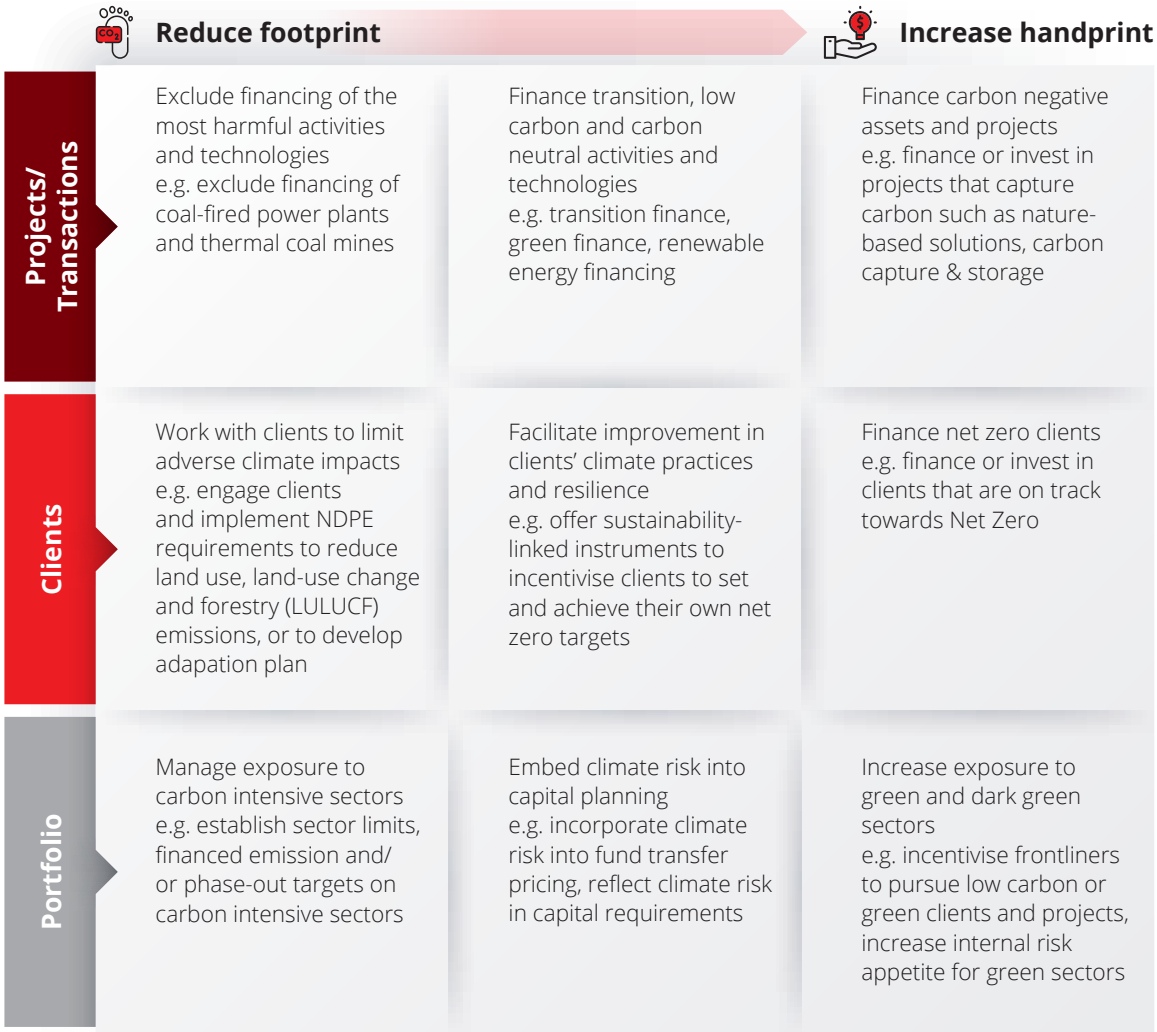
Additionally, while we seek to move our business and our clients towards Net Zero, we have a responsibility to ensure that we facilitate an orderly and just transition for our stakeholders. For example, while transitioning away from carbon-intensive sectors and technologies will create new green jobs, it may also result in stranding of human capital, resulting in job losses. This is particularly pertinent among blue collar and low wage workers, exacerbating social inequalities.

We must therefore take a measured and holistic approach to our climate strategies and policy decisions. We also have the opportunity through our portfolio transformation to address gender inequalities, including differences in gender participation and wages.

## GETTING TO NET ZERO BY 2050

Our 2050 Net Zero Plan offers a high-level view on some of the key steps and levers that we plan to undertake to put ourselves on track towards our 1.5ºC ambition.

**Levers Towards our Net Zero Financed Emissions Goal**




As we perform portfolio analyses, we will continue to provide greater clarity and certainty to our plans and strategies, drawing lessons from our own and peers' climate-related initiatives, as well as feedback from internal and external stakeholders.

## TRANSITION RISK SCENARIO ANALYSIS: ASSESSING OUR FINANCING PORTFOLIO ALIGNMENT

Climate scenario analysis provides a means for us to cut through the complexity of climate-related risks and assess our exposure to such risks under a plausible range of climate scenarios. In 2021, we embarked on our first transition risk scenario analysis pilot using the Paris Agreement Capital Transition Assessment (PACTA) for Banks tool.

This pilot was part of the Malaysia-UK PACT (Partnering for Accelerated Climate Transitions) programme implemented by WWF (UK and Malaysia) and 2 Degrees Investing Initiative (2DII), whom we worked closely with and received guidance from throughout the pilot. The programme aims to contribute to Malaysia's carbon emissions reduction by supporting investments in low-carbon sectors, building capacity of financial regulators and institutions as well as strengthening the integration of climate-related risks and opportunities into policies, decision-making processes and financial product innovations.

PACTA for Banks is a free, open-source climate scenario analysis tool which was developed by 2DII, focusing on corporate financing portfolios. Via this pilot, we assessed the alignment of our financing book to the temperature goals of the Paris Agreement, by comparing desired sectoral decarbonisation pathways or technology roadmaps with our own sector exposures and projections.

# GOVERNANCE AND RISK

## The PACTA for Banks Methodology

PACTA for Banks allows us to measure if we are channeling financial flows sufficiently towards a low-carbon economy pathway, by providing a 5-year forward looking portfolio alignment projection through a bottom-up analysis of clients' production plans, based on their physical assets in the real economy.

To derive the forward-looking alignment results, we relied on the Asset-Based Company Dataset (ABCD) provided by 2DII's data provider, Asset Resolution (AR). The ABCD contains 5-year production forecasts of approximately 40,000 companies globally, updated annually. CIMB's corporate banking clients in Malaysia and Singapore, were matched with the ABCD, based on outstanding financing amount (i.e. defined as drawn amount in PACTA for Banks) as at 31 December 2020 (Portfolio), with a match success rate of 100% for Oil & Gas (Upstream), 98% for Power (Generation) and 7% for the Automotive (Car Manufacturing) sector.

## Pilot Scope and Parameters

| Sector[1], Segment[2], and Climate-Critical Technologies | | Climate Scenarios[3] | | | Region Benchmark[6] | Other Important Parameters |
|---|---|---|---|---|---|---|
| | | Scenario Name | Implied Temperature Rise[4] (Probability[5]) | Publication | | |
| **Oil & Gas \| Upstream** | • Oil Extraction<br>• Gas Extraction | Sustainable Development Scenario (SDS) | 1.8°C (66%) | International Energy Agency (IEA) World Energy Outlook (WEO) (2020) | Global | Market Benchmark[7]: Corporate Economy<br><br>Metric[8]: Production volume trajectory<br><br>Allocation Rule[9]: Portfolio weight approach |
| | | Stated Policy Scenario (SPS) | 2.7°C (50%) | | | |
| **Power \| Generation** | • Coal Capacity<br>• Oil Capacity<br>• Gas Capacity<br>• Hydro Capacity<br>• Renewable Capacity | Sustainable Development Scenario (SDS) | 1.8°C (66%) | | Southeast Asia | |
| | | Stated Policy Scenario (SPS) | 2.7°C (50%) | | | |
| **Automotive \| Car Manufacturing** | • ICE Vehicles<br>• Hybrid Vehicles<br>• Electric Vehicles | Net Zero 2050 (NZE_2050) | 1.5°C (50%) | IEA Net Zero by 2050 (2021) | Global | |

1 PACTA sectors not included in the pilot were Coal, Steel, Cement, Aviation and Shipping. We intend to extend our scenario analysis to these sectors in future.
2 The PACTA methodology does not extend to the entire value chain of a given sector, but focuses on the part which controls the bulk of the sector's climate system impact, and would spur the other activities in the sector to fall into alignment.
3 Climate scenarios (preformatted by 2DII for the PACTA for Banks) were selected based on sectoral and regional coverage, as well as recognition amongst policy makers and financial institutions. For the full list of preformatted scenarios for PACTA for Banks, refer to 2DII's PACTA for Banks Scenarios document here https://www.transitionmonitor.com/wp-content/uploads/2021/07/20210706-PACTA-for-Banks_Scenario-Supporting-document_V11.pdf.
4 Implied Temperature Rise in 2100 (ITR) represents the projected increase in global average temperatures above pre-industrial levels.
5 Different scenarios have different carbon budgets, as well as different probabilities of achieving the carbon budget.
6 We use regional benchmarks where possible for a more granular comparison. For example we used a regional benchmark for power, since power is produced and consumed in the same region.
7 The global and Southeast Asia corporate economy refer to all the assets in the world and in Southeast Asia within the ABCD. A comparison of our loan portfolio against the corporate economy is made to see if we outperform, underperform or are on par with the broader market's progress towards climate goals.
8 PACTA offers three main metrics of portfolio alignment: Technology Mix, Production Volume Trajectory and Emission Intensities. The Technology Mix and the Production Volume Trajectory are used for Power and Automotive, where technology roadmaps are known. Emission Intensities are used for Steel, Cement and Aviation, where technology roadmaps are less well defined. In this report, we use Production Volume Trajectory, which measures the alignment of our portfolio's projected production volumes, based on the 5-year capital plans of our clients, to those given in climate scenarios. In other words, it compares the required change in production to align with selected scenarios. Note that PACTA assumes a static balance sheet i.e. loan/financing exposures analysed (in our case as at 31 December 2020) are kept constant for 5 years (deemed as an appropriate timeframe for reliable data to be gathered). Thus, the projected figures computed, are a result of any changes in production plans of the companies we finance as captured in the ABCD rather than a change in the composition of our loan/financing book.
9 We apply a portfolio weighted approach whereby a client's alignment with a given climate metric is allocated to our loan book based on the relative exposure of our book to that client i.e. if our loan book allocates 80% of our capital to a client, 80% of that client's required alignment per a given climate metric is allocated to our loan book.

## Pilot Findings and Potential Implications

This section discusses the initial outcomes of our first pilot study, which was conducted with the primary objective of learning and refining the methodology and tools. While we aim to promote as much transparency as possible, it is important to note that these pilot results are highly preliminary, as are any potential implications that we draw from them.

Through our discussions with internal stakeholders, as well as with selected clients, we have uncovered a number of analysis limitations and data gaps. For instance, results for the Automotive (Car Manufacturing) sector cannot be taken to represent our overall sector alignment, since data for only 7% of our exposure was represented on the ABCD. As such, this section should be read as the documenting of our pilot study, rather than a conclusive and concrete plan for the pilot sectors.

The table below provides an overview of the production trajectory alignment of selected portfolios in 2025.

| | | Our Portfolio (CIMB) | Corporate Economy (Market benchmark) |
|---|---|---|---|
| **Oil & Gas \| Upstream (Global)** Sector Exposure: 0.1% | Oil Extraction | >2.7°C | >2.7°C |
| | Gas Extraction | >2.7°C | 1.8 – 2.7°C |
| **Power \| Generation (ASEAN)** Sector Exposure: 0.8% | Coal Capacity | <1.8°C | >2.7°C |
| | Oil Capacity | >2.7°C | >2.7°C |
| | Gas Capacity | <1.8°C | >2.7°C |
| | Hydro Capacity | <1.8°C | <1.8°C |
| | Renewable Capacity | >2.7°C | >2.7°C |
| **Automotive \| Car Manufacturing (Global)** Sector Exposure: 0.2% | ICE Vehicles | >1.5°C | >1.5°C |
| | Hybrid Vehicles | >1.5°C | <1.5°C |
| | Electric Vehicles | >1.5°C | >1.5°C |
| | Fuel Cells | >1.5°C | >1.5°C |

1 Sector exposure herein refers to total loan/financing amount booked in CIMB Bank and CIMB SIngapore for the chosen sector over the Group's total gross loans, as at 31 December 2021.
2 Oil & Gas and Automotive sectors were not analysed at Southeast Asia level due to limited geographical coverage within the selected scenarios.

# GOVERNANCE AND RISK

### *OIL & GAS SECTOR*

The pilot analysis shows that our trajectory for oil and gas in the next 5 years is misaligned with both the SPS and SDS at the global level, indicating potential exposure to transition risks. As more governments take steps toward meeting their Nationally Determined Commitments (NDCs), policy shocks could happen in ASEAN. For example, implementation of national policies and mechanisms such as carbon tax and other sector policies to limit emissions in order to meet Paris commitments could impact our clients in this sector.

While for both oil and gas technologies we are on track to a more than 2.7°C warming scenario, comparison to the global corporate economy benchmark shows that we are under-weighted in gas extraction. This suggests that we should look at tilting our portfolio towards lower carbon alternatives.

### *POWER SECTOR*

Within the power sector, our trajectory for coal, gas and hydro capacity follows the SDS at the regional level, with CIMB's coal and gas capacity even out-pacing the regional benchmark. Continued Paris alignment of coal capacity is likely, due to our Coal Sector Guide which prohibits financing of new (and expansions of) thermal coal mines and coal-fired power plants from 2021 onwards, and our commitment to phase out coal exposure by 2040.

Given that our trajectory in oil capacity is misaligned with the SDS scenario, we may experience higher risk of discounted cash flows, probabilities of default or expected losses, if our power generation clients are unable to switch from oil-based power production to lower-carbon alternatives in a timely manner.

On the other hand, there are clear opportunities for transition and green financing with our clients, potentially from oil towards lower carbon alternatives in particular renewable capacity, where we are projected to remain flat up to 2025 (note that exposure relating to project financing is not captured during the PACTA for Banks analysis, as the tool currently only focuses on the lending/financing portfolio). Renewable energy is one of the focus areas of CIMB GSSIPS Framework, which we are actively pursuing as part of our RM30 billion sustainable finance target.

### *AUTOMOTIVE SECTOR*

*Note that we only achieved a 7% match success rate for this segment. Results presented for this segment are therefore highly indicative*

The pilot analysis shows that the trajectory for this sector in the next 5 years is misaligned with the NZE_2050 scenario at the global level, indicating potential exposure to transition risks. We also have the opportunity to build exposure in hybrid vehicles, where we are behind the global benchmark.

## MOVING FORWARD

Although highly preliminary, the pilot provided useful insights into the PACTA for Banks tool, its use cases and limitations, as well as the degree of climate alignment of our loan/financing books in Malaysia and Singapore. This pilot has helped to build the groundwork for future work on portfolio-level scenario analysis, which includes among others, extending the scope of the PACTA for Banks to cover other carbon-intensive sectors and geographies such as Indonesia and Thailand.

We plan to use results from PACTA for Banks as a risk management tool to monitor our portfolio alignment, inform our sector strategies and appetite limits, as an engagement tool for meaningful conversations with our clients, and potentially as an input for our climate target-setting and stress testing, as well as other strategic planning processes in the near future.

Note that continued refinements are being made to the PACTA methodology, to improve identified limitations and enhance analytical capabilities, as the understanding, approaches and data in the area continue to mature.

## PHYSICAL RISK SCENARIO ANALYSIS: QUANTIFYING THE IMPACT OF CLIMATE EVENTS

Flooding in the ASEAN region has increased in severity and frequency over the years, in part due to an increase in extreme monsoon rains, and exacerbated by watershed disruptions. Understanding the impact of this changing phenomenon on our portfolios will help us develop a framework to integrate physical risks into client risk assessments, as well as to manage the risks to our own operating footprint.

### Pilot Study Methodology

In 2021, we conducted a study on a portion of our mortgage portfolio in the Klang Valley, using the SwissRe CatNet® Geo Risk tool and the Physical Risk – Real Estate Assessment tool, which was developed by Acclimatise, as part of the UNEP FI Phase I TCFD Banking Programme. In our pilot study, we assessed the impact of physical climate risk hazards, and in particular, flooding, which was most relevant to our geographies of operation. The tools were used to identify our mortgage properties which are "at risk" of flooding and to calculate the changes to property value and loan-to-value (LTV) in year 2040, at a 4°C warming scenario based on Intergovernmental Panel on Climate Change (IPCC) scenario RCP8.5 (Representative Concentration Pathway), which represents a "Business as Usual" scenario.

A small randomised sample was taken of homes, including some adjacent to and some away from water bodies, to understand the return period of hazards that could potentially affect the property value of our mortgages. The return period of the hazards, which represents the probability and frequency of an event occurring at various levels was used to provide an indication of the level of risk posed by flooding. The SwissRe CatNet® flood data provides a range of return periods (50, 100, 200 and 500 years) for various locations based on coordinates. The return period was then adjusted using the country-level return period change factor for the hazard, to cater to Malaysian country differences. Encounter probability is then calculated using the adjusted return period and the remaining mortgage period of the samples.

Impacts to property values are provided within the Physical Risk – Real Estate Assessment Tool, which included three levels of property value impact due to hazards: 5%, 10% and 20%, representing a range of estimates from low impact (aggressive) to high impact (conservative). These estimates were derived based on a literature review of the impacts of extreme weather events (mainly tropical cyclone and flood events) on property value in several countries. For each sample, we choose the more conservative or aggressive ends of the impact ranges, depending on the incidence of short-return period hazards (i.e. higher risk). This estimate is then multiplied by the sample's encounter probability to estimate the potential reduction in property value.

### Pilot Results and Moving Forward

From the samples studied, we found all sampled properties to be impacted, with a potential property value reduction ranging from 0.8% to 9.2% in 2040 under a 4°C warming scenario. The most common reduction was seen to be around 4.3%.

Following the initial pilot, we are now in the process of refining the study by using more granular local data references, for example, to better understand the effect of hazards to property value. Meanwhile, we are also researching the functionality of other available tools that we can use as we incorporate physical climate risk into our overall risk assessment framework.

# GOVERNANCE AND RISK

## RISK MANAGEMENT

The unique and complex nature of climate change represents a challenge for financial institutions to determine their own climate-related risks and quantify the impact of those risks on their organisation.

### METHODOLOGIES FOR IDENTIFYING AND ASSESSING CLIMATE-RELATED RISKS

At CIMB, we take a multi-faceted approach to our climate risk assessment, guided by the following principles:

- Leverage and adapt existing conventional risk infrastructure (e.g. Enterprise-wide Risk Management Framework, Group Risk Library), where possible
- Rely on metrics such as sector exposure as proxies for climate risk, where data and analysis is limited
- Take a risk-based approach to prioritise countries, sectors, business portfolios (e.g. financing), and financial risk types (e.g. credit risk) that are most material to us
- Assess risks at both portfolio (top down) and borrower/transaction (bottom up) level, using qualitative or quantitative methods
- Utilise forward-looking climate risk methodologies such as heatmapping, scenario analysis and stress testing

**Our Existing Climate Risk Assessment Tools and Methodologies**

| Tool and Assessment Level | Risk Types Considered | How the Assessment is Conducted | How We Use the Analysis |
|---|---|---|---|
| **Material Risk Assessment (MRA)** at portfolio level | Transition<br>Physical | MRA is the starting point of CIMB's Internal Capital Adequacy Assessment (ICAAP) process, where Business Units and Enablers (BU/BEs) (first line of defence) perform a self-assessment of non-measurable risks (e.g. sustainability risk) and control effectiveness.<br><br>In 2021, Group Sustainability, as the risk type owner and subject matter expert for Sustainability Risk (second line of defence), began leveraging the Group's annual MRA to ensure sustainability and climate-related risks were identified and managed by relevant BU/BEs from the point of risk-taking activities. | Losses associated with non-measurable risks are estimated and an amount of capital will be set aside for that purpose. |
| **Sustainability Risk Dashboard** at portfolio level | Transition | In 2021, we started monitoring our financing exposure to High Sustainability Risk sectors (including carbon-intensive sectors) as a proxy indicator for our vulnerability to transition risk. We established a Sustainability Risk Dashboard and report exposure to various risk committees at Board and management level on a quarterly basis. See page 52 for our December 2021 exposure.<br><br>In addition to risk aspects, GSSIPS performance is reported to provide a holistic picture covering both risk and opportunity perspectives. | The medium-term plan is to leverage the dashboard and establish risk appetite indicators and thresholds for sustainability/climate thereafter. |
| **Scenario Analysis** at portfolio level | Transition<br>Physical | Refer to pages 86 to 89, where our methodologies are discussed. | Refer to pages 86 to 89. |
| **Sustainability Due Diligence** at borrower and transaction level | Transition<br>Physical | In late 2021, we enhanced our Basic Sustainability Due Diligence (BSDD) to include climate-specific questions to gauge the impact of climate change risks facing our non-retail financing clients. The expanded BSDD is currently being piloted and will be rolled out across Corporate Banking and Commercial Banking starting 2022.<br><br>Refer to pages 50 to 55 for more information about our due diligence process. | Depending on the BSDD outcome, we may need to form a view of sustainability and climate risks associated with a borrower or transaction via Enhanced Sustainability Due Dilligence (ESDD), and provide our recommendations on whether the deal should proceed. Action plans may be recommended to ensure the borrower address the identified risks. |

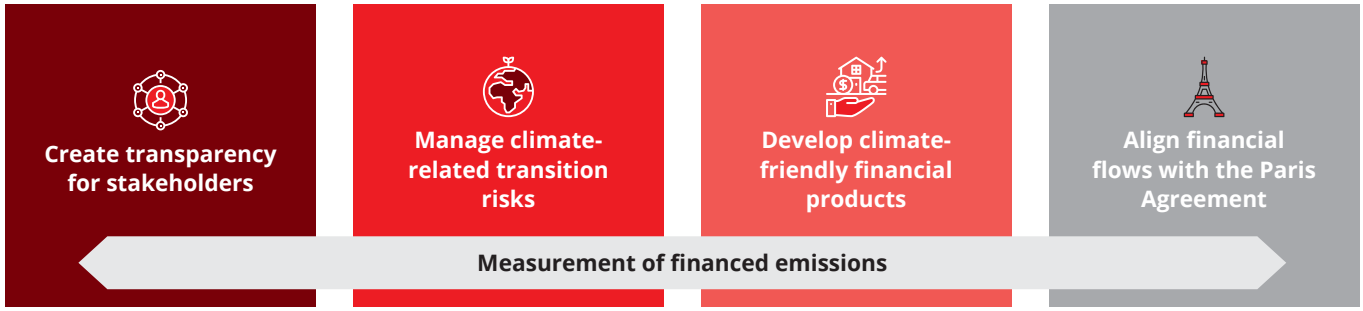
## Improving Our Suite of Tools for Assessing Climate-Related Risk

We are currently working on two projects that would complement our existing climate risk assessment processes:

### *Creating a Financed Emissions Baseline*

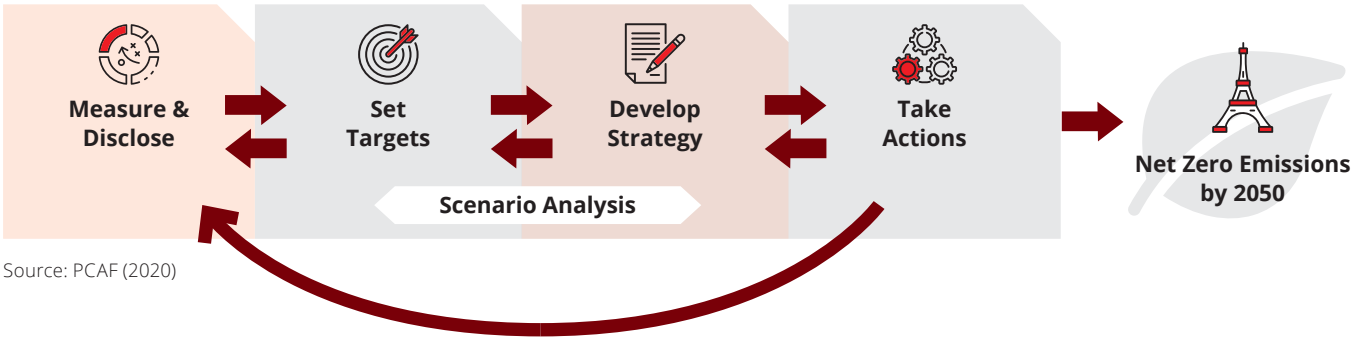
As part of our journey to achieve Net Zero by 2050, measuring and understanding our financed emissions, which represent by far the largest portion of our overall GHG emissions, is central to our climate actions. Our financed emissions baseline will serve as a foundation for strategic direction and target setting, and will also give us a view of our own financed emission profiles which can be used as a proxy for our own exposure to transition risk, among other benefits.

**Why We Measure Financed Emissions**




Source: PCAF (2020)

**The Paris Alignment Value Chain for Financial Institutions**




Source: PCAF (2020)

We have committed as part of CCCA and NZBA to develop a financed emissions baseline by 2022. To help us achieve this, we signed up to be a member of the Partnership for Carbon Accounting Financials (PCAF) in September 2021. Membership of PCAF, along with the tools and data that PCAF provides, is free. However, PCAF members must commit to disclose their GHG emissions associated with financing and investment portfolios within a period of three years of joining, to ultimately enable the alignment of portfolios with the Paris Climate Agreement.

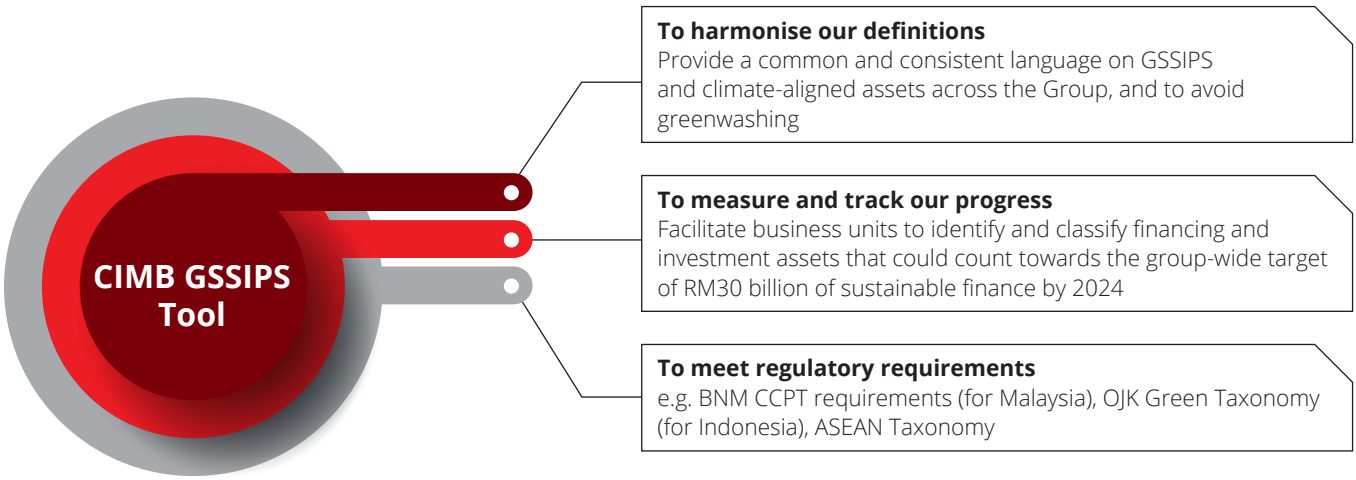
# GOVERNANCE AND RISK

### *Implementing Tools and Procedures to Comply with Bank Negara Malaysia's Climate Change and Principle-based Taxonomy*

In April 2021, the Malaysian central bank issued its inaugural Climate Change and Principle-based Taxonomy (CCPT), to facilitate standardised classification and reporting of climate-related exposures to support risk assessments at the institution and systemic levels, strengthen accountability and market transparency, and encourage financial flows towards supporting climate objectives.

Since then, we have embarked on the development of an internal tool, the GSSIPS Tool, to provide a common and consistent language on financing and investment assets that are considered in line with the CCPT and CIMB's own GSSIPS Framework. Meant for group-wide application, the GSSIPS Tool is a living document that will be regularly reviewed and expanded to cater to multiple taxonomies such as the ASEAN Taxonomy and the Green Taxonomy by Otoritas Jasa Keuangan, the financial services authority of Indonesia.

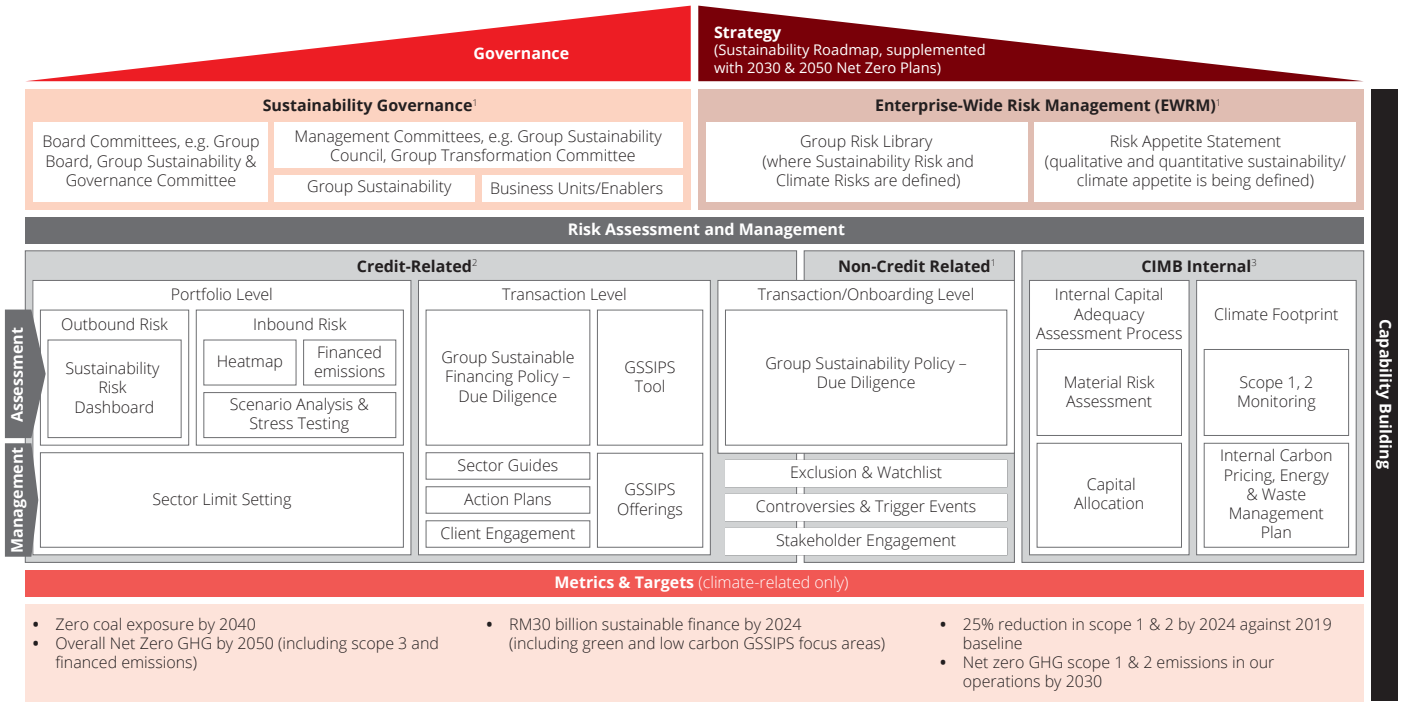
We target to roll out the GSSIPS Tool in phases across the region starting 2022, with a view to ensure that the first official half-yearly reporting of our assets is provided to BNM by July 2022.



## OUR APPROACH TO MANAGING CLIMATE-RELATED RISKS

A key sub-component of Sustainability Risk, climate-related physical and transition risks are currently managed at different levels as part of our Sustainability Risk Management Framework, via relevant policies, procedures, tools and measures.

### SUSTAINABILITY RISK MANAGEMENT FRAMEWORK




[1] Managed under Pillar 4 Governance & Risk
[2] Partly managed under Pillar 2 Sustainable Business and Pillar 4 Governance & Risk
[3] Partly managed under Pillar 1 Sustainable Action and Pillar 4 Governance & Risk

### Our Current Approaches

As we are still in the nascent stages of our climate journey, our current approach is predominantly focused on the following:

- Managing our own outbound impacts on the climate by reducing our operational carbon footprint (refer to pages 26 to 27 for further details)
- Managing climate-related risks associated with our lending and financing for clients, covering both outbound impacts by clients on the climate, as well as inbound impacts on our clients, which could have knock on impacts to us as a financier

At the borrower and transaction level, we continue to leverage our existing sustainability policies and procedures, in particular the Group Sustainable Financing Policy and Sector Guides as our primary climate risk management tool. Time-bound action plans are issued to clients who are not in compliance with our sector guide requirements or are found to have ongoing environmental and social concerns or controversies. Concurrently, we remain steadfast in our pursuit of new GSSIPS growth to help facilitate our clients' transition. Refer to pages 50 to 55 for more information on GSFP, and pages 56 to 60 for more information on GSSIPS.

### Reinforcing Our Climate Credibility through Global Partnerships

We believe that a global threat such as climate change requires global collective action, where all parties must be part of the solution, and work together to achieve humanity's climate goals.

In this regard, we are a member and signatory to various leading climate coalitions and pledges such as UNEP FI PRB, CCCA, NZBA, PCAF and TCFD. Via these platforms, we are able to learn from peers about their own climate journeys, experiences and how they overcame specific challenges. It also allows us to stay informed of the latest best practices, methodologies, and tools offered by subject matter experts which we can then use to strengthen our own practices and avoid greenwashing. As we learn together, we collaborate to develop further tools, methodologies and guidance to help others along the way.

# GOVERNANCE AND RISK

### Developments in 2021 and our plans moving forward

In late 2021, a climate overlay focusing on sector sensitivity to transition risks was integrated by Group Sustainability into Group Risk's 2022 Country Sector Limit Methodology. This initiative marked our first attempt to manage our portfolio exposure to climate-related risks at the onset. The overlay, which referred to the Transition Risk Heatmap from the United Nations Environment Program Finance Initiative (UNEP-FI) TCFD Phase II banking pilot, was used as the final sector appetite cap. If the sensitivity of a sector to transition risks was high or unsatisfactory, the sector appetite may be adjusted to "Restricted" if the existing appetite (without the climate overlay) was higher. If the sensitivity was moderate, sector appetite may be adjusted to "Selective". If the sensitivity was satisfactory, no change was made to the existing appetite.

As we continue to progress, we aim to broaden and deepen our climate risk management approaches to include physical risk (for instance, mitigating clients' vulnerability to acute and chronic climatic events, developing CIMB's own adaptation plans for branches operating in high flood risk locations) and other types of financial risks such as market risk and liquidity risk that may arise as a result of climate impacts.

## METRICS AND TARGETS

We have begun to collate and report some climate-related data and targets, as shown in the initial dashboard below. Notwithstanding, we are cognisant of the necessity to build out our dashboard with more decision-useful data points for our stakeholders, especially our investors and clients.

**Key Metrics, Targets and 2021 Performance**

| Metric | Sub-Metric | | Target[1] | 2021 Performance | Page Reference |
|---|---|---|---|---|---|
| High Sustainability Risk Sector Overall Exposure (% of Group gross loans) | **Palm Oil** | | N/A | 2.8% | 52 |
| | **Oil & Gas** | | N/A | 2.3% | |
| | **Coal** | | Zero by 2040 | 0.7% | |
| | **Forestry** | | N/A | 0.7% | |
| | **Mining & Quarrying** | | N/A | 0.1% | |
| Temperature Alignment of Selected Financing Portfolios Against the Paris Agreement Goals in 2025 using the PACTA for Banks tool[2] | **Oil & Gas** | • Oil Extraction<br>• Gas Extraction | <1.5°C or Net Zero by 2050 | >2.7°C<br>>2.7°C | 85 to 88 |
| | **Power** | • Coal Capacity<br>• Oil Capacity<br>• Gas Capacity<br>• Hydro Capacity<br>• Renewable Capacity | | <1.8°C<br>>2.7°C<br><1.8°C<br><1.8°C<br>>2.7°C | |
| | **Automotive** | • ICE Vehicles<br>• Hybrid Vehicles<br>• Electric Vehicles<br>• Fuel Cells | | >1.5°C<br>>1.5°C<br>>1.5°C<br>>1.5°C | |
| Sustainable finance mobilised (RM billion) | | | RM30 billion between 2021-2024 | RM25.9 billion | 56 to 60, 104 to 105 |
| Renewable energy financing exposure (RM million)[3] | | | N/A | RM527 million | 106 to 107 |
| GHG emissions absolute reduction (scope 1 and 2) (% from 2019 baseline)[3] | | | 25% by 2024; net zero by 2030 | 24% | 25, 118 |

1 N/A denotes not applicable or available.
2 Calculated from CIMB Malaysia and Singapore's corporate outstanding financing amount (i.e. defined as drawn amount in PACTA for Banks) as at 31 December 2020. Results are highly preliminary and indicative due to analysis limitations and data gaps, especially for the automotive sector, where only 7% of our automotive sector exposure was mapped and assessed.
3 The exposure only covers corporate banking and commercial banking clients in Malaysia, Indonesia, Singapore and Thailand.

We have started working on our financed emissions baseline and the first round of sector specific targets in line with the Guidelines for Climate Target Setting for Banks by the UNEP FI's CCCA. We expect to release this information publicly in the second half of 2022.