# CLIMATE RISK ASSESSMENT

Extreme weather events such as floods are becoming more rampant in Malaysia, as climate change continues to threaten our lives and business activities. Thus, it is crucial for Pharmaniaga to identify climate-related risks and take tangible mitigating measures to ensure business sustainability. The need to address and disclose climate-related risks is even more important now, as the investing community demands for more transparency in climate-related financial disclosures.

This year, we embarked on our first climate-related risk report by adopting the recommendations from the Task Force on Climate-related Financial Disclosures (TCFD). We conducted a climate risk assessment to identify the physical and transition risks, which was our first step in preparing to mitigate climate-related risks.

The table below shows the alignment of our disclosures against the four pillars of the TCFD. Going forward, we will intensify our climate action and deepen our mitigation measures, such as conducting a climate scenario analysis, to increase the transparency of our climate-related disclosures.

### **GOVERNANCE**

The Board Sustainability Committee has oversight of climate-related matters and GHG emissions. This includes driving the Group in its climate change strategy and GHG emissions reduction.



For more information about our Sustainability Governance, please refer to page 28.

For more information about our climate action, please refer to Greenhouse Gas & Climate Change from pages 82 to 87.

### **RISK MANAGEMENT**

In 2022, our risk management team conducted a climaterelated risk assessment, which enabled us to identify the climate-related risks and opportunities that are most pertinent to our business activities.

The assessment was conducted based on TCFD's recommendations, which consist of:

Transition Risks

Risks related to the transition to a low-carbon economy.

Physical Risks

Risks related to the physical impacts of climate change, which will affect the value of our assets.

#### **STRATEGY**

We are currently stepping up our climate action to implement more robust measures to identify the climate risks and opportunities that will impact our business in the long term. We aspire to embark on science-based emissions reduction targets and conduct a climate scenario analysis in the near future.

### **METRICS & TARGETS**

We have been collecting data and disclosing our Scope 1 and Scope 2 GHG emissions since 2019. As part of our transition to a low-carbon economy, we are looking into disclosing Scope 3 GHG emissions to reduce the carbon emissions of our value chain. This will be accelerated by our Decarbonisation Programme, which seeks to significantly reduce the energy consumption and carbon emissions of our operations across Malaysia and Indonesia.

In 2022, our GHG emissions reduced by 17.1% from  $37,503.58 \text{ tCO}_2\text{e}$  in 2019.

Scope 1 : 6,044.78 tCO<sub>2</sub>e Scope 2 : 25,051.73 tCO<sub>2</sub>e



For more information about our GHG emissions and energy consumption, please refer to page 82.

### **CLIMATE-RELATED RISKS, OPPORTUNITIES AND POTENTIAL FINANCIAL IMPACTS**

We undertook a climate-related risk assessment to evaluate and identify the climate-related risks and opportunities that will most likely impact our business in the long term. The climate related risks are divided into two major categories while the opportunities are categorised into five different types. Our climate-related risk assessment and disclosures are in accordance with the recommendations of the TCFD.

RISKS		OPPORTUNITIES
Transition Risks	Physical Risks	- Resource Efficiency
<ul><li>Policy and Legal</li><li>Technology</li><li>Market</li><li>Reputation</li></ul>	- Acute - Chronic	<ul><li>Energy Source</li><li>Products and Services</li><li>Markets</li><li>Resilience</li></ul>

### RISKS

RISKS				
Type	Transition Risks			
Climate	e-Related Risks	Potential Financial Impacts		
Policy a	and Legal			
<ul> <li>Increased pricing of GHG emissions</li> <li>Exposure to litigation</li> </ul>		<ul> <li>Increased operating expenditure due to compliance cost to climate risk requirement and penalty of breaching act or requirement</li> <li>Write-offs, asset devaluation and asset impairment e.g. damaged building due to flood</li> </ul>		
Techno	llogy			
<ul> <li>Low Substitution Cost – customers preferences for products and services with lower emissions</li> <li>Costs to transition to lower emissions with technology</li> </ul>		<ul> <li>Reduced demand for products and services</li> <li>R&amp;D expenditures in new and alternative and low emission technologies</li> </ul>		
Market				
Changes in customer behaviour due to rising awareness		<ul> <li>Reduced demand for goods and services due to shift in consumer preferences</li> <li>Increased production costs due to changing input prices such as energy and water and output requirements such as waste treatment</li> </ul>		
Reputa	tion			
Increases stakeholder concern on green initiative and sustainability		<ul> <li>Increased cost of implementing green initiatives</li> <li>Limited access to financing if unable to meet banks' green initiative requirement</li> </ul>		

Climate-Related Risks	Potential Financial Impacts
Acute	
Increases severity of extreme weather events such as droughts and floods	<ul> <li>Reduced revenue and higher costs from negative impacts on workforce such as health and safety</li> <li>Additional operating cost due to increased airconditioning consumption during extreme heat wave</li> </ul>
Chronic	
<ul> <li>Changes in rainfall patterns and extreme variability in weather patterns</li> <li>Rising mean temperatures</li> <li>Rising sea level</li> </ul>	<ul> <li>Increased operating costs due to:</li> <li>Spike in monthly energy consumption, which causes overhead to increase</li> <li>Breach of contracts which may lead to penalties beer</li> <li>Increase in capital costs such as damage to facilities due to flood and rising sea level</li> <li>Increased insurance premiums and/or limited insurance coverage on assets in "high-risk" locations</li> </ul>

OPPORTUNITIES	
Type Resource Efficiency	
Climate-Related Opportunities	Potential Financial Impacts
<ul> <li>Utilise greener modes of transportation to reduce carbon emission</li> <li>Adopt more efficient production as well as distribution processes and technologies</li> <li>Increase employees' competencies in Risk Management (RM) and Business Continuity Management (BCM) to strengthen the implementation of RM/BCM in the organisation</li> <li>Eligible for Green Investment Tax Allowance (GITA) and/or Green Income Tax Exemption (GITE)</li> <li>Increase production capacity and revenues</li> </ul>	<ul> <li>CAPEX and OPEX incurred for implementing green initiatives</li> <li>More penalties due to business disruption/breach of contract</li> </ul>
Type Energy Source	
Climate-Related Opportunities	Potential Financial Impacts
<ul><li>Increase the usage of renewal energy</li><li>Utilise electrical vehicles to reduce carbon emissions</li><li>Eligible for GITA and/or GITE</li></ul>	CAPEX incurred for the installation of solar panels

### Type **Products and Services** Potential Financial Impacts · Retrofit old machineries with energy efficient parts • Reduce cost by using recyclable materials · Repurposing materials e.g. for packaging • Usage of recyclable and biodegradable materials Type Markets Potential Financial Impacts • Additional cost to meet potential climate-related • Potential access to new markets through good ESG rating obtained requirements from authorities • Leveraging on introduced public-sector incentives • Increase revenues through access to new and emerging markets such as partnerships with government and development banks Resilience Type Climate-Related Opportunities Potential Financial Impacts · Conduct comprehensive business impact analysis (BIA) and · Insurance premium increased for coverage of risk assessment (RA) when exploring new business sites climate change risks

### **CHALLENGES**

Adopting the TCFD recommendations for the first time proved to be challenging, as we navigated hurdles such as data collection to fulfil all the 11 recommendations. However, we are proud to have started the TCFD journey and will strengthen our disclosures against the TCFD recommendations going forward. This will include intensifying our climate action and deepening our mitigation measures, such as conducting a climate scenario analysis to increase the transparency of our climate-related disclosures.

### OUTLOOK

Overall, while there are challenges to climate change and TCFD reporting, the trend towards greater transparency and standardisation is positive, and this will be crucial in helping Pharmaniaga to manage the risks and opportunities associated with climate change to maintain business resilience.