MALAYSIA'S THIRD ITERATION OF THE NATIONALLY DETERMINED CONTRIBUTION

In accordance with paragraph 2(b) of decision 1/CP.19, Malaysia communicated its first Nationally Determined Contribution (NDC 1.0) to the United Nations Framework Convention on Climate Change (UNFCCC) Secretariat on 16th November 2016. Malaysia later communicated its second iteration of the NDC (NDC 2.0) on 30th July 2021.

Malaysia hereby communicates the third iteration of the NDC (NDC 3.0) in accordance with paragraph 24 of decision 1/CP.21, and the information necessary for clarity, transparency, and understanding is communicated as per decision 4/CMA.1, and common timeframe is applied as per decision 6/CMA.3, and considering the outcomes of the global stocktake as per decision 1/CMA.5 to contribute to the implementation and achievement of the goals of the Paris Agreement.

Malaysia's current projections indicate that national greenhouse gas emissions are expected to peak between 2029 and 2034. In line with its commitments under the Paris Agreement, Malaysia strives to peak its emissions by 2030, subject to the availability of support and enabling conditions. Building on this trajectory, Malaysia intends to achieve an absolute reduction of 15–30 million tonnes of CO_2 equivalent ($MtCO_2eq$) by 2035 from the peak level. This comprises an unconditional reduction of up to 20 $MtCO_2eq$, with a further 10 $MtCO_2eq$ reduction conditional upon the provision of climate finance, technology transfer, and capacity-building support from international sources.

Criteria of Malaysia's NDC 3.0 target:

(a) Malaysia is expected to peak its GHG emissions between 2029 and 2034;

(b) The target is absolute emissions reduction target and will reduce between 15 – 30 $MtCO_2eq$;

(c) The target is economy-wide and covers all seven (7) greenhouse gasses (GHG): Carbon dioxide (CO_2), Methane (CH_4), Nitrous oxide (N_2O), Hydrofluorocarbons (HFCs), Perfluorocarbon (PFCs), Sulphur hexafluoride (SF_6) and Nitrogen trifluoride (NF_3); and

(d) Malaysia is expected to further reduce up to 10 $MtCO_2eq$ contingent on the provision of climate finance, technology transfer, and capacity-building support from international sources.

The information for clarity, transparency, and understanding are outlined below and the accompanying information on Malaysia's adaptation strategies is outlined in Annex 1 to this submission.

Further information necessary for clarity, transparency, and understanding (ICTU) of Malaysia's NDC 3.0

1. Quantified information on the reference point, including, as appropriate, a base year	
a. Reference year(s), base year(s), reference period(s) or other starting point(s);	2029 - 2034
b. Quantifiable information on the reference indicators, their values in the reference year(s), base year(s), reference period(s) or other starting point(s), and, as applicable, in the target year;	Quantification of the reference indicator will be based on national GHG inventory reported in the National Communications (NC) and Biennial Transparency Report (BTR) submissions and may be updated due to the improvements in the national GHG inventory.
c. For strategies, plans and actions referred to in Article 4, paragraph 6, of the Paris Agreement, or polices and measures as components of NDCs where paragraph 1(b) above is not applicable, Parties to provide other relevant information;	n/a
d. Target relative to the reference indicator, expressed numerically, for example in percentage or amount of reduction;	Economy-wide absolute emissions reduction of 15–30 million tonnes of CO_2 equivalent ($MtCO_2eq$) by 2035 from the peak level.
e. Information on sources of data used in quantifying the reference point(s);	The reference indicator will be quantified based on the national GHG inventory.
f. Information on the circumstances under which the Party may update the values of the reference indicators.	The national GHG emissions and removals may be updated and recalculated due to continuous improvements of the national GHG inventory and will be included in the BTR.

2. Time frames and/or periods for implementation	
a. Time frame and/or period for implementation, including start and end date, consistent with any further	1st January 2026 – 31st December 2035 (10 years).

relevant decision adopted by the CMA;	
b. Whether it is a single-year or multi-year target, as applicable.	Single year target in 2035.

3. Scope and coverage	
a. General description of the target;	Economy-wide absolute GHG emissions reduction of 15–30 million tonnes of CO_2 equivalent ($MtCO_2eq$) by 2035 from the peak level.
b. Sectors, gases, categories and pools covered by the nationally determined contribution, including, as applicable, consistent with IPCC guidelines;	<u>Sectors</u>: Energy Industrial Processes and Product Use Waste Agriculture LULUCF. <u>GHGs</u>: Carbon dioxide (CO_2) Methane (CH_4) Nitrous oxide (N_2O) Hydrofluorocarbons (HFCs) Perfluorocarbon (PFCs) Sulphur hexafluoride (SF_6) Nitrogen trifluoride (NF_3)
c. How the Party has taken into consideration paragraphs 31(c) and (d) of decision 1/CP.21;	Malaysia's NDC 3.0 is economy-wide absolute emissions reduction target and will strive to include all key categories of anthropogenic emissions and removals.
d. Mitigation co-benefits resulting from Parties' adaptation actions and/or economic diversification plans, including description of specific projects, measures and initiatives of Parties' adaptation actions and/or economic diversification plans.	n/a

4. Planning process	
a. Information on the planning processes that the Party undertook to prepare its NDC and, if available, on the Party's implementation plans, including, as appropriate: i. Domestic institutional arrangements, public participation and engagement with local communities and indigenous peoples, in a gender-responsive manner;	The NDC 3.0 was developed through participatory and inclusive process through inter-ministerial/ agencies/ state governments/ NGOs /private sector/ academia working groups and consultations. The NDC 3.0 has been endorsed by the National Task Force on NDC and approved by the Malaysian Cabinet.
ii. Contextual matters, including, inter alia, as appropriate: a. National circumstances, such as geography, climate, economy, sustainable development and poverty eradication;	The national circumstances of Malaysia had been reported through NC and BTR submissions.
b. Best practices and experience related to the preparation of the nationally determined contribution;	Malaysia developed its NDC 3.0 in line with decision 4/CMA.1. The development of NDC 3.0 is led by Ministry of Natural Resources and Environmental Sustainability (NRES). In determining the target levels, NRES engaged all relevant ministries, state governments, private sector, non-government organizations (NGOs), and youth to ensure the highest possible level of ambition, while also taking into account the outcomes of the first Global Stocktake. A broad range of stakeholders contributed to the formulation of Malaysia's economy-wide absolute emissions reduction target, recognizing that the responsibilities for implementing policies to reduce emissions are distributed across multiple levels of government and private sector. NRES also works closely with UNICEF to engage youth and children on climate change awareness and capacity building programs. Moving

	forward, Malaysia will continue to adhere to UNFCCC guidelines, supported by domestic governance mechanisms and stakeholder engagement processes to track NDC 3.0 progress. In line with this commitment, Malaysia is also in the process of developing a National Climate Change Bill.
c. Other contextual aspirations and priorities acknowledged when joining the Paris Agreement;	As a developing country, Malaysia needs to ensure a balance between its socio-economic development and low carbon agenda. Malaysia continues to make progress across several priority policy areas that are critical to its overall climate action strategy, including forests and biodiversity, food security, sustainability, public health, and upgrading of national skills. In these endeavours, Malaysia has updated its National Climate Change Policy (NCCP) to NCCP 2.0, which strengthens the country's transition towards a low-carbon economy while enhancing national climate resilience. Malaysia also recognizes the importance of integrated approaches to address the triple planetary crisis of climate change, biodiversity loss, and pollution. As one of the world's megadiverse countries, Malaysia has undertaken significant efforts to protect and sustainably manage its forests as part of both mitigation and adaptation strategies. Furthermore, Malaysia has developed the National Energy Transition Roadmap (NETR), an ambitious framework that charts the country's pathway towards a sustainable and low-carbon energy future.
b. Specific information applicable to Parties, including regional economic integration organizations and their member States, that have reached an agreement to act jointly under Article 4, paragraph 2, of the Paris	n/a

Agreement, including the Parties that agreed to act jointly and the terms of the agreement, in accordance with Article 4, paragraphs 16–18, of the Paris Agreement;	
c. How the Party's preparation of its NDC has been informed by the outcomes of the global stocktake, in accordance with Article 4, paragraph 9, of the Paris Agreement;	Malaysia's NDC 3.0 adopts an economy-wide absolute emissions reduction target, covering all seven greenhouse gases, sectors, and categories as appropriate. The target is estimated to reduce national emissions by 15 – 30 $MtCO_2eq$ from the projected peak level, anticipated between 2029 and 2034. This pathway is consistent with the findings of the IPCC Special Report on 1.5 °C, which emphasizes the need for deep, rapid, and sustained emissions reductions to limit global warming to 1.5 °C above pre-industrial levels. Informed by the decision 1/CMA.5 on the outcomes of the first Global Stocktake (GST), Malaysia has taken steps to align its domestic policies with the global outcomes outlined in paragraph 28, including: **<u>Energy transition</u>** By 2035, Malaysia's National Energy Transition Roadmap (NETR) outlines a robust trajectory to advance the nation's low-carbon energy transformation. Under this roadmap, coal-fired power plants are set for near-complete retirement through natural phase-outs, with no new additions planned. Renewable energy is poised to make a substantial contribution to installed capacity, while natural gas remains a key transitional fuel in the national energy mix. **<u>Transport decarbonisation</u>** Major investments are being made in sustainable rail infrastructure, including the East Coast Rail Link (ECRL), Light Rapid Transit 3 (LRT3), and Mass

	Rapid Transit 3 (MRT3), to accelerate the shift towards low-carbon public transport systems and reduce road transport emissions. Concurrently, the country is accelerating the electric vehicle transition and launching hydrogen pilot projects in the heavy-duty transport segment. **Phasing down coal and fossil fuel use** Malaysia is progressively phasing down the role of unabated coal in its energy mix, while promoting the transition away from fossil fuels and scaling up zero- and low-emission technologies. Malaysia also has commenced significant fuel subsidy reforms, which serve as an important driver in realigning fiscal and environmental priorities. Malaysia began phasing out blanket diesel subsidies on 10 June 2024 by allowing the price in Peninsular Malaysia to float to market rates, while maintaining subsidized rates for Sabah, Sarawak, and Labuan, as well as targeted groups such as fishermen and eligible logistics companies through programmes such as Diesel Fleet Card 2.0. **Non-CO_2 emissions** Efforts are underway to scale up methane capture from solid waste management and industrial wastewater treatment facilities, in line with the GST call to substantially reduce non-CO_2 emissions, particularly methane, by 2030. **Forests and land use** In line with the with paragraph 33 of the decision 1/CMA.5 on the outcomes of the first Global Stocktake, Malaysia is enhancing its measures, reinforced through the National Forestry Act 2022, which mandates simultaneous

	replacing of deforested areas, and the Ecological Fiscal Transfer (EFT) mechanism that incentivises forest protection and sustainable forest management. Consistent with the Kunming-Montreal Global Biodiversity Framework and Malaysia's National Policy on Biological Diversity 2.0 (NPBD 2.0), the country aims to conserve at least 20% of terrestrial areas and inland waters by 2030 through an effectively managed and ecologically representative system of protected areas and other conservation measures. These areas safeguard ecosystems, species, and habitats while also providing vital co-benefits such as mitigating climate change, securing clean water and food supplies, reducing disaster risks, alleviating poverty, and preserving cultural values. Through these efforts, biodiversity conservation strengthens human well-being and contributes directly to long-term sustainable development. Malaysia is therefore fully committed to the outcomes of paragraphs 28 and 33 of the decision 1/CMA.5 on the outcomes of the first Global Stocktake, and will continue contributing to these global goals through domestic actions, policies, and reforms. These efforts reflect Malaysia's determination to advance its NDC implementation in a manner consistent with the Paris Agreement's long-term temperature goal of limiting warming to 1.5 °C.

d. Each Party with an NDC under Article 4 of the Paris Agreement that consists of adaptation action and/or economic diversification plans resulting in mitigation co-benefits consistent with Article 4, paragraph 7, of the Paris Agreement to submit information on: i. How the economic and social consequences of response measures have been considered in developing the NDC; ii. ii. Specific projects, measures and activities to be implemented to contribute to mitigation co-benefits, including information on adaptation plans that also yield mitigation co-benefits, which may cover, but are not limited to, key sectors, such as energy, resources, water resources, coastal resources, human settlements and urban planning, agriculture and forestry; and economic diversification actions, which may cover, but are not limited to, sectors such as manufacturing and industry, energy and mining, transport and communication, construction, tourism, real estate, agriculture and fisheries.	n/a

5. Assumptions and methodological approaches, including those for estimating and accounting for anthropogenic greenhouse gas emissions and, as appropriate, removals:	
a. Assumptions and methodological approaches used for accounting for anthropogenic greenhouse gas emissions and removals corresponding to the Party's NDC, consistent with decision 1/CP.21, paragraph 31, and accounting guidance adopted by the CMA;	Malaysia will report the anthropogenic GHG emissions and removals following the decisions 18/CMA.1 and 5/CMA.3. The details of any assumptions applied will be reported in the BTR. Malaysia will also use accounting guidance in decisions 4/CMA.1 and 2/CMA.3 for Article 6 implementation. The methodologies and metrics used are reflected in 5 (d).

b. Assumptions and methodological approaches used for accounting for the implementation of policies and measures or strategies in the NDC;	n/a
c. If applicable, information on how the Party will take into account existing methods and guidance under the Convention to account for anthropogenic emissions and removals, in accordance with Article 4, paragraph 14, of the Paris Agreement, as appropriate;	See (d)-(e) below.
d. IPCC methodologies and metrics used for estimating anthropogenic greenhouse gas emissions and removals;	IPCC Methodologies: Malaysia uses the 2006 IPCC Guidelines for National GHG Inventories to estimate anthropogenic GHG emissions and removals, IPCC Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories, and the 2013 Supplement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories: Wetlands. Metrics: The 100-year time horizon GWP values from the IPCC's Fifth Assessment Report or any future updates will be used to calculate the CO_2 equivalent emissions and removals in accordance with decision 18/CMA.1.
e. Sector-, category- or activity-specific assumptions, methodologies and approaches consistent with IPCC guidance, as appropriate, including, as applicable:	Information provided in sections 5(e) and 5(f) are based on current policies and knowledge. Malaysia reserves the right to update the information as appropriate.
i. Approach to addressing emissions and subsequent removals from natural disturbances on managed lands;	Assumptions, methodologies and approaches will be reported in the Malaysia's future BTR.
ii. Approach used to account for emissions and removals from harvested wood products;	Malaysia will report the approach use (if applicable) in the Malaysia's future BTR.

iii. Approach used to address the effects of age-class structure in forests;	Assumptions, methodologies and approaches will be reported in the Malaysia's future BTR. The final choice of LULUCF methodology will not affect the overall NDC 3.0 ambition.
f. Other assumptions and methodological approaches used for understanding the NDC and, if applicable, estimating corresponding emissions and removals, including:	n/a
i. How the reference indicators, baseline(s) and/or reference level(s), including, where applicable, sector-, category- or activity-specific reference levels, are constructed, including, for example, key parameters, assumptions, definitions, methodologies, data sources and models used;	The reference indicator is the national GHG inventory. Assumptions, methodologies and approaches will be reported in the Malaysia's future BTR. Malaysia will follow the guidance in accordance with the 2006 IPCC Guidelines for National GHG Inventories consistent with decision 18/CMA.1 as appropriate. Malaysia will continue to improve its methodologies to account for historical emissions. Adopting future improvements may affect historical emissions.
ii. For Parties with NDCs that contain non-greenhouse-gas components, information on assumptions and methodological approaches used in relation to those components, as applicable;	n/a
iii. For climate forcers included in NDCs not covered by IPCC guidelines, information on how the climate forcers are estimated;	n/a
iv. Further technical information, as necessary;	A bottom-up approach was applied to estimate the potential mitigation of GHG emissions across sectors and subsectors under the implementation of policies, measures, and strategies. Given data limitations, this approach relied on the best available national information to identify relevant projects and activities within each sector and subsector.

g. The intention to use voluntary cooperation under Article 6 of the Paris Agreement, if applicable.	Malaysia plans to fulfil its NDC 3.0 target through domestic measures and participating in voluntary cooperation under Article 6 of the Paris Agreement.

6. How the Party considers that its NDC is fair and ambitious in light of its national circumstances	
a. How the Party considers that its NDC is fair and ambitious in the light of its national circumstances;	Malaysia considers its NDC 3.0 to be both fair and ambitious when viewed against its national circumstances and development priorities. As a developing country and oil and gas producer, Malaysia faces unique challenges in transitioning to a low-carbon economy. Nonetheless, Malaysia has committed to peaking its greenhouse gas emissions no later than 2034, with the intention to peak earlier by 2030. This represents a significant step forward in aligning national actions with global pathways to limit global warming to 1.5°C. Malaysia has introduced concrete measures to phase down fossil fuels and increase the share of renewable energy in its energy mix, despite inherent constraints and limited options. In recognition of hard-to-abate sectors, Malaysia has taken steps to establish a legal framework to enable the deployment of carbon capture, utilisation and storage (CCUS), which will play a critical role in long-term decarbonisation. Complementing these efforts, Malaysia is also pursuing cooperative approaches under Article 6 of the Paris Agreement to facilitate access to advanced technologies and enhance emissions reduction outcomes. Malaysia also will be implementing carbon pricing instruments (CPIs) as strategic enablers to drive decarbonisation across the economy, incentivise low-carbon investments, strengthening the transition towards

	sustainable growth, and fostering climate-resilient development. In the land use sector, Malaysia has strengthened policies for the protection, conservation, and sustainable management of forests and ecosystems, including a commitment to conserve at least 20% of terrestrial and inland waters by 2030 through effectively managed protected areas. Additional measures include investments in high-yield planting material and the revitalisation of abandoned cropland to enhance agricultural productivity, while efforts are also being made to scale up waste-to-energy projects as part of Malaysia's broader clean energy transition. Recognising the geographical and technical limitations for conventional renewable energy deployment, Malaysia continues to explore and invest in a range of alternative and innovative grid decarbonisation solutions. These efforts are underpinned by ongoing work to establish a national Climate Change Bill, which will provide a strong legislative foundation to enhance the implementation of mitigation and adaptation actions at all levels, while ensuring clear accountability, transparency, and compliance. Delivering these commitments will require substantial investment in infrastructure, acquiring low-carbon technologies, behavioural changes as well as upscaling the skills of Malaysians. Malaysia believes these measures demonstrate both fairness - given its development status and constraints, and ambition - as they represent a clear progression from the carbon intensity target to absolute emissions reduction target, which is a

	meaningful contribution towards the global long-term goal of the Paris Agreement.
b. Fairness considerations, including reflecting on equity;	Malaysia regards its NDC 3.0 to represent its fair share of the efforts to achieve the global long-term goal of the Paris Agreement in view of its national circumstances and capabilities.
c. How the Party has addressed Article 4, paragraph 3, of the Paris Agreement;	Malaysia's now presenting an economy-wide absolute emissions reduction target in its NDC 3.0. Malaysia regards this target as progressive and reflects its highest possible ambition given that the mitigation actions will be undertaken domestically.
d. How the Party has addressed Article 4, paragraph 4, of the Paris Agreement;	Malaysia's NDC 3.0 involves economy-wide absolute emissions reduction target.
e. How the Party has addressed Article 4, paragraph 6, of the Paris Agreement.	n/a

7. How the NDC contributes towards achieving the objectives of the Convention as set out in its Article 2	
a. How the NDC contributes towards achieving the objective of the Convention as set out in its Article 2;	Malaysia's NDC 3.0 takes into consideration the long-term global goal of the Paris Agreement and Article 2 of the Convention.
b. How the NDC contributes towards Article 2, paragraph 1(a), and Article 4, paragraph 1, of the Paris Agreement.	Malaysia has committed to peaking its GHG emissions no later than 2034, with the intention to peak earlier by 2030. This represents a significant step forward in aligning national actions with global pathways to limit global warming to 1.5°C.

ANNEX I

ACCOMPANYING INFORMATION ON MALAYSIA'S ADAPTATION STRATEGIES

Climate Risks and Vulnerabilities

Malaysia faces increasing climate risks that threaten sustainable development and human well-being. Average annual temperatures are projected to rise by 1.7 – 2.1 °C by 2100, intensifying water demand and heat stress. Rainfall variability will increase both flood severity and the frequency of dry spells, with flood-prone areas in Peninsular Malaysia expanding by more than 5% and rainfall reductions of up to 22% projected in northern regions by 2050. Sea levels may rise by as much as 0.74 metres by 2100, potentially inundating almost 77% more coastal land area. These shifts put water resources and security, sea level rise and coastal resources, agriculture sustainability and food security, infrastructure and cities, public health resilience and forest and biodiversity at significant risk.

National Adaptation Plan

Malaysia is developing its first National Adaptation Plan (MyNAP), scheduled for completion in 2026. MyNAP will provide the national framework for adaptation action in the period 2026–2035, guiding sectoral responses, identifying financing needs, and strengthening institutional arrangements. This Annex builds on the Adaptation Communication submitted in 2024, updating Malaysia's adaptation priorities in line with emerging evidence and national planning processes.

Adaptation Priorities (2026–2035)

Malaysia's adaptation priorities from 2026 until 2035 are as follows:

1. **Managing water resources and security:** Reduce Non-Revenue Water to 30%, secure reserve margins of at least 15% in all states, expand Integrated River Basin Management coverage, and strengthen national flood forecasting and early-warning systems.

2. **Mainstreaming sea level rise adaptation and protecting coastal resources:** Apply safe design standards for coastal infrastructure, implement Integrated Shoreline Management Plans, restore mangroves and seagrass meadows, and operationalise the Blue Economy Blueprint.

3. **Ensuring agriculture sustainability and food security:** Introduce and scale up climate-resilient rice varieties, strengthen flood and irrigation infrastructure, and promote Climate-Smart Agriculture, including myGAP and myOrganic schemes recognised as adaptation measures with mitigation co-benefits. Adaptation strategies will also cover oil palm, rubber, livestock, and fisheries.

4. **Increasing resilience for infrastructure and cities:** Apply climate-risk standards to all major projects, integrate sponge city concepts and Smart City Master Plans, and implement the Circular Economy Blueprint (2025–2035) to reduce waste and enhance resource efficiency.

5. **Improving public health resilience:** Roll out facility resilience toolkits nationwide, conduct climate–health vulnerability assessments, and establish a national climate–health early-warning system.

6. **Protecting and conserving forests and biodiversity sustainably:** Conserve at least 50% of forest and scale up increasing connectivity between forests to enhance resilience under the Central Forest Spine and Heart of Borneo initiatives and urban biodiversity initiatives.

Cross-Cutting Measures

Malaysia will strengthen its disaster risk management through the National Disaster Risk Reduction Policy 2030, National Disaster Management Agency (NADMA) directives, and community-based disaster risk management initiatives. Youth and children engagement, gender inclusion, and protection of vulnerable groups remain central, with education and public awareness programmes (communication, education and public awareness – CEPA and Education for Sustainable Development - ESD) expanding climate literacy nationwide.

Monitoring and Reporting

Adaptation actions in Malaysia will be implemented under the framework of MyNAP, with clearly designated sectoral indicator owners responsible for monitoring and reporting. A national monitoring system will support data integration and tracking. Progress of adaptation actions will be reported through National Communication (NC) and future Adaptation Communication updates under Article 7 of the Paris Agreement.