

The International Climate Situation and Malaysia's Commitment

CLIMATE change is a severe threat to humanity, impacting ecosystems, economies, and societies. The international community has responded through coordinated efforts and binding agreements. The UNFCCC provides a global framework for nations to address climate change. The Paris Agreement, a significant achievement under the UNFCCC, aims to limit global temperature rise to below 2°C or even 1.5°C above pre-industrial levels. It encourages ambitious targets for reducing emissions and increasing climate resilience.

Initiatives like REDD+ incentivise developing countries to conserve forests, crucial carbon sinks. The CDM allows emission-reduction projects in developing countries to earn certified credits, promoting sustainable development. Reforestation and ecosystem



Malaysia's rich biodiversity and vast carbon sinks are priceless assets that must be preserved through strategic initiatives like the 6CMU. Equipping local expertise with the right tools is crucial for sustainable carbon management. 6CMU will play a vital role in capacity building, enabling communities to effectively participate in ecosystem conservation and carbon sequestration efforts.

— Prof Azlizam Aziz, Dean, Faculty of Forestry and Environment, UPM

Formation of UPM's 6Carbon Management Unit

restoration efforts enhance carbon sequestration.

Malaysia actively participates in global endeavours, recognising the urgency of climate action. The country faces challenges from various carbon sources, including energy production, transportation, industry, and land-use changes. Deforestation and unsustainable agriculture release stored carbon, exacerbating emissions. Malaysia is taking proactive steps to address these challenges.

The country pledges to reduce carbon intensity relative to GDP by 45% by 2030, aligning with Paris Agreement targets. Prime Minister Anwar Ibrahim allocated RM10 million to support the voluntary carbon market, signaling determination for net-zero emissions. Bursa Malaysia launched its Voluntary Carbon Market to facilitate carbon credit trading, promoting sustainable development.

Malaysia acknowledges the vital role of natural ecosystems, such as rainforests and peatlands, as carbon sinks. Protecting and restoring these ecosystems is crucial for mitigating climate change. Safeguarding forests, peatlands, and agricultural ecosystems globally could mitigate over 50 gigatonnes of carbon emissions. Deforestation and ecosystem degradation threaten natural carbon sinks.

Addressing diverse carbon emissions sources and enhancing carbon sequestration through ecosystem conservation and restoration are vital components of Malaysia's climate change strategy, aligning with international efforts.

Establishment of 6Carbon Management Unit and its Goals, Objectives

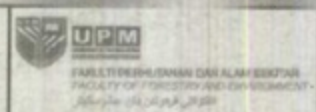
To address the lack of local expertise and education on carbon management, the Faculty of Forestry and Environment at Universiti Putra Malaysia (UPM) has established the 6Carbon Management Unit (6CMU). The 6CMU aims to provide awareness, education, and practical training on carbon activities.

The 6CMU at UPM consists of esteemed members and operates



6CARBON STORIES

BY DR WASEEM RAZAQ KHAN



under the direct supervision of the Dean, ensuring close integration with the faculty's research and academic programs. It focuses on several key objectives and future activities.

First, the 6CMU aims to be a knowledge hub, building expertise and developing standards for carbon management projects.



The establishment of 6CMU reflects Malaysia's commitment to combating climate change through locally driven solutions. Building a comprehensive framework for carbon quantification and monitoring is the need of the hour. 6CMU's expertise can develop robust methodologies tailored to Malaysia's unique ecosystems, ensuring accurate reporting and verification of carbon stocks and flows.

— Prof Dr Jegatheswaran Ratnasingam, Faculty of Forestry and Environment, UPM

It conducts research, organises workshops, and collaborates with industry partners to advance carbon management strategies. The unit strives to become the central hub for carbon-related activities in Malaysia and supports capacity-building efforts for Climate Action.

Second, the 6CMU focuses on innovative research solutions, particularly Nature-Based Removal (NBR) methods.

These methods utilise the carbon sequestration capabilities of natural ecosystems, such as forests and peatlands. By promoting NBR methods, the unit contributes to preserving natural resources and boosting the economy through sustainable practices.

Third, the 6CMU develops frameworks for assessing, monitoring, and managing carbon storage and emissions. It establishes methodologies for quantifying carbon stocks and fluxes in various ecosystems and protocols for monitoring and verifying emission reductions.

Malaysia's Carbon Management Landscape and the 6CMU's Role

Malaysia's carbon business is growing due to global demand for carbon credits and recognition of its natural resources as potential carbon sinks.

However, the country lacks reliable local organisations for guidance and expertise, often relying on international consultants for carbon management projects. The establishment of the 6Carbon Management Unit at UPM addresses this gap.

The 6CMU aims to become a leading authority in carbon management in Malaysia. By building a team of qualified professionals and leveraging research resources, the unit showcases Malaysia's expertise in measuring, reporting, and verifying carbon content. It positions Malaysia as a participant in global carbon markets and helps meet emission reduction commitments under international agreements like the Paris Agreement.

As the demand for carbon credits and sustainable practices grows, the 6CMU's expertise becomes invaluable in attracting

investment and capitalising on opportunities in the carbon business.

By fostering collaboration between academia, industry, and government, the unit facilitates knowledge transfer, capacity-building, and the development of innovative solutions tailored to Malaysia's environmental and economic contexts. This collaborative approach ensures sustainable utilisation of natural resources while contributing to global climate change mitigation efforts.



Innovative carbon management strategies are imperative for Malaysia to balance economic growth and environmental conservation. The 6CMU will spearhead research into nature-based solutions, aligning development with climate resilience. By leveraging the nation's rich natural resources, 6CMU can unlock sustainable economic opportunities while mitigating climate risks.

— Dr Shazali Johari, Faculty of Forestry and Environment, UPM

The views expressed here are those of the writer and do not necessarily represent the views of the New Sarawak Tribune.