

LESTARI GEMS

Vol. 12

Boost to Carbon Credit Trading

By Joshua Ng | joshuang@kenanga.com.my

Featured Report

BCX Enhances Transparency, Clarity & Variety

Dewan Rakyat passes Energy Efficiency and Conservation Bill

The Dewan Rakyat on Wednesday passed the Energy Efficiency and Conservation Bill, which provides for compulsory energy audits of larger commercial and industrial electricity and gas consumers.

The Energy Efficiency and Conservation Act (EECA), set to be enforced 12 months after it is gazetted, will regulate industrial and commercial users that consume 21,600 gigajoules of energy per year, equivalent to RM2.4m in annual electricity bills, or RM1m in natural gas bills. Compliance is estimated to reduce electricity bills by up to 25%.

The EECA will cover 1,500 out of 27,000 industrial consumers, representing 70% to 80% of industrial consumption, as well as 500 out of 1.7m commercial consumers making up 21% of commercial segment consumption. — [theedgemalaysia.com](#)

Suriname sets USD30 in carbon sale

Suriname has set a price of USD30 per credit in a bid to raise USD144m, bringing much-needed resources to help fight deforestation in a country 93% covered in forests, Marciano Dasai, Minister of Spatial Planning and Environment told *Reuters*.

The price of USD30 per credit is high compared to the voluntary carbon market, where different registries set their own standards. Voluntary credits backed by nature-based solutions, such as forest protection, peaked in January 2022 at USD15.75 on the Xpansiv, the world's

largest spot market, but have since fallen to around USD3. — *Reuters*

Coal industry could face 1m job losses from energy transition

The global coal industry may have to shed nearly 1m jobs by 2050, even without any further pledges to phase out fossil fuels, with China and India facing the biggest losses, research showed.

Hundreds of mines are expected to close in the coming decades as they reach the end of their lifespans and countries replace coal with cleaner low-carbon energy sources.

US-based think tank Global Energy Monitor looked at 4,300 active and proposed coal mine projects around the world covering a total workforce of nearly 2.7m. It found that over 400,000 workers are employed in mines set to cease operations before 2035. — *Reuters*

Extreme weather could cause USD5t losses, Lloyd's says

Global economic losses could reach USD5t under a "plausible increase" in extreme weather events linked to climate change that cause crop failures and food and water shortages, insurance marketplace Lloyd's of London said on Wednesday.

Adjusting the estimated USD5t over a five-year period, the expected global economic losses were USD711b, Lloyd's said. — *Reuters*

ESG CALENDAR

2nd World Conference on Climate Change & Sustainability

Date: 16–18 Oct 2023
Venue: Rome, Italy
Type: In Person, Paid
Register [here](#)

GITEX IMPACT Summit & Sustainability Event

Date: 16–20 Oct 2023
Venue: Dubai World Trade Centre
Type: In Person, Paid
Register [here](#)

15th Bioplastics Market

Date: 18–19 Oct 2023
Venue: Radisson Blu Plaza Bangkok
Type: Hybrid, Paid
Register [here](#)

2nd Asia Green Packaging Innovation Summit 2023

Date: 18–19 Oct 2023
Venue: Singapore
Type: In Person
Register [here](#)

Responsible Business Awards 2023

Date: 1 Nov 2023
Venue: London
Type: In Person, Paid
Register [here](#)

Transform Food USA 2023 23

Date: 2-3 Nov 2023
Venue: Minneapolis, MN
Type: In Person, Paid
Register [here](#)

ESG Rating 4 stars

Company	F4GBM Index	Rating	TP (RM)
ABMB	Yes	OP	4.30
CIMB	Yes	OP	6.30
PBBANK	Yes	OP	4.75
KLK	Yes	OP	24.50
IOI CORP	Yes	MP	3.80
PPB	Yes	OP	19.30
MISC	Yes	MP	7.60
YINSON	Yes	OP	3.79
CTOS	Yes	OP	1.80
SUNCON		OP	2.39
GAMUDA		OP	5.45
SAMAIDEN		OP	1.51

ESG Rating 2 stars

Company	F4GBM Index	Rating	TP (RM)
ARMADA	Yes	OP	0.60
TAANN		MP	3.40
KOSSAN		MP	1.28
SUPERMAX		MP	0.85

13 October 2023

Bursa Carbon Exchange

Enhancing Transparency, Clarity & Variety

By Joshua Ng | joshuang@kenanga.com.my

Bursa Carbon Exchange (BCX) is taking several steps to boost the trading of carbon credits, starting with off-market trades on its platform beginning 25 Sep 2023. The world's first Shariah-compliant carbon exchange also released the much-awaited VCM Handbook during its inaugural Carbon Market Forum at iGEM 2023 and announced its plan to facilitate the trading of renewable energy certificates (RECs) by 3Q 2024, adding to the current offerings of global nature-based plus carbon (GNC) contracts and global technology-based carbon (GTC) contracts. Plans are also underway to offer the first Malaysia-based carbon credits in its second auction expected to take place next year.

Bursa Carbon Exchange's trading platform came [online](#) on 25 Sep 2023, enabling off-market trades of carbon credits as part of BCX's continuous efforts to attract participation and improve the prospects of the voluntary carbon market. Two standardised contracts are currently being offered i.e. GTC contracts at RM8.80 per contact, focusing on global technology-based greenhouse gas (GHG) reduction projects, and GNC contracts at RM34.50 per contact, which feature global nature-based GHG reduction projects with co-benefits in the agriculture, forestry and other land use (AFOLU) sector.

The bulk of the trades was transacted during the first two days which saw 16,500 Verra-registered carbon credits (contracts) changing hands involving 10 companies from various industries. Another 80 contracts were transacted in subsequent trading days (up till 12 Oct 2023). Apart from Yinson Holdings Bhd and CIMB Bank Bhd which were successful bidders of BCX's inaugural auction in March this year, the other eight companies were new entrants i.e. Vitol Asia Pte Ltd, Petro Ocean Sdn Bhd, Global Tunikara Sdn Bhd, Sumisaujana TCM Chemicals Sdn Bhd, Green Innotech Sdn Bhd, Graphene Synergy R&D Sdn Bhd, ICT Zone Asia Bhd and Sisma Water Technology Sdn Bhd.

BCX Daily Scoreboard: 25 Sep-12 Oct 2023 (Contracts)												
Product	Price (RM)	25/09	26/09	27/09	28/09	29/09	30/09	2-3/10	4/10	5-6/10	9-12/10	Total
GNC+	34.50	1,500	550	-	-	-	-	-	60	-	-	2,050
GTC	8.80	11,399	3,051	-	-	-	-	-	20	-	-	14,450
Total		12,899	3,601						80			16,580

Source: Bursa Carbon Exchange

However, **much remains to be done** to encourage participation and convince Malaysian companies and organisations of the viability of the voluntary carbon market as evidenced by the lacklustre market activities. Natural Resources, Environment and Climate Change (NRECC) Minister Nik Nazmi Nik Ahmad, who officiated BCX's inaugural Carbon Market Forum, expressed his disappointment over the lack of interest in Malaysia's voluntary carbon market. He called on Malaysian corporates to translate their net zero commitments into concrete actions by stepping up and investing in the carbon market in tandem with Malaysia's efforts to address the impact of climate change.

Nevertheless, the bright spot is the **participation of smaller companies** in the off-market trades which signalled the growing awareness of environmental responsibility among small and medium-sized enterprises as Malaysia shifts towards a low-carbon economy. This could spell better prospects for the development of local carbon credit projects.

To recap, BCX carried out Malaysia's first carbon credit auction on 16 March 2023. The auction saw 15 buyers from various industries purchasing a total of 150,000 Verra-registered carbon credits. These comprised 100,000 global GNC contracts from Cambodia's Southern Cardamom Project at RM68.00 per contract, and 50,000 GTC contracts from the Linshu Biogas Recovery and Power Generation Project in China at RM18.50 per contract. BCX aims to hold three modes of trading eventually. The last will be continuous spot trading which BCX will make available when the VCM becomes more vibrant.

Renewable energy certificates (RECs)

In response to increasing requests from corporates seeking an independent and cost-effective platform for renewable energy certificate (REC) transactions, BCX has announced that it plans to **offer RECs by 3Q 2024**. Apart from adding variety to its carbon offset offerings, Bursa Malaysia is also playing its role in the national energy transition by facilitating the acceleration in the push towards renewable energy and financing the development of low-carbon projects and the technologies required to build the ecosystem.

13 October 2023

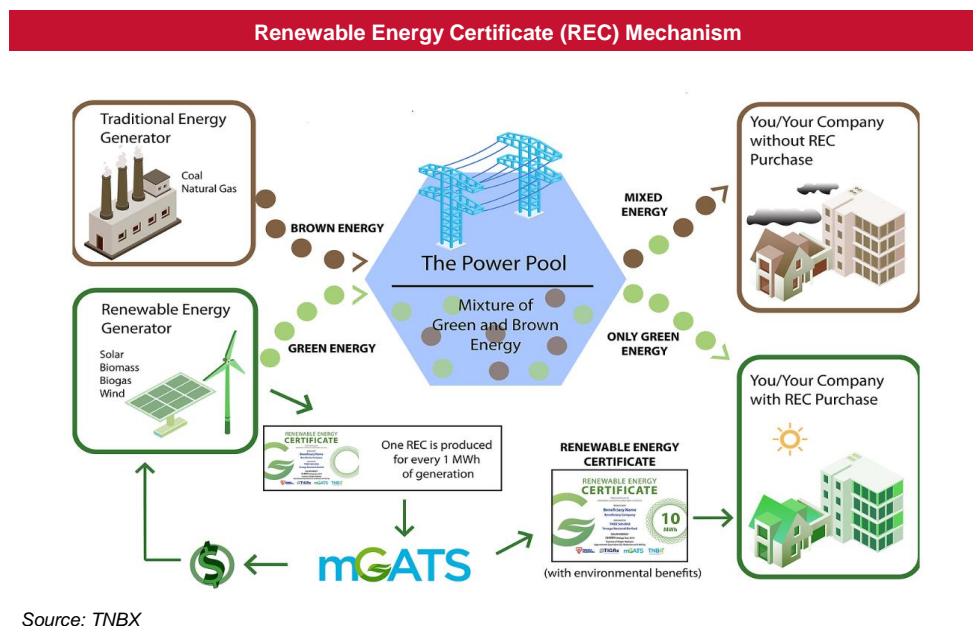
The REC is a **globally recognized tool that enables companies to purchase RE in a transparent and credible way**. One REC represents the delivery of 1MWh of RE to the grid, and all associated environmental benefits of displacing 1MWh of conventional power in Malaysia. It can be used to offset Scope 2 emissions (from grid electricity). Hence, RECs have a clear value proposition for both project developers (they can generate additional revenue for each MWh of RE produced) and companies (they can meet their sustainability goals). Additionally, RECs certified by the International REC Standard Foundation (I-REC), are approved by all major standards and recognised internationally.

The move to offer RECs will spur investments and accelerate the development of more RE assets. This is also in view of the rising demand for RE certification for businesses looking to enhance the marketability of their products across markets with stringent ESG regulations. Similar to the auction of carbon credits, the BCX mechanism will promote price discovery while allowing wider access to RECs.

Currently, RECs are awarded through **TENAGA's Green Electricity Tariff (GET) scheme** at a fixed price (21.8 sen/kWh from 1 Aug to 31 Dec 2023). Called mRECs, GET customers receive their certificates after the end of a calendar year, validating the total green electricity consumed throughout their subscription period. TENAGA's mRECs are I-REC certified and meet the Bursa Malaysia Reporting Guide requirements. **For now, mREC is not tradable** as it retires to end customers.

Going forward, TENAGA plans to trade RECs via TNBX's national REC market place called Malaysia Green Attribute Tracking System (mGATS). TNBX targets to launch the trading feature of mGATS by **1Q 2024** where RECs will be auctioned (bidding starts from the reserve price). According to TNBX, the auction will be open to all (subscribers of GET and non-GET or other green energy tariff schemes) and that mGATS transactions comply with international standards such as CDP, GHG Protocol and RE100. This means Malaysia could have two market places for RECs by 2024.

There are other players offering REC related services. **SLVEST** offers to buy and sell RECs on behalf of customers. It is partnering with T-RECs.ai (now REDEX), an approved independent verifier, that uses a blockchain-enabled platform to track and certify the transfer of ownership and retirement of RECs. **Jentayu Sustainables** (formerly Ipmuda Bhd) also offers similar services. **YTL PowerSeraya's** Geneco SG offers RECs to residential customers in Singapore.



VCM Handbook

The VCM Handbook is jointly published by Bursa Malaysia and Malaysian Green Technology and Climate Change Corporation (MGTC). It is a **comprehensive project development toolkit** that provides extensive reference to professionals and stakeholders in the industry on regulations at the national and state levels, types of projects, process flow of formulating a VCM project, the methodology and reviews, case studies and government incentives. Among the highlights are:

- As at 16 May 2023, there are **13 registered projects** under the [Verra registry](#) and **143** under [CDM](#) in Malaysia.
- Few states in Malaysia have **carbon trading policies and regulations**. **Sarawak is the most advanced** as it is the only state that has amended its laws to enact legislation on permitting carbon storage and nature-based venture businesses i.e. the Land (Carbon Storage) Rules, 2022, and Forests (Forest Carbon Activity) Rules, 2022. Sarawak is also the first state to have legislation that enables industries, including oil and gas, to comply with international requirements to reduce CO2 emissions intensity under the UN Framework Convention for Climate Change. **Sabah** is formulating its law while **Pahang** is amending its enactment to accommodate carbon trading.

13 October 2023

- Related **government incentives for emission reduction initiatives**, including carbon credit projects.

Incentive	Details
1. Carbon Credit	RM10m seed funding to kick-start VCM ecosystem. Details still lacking as of Oct 2023
2. Green Technology	
i) Green Investment Tax Allowance (GITA) <ul style="list-style-type: none"> ▪ By Malaysian Green Technology and Climate Change Corporation (MGTC) ▪ Extended until 31 Dec 2025 	<ul style="list-style-type: none"> ▪ For purchase of green technology equipment and assets i.e. <ul style="list-style-type: none"> ▪ Assets listed under the MyHIJAU directory for own use ▪ Projects undertaken for own business/use ▪ Service providers listed under the MyHIJAU directory ▪ Leasing i.e. companies listed under the registered PV investor (RPVI) directory ▪ Projects eligible for carbon credits are: <ul style="list-style-type: none"> ○ RE i.e. biomass, biogas, mini hydro, geothermal, solar ○ Energy efficiency i.e. investment in energy efficiency equipment and technologies
ii) Green Income Tax Exemption (GITE)	<ul style="list-style-type: none"> ▪ Service providers listed under the MyHIJAU directory
iii) Green Technology Financing Scheme (GTFC) <ul style="list-style-type: none"> ▪ By MGTC 	<ul style="list-style-type: none"> ▪ Now at GTFS4.0 with guaranteed value increased to RM3b until 2025 ▪ Guaranteed limit of up to 60%, scope of funding widened to cover EVs ▪ Eligible projects are energy, water, buildings, transport, manufacturing
iv) Low Carbon Transition Facility (LCTF) <ul style="list-style-type: none"> ▪ By Bank Negara Malaysia 	<ul style="list-style-type: none"> ▪ Up to RM10m for each SME, with maximum financing rate of 5.0% per annum for up to 10 years ▪ Energy efficiency and RE projects that can generate carbon credits
v) Dana Program Pembangunan Teknologi Hijau dan Pemuliharaan Alam Sekitar <ul style="list-style-type: none"> ▪ By Malaysia Forest Fund (agency under NRECC Ministry) 	<ul style="list-style-type: none"> ▪ Companies and individuals that make contributions to forests through the FCC (Forest Conservation Certificate) are eligible for tax deductions of up to 10% ▪ Valid from 1 Jan 2023 to 31 Dec 2027 ▪ Limited to a maximum cumulative amount of RM55m in allowable tax deductions ▪ Contributions must be in cash of RM1,000 and above; subject to provisions stipulated in subsection 44(11C) of the Income Tax Act 1967
3. Transport (EV)	
i) Import duty, excise duty and sales tax exemption <ul style="list-style-type: none"> ▪ By Royal Malaysian Customs Dept 	<ul style="list-style-type: none"> ▪ 100% exemption on import duty on components for local EV assembly ▪ 100% exemption on excise duty and sales tax for CKDs ▪ 100% exemption on import duty and excise duty for CBUs
ii) Road tax exemption <ul style="list-style-type: none"> ▪ By Road Transport Dept 	<ul style="list-style-type: none"> ▪ 100% exemption for batteries and fuel cells (hydrogen) EVs but not hybrid vehicles
iii) Tax incentive for companies renting non-commercial EVs <ul style="list-style-type: none"> ▪ By Inland Revenue Dept 	<ul style="list-style-type: none"> ▪ Tax deduction on the rental amount of up to RM300,000
iv) Tax incentive for manufacturers of EV charging equipment <ul style="list-style-type: none"> ▪ By Malaysia Investment Development Authority (MIDA) 	<ul style="list-style-type: none"> ▪ 100% income tax exemption on statutory income for up to 10 years for companies that make early investments from YA2023 to YA2032. ▪ Investments after YA2023 will be eligible to enjoy the exemption for the remaining period; or ▪ 5-year 100% investment tax allowance set off against 100% of statutory business income for each YA
4. Carbon Capture and Storage (CCS) <ul style="list-style-type: none"> ▪ By Ministry of Finance ▪ Applicable for 3 activities: <ul style="list-style-type: none"> ○ carbon capture ○ transportation of captured CO₂ ○ Underground or sea bed carbon storage 	<ul style="list-style-type: none"> ▪ Companies with in-house CCS activities: <ul style="list-style-type: none"> ○ Investment tax allowance (ITA) of 100% of capex for 10 years. ITA can be set off against up to 100% of business statutory income ○ Import duty and sales tax exemption on equipment from 1 Jan 2023 until 31 December 2027 ○ Tax deduction for pre-commencement expenses within 5 years from the start of operations ▪ Companies undertaking CCS activities: <ul style="list-style-type: none"> ○ Investment tax allowance (ITA) of 100% of capex for 10 years. ITA can be set off against up to 100% of business statutory income ○ 70% tax exemption on statutory income for 10 years ○ Import duty and sales tax exemption on equipment from 1 Jan 2023 until 31 December 2027
5. Feed-in Tariff (FIT) <ul style="list-style-type: none"> ▪ By Sustainable Energy Development Authority (SEDA) 	<ul style="list-style-type: none"> ▪ Covers four types of RE i.e. biogas, biomass, small hydropower and solar ▪ Feed-in approval holders receive payments from the RE Fund i.e. 21 years for solar PV and small hydropower and 16 years for biogas and biomass

Source: MGTC

13 October 2023

Meanwhile, the VCM [directory](#) (work in progress) lists the following approved companies in their respective roles:

- Consultants – Eco-Consulting Sdn Bhd, Global Tunikara Sdn Bhd
- Validation & verification bodies (VVBs) – None
- Project developers – Cenergi Sea Bhd, Green Lagoon Technology Sdn Bhd
- Financial institutions (FIs) – None

One area that is severely lacking is financing. There is no framework for financing the development of carbon credit projects at the national or state levels. Neither is there any approved financial institution listed in the VCM directory. Financing remains a major barrier, especially for small and mid-size project developers. The most common financing methods now are forward purchase agreements (forward contracts) and own funding. Forward contracts are considered key to scaling up the VCM. Thus far, NRECC has introduced the **REDD Plus Finance Framework (RFF)** as a sustainable financing mechanism. REDD Plus means reducing emissions from deforestation and forest degradation with additional forest-related activities that include sustainable management of forests and the conservation and enhancement of forest carbon stocks in developing countries. There are two RFF financing mechanisms i.e. the Forest Conservation Certificate (non-market based) and the Forest Carbon Offset (market-based). The agency responsible for implementing the RFF is **the Malaysia Forest Fund (MFF)**.

Developments in Singapore and Indonesia

Singapore recently set **eligibility criteria of its International Carbon Credit (ICC) framework** that ensures **only high-quality carbon credits from different voluntary markets can be used by Singapore companies to offset their taxable emissions** and support both parties' climate targets. This is positive development, opening up opportunities in the development of carbon credit projects and carbon credit trading. Singapore's carbon exchange ACX plans to offer carbon credits that meet the ICC eligibility criteria.

- The ICC framework will allow companies subject to Singapore's carbon tax (those emitting 25,000 tonnes or more GHG) to **use international carbon credits to offset up to 5% of their taxable emissions beginning 2024**. Singapore's carbon tax will jump five times next year to SGD25/mtCO₂e from SGD5 currently. This will further rise to SGD45 per tonne from 2026 to 2027, and SGD50–80 by 2030.
- The framework will be **aligned with Article 6** of the Paris Agreement, enabling Singapore to cooperate with other countries to support their respective climate targets. Article 6 rules dictate that the carbon credit transfers between countries require corresponding adjustments to be made to each country's GHG inventory to prevent double-counting.
- On this front, Singapore has concluded negotiations with **Ghana and Vietnam** on Implementation Agreements setting out the requirements and processes for Article 6 compliant carbon credit cooperation. It has signed MOUs to work towards Implementation Agreements with **Bhutan, Cambodia, Chile, Colombia, Dominican Republic, Indonesia, Kenya, Mongolia, Morocco, Papua New Guinea, Peru and Sri Lanka** while discussions are ongoing with **Brazil, Brunei and Thailand**.

Meanwhile, the **Indonesian Carbon Trading Association is working with Verra** to streamline registration of projects in both the Indonesian National Registration System and the Verra Registry, thereby enabling the projects to meet the needs of national and international markets. Indonesia began trading carbon emissions on 26 Sep 2023 with 13 transactions for carbon credits representing nearly 460,000 metric tonnes of CO₂e priced at 69,600 rupiah (USD4.51) per tonne.

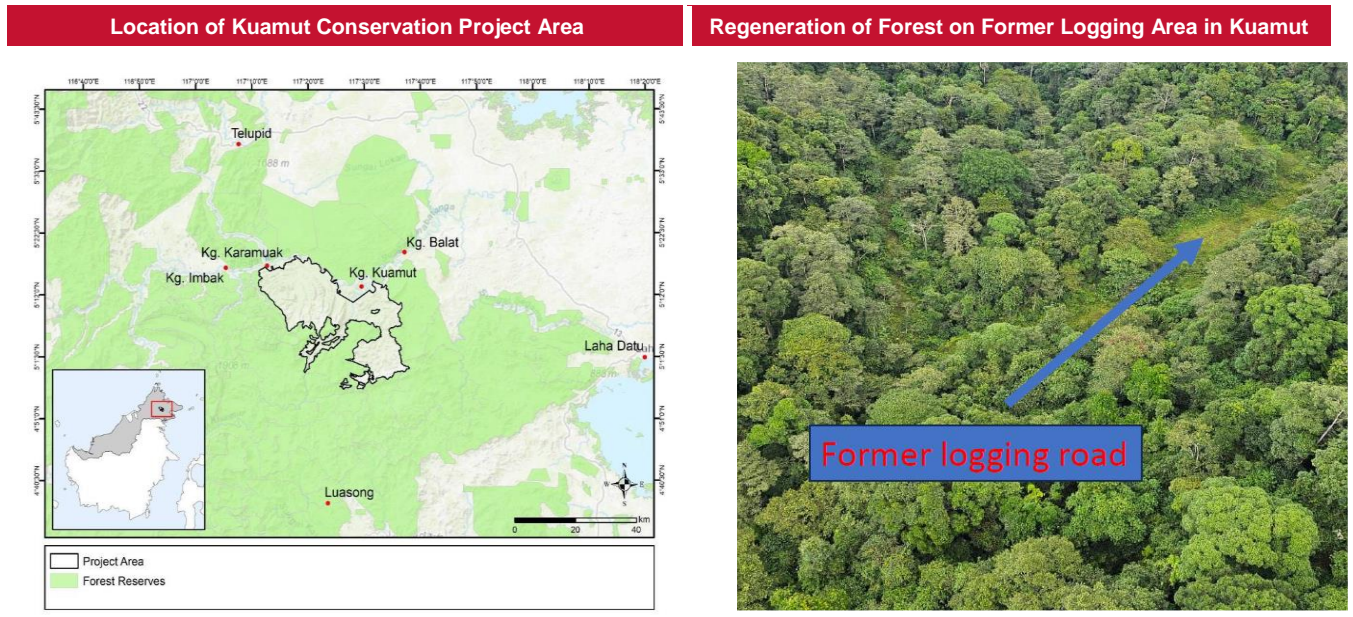
What's next

One promising outlook for the domestic carbon market is the offering of Malaysia nature-based plus carbon credit on BCX in its next auction taking place in 2024. These carbon credits are generated by the **Kuamut Rainforest Conservation Project involving 83,381ha** in Sabah, located in the Tongod and Kinabatangan districts, west of Lahad Datu.

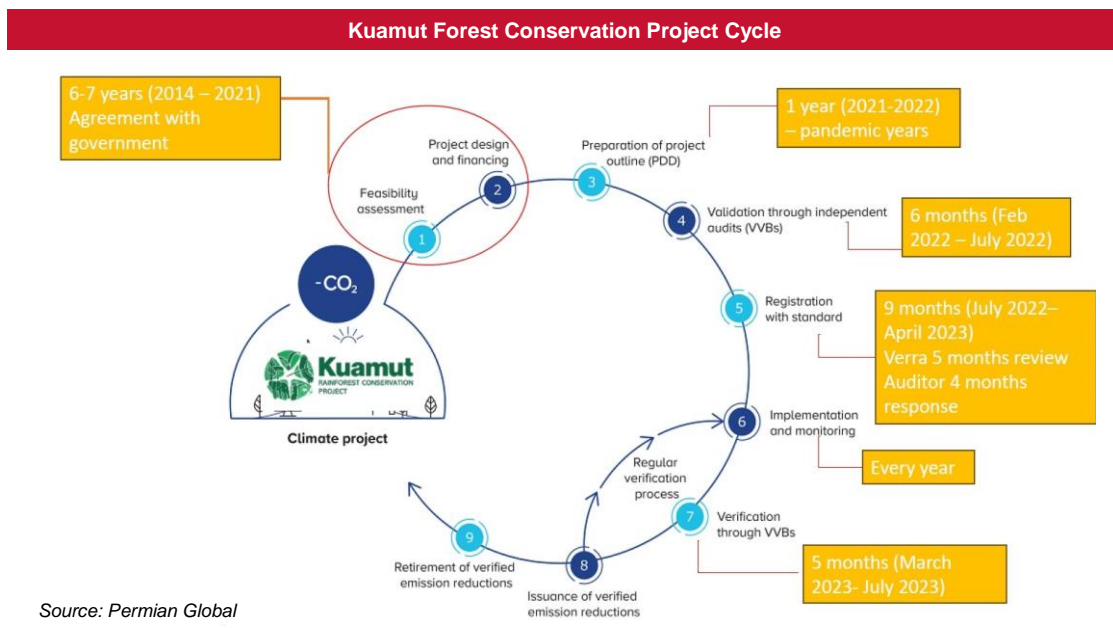
- The project is a public-private partnership between **Permian Malaysia, Sabah Forestry Department, Rakyat Berjaya Sdn Bhd, Yayasan Sabah**, and supported by **PACOS Trust and South East Asia Rainforest Research Partnership**.
- It is an improved management forest (IFM) project that **will generate over 14,500,000 VCUs over a 30-year period (11 Dec 2015– 10 Dec 2045)** through the avoidance and removals of carbon dioxide.
- The project area had been **repeatedly logged and was earmarked for further commercial exploitation. Establishing the project has prevented this from happening, allowing the forest to regenerate.**
- The project supports **more than 3,000 people in eight villages**, and protects the habitat of **rare, threatened or endangered 29 mammal and 12 bird species**.
- The Kuamut project is a **triple gold-rated forest carbon project** which means it has been third-party verified against the Verra Verified Carbon Standard (VCS) and the Climate, Community and Biodiversity (CCB) Standard. It is also ranked best-in-class and has been rated **Ae**, currently **the highest rated IFM project in the world** assigned by the third-party rating agency **BeZero**.

13 October 2023

The project began in 2015 when a large timber concession was turned into a protected area. However, it was marred by repeated delays due to internal governance changes in the communities and lengthy approval process, the last one due to the Covid-19 pandemic.



Source: Permian Global



Source: Permian Global

The success of this project shows that conservation projects are an excellent multi-pronged approach to address the impact of climate change. Malaysia with over 55% of forest coverage totalling more than 18m hectares has huge potential for such projects. Hence, it is crucial that the federal government and all state governments align their laws to facilitate the development of carbon credit projects, in particular forest conservation, as forest-related activities are under the purview of the respective states. Towards this end, Nik Nazmi reiterated that the **National Carbon Policy will be implemented this year**. Apart from providing guidance on carbon trading at the state level, the government will also study law enforcement requirements for regulatory aspects as well as monetisation of the carbon business.

The global carbon market is gaining traction. In 2022, the traded value was estimated to be USD978.56b with the share of the VCM at USD2b, showing that over 99% of the carbon market is dominated by the compliance carbon market (CCM). However, a 2021 study by McKinsey indicated that VCM growth may outpace CCM growth to achieve a similar total market value by 2030, growing 15-fold to 1.5 to 2 gigatonnes of CO₂ per year by 2030, and up to 7 to 13 gigatonnes by 2050. The timing is ripe for Malaysia to start building its carbon pool.

This section is intentionally left blank

This document has been prepared for general circulation based on information obtained from sources believed to be reliable but we do not make any representations as to its accuracy or completeness. Any recommendation contained in this document does not have regard to the specific investment objectives, financial situation and the particular needs of any specific person who may read this document. This document is for the information of addressees only and is not to be taken in substitution for the exercise of judgement by addressees. Kenanga Investment Bank Berhad accepts no liability whatsoever for any direct or consequential loss arising from any use of this document or any solicitations of an offer to buy or sell any securities. Kenanga Investment Bank Berhad and its associates, their directors, and/or employees may have positions in, and may effect transactions in securities mentioned herein from time to time in the open market or otherwise, and may receive brokerage fees or act as principal or agent in dealings with respect to these companies. . Kenanga Investment Bank Berhad being a full-service investment bank offers investment banking products and services and acts as issuer and liquidity provider with respect to a security that may also fall under its research coverage.

Published by:

KENANGA INVESTMENT BANK BERHAD (15678-H)

Level 17, Kenanga Tower, 237, Jalan Tun Razak, 50400 Kuala Lumpur, Malaysia

Telephone: (603) 2172 0880 Website: www.kenanga.com.my E-mail: research@kenanga.com.my