

Bursa Malaysia Voluntary Carbon Market Exchange

Dr Wei-nee Chen, Head of Carbon Market, Group Sustainability Bursa Malaysia



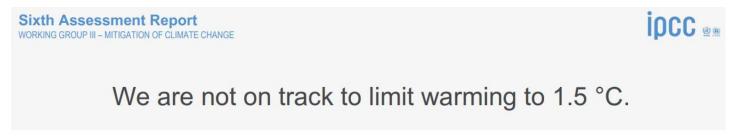


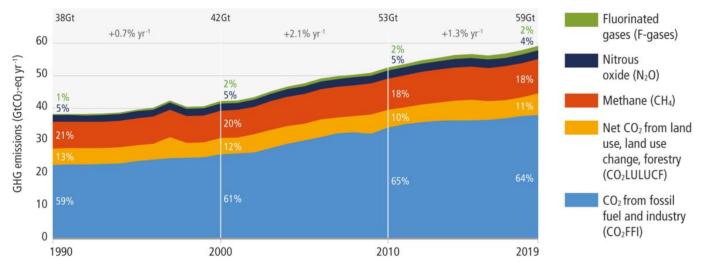
Climate Crisis & our Nation's Call to Action

Voluntary Carbon Market (VCM)

Bursa Malaysia VCM Exchange Design

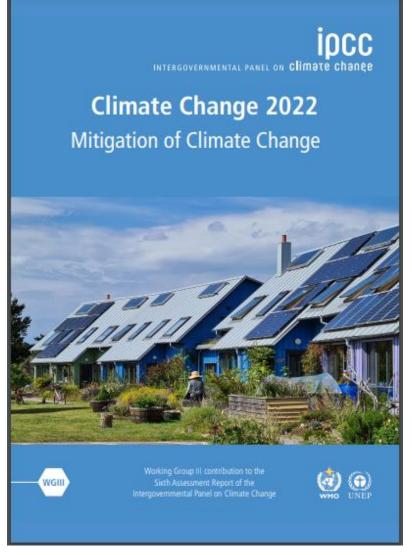
Our Climate Crisis: We are not on track to 1.5°C





- WG1 (Aug 2021): Code Red for Humanity Human activities have caused increase of 1.1°C since pre-industrial times. Carbon budget ~ 500 gigatons left, emit @ 55 gigatons /year. Carbon budget will be exhausted within 10 years at 50% chance of achieving 1.5°C;
- WG2 (Feb 2022): Impact of climate change, vulnerabilities and the capacities and limits of the natural world and human societies to adapt to climate change;
- WG3 (4 Apr 2022): Mitigation of climate change is reaching urgency level and we are not on track to 1.5°C





Our Nation's Call to Action



- In Budget 2022, the Government of Malaysia (GoM) announced the implementation of a voluntary carbon market (VCM) as one of the key initiatives to address the climate change agenda;
- The VCM is an initiative under the purview of the Ministry of Finance (MoF) and Ministry of Environment and Water (KASA), and Bursa Malaysia Berhad has been mandated to implement a VCM Exchange by end of 2022;
- The GoM is also exploring the implementation of a domestic Emissions Trading System (ETS) and carbon tax.





There are three main mechanisms for "pricing" carbon

Carbon credits can play a role in each of these three carbon pricing mechanisms

Voluntary Carbon (The Carbon C Markets (VCM)

Companies purchase and "retire", voluntarily, carbon offsets/credits, to fulfil either voluntary emissions reduction targets or to create "Carbon neutral" products for their customers.

Emissions Trading \triangleright System (ETS)

The regulator sets a fixed limit for the The regulator sets a fixed limit for amount of CO_2 to be emitted, sometimes called 'cap. They then issue the respective amount of emission allowances (or permits) to firms either directly or through auctions. One allowance typically grants the right to emit one ton of CO₂

Carbon Tax [9]



the amount of CO₂ to be emitted and then taxes every ton of CO₂ emitted in excess of the defined limit at fixed rates. Depending on design, carbon credits may be acceptable, to a limit, to offset an organization's exposure to tax





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Carbon credits can be traded on a "Voluntary Carbon Market" (VCM), where companies make voluntary purchases to compensate for their emissions



Emission mitigation project



A developer sets up a project.

Developer obtains validation and registers on a certification standard.

Developer operates and monitors results.

3rd party verifies results.

Project verified by standards and credit issuance



A carbon credit is "issued" i.e. a certificate is issued and a unique serial number on the registry is created for each ton of CO₂e

The first credit issuance can be 2 - 3 years after the start of the project

Trading and carbon markets



Issued credits belong to project developers.

These can be bought and sold, and their ownership on the registry changes, until a buyer "redeems" (retires), at which point the credit ceases to exist (it is marked as "retired" in the registry)

Credits retired toward company targets



The carbon credits are "retired", by companies, to fulfill either voluntary emissions reduction targets or to create "Carbon neutral" products for their customers.

Today, companies tend to buy a credit, and retire it shortly after, to use in meeting their emissions targets. However, transactions when a company buys credits for future use, or intermediaries buy credits to sell onwards / to benefit from price appreciation can also occur

A successful VCM relies on an ecosystem of actors

These players are necessary to generate credit supply





Technical experts



Financial Institutions



Standards



Project proponents



Project developers



Validation and Verification Bodies (VVBs)



Stakeholder	Role in VCM
Government	Sets surrounding environment for project development and may play an active role in facilitating VCM scaling
Project proponent	Owns land or assets of the crediting project
Project developer*	Plans, implements, and runs projects. Have expertise in applying the standards' procedures/methodologies
Technical expert*	Works with/as part of project developers to provide scientific/engineering expertise to assess mitigation potential and implement project
Standard	Creates rules and procedures governing carbon credit market and maintains registry of issuances
VVB*	Validates project design (prior to implementation) and verifies periodically (to issue credits). To validate/verify projects of a particular standard VVB must be accredited with that standard
Financial Institutions	Unlock green financing by allocating capital and steering financial flows towards more low carbon, climate resilient activities

*A robust local ecosystem is required for successful VCM scaling

There are several options for carbon crediting project activities





Renewable Energy

Biomass, geothermal, hydro (e.g., run of river hydro-electricity), solar, wind



Industrial Gases

N₂O from nitric acid and adipic acid plants, ozone-depleting substances (HFCs)



Tech-based Removals

Direct Air Carbon Capture and Storage, Bio Energy Carbon Capture and Storage



Energy efficiency

Waste heat recovery, process efficiencies, insulation/weatherization of buildings



Household Devices

Clean cookstoves, water purification devices



Waste Disposal

Waste management, landfill gas (e.g., landfill methane), wastewater, biogas



Transport

Electrification, lower fuel use (e.g., biofuels)







Agriculture / Soil Carbon

Rice methane, improved fertilizer management, no- and low-till agriculture, cover crops



Forestry

Afforestation, reforestation, improved forest management (IFM), conservation (REDD+)



Other Land Use

Grassland management, restoring or avoiding conversion of peatlands



Blue Carbon

Restoration or avoiding conversion of mangroves, wetlands, seagrass





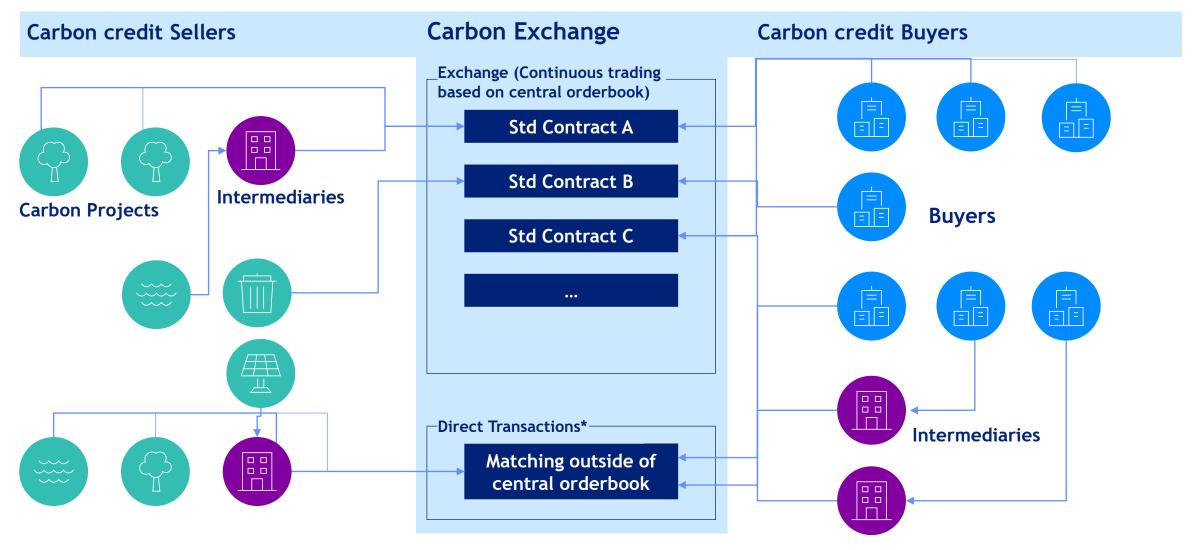
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The VCM exchange will offer standardized products





^{*}This functionality may be available only at a later phase.

Each carbon credit within the standardized products on the exchange is still tied to a unique serial number on a registry

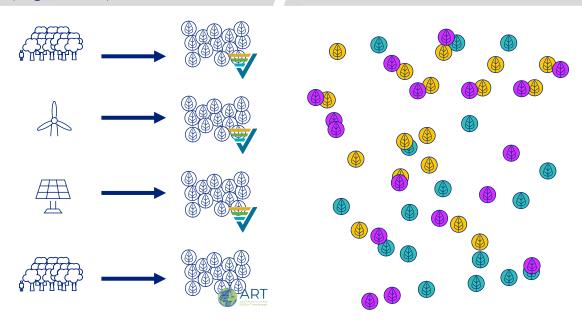
ILLUSTRATIVE



Carbon credits from carbon projects are issued by registries (e.g., Verra)

All carbon credits are onboarded on exchange - they become tradeable credits via standardized contracts

Credits are categorized into standardized contracts based on fit with contract specifications



Each carbon credit meets the quality criteria of a **standardized contract** on the exchange, and will be used to fill orders based on price and quantity

Each carbon credit is associated with a unique serial number

Each carbon credit that satisfies the exchange's contract specifications is onboarded (moved to the exchange's omnibus registry account and a corresponding entry on the ledger is created), and continues to retain its unique serial number

Each carbon credit retains its unique serial number as on the registry

Orders are filled by a subset of credits that meet the criteria of each standardized contract, fit of bid and offer prices





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Corporates can purchase carbon credits from VCM Auction by year-end 2022

Bursa Malaysia intends to hold an auction to launch new standardised contracts with underlying carbon credits that will be offered on the VCM Exchange

Why auction?



Facilitate price discovery for new products on VCM Exchange



Provide reference price for carbon credit trading on VCM Exchange



Tangible price signal for potential issuers to embark on domestic carbon credit projects

Potential Products For 2022 Auction

Given the scarcity of locally-generated Verracertified carbon credits, we may offer carbon credits sourced from other countries for the auction:

- Technology-based carbon credits such as biogas utilisation, methane capture, green mobility etc.
- Nature-based carbon credits such as forest conservation, mangrove protection, reforestation etc.

Further details regarding VCM exchange rules, auction mechanism and market participant onboarding process will be announced soon.



How You Can Participate

Participate in the inaugural auction year-end. Companies may choose to purchase small volumes of Verracertified carbon credits to kickstart their offsetting journey.

Tentative timeline:

Mid Oct ➤ Onboarding starts

Late Nov ➤ Auction workshop

Early Dec > Auction

Corporates interested to participate in the auction can register

your interest now

Potential Areas of Support

For A Buyer



Facilitate access high-quality standardised carbon credit products offered on VCM Exchange to offset carbon footprint from operations and/or product value chain



Enable support of development of **domestic carbon credit projects** which can help Malaysia achieve its net zero GHG emissions aspirations through voluntary offsetting



Please register your interest via the forms provided in the link or QR code below:

Potential Buyers

Link to Registration Form





