ESG

27 November 2023



Enhancing Malaysia's competitiveness through Bursa Carbon Exchange and upcoming carbon policy

Ong Shu Yi ESG Analyst +65 6530 7348

ShuyiOng1@ocbc.com

Role of carbon markets in global decarbonisation

The global carbon market comprises compliance and voluntary carbon markets, which can promote global decarbonisation by complementing other emissions reduction measures. Regulatory bodies drive compliance markets, while voluntary carbon markets (VCMs) enable companies and individuals to voluntarily participate in carbon trading.

The use of voluntary carbon credits has been gaining traction as companies explore various net-zero pathways, although the market is currently hampered by oversupply and greenwashing criticisms questioning the quality of carbon credits. VCMs are a growing market despite uncertainties, with upcoming frameworks and international standards to bolster confidence in the market and ensure high carbon credit quality. The market value of VCMs was valued at ~US\$2bn in 2021 and is estimated to grow by at least 5 times to US\$10 – 40bn by 2030, according to a report by BCG and Shell¹.

Launch of Malaysia's national VCM

Malaysia launched its VCM called the Bursa Carbon Exchange (BCX), which is the world's first Shariah-compliant carbon exchange in December 2022. It aims to complement existing national efforts to combat climate change, and support Malaysia's ambition to achieve its target of net-zero emissions by 2050.

The launch of the BCX is the first step to broader carbon-related policies in Malaysia such as a carbon tax. Malaysia's New Industrial Master Plan (NIMP) 2030 highlighted plans to develop a carbon tax system and carbon accounting model, to encourage industry players to adopt more sustainable mitigation measures and reduce greenhouse gas (GHG) emissions (see Global Markets Research report named "Comprehensive & Ambitious Reform Agenda").

As the BCX is at its early stages, it may take some time to scale up the supply of carbon credits and streamline the associated administrative processes. To incentivise companies to participate in the BCX as suppliers or buyers, BCX will be waiving its onboarding fee and offering a discount on its trading fee until the end of 2023.

¹ Shell and BCG published a joint report in 2023 on the VCM, specific to 2022 insights and trends. The report highlights market updates, growth possibilities and challenges faced by the market.



ESG

27 November 2023

Guidance for stakeholders through Malaysia's VCM Handbook

A VCM Handbook, put together by Bursa Malaysia and Green Technology and Climate Change Corporation, was published to provide interested parties with guidance on the VCM mechanism in Malaysia. Other information includes types of eligible projects, VCM project formulation, methodologies, case studies, as well as relevant government incentives.

The focus is on nature-based solutions (NBS) and technology-based solutions (TBS) as the two project types that are allowed to be traded on the BCX currently.

NBS projects comprise two main categories, namely:

- (i) Agriculture, Forestry and Other Land Use (AFOLU) projects, which Verra's Verified Carbon Standard (VCS) Program² categorised into six subtypes:
- a. Afforestation, Reforestation and Revegetation (ARR);
- b. Agricultural Land Management (ALM);
- c. Improved Forest Management (IFM);
- d. Reduced Emissions from Deforestation and Degradation (REDD);
- e. Avoided Conversion of Grasslands and Shrublands (ACoGS); and
- f. Wetlands Restoration and Conservation (WRC)
- (ii) Livestock and Manure Management to achieve reductions in methane emissions produced from livestock enteric fermentation and manure decomposition.

TBS project categories include renewable energy projects and carbon capture and storage (CCS) projects, that many emissions-intensive industries in Asia can explore. This highlights the huge potential for Asia to generate carbon credits through TBS projects. As of 16 May 2023, there were a total of 156 projects registered or requesting for registration in Malaysia (Table 1).

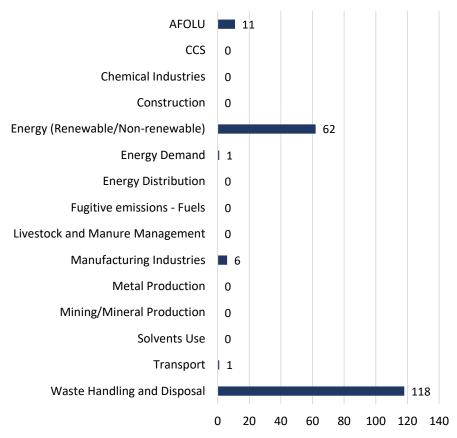
² Verra's VCS Program is a global program and standard for GHG emission reduction and removal projects. It aims to enable the successful development of GHG projects and programs for the creation of high-quality GHG credits.



ESG

27 November 2023

Table 1: Number and type of carbon projects registered or requesting for registration in Malaysia



Note: Some projects fall into multiple sectoral scopes, leading to a total of 199 projects that fall into the sectoral scopes (as of 16 May 2023). Source: Bursa Malaysia Berhad, Malaysia Green Technology and Climate Change Corporation, OCBC

The majority (~76%) of projects in Malaysia fall under waste handling and disposal, followed by energy (renewable/non-renewable) (~40%) and AFOLU projects (7%). An example of an NBS project registered under AFOLU (Improved Forest Management) is the Kuamut Rainforest Conservation Project located in Sabah, estimated to reduce 543,049 tCO $_2$ e of GHG reductions annually. The project aims to protect and restore the rainforest, enhance the livelihoods of communities in the area, and enable biodiversity in the area to thrive.

Enhancing Malaysia's global competitiveness

Developing a robust carbon market can enable Malaysia to enhance its global competitiveness, especially when global policies and regulations are evolving to become increasingly climate aligned. For instance, the European Union's Carbon Border Adjustment Mechanism (CBAM) will impact Malaysia due to considerable exports of products covered under the regulation to the EU e.g., iron, steel and aluminium. The impact to Malaysia may grow if the scope of products covered under the CBAM expands. Therefore, the launch of the BCX can enable greater climate action and increase Malaysia's competitiveness on an international level.



ESG

27 November 2023

With plans for the implementation of a carbon tax, it can spur greater sustainability efforts from carbon tax-liable companies if the carbon tax is appropriately priced. This can be an enabler for the transformation of brown sectors to become greener and accelerate the growth of green industries.

What's next?

The BCX is working towards stronger stakeholder participation to build greater carbon credit supply and increase liquidity. There are also product expansion plans to offer renewable energy certificates (RECs) on BCX by 3Q 2024, in response to an increasing number of corporates seeking a platform for RECs transactions. Malaysia, being a country with abundant natural resources, has great potential in creating high-quality carbon credits such as through AFOLU projects. With increasing awareness of VCMs and technical capabilities for project formulation, coupled with government incentives, the number of Malaysia-based projects registered on BCX across both NBS and TBS project types may start to increase.

In Malaysia's journey towards net-zero GHG emissions by 2050, stakeholders can anticipate the implementation of a progressive carbon tax system as part of the country's upcoming carbon policy. Company operations and emissions-reduction measures can better prepare companies for a low-carbon future, especially in anticipation of the carbon tax.

Sources: BCG and Shell, Bursa Malaysia Berhad and Malaysia Green Technology and Climate Change Corporation, New Straits Times, New Industrial Master Plan 2030, The Business Times, Verra



27 November 2023



Global Markets Research & Strategy

Macro Research

Selena Ling

Head of Strategy & Research LingSSSelena@ocbc.com

Lavanya Venkateswaran Senior ASEAN Economist

lavanyavenkateswaran@ocbc.com

Tommy Xie Dongming *Head of Greater China Research*

XieD@ocbc.com

Ahmad A Enver

ASEAN Economist

ahmad.enver@ocbc.com

Keung Ching (Cindy)

Hong Kong & Macau

cindyckeung@ocbcwh.com

Jonathan Ng

ASEAN Economist

JonathanNq4@ocbc.com

Herbert Wong

Hong Kong & Macau

herberthtwong@ocbcwh.com

Ong Shu Yi

ESG

ShuyiOng1@ocbc.com

FX/Rates Strategy

Frances Cheung

Rates Strategist

FrancesCheung@ocbc.com

Christopher Wong

FX Strategist

christopherwong@ocbc.com

Credit Research

Andrew Wong

Credit Research Analyst
WongVKAM@ocbc.com

Ezien Hoo

Credit Research Analyst EzienHoo@ocbc.com Wong Hong Wei

Credit Research Analyst
WongHongWei@ocbc.com

Chin Meng Tee

Credit Research Analyst
MengTeeChin@ocbc.com

This publication is solely for information purposes only and may not be published, circulated, reproduced or distributed in whole or in part to any other person without our prior written consent. This publication should not be construed as an offer or solicitation for the subscription, purchase or sale of the securities/instruments mentioned herein. Any forecast on the economy, stock market, bond market and economic trends of the markets provided is not necessarily indicative of the future or likely performance of the securities/instruments. Whilst the information contained herein has been compiled from sources believed to be reliable and we have taken all reasonable care to ensure that the information contained in this publication is not untrue or misleading at the time of publication, we cannot guarantee and we make no representation as to its accuracy or completeness, and you should not act on it without first independently verifying its contents. The securities/instruments mentioned in this publication may not be suitable for investment by all investors. Any opinion or estimate contained in this report is subject to change without notice. We have not given any consideration to and we have not made any investigation of the investment objectives, financial situation or particular needs of the recipient or any class of persons, and accordingly, no warranty whatsoever is given and no liability whatsoever is accepted for any loss arising whether directly or indirectly as a result of the recipient or any class of persons acting on such information or opinion or estimate. This publication may cover a wide range of topics and is not intended to be a comprehensive study or to provide any recommendation or advice on personal investing or financial planning. Accordingly, they should not be relied on or treated as a substitute for specific advice concerning individual situations. Please seek advice from a financial adviser regarding the suitability of any investment product taking into account your specific investment objectives, financial situation or particular needs before you make a commitment to purchase the investment product. OCBC Bank, its related companies, their respective directors and/or employees (collectively "Related Persons") may or might have in the future interests in the investment products or the issuers mentioned herein. Such interests include effecting transactions in such investment products, and providing broking, investment banking and other financial services to such issuers. OCBC Bank and its Related Persons may also be related to, and receive fees from, providers of such investment products.

This report is intended for your sole use and information. By accepting this report, you agree that you shall not share, communicate, distribute, deliver a copy of or otherwise disclose in any way all or any part of this report or any information contained herein (such report, part thereof and information, "Relevant Materials") to any person or entity (including, without limitation, any overseas office, affiliate, parent entity, subsidiary entity or related entity) (any such person or entity, a "Relevant Entity") in breach of any law, rule, regulation, guidance or similar. In particular, you agree not to share, communicate, distribute, deliver or otherwise disclose any Relevant Materials to any Relevant Entity that is subject to the Markets in Financial Instruments Directive (2014/65/EU) ("MiFID") and the EU's Markets in Financial Instruments Regulation (600/2014) ("MiFIR") (together referred to as "MiFID II"), or any part thereof, as implemented in any jurisdiction. No member of the OCBC Group shall be liable or responsible for the compliance by you or any Relevant Entity with any law, rule, regulation, guidance or similar (including, without limitation, MiFID II, as implemented in any jurisdiction).

Co.Reg.no.:193200032W