ISRA | RESEARCH PAPER

NO. 124/2025

The Sharīʿah Compliance and Sustainability Implications of Carbon Credits

CIMB ISLAMIC

INCEIF UNIVERSITY | ISRA INSTITUTE

Published by
ISRA Institute
An imprint of INCEIF University
Jalan Tun Ismail
50480 Kuala Lumpur

Tel: +603 7651 4000
Fax: +603 7651 4094
Email: publication-isra@inceif.edu.my

Authors
Professor Dr Younes Soualhi
Senior Researcher
ISRA Institute

Dato' Professor Dr Ashraf Md. Hashim
Professor
INCEIF University

Citation
Soualhi, Y. & Md. Hashim, A. (2025), 'The Sharīʿah compliance and sustainability implications of carbon credits', ISRA Research Paper No. 124/2025, ISRA Institute, Kuala Lumpur.

Acknowledgement
This publication was made possible through the research funding provided by CIMB Islamic Bank Berhad to INCEIF University. The authors would like to express their sincere appreciation to the Bank's team for their constructive review and thoughtful feedback on the content, which significantly enhanced the quality of this work.

CONTENTS

EXECUTIVE SUMMARY

This research explores the intersection of Islamic finance, sustainability, and environmental governance through an in-depth examination of carbon credits. The central aim is to evaluate whether carbon credits can be recognised as Sharīʿah-compliant assets and whether their trading mechanisms align with the higher objectives of Islamic law (*maqāṣid al-Sharīʿah*), particularly the preservation of the environment (*ḥifẓ al-bīʾah*). The study adopts a qualitative approach based on *fiqhī* analysis (*takyīf fiqhī*), classical and contemporary Islamic legal scholarship, authoritative fatwas, and practical case studies, such as the Bursa Carbon Exchange (BCX) in Malaysia.

Carbon credits are tradeable instruments representing verified reductions or removals of greenhouse gases (GHGs), generally quantified as one metric ton of CO_2 equivalent. These credits are generated through environmental projects and traded in either compliance or voluntary carbon markets. While compliance markets are governed by regulatory obligations, voluntary markets are driven by organisations seeking to fulfil internal sustainability goals or demonstrate climate leadership. As the world pivots toward carbon neutrality, these credits are increasingly seen as vital tools in global efforts to mitigate climate change.

The study begins by analysing the nature, types, and functioning of carbon credits, as well as their historical development since the Kyoto Protocol and the Paris Agreement. Technological advancements, such as blockchain and digital registries, are improving credit traceability and reducing fraud. However, the paper also acknowledges criticisms related to human rights violations and questionable environmental benefits in some offset projects, urging strong governance and ethical safeguards.

A major contribution of the research lies in its legal and Sharīʿah-based classification of carbon credits. Drawing upon diverse global legal interpretations, the authors assert that carbon credits can be treated as **intangible financial rights** (*ḥaqq mālī*). Islamic finance generally prohibits elements such as usury (*ribā*), excessive uncertainty (*gharar*), and speculation (*maysir*), and any financial asset must be backed by real value. The paper finds that carbon credits, while intangible, are definable, transferable, and possess economic benefit—satisfying key Sharīʿah criteria for property (*māl*).

The research then explores whether carbon credit trading aligns with *maqāṣid al-Sharīʿah*. Although early jurists did not explicitly include environmental preservation among the five classical objectives of Sharīʿah (religion, life, intellect, lineage, and wealth), modern Islamic scholarship views *ḥifẓ al-bīʾah* as integral to all five. For example, climate change endangers life, health, and livelihoods, making environmental protection an Islamic imperative. Qur'ānic verses and hadiths reinforce the responsibility of humans as stewards (*khulafāʾ*) of the Earth, encouraging sustainable living and accountability.

A nuanced issue addressed is whether permitting carbon offsetting indirectly condones pollution. The study clarifies that Islam permits necessary harm if it is outweighed by a greater public benefit (*maṣlaḥah*). Thus, allowing unavoidable emissions to be offset through verified credits is justified when it leads to broader environmental preservation.

This reasoning is grounded in the Islamic legal maxim: 'When harm and benefit conflict, the greater benefit is given precedence'.

The practical implementation of these concepts is best illustrated through Malaysia's experience. The 2022 Sharīʿah ruling by the Securities Commission and Bursa Malaysia declared carbon credits as Sharīʿah-compliant tradeable rights. The Bursa Carbon Exchange (BCX), launched in 2023, became the world's first Islamic-compliant carbon market, allowing businesses to offset emissions through verified green projects while adhering to Islamic ethics. The BCX operates on the principles of transparency, public welfare (*maṣlaḥah ʿāmmah*), and environmental stewardship.

In conclusion, the paper confirms that carbon credit trading is not only permissible under Sharīʿah when structured appropriately but also supports the *maqāṣid al-Sharīʿah*. It represents a valuable tool for ethical investment, environmental justice, and global sustainability. The authors recommend standardising Sharīʿah guidelines for environmental finance, integrating carbon credits into Islamic ESG instruments, and promoting awareness among Muslim communities to actively engage in climate action through Sharīʿah-compliant means.

Keywords: Carbon credit, Environment, *Maqāṣid al-Sharīʿah*, Offsetting and trading.

INTRODUCTION

Voluntary carbon markets facilitate the generation and trading of carbon credits from projects that reduce or remove greenhouse gas emissions, enabling organisations to offset their carbon footprint. The expansion of these markets—valued in the billions of dollars and intertwined with corporate sustainability pledges—has raised questions about their permissibility and proper governance under Islamic law. At the 29th United Nations Climate Change Conference (COP29) held in Baku, Azerbaijan, in November 2024, significant progress was made in operationalising Article 6 of the Paris Agreement, thereby unlocking international carbon markets. Article 6.2 established a framework for countries to engage in bilateral agreements to trade 'Internationally Transferred Mitigation Outcomes' (ITMOs), enhancing flexibility in meeting their Nationally Determined Contributions (NDCs). Article 6.4 introduced a centralised UN-supervised carbon crediting mechanism, akin to the Clean Development Mechanism under the Kyoto Protocol, allowing for the generation and trading of carbon credits from emission reduction projects. The adoption of these mechanisms is expected to bolster transparency, environmental integrity, and the robustness of global carbon markets, providing a structured approach for countries to collaborate on emission reductions.

In alignment with global efforts, Malaysia announced the introduction of a carbon tax as part of its Budget 2025, presented by the Prime Minister on 18 October 2024. The carbon tax is set to commence in 2026 and will initially apply to high-emission industries, specifically the iron, steel, and energy sectors. Proceeds from the carbon tax will be allocated to fund green research and technology programs, supporting Malaysia's transition to a low-carbon economy. This initiative underscores Malaysia's commitment to achieving net-zero emissions by 2050 and reflects its proactive stance in adopting market-based mechanisms to drive environmental sustainability.

In Islamic finance, every financial instrument must align with Sharīʿah principles, avoiding elements of *ribā* (usury), *gharar* (excessive uncertainty), and *maysir* (speculation), while promoting ethical outcomes in line with the higher objectives of Islamic law (*maqāṣid al-Sharīʿah*). This research explores the Sharīʿah compliance and sustainability implications of carbon credits through a detailed Islamic legal (*fiqhī*) analysis, focusing on the classification of carbon credits as assets, financial rights (*ḥaqq mālī*), or commodities, and the implications of each classification for ownership and tradability. Both types of carbon credits—emission allowances (such as EU ETS permits) and carbon offset credits—are examined in light of Sharīʿah doctrines. A particular emphasis is placed on the juristic characterisation (*takyīf fiqhī*) of carbon credits by contemporary scholars and Sharīʿah advisory bodies, including Bursa Malaysia's Sharīʿah pronouncement recognising carbon credits as tradeable rights within Islamic finance. Furthermore, the discussion integrates the higher objectives of Sharīʿah, notably preservation of the environment (*ḥifẓ al-bīʾah*), evaluating how the environmental benefits of carbon trading align with Islamic ethical goals and whether commoditising the 'right to emit' could conflict with the *maqāṣid* by potentially legitimising pollution. Comparative case studies of the Bursa Malaysia voluntary carbon market—the world's first Sharīʿah-compliant carbon exchange—and the EU ETS will illustrate practical applications and differing approaches.

Finally, the analysis will extend to ESG (Environmental, Social, and Governance) and ethical investment perspectives, considering how carbon credits fit into responsible investment frameworks and what governance measures are needed to ensure their integrity and Sharīʿah compliance. By drawing on peer-reviewed literature, Islamic legal resolutions (fatwas) in both English and Arabic, and official reports, this article aims to present a comprehensive scholarly examination of carbon credits at the intersection of Islamic finance and sustainable development. It is structured in sections ranging from literature review and legal classification to Sharīʿah analysis, case studies, and conclusions with recommendations.

The research paper contains six main sections, each addressing a distinct aspect of the topic. The **first section** briefly introduces the concept of carbon credits, highlights the research objectives, and reviews past literatures on the topic. The **second section** explains the nature, evolution, market structure, and operational mechanisms of carbon credits globally. The **third section** discusses the varying legal definitions and classifications of carbon credits across different jurisdictions and legal systems. The **fourth section** evaluates the status of carbon credits under Islamic jurisprudence, framing them as intangible financial rights and tradeable assets. The **fifth section** analyses carbon credit trading through the lens of Islamic ethical objectives, particularly focusing on environmental responsibility. Finally, the **last section** examines Malaysia's regulatory and Sharīʿah-based initiatives, highlighting the Bursa Carbon Exchange as a practical model of implementation.

Research Objectives

This research aims to:

1. Identify the underlying assets in carbon credit trading: Examine the fundamental components that constitute a carbon credit in the context of trading, and determine how these align with Sharīʿah principles.
2. Assess the qualification of carbon credits as assets under Sharīʿah law: Investigate whether carbon credits are recognised as assets within Islamic finance, considering principles such as ownership, value, and permissibility.
3. Evaluate the fungibility and intangibility of carbon credits in Islamic finance: Analyse whether carbon credits are considered fungible and intangible assets within Islamic financial frameworks, and assess the implications of these characteristics.
4. Examine the Sharīʿah compliance of carbon emission offsetting mechanisms: Investigate whether permitting the offsetting of carbon emissions aligns with Sharīʿah principles, particularly concerning the indirect allowance of pollution and the ethical implications of granting the right to pollute.
5. Analyse the sustainability aspects of carbon credit trading from a *maqāṣid* perspective.
6. Investigate the *maqāṣid* and sustainability dimensions of carbon credit trading and the extent to which the two dimensions converge or diverge.

Literature Review

Carbon credit systems are now essential instruments in both voluntary and regulatory environmental markets due to the urgency of addressing global climate change. Carbon credits, which are tradeable permits allowing the holder to emit a specific amount of greenhouse gases, have become essential to global climate strategies. These mechanisms are used to incentivise reductions in emissions and support sustainability goals across countries and corporations. While they are well-integrated within conventional financial systems, their compatibility with Islamic finance principles remains an emerging and nuanced discourse.

Carbon credits operate through cap-and-trade systems and voluntary offset markets, allowing entities to either comply with emissions caps or voluntarily compensate for their carbon footprint. They fund initiatives such as reforestation, renewable energy, and energy efficiency, offering flexible pathways to emission reduction (Streck & Von Unger, 2016). However, critiques persist. Lohmann (2011) questions the commodification of the atmosphere, highlighting risks such as socio-economic injustice, greenwashing, and the failure to deliver real environmental impact, particularly in the Global South. These criticisms highlight the need for ethical governance, transparency, and social justice, which are core elements in Islamic financial thinking.

The potential integration of carbon credits into Islamic finance frameworks must address essential Sharīʿah principles, including the prohibition of excessive uncertainty (*gharar*), speculative behaviour (*maysir*), interest-based transactions (*ribā*), and the requirement of asset-backing and tangible value. Scholars have begun engaging with these concerns from both legal and ethical dimensions.

In a study by al-Hazza (2023), he opines that legally, carbon certificates grant their holders a right that entitles them to receive financial compensation. He remarked that Islamic juristic classification does not differ from the legal one in that these certificates represent a right owned by the holder. The prevailing opinion is that such rights fall within the scope of property (*māl*) and that rights with financial value may be the subject of exchange. Obaidullah (2019) suggests aligning carbon credits with Islamic social finance instruments such as *waqf* and zakat, thereby turning them into vehicles for sustainable and equitable development. A notable contribution in Carbon credit is a *fiqhī* study titled 'Tadāwul Arṣidat al-I'timān al-Karbōnī: Dirāsah Fiqhiyyah Ta'ṣīliyyah' (Trading of Carbon Credit Certificates: A Fundamental Fiqh Study), by Hisham, which appeared in a Saudi juristic journal. In his analysis, the author remarked that Islamic jurisprudential studies on the environment have addressed various aspects related to the application of legal principles to environmental issues. Among these is the principle of 'no harm and no reciprocating harm,' which serves as a foundational rule to which legal judgments are referred. He reiterated that the objectives of Islamic law are closely linked to environmental protection, as harming the environment contradicts these objectives, which aim to preserve the five essential necessities. Climate pollution, therefore, constitutes a violation of these goals. On the juristic characterisation (*takyīf fiqhī*) of carbon credits, he is of the view that carbon credit trading can be

jurisprudentially described as a permit or license granted to companies in exchange for specific environmental actions, giving them the right to issue tradeable certificates that generate various profits.

Such works delve into classical jurisprudence (*fiqh*) to determine whether carbon credits can be considered legally cognisable property (*māl mutaqawwim*), and under what conditions their trade would be permissible. They often draw parallels with well-established concepts such as the trading of intangible rights (*ḥuqūq mujarradah*) in Islamic law. Since the classical jurists did not confront environmental credits, contemporary scholars employ analogical reasoning (*qiyās*) and juristic preference for public interest (*istihsān*) to extend rulings from analogous cases—e.g. water rights, grazing rights, or the transfer of allowances (*iqṭāʿāt*)—to the context of carbon emissions.

In a 2011 paper presented at an international Islamic finance conference, Nazir outlined several elements of emissions trading that appeared to be contrary to Sharīʿah rules, such as the heavy use of complex financial derivatives and the fact that trading under cap-and-trade schemes was not asset-backed in the tangible sense.

The world's first Sharīʿah pronouncement (fatwa) approving carbon credits as a commodity for Islamic finance was issued in Malaysia in 2022. This Sharīʿah resolution, delivered by the Shariah Committee of Bursa Malaysia's Islamic Markets arm, effectively paved the way for carbon credits to be traded on a Sharīʿah-compliant exchange, treating them as valid underlying assets for transactions. The Bursa Malaysia Shariah Committee's resolution came after reviewing the proposed Voluntary Carbon Market (VCM) framework and examining the juristic characterisation (*takyīf fiqhī*) of carbon credit instruments in depth.

On the financial product side, writers such as Haniffa and Hudaib (2022) propose the integration of green *ṣukūk* with carbon offset verification. In this model, the proceeds from *ṣukūk* are used to finance renewable energy projects, while certified carbon credits validate the climate impact of the funded activities. This structure aligns with the higher objectives of Islamic law (*maqāṣid al-Sharīʿah*), particularly the preservation of life, wealth, and the environment (Khan & Ahmed, 2018).

Beyond legal permissibility, Sharīʿah scholars are placing increasing emphasis on the ethical implications of carbon credit trading. Yusof (2017) highlights that environmental stewardship is not only permissible but is regarded as a religious obligation in Islam. Concepts such as stewardship of the Earth (*khilāfah*) and excellence in conduct (*iḥsān*) form the moral foundation for Muslim engagement in carbon markets, provided that such markets are governed with integrity and directed toward genuine environmental benefit.

Zubaidah *et.al* (2025) held that *waqf* can promote climate adaptation and mitigation by reinvesting profits in climate resilience projects. This approach transforms carbon finance from a purely market-based tool into a model for environmental justice and social equity, consistent with the objectives of Islamic social finance.

Rahman (2022) supports this view by documenting a growing number of juristic opinions and fatwas that indicate a shift from strict prohibition to conditional permissibility. These rulings emphasise the importance of environmental benefit and equitable application, which align with the core principles of Sharīʿah.

In synthesising the literature, two broad strands emerge: one focused on legal classification (how to define carbon credits within the framework of Islamic property and contracts law), and another focused on ethical implications (how carbon trading aligns with Islamic values and the objectives of Sharīʿah). The legal classification discourse has converged mainly on the view that carbon credits represent a form of intangible asset or usufruct right that can be owned and transacted.

SECTION 2

AN OVERVIEW OF CARBON CREDITS: NATURE, TYPES, AND MARKETS

Carbon credits have rapidly emerged as a key solution in global efforts to address climate change. In recent years, governments, corporations, and financial institutions have begun adopting carbon credit mechanisms as part of their strategies to reduce carbon footprints and achieve sustainability targets. As of 2024, approximately 28 per cent of global greenhouse gas emissions are covered by carbon pricing instruments, such as emissions trading systems and carbon taxes, reflecting the growing importance of carbon markets in climate policy (World Bank, 2024).

This momentum is supported by several key developments. Many countries are expanding their carbon pricing frameworks, while companies across sectors are setting net-zero targets and turning to carbon credits to bridge the gap. At the same time, regulators and investors are pushing for stronger governance and transparency in the market. Technological innovations, including blockchain and digital registries, are also helping to improve traceability and reduce the risk of double-counting (Wibowo, 2025).

With this growing attention and investment, it is essential to understand what carbon credits are, how they function, and the different forms they take. The next sections will provide a clearer understanding of the nature, types, and structure of carbon credits and the markets in which they operate.

The Evolution and Current Progress of Carbon Credits

The concept of carbon credits emerged in response to growing global concern over climate change. In the early 1990s, as scientists raised alarms about rising temperatures and increasing levels of greenhouse gases (GHGs), the international community began exploring market-based approaches to address emissions more efficiently.

> **The concept of carbon credits emerged in response to growing global concern over climate change in the early 1990s, as scientists raised alarms about rising temperatures and increasing greenhouse gas levels.**

A major breakthrough came in 1997 with the adoption of the Kyoto Protocol under the United Nations Framework Convention on Climate Change (UNFCCC). This agreement was the first to impose legally binding emission reduction targets on industrialised nations. To support compliance in a cost-effective manner, the Kyoto Protocol introduced mechanisms such as the Clean Development Mechanism (CDM), which allows developed countries to invest in emission-reduction projects in developing economies and, in return, earn Certified Emission Reductions (CERs), a form of carbon credit (UNFCCC, n.d.).

At the same time, voluntary carbon markets (VCMs) began to take shape outside the formal treaty framework. Unlike the CDM, which functioned under international law, VCMs allowed private entities to voluntarily purchase carbon credits to offset their emissions and demonstrate climate responsibility. Institutions like Verra and Gold Standard established widely used standards to certify these credits, covering areas such as renewable energy, forest preservation, and community-driven projects (Verra, 2024; Gold Standard, 2024). By the late 2000s, the voluntary market had become an important tool in global sustainability efforts, although questions regarding the additionality and permanence of some projects began to surface (World Bank, 2023).

A major shift occurred in 2015 with the adoption of the Paris Agreement, which required all countries, both developed and developing, to submit Nationally Determined Contributions (NDCs) outlining their climate commitments (UNFCCC, 2015). This broadened the reach of market-based solutions and introduced Article 6, aimed at promoting international cooperation through Internationally Transferred Mitigation Outcomes (ITMOs). Although the implementation of Article 6 has faced delays due to complex negotiations, the underlying principles of cooperation and flexibility encouraged more businesses to commit to net-zero targets and use carbon credits to manage their remaining emissions (ICVCM, 2023; SBTi, 2023).

The demand for carbon credits grew rapidly in the 2020s. However, this growth also highlighted weaknesses in the market such as inconsistent credit quality, fragmentation, and a lack of transparency. These challenges led to increasing calls for reform. In response, independent bodies like the Integrity Council for the Voluntary Carbon Market (ICVCM) and the Voluntary Carbon Markets Integrity Initiative (VCMI) were established to raise standards and ensure credibility across the sector (ICVCM, 2023; VCMI, 2023).

The demand for carbon credits grew rapidly in the 2020s. However, this growth also highlighted weaknesses in the market such as inconsistent credit quality, fragmentation, and a lack of transparency.

Technological innovation has also begun to reshape the landscape. Tools such as blockchain, satellite monitoring, and AI-based credit assessments have improved the traceability and reliability of carbon credits. Platforms like Sylvera and BeZero now offer independent ratings, evaluating carbon credits based on environmental integrity and added social benefits (Sylvera, 2023).

As of 2025, carbon credit markets are evolving quickly, although issues related to uneven quality and market structure remain. The voluntary market continues to expand, largely fuelled by increasing corporate climate commitments and growing investor scrutiny. Credit prices reflect this diversity, ranging from under USD5 per ton for basic renewable energy projects to over USD30 for high-integrity removal credits. This signals heightened interest in meaningful climate contributions (BloombergNEF, 2025). There

is a clear shift toward prioritising credits that are additional, independently verified, and aligned with broader goals like the UN Sustainable Development Goals (Gold Standard, 2024).

Meanwhile, compliance markets are gaining ground. Countries such as Indonesia, Colombia, and South Africa have introduced new carbon trading systems, while others are testing mechanisms under Article 6 to support international collaboration (World Bank, 2023). In Southeast Asia and Africa, national efforts are also moving forward. Malaysia and Kenya, for example, are working on national registries and benefit-sharing frameworks to ensure equitable carbon revenue distribution.

On the corporate front, offsetting strategies are becoming more refined. Many companies are adopting a 'reduce first, offset later' approach guided by initiatives like the Science Based Targets initiative (SBTi), which stresses the importance of cutting internal emissions before relying on carbon credits (SBTi, 2023).

What Is a Carbon Credit?

A carbon credit is a tradeable certificate that represents the reduction, removal, or avoidance of one metric ton of carbon dioxide (CO_2) or its equivalent in other GHGs. It plays a key role in climate action by allowing individuals, companies, or governments to compensate for their emissions by supporting environmental projects elsewhere. These projects may include renewable energy, reforestation, or carbon capture and storage.

> **A carbon credit is a tradeable certificate that represents the reduction, removal, or avoidance of one metric ton of carbon dioxide (CO_2) or its equivalent in other GHGs.**

According to Kenton (2025), a carbon credit reflects one ton of CO_2 reduced, avoided, or removed through verified projects, stressing the importance of transparency and credibility in emissions accounting. Similarly, the World Bank (2023) explains that carbon credits can be traded and represent a certified removal or reduction of one tonne of CO_2 equivalent from the atmosphere. The United Nations Framework Convention on Climate Change (UNFCCC, n.d.) describes carbon credits as instruments issued under approved mechanisms, such as the Clean Development Mechanism (CDM), to encourage verified GHG reductions. Meanwhile, the International Carbon Action Partnership (ICAP, n.d.) defines them as certified units representing one ton of CO_2 or its equivalent, issued by governments or recognised bodies.

Characteristics of Carbon Credits

Carbon credits have several key characteristics that define their role and function within climate policy and environmental markets. Understanding these features is essential to evaluating their credibility, effectiveness, and potential for impact. Carbon credits have the following attributes:

Source: Bursa Malaysia, 2023

How Carbon Credits Work

Carbon credits operate within a structured system designed to quantify and reward efforts that reduce or remove GHG emissions. These credits are traded in carbon markets, which are generally divided into two main categories: compliance markets and VCMs. Each serves a distinct purpose, but both contribute to global decarbonisation efforts by creating financial value for verified emission reductions.

In compliance markets, carbon trading is mandated by law or regulation, with governments or regional authorities setting emission limits for specific sectors. Participants must surrender carbon allowances or credits to meet these limits, driving demand for certified emissions reductions. Notable examples include:

- EU Emissions Trading System (EU ETS): The world's largest cap-and-trade program, covering power generation, aviation, and maritime sectors. By 2025, maritime emissions will fall under a 70 per cent compliance threshold, which is projected to increase demand by an additional 80 million EU Allowances (EUAs).

- California's Cap-and-Trade Program: Reforms scheduled for 2025 target a 48 per cent reduction in emissions below 1990 levels by 2030, intensifying the pace of allowance auctions and tightening caps.
- China's National ETS: Initially focused on the power sector, it is expanding in 2025 to cover heavy industries such as steel and cement, potentially generating demand for up to 1.5 billion credits annually.

In contrast, voluntary carbon markets are driven by organisations and individuals choosing to offset emissions beyond regulatory requirements, often to meet internal sustainability targets or demonstrate climate leadership. These markets are rapidly growing in scale and complexity:

- In Q1 2025 alone, corporate retirements of voluntary credits reached 54.56 million. Companies are increasingly selective, favouring so-called 'Goldilocks vintages' (credits issued 3–5 years ago) due to concerns over environmental integrity and project credibility.
- Technology is also playing a key role in improving transparency and trust in VCMs. Innovations such as blockchain and AI are being adopted to track, verify, and report emissions reductions. Major firms like Microsoft and Amazon have invested in blockchain-monitored forestry projects to ensure traceability and prevent greenwashing.

The compliance market involves companies and governments that are legally required to limit their emissions under regulatory frameworks such as the EU ETS. In contrast, the voluntary carbon market allows businesses, institutions, or individuals to purchase credits on a voluntary basis to offset their carbon footprint and achieve internal sustainability goals (World Bank, 2023).

The following presents a sample of active registries and projects within the voluntary carbon market for 2023–2024 (Climate Focus, 2025):

Market/Registry	Country/ Region	Estimated Trading Volume (2023–2024)	Notes
Verra (VCS)	Global (HQ: USA)	~308 $MtCO_2e$ (2023); ~287 $MtCO_2e$ (2024)	Largest VCM registry; faced scrutiny over credit quality; issuance volumes declined slightly in 2024.
Gold Standard	Global (HQ: Switzerland)	Data not specified	Focuses on sustainable development and high-integrity projects.
American Carbon Registry (ACR)	USA	Data not specified	One of the oldest registries; emphasises rigorous standards.

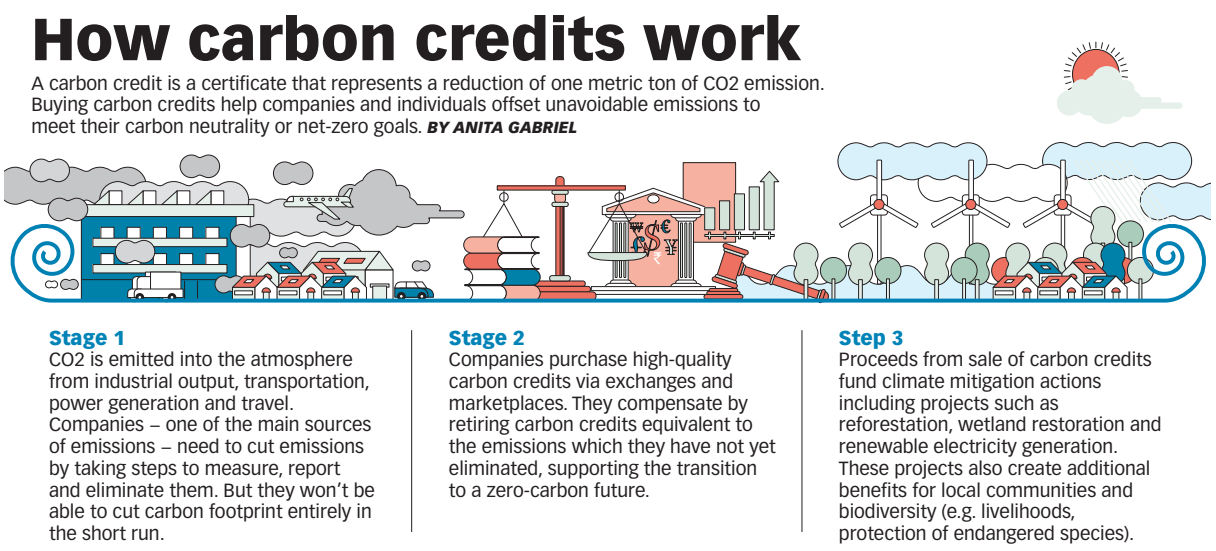
Market/Registry	Country/ Region	Estimated Trading Volume (2023–2024)	Notes
Climate Action Reserve (CAR)	USA	Data not specified	Known for standardised protocols and North American projects.
Plan Vivo	Global (HQ: UK)	Data not specified	Specialises in community-based forestry and land-use projects.
Global Carbon Council	Qatar (Global projects)	Data not specified	Emerging registry focusing on the MENA region.
China Certified Emission Reduction (CCER)	China	Data not specified	China's voluntary offset program; details on volumes are limited.
Colombia National Registry	Colombia	Data not specified	Colombia has a national registry and is revising its carbon tax to boost credit supply.
Kenya Voluntary Market	Kenya	Data not specified	Active in nature-based solutions; attracting international investment.
Cambodia Voluntary Market	Cambodia	Data not specified	Emerging market with supportive policies for carbon projects.
Mexico Voluntary Market	Mexico	Data not specified	Developing regulatory frameworks to support carbon trading.
Peru Voluntary Market	Peru	Data not specified	Engaged in Reducing Emissions from Deforestation and Forest Degradation (REDD+) projects; political stability affects investment.

Carbon credits are typically generated through carbon projects initiated and managed by project owners. These projects involve activities that either avoid emissions, such as replacing coal-fired power with solar energy, or remove carbon from the atmosphere, such as through reforestation or soil carbon sequestration. Many of these projects also deliver co-benefits, including biodiversity protection and support for local communities (Gold Standard, 2024). However, there are reports that single out some negative impacts of Carbon credit activities.

Carbon offsetting, where polluters pay to reduce emissions elsewhere, has grown rapidly but faces criticism. Investigations by Dunne and Quiroz (2023) reveal some flaws in some carbon-offset projects, particularly regarding human rights violations and exaggerated environmental benefits. According to the same authors, a key concern is the harm caused to Indigenous peoples and local communities. In 72 per cent of examined cases, Indigenous groups were displaced, threatened, or had their land rights violated to make space for offsetting schemes, despite being long-standing protectors of ecosystems. In countries like the Republic of the Congo, Kenya, and across the Amazon, communities reported evictions, cultural site destruction, and lack of consultation.

Another major issue discussed in Dunne and Quiroz's article is the overstatement of emissions reductions. In 43 per cent of the reports, carbon-offset projects were found to exaggerate their climate benefits, sometimes selling credits for forests later destroyed or using accounting tricks.

These criticisms require a full-fledged investigation, which falls beyond the scope of this research that tries to focus more on the Shariah compliance of carbon credits. Premised on this approach, the Carbon credit activities are generally deemed by relevant stakeholders as sustainable, but without overruling some violations and malpractices.



Source: Medium, 2022

The diagram illustrates the basic process of how carbon credits function in three key stages:

Stage 1—Emissions Occur

Carbon dioxide (CO_2) is released into the atmosphere through various human activities such as manufacturing, transportation, and energy generation. While companies are expected to measure, report, and reduce these emissions, they cannot eliminate them entirely in the short term.

Stage 2—Purchasing Carbon Credits

Before credits can be issued, each project must undergo a rigorous validation and verification process conducted by independent third-party organisations. A project developer, often a specialised consultant, prepares detailed documentation outlining the expected emissions reductions. Standards bodies such as Verra, which administers the Verified Carbon Standard, and the Gold Standard then assess the project to confirm its actual climate impact (Verra, 2024; Gold Standard, 2024).

Once verified, carbon credits are issued and registered on official platforms. These credits can then be sold in either compliance or voluntary markets. When a credit is used to offset emissions, it is permanently retired to ensure it cannot be resold or double-counted (ICAP, 2024).

Stage 3—Funding Climate Projects

The funds generated from selling carbon credits are used to support climate-friendly projects such as reforestation, wetland conservation, and renewable energy initiatives. These projects not only reduce emissions but also offer social and environmental benefits—such as biodiversity protection and improved livelihoods for local communities.

Carbon credits come in a variety of types and are created by a wide range of programs focused on decreasing or eliminating greenhouse gas emissions. Some rely on natural remedies such as tree planting, forest conservation, and land rehabilitation. Others concentrate on clean energy generation via solar power, wind farms, or community biogas systems. Additional projects include improving agricultural techniques, better waste management, and increasing energy efficiency in both homes and industries.

Source: Global Green Institute, 2025

Key Entities in the Carbon Credit Ecosystem

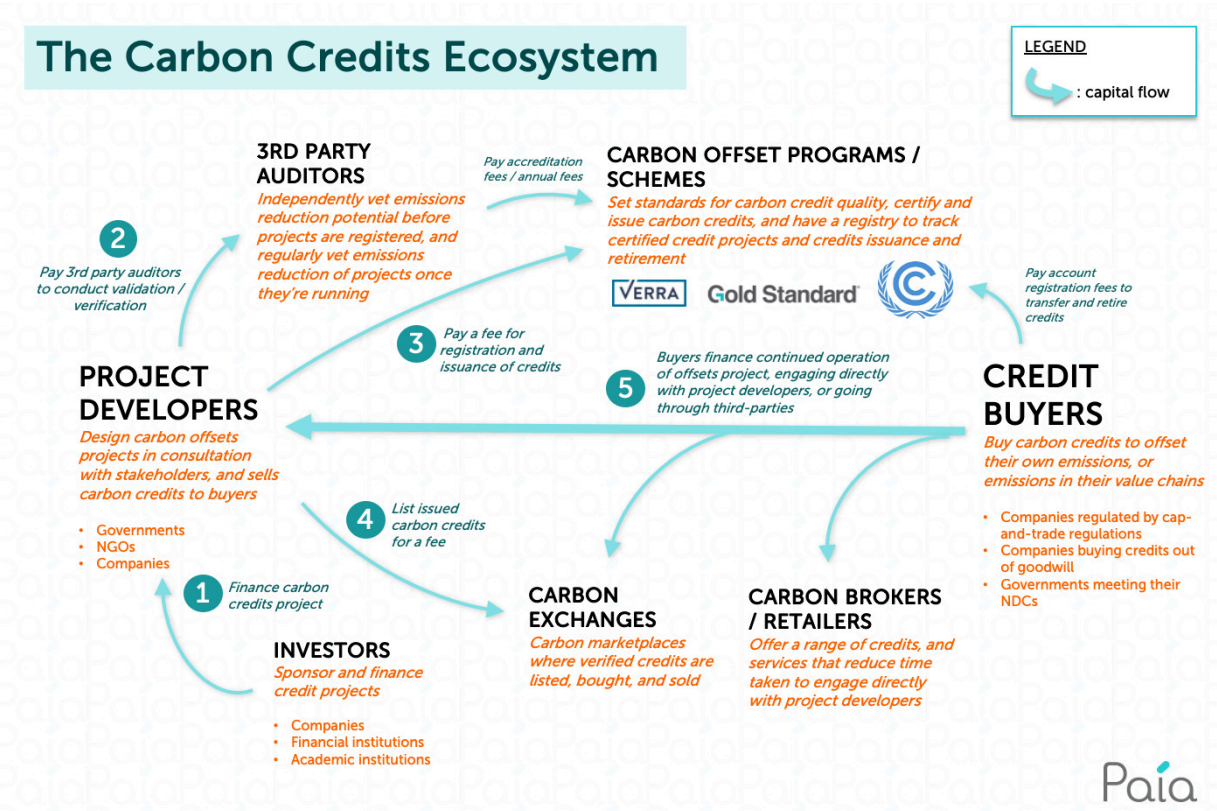
The carbon credit ecosystem consists of interconnected entities that collectively enable the creation, verification, issuance, trade, and retirement of carbon credits. Each entity plays a critical role in ensuring the environmental integrity, transparency, and credibility of carbon markets. The following outlines the specific functions and interactions among the key players:

Players	Role	Functions
Investors	Investors provide the initial capital required to develop carbon offset projects. These may include private companies and financial institutions seeking to support climate-positive initiatives.	▶ Finance the design and implementation of emission reduction or removal projects. ▶ Partner with project developers to fund activities with potential for carbon credit generation. ▶ Receive a return on investment through the future sale of carbon credits.
Project Developers	Project developers are the architects of carbon credit projects. They conceptualise, design, and implement projects that reduce or remove GHG emissions.	▶ Develop and manage projects such as renewable energy, reforestation, or methane capture. ▶ Consult with stakeholders, including local communities and regulators. ▶ Contract third-party auditors to validate and verify emission reductions. ▶ Submit project documentation to standards bodies for registration and credit issuance. ▶ Sell issued carbon credits to buyers in voluntary or compliance markets.
Third-Party Auditors	Auditors ensure the credibility of the carbon crediting process by conducting independent assessments.	▶ Validate project design and methodology before implementation. ▶ Provide independent assurance that the project meets environmental integrity standards. ▶ Maintain regular monitoring and auditing throughout the crediting period.

Players	Role	Functions
Carbon Offset Programs/ Standards Bodies, e.g. Verra (Verified Carbon Standard), Gold Standard, (UNFCCC)	These organisations set the rules and certify carbon credits to ensure consistency, quality, and transparency.	▶ Develop and publish standards and methodologies for eligible projects. ▶ Register validated projects in official registries. ▶ Assess verification reports submitted by auditors. ▶ Issue and track certified carbon credits. ▶ Ensure avoidance of double-counting by maintaining registries for credit issuance and retirement.
Carbon Exchanges	Carbon exchanges serve as trading platforms where verified credits are listed, bought, and sold.	▶ Facilitate market-based pricing for carbon credits. ▶ Improve transparency and liquidity in the carbon market. ▶ Enable both voluntary and compliance market participants to trade credits efficiently.
Carbon Brokers and Retailers	Brokers and retailers act as intermediaries between project developers and credit buyers, often streamlining access and reducing transaction complexity.	▶ Provide consulting services to help buyers find suitable credits. ▶ Offer bundled services including due diligence, credit verification, and registry management ▶ Facilitate the purchase and retirement of credits on behalf of clients.
Credit Buyers	Credit buyers are end-users who purchase carbon credits to compensate for their emissions or contribute to sustainability goals.	▶ Offset unavoidable emissions to meet regulatory obligations or voluntary commitments. ▶ Support carbon reduction projects as part of corporate social responsibility or net-zero targets. ▶ Purchase credits directly from project developers or through brokers and exchanges. ▶ Retire credits to ensure they are not reused or resold.

Source: Authors' own

The diagram below shows the flow of carbon credits and the roles of different entities involved in the ecosystem. It highlights how carbon credits are developed, verified, certified, and eventually sold to buyers who use them to offset their emissions.



Source: PAIA Consulting, 2021

Financial Reward

Carbon credit systems are underpinned by the principle of financial incentives for reducing or removing GHG emissions. These incentives are crucial for accelerating climate action, particularly in sectors or regions that lack sufficient funding. Two main financial rewards arise from carbon crediting: funding for emission-reduction projects and market-driven motivation for emitters to reduce their own carbon footprint.

Projects that reduce emissions, such as forest conservation, renewable energy installations, or methane capture, often require significant capital investment. One of the primary ways these projects secure funding is through the sale of carbon credits. By converting verified emissions reductions into tradeable credits, project developers gain a financial return that supports the project's feasibility and long-term operation. However, to qualify, these projects must demonstrate additionality, meaning the emissions reductions would not have occurred without the revenue from credit sales. Without this condition, a project would not be eligible to generate credits under most certification schemes.

As the price of carbon credits increases, the financial reward for verified emissions reductions becomes more attractive. This makes emission-reduction activities more economically viable, even in low-income regions. Increasing carbon prices also send a signal to the market, making it more costly to purchase enough credits to offset emissions. This encourages businesses and individuals to cut their emissions directly, typically at a lower cost than purchasing credits.

The tradeable nature of carbon credits enables emission reduction projects from any part of the world to access international funding. This creates a global mechanism whereby projects that deliver the most cost-effective and verifiable reductions are financially rewarded, regardless of geographic location. In this way, carbon markets help channel resources to high-impact areas, especially in developing countries.

Carbon credit prices also vary based on project type and quality. For instance, credits from nature-based solutions (NBS), such as forest preservation or mangrove restoration, often command higher prices due to their co-benefits, including biodiversity protection, water conservation, and support for local livelihoods. In contrast, credits from industrial projects such as renewable energy or landfill gas capture may be priced lower. Another pricing variable is the vintage of the credit—the year the emissions reduction occurred—with newer vintages generally perceived as more valuable.

However, not all carbon credits are created equal. Credits also differ in terms of environmental integrity, or the true amount of CO_2 they effectively reduce or remove. While quality variations sometimes influence price, the market has historically lacked consistent transparency and evaluation tools. In response, carbon intelligence and ratings platforms, such as Sylvera, have emerged to assess the quality and credibility of carbon credits, enabling buyers to make informed decisions and avoid low-impact or poorly verified projects.

Beyond project-based dynamics, macroeconomic factors also affect credit prices. These include demand trends, investor confidence, speculative trading, and policy developments. In recent years, voluntary carbon markets have seen increasing price trends, reflecting stronger climate commitments by companies and governments.

The Difference between Carbon Credits and Allowances

Carbon credits and carbon allowances are both instruments designed to mitigate greenhouse gas emissions, but they operate within different frameworks and serve distinct purposes. Carbon credits are generated by projects that actively reduce or remove emissions, such as reforestation or methane capture from palm oil mill effluent (POME), and are typically traded in voluntary markets. These credits allow organisations to offset their emissions by investing in environmental projects. In contrast, carbon allowances are permits issued by regulatory bodies under cap-and-trade systems, granting companies the right to emit a specific amount of greenhouse gases. Companies must hold sufficient allowances to cover their emissions or face penalties, creating a financial incentive to reduce emissions. While both tools aim to lower overall emissions,

carbon credits focus on offsetting emissions through external projects, whereas carbon allowances regulate emissions by setting caps within compliance markets. The following table summarises the main differences:

	Carbon Credits	Carbon Allowances
Definition	Carbon credits represent quantifiable reductions or removals of GHG emissions that can be bought or sold as units. They are generated by projects or activities that reduce emissions or enhance carbon removal.	Carbon permits/allowances are granted by regulatory authorities to compliance entities covered by Emissions Trading Schemes (ETSs) to emit a certain amount of GHG within a defined time period.

Source: Bursa Malaysia, 2023

What Is the Difference between Carbon Credits and Carbon Offsets?

While often used interchangeably, carbon credits and carbon offsets are distinct concepts. Understanding their differences is essential for stakeholders navigating carbon markets and making credible emissions reduction claims.

Carbon Credit: A Tradeable Certificate

A carbon credit is a certified and verified unit representing the reduction or removal of one metric ton of carbon dioxide equivalent (CO_2e) from the atmosphere. These credits are generated by projects that actively reduce emissions, such as reforestation or afforestation, renewable energy production (e.g., solar or wind farms), etc.

After verification by a recognised standard body—such as Verra (Verified Carbon Standard), Gold Standard, or the UN Clean Development Mechanism—a credit is issued and recorded in a registry. At this stage, the carbon credit is simply an asset that can be traded in either voluntary or compliance carbon markets. It is not yet tied to any specific emissions offset claim.

Carbon Offset: The Act of Neutralising Emissions

A carbon offset refers to the act of compensating for a specific amount of GHG emissions by using carbon credits. In practical terms, when a company or individual purchases a carbon credit and chooses to retire it—meaning it is permanently removed from circulation and cannot be sold again—the credit becomes a carbon offset. This act legally and ethically allows the buyer to claim that their emissions have been neutralised.

In essence, a carbon credit is a potential offset, while a carbon offset is a carbon credit that has been retired to compensate for emissions.

Implications for Corporate Climate Claims

This distinction has important implications, particularly for companies making environmental claims such as 'carbon neutral' or 'net zero'. Regulatory guidance and voluntary standards (e.g., the Science Based Targets initiative, ISO 14064, or the Voluntary Carbon Markets Integrity Initiative) emphasise that:

(a) Offsetting must be based on high-quality, verified credits.

(b) Claims must be supported by proof of retirement, not just ownership.

(c) Companies should prioritise internal emissions reduction before relying heavily on offsets.

In light of growing scrutiny over 'greenwashing,' clearly communicating the difference between carbon credits held and carbon offsets claimed is becoming a governance and reputational necessity.

In light of growing scrutiny over 'greenwashing,' clearly communicating the difference between carbon credits held and carbon offsets claimed is becoming a governance and reputational necessity.

LEGAL CHARACTERISATION OF CARBON CREDITS

The legal nature of Voluntary Carbon Credits (VCCs) varies significantly across jurisdictions. In many countries, VCCs are recognised as a form of **intangible property**, granting holders certain proprietary rights. Conversely, in other jurisdictions, they are treated as a bundle of contractual rights, emphasising the agreements between the parties involved (ISDA, 2021).

> **The legal nature of Voluntary Carbon Credits (VCCs) varies significantly across jurisdictions. In many countries, VCCs are recognised as a form of intangible property, granting holders certain proprietary rights. Conversely, in other jurisdictions, they are treated as a bundle of contractual rights, emphasising the agreements between the parties involved.**

In the United States, legal classification varies by state: California may not recognise VCCs as **property**, while Louisiana has ruled them part of a **property's rights**. This inconsistency hinders cross-state enforcement. Some propose treating VCCs as **commodities**. In Australia, VCCs (ACCUs) are defined as **personal property** under the 2011 Act and may serve as investment instruments or collateral. Singapore treats VCCs as **intangible property** if they meet criteria such as being definable and transferable, supported by the Carbon Pricing (Amendment) Bill. In the EU, only carbon allowances under the EU ETS are considered **financial instruments**, with no unified legal definition for VCCs (Ben McQuhae & Co., 2023).

Based on the above, there is no statutory definition of carbon credit globally, However, under certain jurisdictions such as the English law, the starting point for determining the legal nature of a 'thing' is to determine whether or not that thing constitutes property, and the test for this is whether it is 'definable, identifiable by third parties, capable in its nature of assumption by third parties, and have some degree of permanence or stability' (Ben McQuhae & Co., 2023).

Under English law, for an asset to be recognised as property, it must satisfy the criteria established in *National Provincial Bank v Ainsworth* [1965] AC 1175, which include being:

1. Definable: Carbon credits are issued with unique serial numbers and are documented within specific carbon registries, rendering them clearly definable.
2. Identifiable by third parties: These credits are recorded on public or semi-public registries, allowing third parties to identify and verify their existence and ownership.
3. Capable of assumption by third parties: Carbon credits are transferable and can be traded between parties, subject to the rules and procedures of the relevant carbon registry, indicating their capability of assumption by third parties.

4. Characterised by some degree of permanence or stability: Once issued, carbon credits remain valid and are recorded in the registry until they are retired or cancelled, demonstrating a degree of permanence and stability.

This divergence in legal characterisation influences several aspects of VCC transactions in terms of:

- Creation and Transfer: The processes for creating, buying, selling, and retiring VCCs differ based on their legal status.
- Security Interests: The ability to use VCCs as collateral or to secure interests is contingent upon their recognition as property or contractual rights.
- Insolvency Treatment: In insolvency scenarios, the treatment of VCCs, including considerations like netting and priority of claims, depends on their legal classification.

Given these complexities, stakeholders engaging in VCC transactions should seek jurisdiction-specific legal advice to navigate the varying legal frameworks effectively**.**

From an accounting perspective, and under IFRS Accounting Standards, there is currently no specific guidance on accounting for carbon offsets and credits, leading to diverse practices. Companies must assess the nature and purpose of these credits to determine appropriate accounting treatment. If carbon credits are acquired for resale, they may be classified as **inventory** under IAS 2. Conversely, if held for internal use to offset emissions, they could be recognised as **intangible assets** under IAS 38, provided they meet the asset recognition criteria. The measurement of these assets typically follows the cost model, though fair value measurement is permissible under certain conditions, such as the existence of an active market (KPMG, 2023).

In Malaysia, an asset is defined as 'a present economic resource (i.e. a right that has the potential to produce economic benefits) controlled by the company as a result of past events' (KPMG, 2023). Bursa Malaysia also looked into the legal aspect of carbon credits. Their legal perspective is based on the lack of legislation in Malaysia prescribing the legal characteristics of carbon credits. Hence, they are likely to be regarded as **'intangible property'** with the holder of such 'intangible property,' which is digital in nature, being entitled to the relevant rights and subject to the obligations that are prescribed under the rules of the relevant carbon registries (Bursa Malaysia Islamic Services, n.d.).

THE SHARĪʿAH CHARACTERISATION OF CARBON CREDITS

The Sharīʿah recognition of carbon credits as legitimate assets will be examined in this section from various perspectives.

A Carbon Credit as an Intangible Asset

Conventionally, an intangible asset is defined as 'an identifiable non-monetary asset without physical substance held for use in the production or supply of goods or services, for rental to others, or for administrative services' (IASB, 2022). Considering these legal aspects, carbon credits are deemed intangible assets as they are non-monetary in nature, without physical substance, identifiable either by being separable or arising from contractual or legal rights. Being digital in nature and representing a quantity of carbon reduction or removal from the atmosphere further attests to their intangibility, as the volume of carbon reduced, avoided or removed cannot be fully acquired and ascertained by the participants except by assuming that such quantity has been offset.

Despite these features, legal authorities differed as to whether intangible assets are **proprietary rights** (Usmani, 2011). Some classical jurists were of the view that intangible assets are real proprietary rights, while others held that intangible assets are not **proprietary** rights but would enable their holders to generate financial benefits (al-Sanhuri, n.d.). Many contemporary jurists have echoed the first-mentioned position and concluded that intangible assets fall under the category of **property** (Ngadimon, 2005). This research argues that carbon credits comprise proprietary rights with financial aspects. This is articulated as follows:

Carbon credits are similar to patents, trademarks, copyrights, and goodwill in being non-physical and identifiable. These assets are expected to provide future economic benefits and are recognised in financial statements when specific criteria are met.

It is argued that carbon credits as intangible assets bear resemblance to intangible assets approved by Sharīʿah bodies. In Malaysia, intangible assets have been approved by the Shariah Advisory Councils (SACs) of both Bank Negara Malaysia, and the Securities Commission. SAC-BNM decided that intangible assets, which are non-debt in nature, such as usufructs, services and financial rights, are also valid underlying assets for the *wakālah*-based **Malaysian Government Investment Issue (MGII)** (BNM, 2024). SAC-SC also approved intangible assets as the subject matter of an *ijārah* contract. The resolution reads (SC, 2018):

Forms of Asset and Usufruct that can be leased:

(a) Tangible assets, such as a house; and

(b) Intangible assets, such as rights (e.g. right of intellectual properties) and usufruct (e.g. usufruct of an asset).

There is an agreement between the Malaysian Sharīʿah perspective and the international perspective on the Sharīʿah compliance of intangible assets. The International Islamic Fiqh Academy of the Organisation of Islamic Cooperation (IIFA-OIC) in its landmark Resolution No. 43 (5/5) recognised that incorporeal rights—such as trademarks, patents and, by extension, other modern intangible assets—have monetary value and can be traded, as long as doing so does not violate any Sharīʿah prohibition. The resolution states:

> First:
>
> Trade names, commercial titles, trademarks, copyrights and patents comprise special rights belonging to their owners. In contemporary custom, they have a recognised financial value in that people regard them as wealth. These rights are acknowledged under Sharīʿah, and it is not permissible to infringe upon them.
>
> Second:
>
> It is permissible to conduct transactions involving a trade name, commercial title, or trademark, and to transfer any of them in exchange for financial compensation, provided there is no deception, fraud, or cheating—considering that these have become recognised financial rights.
>
> Third:
>
> Copyrights and patents are protected under Sharīʿah, and their owners have the right to dispose of them. It is not permissible to violate them (IIFA-OIC, 1988).

This resolution establishes a few Sharīʿah principles regarding the intangible assets mentioned. First, intangible assets are **rights** that can be owned, have **financial value**, and are tradeable, which entails transferability and the right of disposal. Carbon credits fulfil these Sharīʿah aspects as they are owned, bought and sold for a price, and tradeable in carbon credit exchanges.

Another dimension for consideration of carbon credits is that carbon allowances are actually **licenses** to issue carbon up to a certain cap. **Licenses** are viewed by Sharīʿah as intangible rights issued by an authority for an entity to undertake certain activities with clear terms and conditions (Al-Qaradāghī, 2011).

A Carbon Credit as a Financial Right (*Ḥaqq Mālī*) with a Financial Value

After establishing in the previous section that carbon credits are intangible assets, the question is whether these assets are rights with financial value. That they are *ḥaqq mālī*, according to the Bursa Sharīʿah pronouncement, is evidenced by the fact that:

> Carbon credits give rights to their holders based on the rules of carbon registries to offset their unavoidable carbon emissions with a value based on a carbon pricing mechanism. The financial aspect of an intangible right is generally permissible in Shariah.

Thus, intangible assets can be bought, sold, and disposed of. This is solidified by AAOIFI's position on intangible assets. In Sharīʿah Standard No. 42, the financial aspect of intangible rights is well recognised. Paragraph 3\3 of the Standard states:

> '3/3 Rights to intangible assets:
>
> 3/3/1 These are **financial rights** to intangible assets, whereby the owner is exclusively entitled to their output.'

To further understand the financial aspect of a right, one may compare it with the financial value of usufruct or benefit. Carbon credits and benefits/usufructs are similar in their intangibility (Abdullah, 2024).

Sharīʿah scholars have two major views with regard to what constitutes property (*māl*), and this will also apply to intangible assets. To be more specific, the schools of classical Islamic jurisprudence differ in their recognition of intangible assets (*manfaʿah*) as property (*māl*):

The Majority View (Shāfiʿī, Mālikī, and Ḥanbalī Schools): These schools consider both tangible and intangible assets as *māl*, provided they offer lawful benefit and are acknowledged by custom. Qāḍī ʿAbd al-Wahhāb (Mālikī) defines *māl* as 'anything that can be benefited from and accepted as compensation (*'iwaḍ*)' (ʿAbd al-Wahhāb, 2013), and Ibn Qudāmah (Ḥanbalī) states that *māl* is 'anything from which benefit can be derived' (Bouheraoua *et al.*, 2015).

Ḥanafī School: Traditionally, the Ḥanafīs restrict *māl* to tangible items that can be physically possessed. Classical scholars like al-Sarakhsī (1993) and Ibn ʿĀbidīn (1992) assert that intangible benefits and rights do not qualify as *māl.* However, the Ḥanafīs consider usufruct (an intangible asset) as *māl* when structured in an exchange contract such as *ijārah* (Ḥammād, 2012).

The view of the majority of Sharīʿah scholars is the one adopted by the IIFA-OIC, the Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI) and the SACs of both Bank Negara Malaysia and the Securities Commission Malaysia. Thus, carbon credit is a financial right with a financial value.

Carbon Credits Recognised by Sharīʿah as a Customary Practice

Custom is a source of Sharīʿah, and scholars use it to determine customary practices that are acceptable from Sharīʿah perspective. With clear conditions, namely that a customary practice is widespread and does not contravene any Sharīʿah ruling or principle of Sharīʿah, many activities are deemed Sharīʿah compliant. Speaking about the types of rights, Sheikh Taqiy Usmani (2011, p. 80) elaborated on customary rights thus:

Second: Customary Rights

What is meant by customary rights are the rights that are established through usage and practice. What is meant by usage is a customary practice that people follow without a legislative ruling. In Islamic jurisprudence, rights established by usage without a Sharīʿah ruling are not recognised. The origin in Sharīʿah is that rights must be established through legislation.

Sheikh al-Qaradāghī (2011, pp. 67–68) observed that sometimes intangible assets are more valued than tangible assets. He puts it,

> Intangible rights fall under a type of complete ownership in our view, because they constitute permanent ownership that does not expire for the owner, in addition to the **prevailing custom** that these rights are valued at large sums which may exceed those of tangible assets.

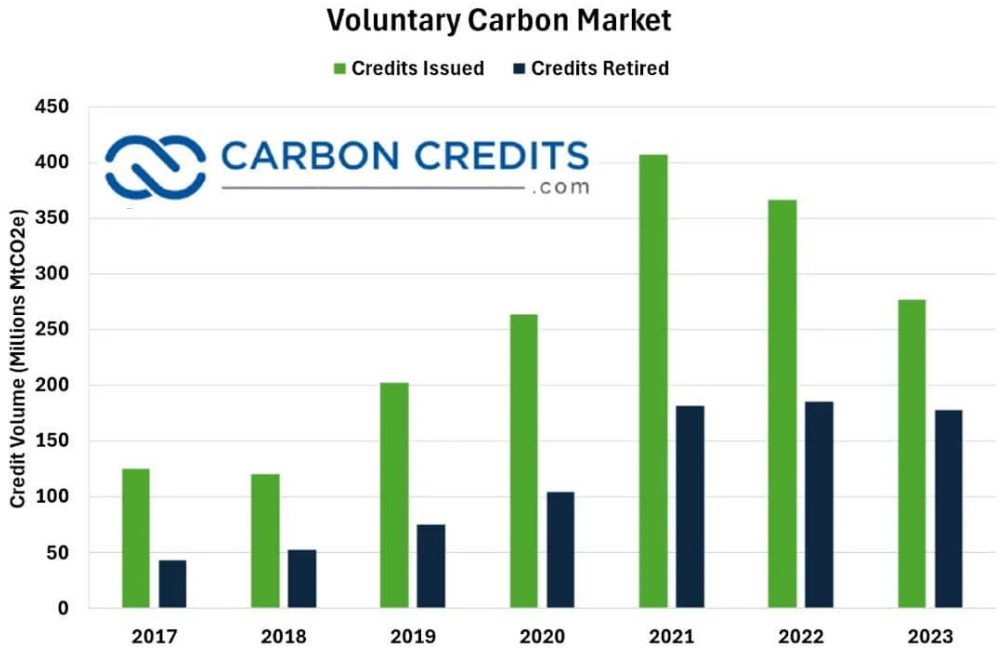
To show how carbon credits have become globally customary, statistics indicate that, as of 2025, nearly 25 per cent of global emissions are covered by carbon pricing instruments, such as taxes and cap-and-trade systems, with the potential to triple in scope by 2030 (Trellis, 2025).

To show how carbon credits have become globally customary, statistics indicate that, as of 2025, nearly 25 per cent of global emissions are covered by carbon pricing instruments, such as taxes and cap-and-trade systems, with the potential to triple in scope by 2030.

In the voluntary carbon market (VCM), approximately 2 billion units of carbon credits have been issued globally, with Verra accounting for over 1.2 billion. About 180 million credits were retired in 2024, maintaining the same level as the previous year. However, credit prices declined by 20 per cent, averaging $4.80 per ton, due to oversupply and market uncertainty. The total market value was estimated at $1.4 billion.

Meanwhile, the EU Emissions Trading System (EU ETS), the world's largest compliance carbon market, reduced its cap by 90 million allowances and extended coverage to the maritime sector, contributing to a 5 per cent emissions reduction. Allowance prices ranged from €50–80 per tonne. Other systems, like California's and Regional Greenhouse Gas initiative (RGGI) traded at lower price points.

Corporations like Shell and Microsoft remained dominant market players, retiring 14.9 million and 9.4 million credits, respectively. With 36 emissions trading systems operating and 22 more in development, the expansion of carbon markets is accelerating, reinforcing their role in achieving net-zero targets and funding low-carbon transitions (World Bank Group, 2024). The following chart shows the credits issued and the credits retired.



Source: Jennifer, 2025

Carbon Credits as Beneficial Assets

Sharīʿah lays great emphasis on the beneficial aspect of an asset. The usable asset must not only be Sharīʿah compliant but also useful and create added value to relevant people (al-Lahim, 2008). This is a fundamental objective of any transaction, so that people's dealings are purposeful and meaningful. The biggest benefit of carbon credits is environmental protection by removing or reducing CO_2 from the atmosphere. Corporations are increasingly aligning with sustainable and net-zero agendas. According to McKinsey, the number of companies with net-zero pledges doubled from 500 in 2019 to over 1,000 in 2020. To achieve global net-zero targets, corporations must reduce emissions as much as possible. For emissions that cannot be eliminated, purchasing carbon credits offers a solution. In the current business environment, acquiring carbon credits enhances a company's reputation, attracts socially conscious investors, and supports sustainability and carbon reporting to stakeholders, ensuring accountability for their net-zero commitments. All these are benefits recognised by Sharīʿah.

This research argues that the Sharīʿah compliance of carbon credits is well grounded in the four elements discussed in the section above. One of the principles that follows from the previous discussion is that the Sharīʿah compliance of carbon credits allows them to be traded in carbon credit exchanges. Some of the details of tradability will be highlighted in the course of explaining Bursa Carbon Credit Exchange when discussing case studies.

MAQĀṢID AL-SHARĪʿAH AND ETHICAL ANALYSIS

Carbon Credit Trading and *Maqāṣid al-Sharīʿah*: Preserving the Environment

Maqāṣid al-Sharīʿah refers to the higher objectives or goals that the Sharīʿah seeks to achieve, primarily the preservation of fundamental benefits (*maṣāliḥ*) for humanity. Classical jurists enumerated objectives like preservation of religion, life, intellect, lineage, and property. While environmental protection (*ḥifẓ al-bīah*) was not explicitly listed by early scholars, contemporary Islamic scholarship recognises it as inherent to these objectives—especially the preservation of life and progeny, since a healthy environment is essential for human survival now and for future generations (Yaakub & Nik Abdullah, 2020). Indeed, modern Islamic finance experts note that the *maqāṣid* share common principles with sustainability, emphasising preservation of the environment and society.

> **While environmental protection (*ḥifẓ al-bīah*) was not explicitly listed by early scholars, contemporary Islamic scholarship recognises it as inherent to these objectives—especially the preservation of life and progeny, since a healthy environment is essential for human survival now and for future generations.**

Sharīʿah texts underscore humanity's role as stewards (*khulafāʾ*) of the Earth. The Qurʾān warns that corruption and ecological harm result from human wrongdoing:

ظَهَرَ ٱلْفَسَادُ فِى ٱلْبَرِّ وَٱلْبَحْرِ بِمَا كَسَبَتْ أَيْدِى ٱلنَّاسِ لِيُذِيقَهُم بَعْضَ ٱلَّذِى عَمِلُوا۟ لَعَلَّهُمْ يَرْجِعُونَ

> Corruption has spread on land and sea as a result of what people's hands have earned, so that Allah may cause them to taste the consequences of some of their deeds and perhaps they might return to the Right Path (Qurʾān, 30:41).

This verse is often cited to remind believers that environmental degradation is a consequence of misbehaviour and that caring for the Earth is a moral duty. Numerous hadiths (Prophetic traditions) likewise promote environmental care. For example, Anas bin Malik narrated that Allah's Messenger (ﷺ) said:

مَا مِنْ مُسْلِمٍ يَغْرِسُ غَرْسًا، أَوْ يَزْرَعُ زَرْعًا، فَيَأْكُلُ مِنْهُ طَيْرٌ أَوْ إِنْسَانٌ أَوْ بَهِيمَةٌ، إِلاَّ كَانَ لَهُ بِهِ صَدَقَةٌ.

> There is no Muslim who plants a tree or sows seeds, and then a bird, or a person, or an animal eats from it, except that it is regarded as a charitable gift for him (al-Bukhari, 1422H, hadith no. 2320).

Such teachings highlight that serving the environment—by greening the earth and avoiding waste or harm—is a form of worship and charity in Islam. In short, protecting nature aligns with Sharīʿah objectives of preventing harm and promoting the common good.

From an Islamic perspective, carbon credit trading can be evaluated through the lens of *maqāṣid* and classical *fiqh*. Preserving the environment is a public interest (*maṣlaḥah*) that Sharīʿah encourages, and any tool that effectively reduces harm (in this case, mitigating climate change) supports that objective. The principle 'Harm shall neither be initiated nor reciprocated' (*lā ḍarar wa lā ḍirār*) in Islamic law would endorse initiatives that prevent the serious harms of pollution and ecological damage. Ibn ʿAbbās (RA) narrated that Allah's Messenger (ﷺ) said:

لَا ضَرَرَ وَلَا ضِرَارَ

'Harm shall neither be initiated nor reciprocated' (Ibn Ḥanbal, 2001, hadith no. 2865; Ibn Mājah, 2009, hadith no. 2341).

Carbon markets, if properly regulated, translate this ethical duty into practical action by making polluters accountable and by funding green projects. This aligns with the Islamic concept of accountability (*muḥāsabah*) for one's impact on Allah's earth.

Crucially, carbon credit transactions must be structured to avoid any Sharīʿah pitfalls. Transparency in how credits are verified and retired is needed to prevent fraud or undue uncertainty (each credit must correspond to a real verified reduction in emissions). Additionally, the intention should be genuine environmental mitigation, not merely a license to freely pollute. When operated with excellence (*ihsān*) and proper oversight, carbon trading serves the *maqāṣid* by reducing harm and promoting justice—polluters pay for the damage and those mitigating emissions are rewarded, a concept harmonious with the Islamic idea of bearing responsibility (*ḍamān*) for one's impact on others.

When operated with excellence (*ihsān*) and proper oversight, carbon trading serves the *maqāṣid* by reducing harm and promoting justice—polluters pay for the damage and those mitigating emissions are rewarded.

The higher objectives of Islamic law (*maqāṣid al-Sharīʿah*) are deeply connected to environmental preservation and climate protection. This connection involves both the development and maintenance of the environment and the prevention of its depletion, destruction, or corruption—whether intentional or unintentional. This is evident when we consider the statements of scholars regarding the essential *maqāṣid* (*ḍarūriyyāt*). For example, Imām al-Shāṭibī said that preservation involves two aspects: one that maintains and reinforces the foundations (considered from the angle of existence), and another that prevents harm or deterioration (considered from the angle of non-existence).

Undoubtedly, environmental protection falls within all five essential *maqāṣid*. A closer look reveals that environmental preservation can be viewed as an overarching objective that fits within each of the five individually, as follows (Abdullah, 2024):

1. Preservation of Religion (*Ḥifẓ al-Dīn*)

   This *maqṣad* is closely linked to caring for the environment and its components, as Allah created and subjugated nature for human benefit and sustainability. The Qurʾān warns against corrupting or altering nature and commands gratitude. Harming the environment contradicts the essence of true religiosity and the role of humans as stewards (*khulafāʾ*) on Earth. It also opposes the justice and benevolence commanded by Allah and contradicts His instructions to build and improve the Earth, as seen in Qurʾānic verses like al-Nahl (16:90) and al-Aʿrāf (7:85). Hence, the objective of preserving religion implicitly calls for climate protection.

2. Preservation of Life (*Ḥifẓ al-Nafs*)

   Islamic law strongly emphasises the sanctity of life and prescribes all measures to protect and sustain it. Environmental degradation, pollution, and resource depletion now pose serious threats to human life and public health. Disasters related to climate change and pollution are major risks that contradict the objective of preserving life.

3. Preservation of Lineage (*Ḥifẓ al-Nasl*)

   Preserving human lineage is a pillar of societal sustainability and national strength. Climate degradation caused by carbon emissions jeopardises future generations. The harm may not be immediate but accumulates and worsens over time, placing future generations in peril and burdening them with the consequences of present-day environmental mismanagement.

4. Preservation of Intellect (*Ḥifẓ al-ʿAql*)

   Islam prohibits anything that harms the intellect, as the mind is essential for accountability (*taklīf*). Scientific evidence links climate pollution—particularly carbon emissions—to adverse effects on brain cells, possibly contributing to mental disorders. Thus, environmental negligence that causes cognitive harm violates the objective of preserving intellect.

5. Preservation of Wealth (*Ḥifẓ al-Māl*)

   Wealth is a foundation for civilisation and societal wellbeing. The Qurʾān commands its protection (e.g., al-Nisāʾ (4:5)). In today's world, environmental damage results in economic loss—from healthcare costs due to pollution-related illness, to decreased productivity and the depletion of valuable, often non-renewable, environmental services and resources. Climate change also undermines tourism, biodiversity, and agricultural productivity. Therefore, preserving wealth is directly connected to protecting environmental assets and preventing ecological degradation.

Does Sharīʿah (Indirectly) Allow Pollution by Permitting the Offsetting of Carbon Emissions?

Sharīʿah does not permit pollution, even indirectly. However, it recognises the practical necessity of addressing unavoidable emissions through mechanisms like carbon credit trading. This approach aligns with the Islamic legal principle of balancing harm and benefit (*mafsadah* and *maṣlaḥah*). Imam Ibn Taymiyyah says:

> وَالشَّرِيعَةُ تَأْمُرُ بِالْمَصَالِحِ الْخَالِصَةِ وَالرَّاجِحَةِ كَالْإِيمَانِ وَالْجِهَادِ؛ فَإِنَّ الْإِيمَانَ مَصْلَحَةٌ مَحْضَةٌ وَالْجِهَادُ وَإِنْ كَانَ فِيهِ قَتْلُ النُّفُوسِ فَمَصْلَحَتُهُ رَاجِحَةٌ.
>
> The Sharīʿah commands pure and predominant benefits such as faith (*īmān*) and jihad. Indeed, faith is a pure benefit, and jihad—although it involves the taking of lives—its benefit outweighs the harm (Ibn Taymiyyah, 2004, vol. 27, p. 230).

This statement reflects the foundational Islamic legal principle that Sharīʿah is built upon the attainment of benefit (*maṣlaḥah*) and the prevention of harm (*mafsadah*). When a certain action contains both harm and benefit, it may be permitted if the benefit clearly **outweighs** the harm.

The Islamic legal principle is that the greater *maṣlaḥah* outweighs the lesser *mafsadah*:

> إِذَا تَعَارَضَ الْمَصْلَحَةُ وَالْمَفْسَدَةُ قُدِّمَ أَرْجَحُهُمَا.

'When benefit (*maṣlaḥah*) and harm (*mafsadah*) conflict, the weightier of them is given precedence' (al-Zuḥaylī, 2006).

Generally, in Islamic jurisprudence, when faced with two conflicting interests, the lesser harm (*mafsadah*) may be tolerated to achieve a greater benefit (*maṣlaḥah*). Applying this to carbon emissions, the lesser harm of residual emissions is accepted to attain the significant benefit of environmental protection through carbon credit trading. This mechanism incentivises emission reductions and supports projects that mitigate climate change, aligning with the objectives of Sharīʿah, particularly the preservation of life and the environment.

Thus, while Sharīʿah strictly prohibits harm, it allows for pragmatic solutions like carbon credit trading to address environmental challenges. By tolerating minimal, unavoidable emissions in favour of substantial environmental benefits, this approach upholds the ethical and legal standards of Islam.

Case Study: Malaysian Frameworks on Carbon Credits

Malaysia has been at the forefront of integrating sustainability with Islamic finance, guided by the objectives of Sharīʿah. Regulatory initiatives such as Bank Negara Malaysia's Value-Based Intermediation (VBI) strategy explicitly link Islamic banking

practices to societal and environmental impact, essentially operationalising *maqāṣid al-Sharīʿah* in finance. Likewise, the Securities Commission Malaysia introduced the Sustainable and Responsible Investment (SRI) Sukuk framework to fund green projects, reflecting the view that protecting the environment is part of the Sharīʿah mandate of promoting welfare. These frameworks underscore that Islamic financial institutions should facilitate environmental stewardship alongside economic goals, resonating with Qurʾānic ethics and *maqāṣid* principles.

Specifically on carbon credits, Malaysian Sharīʿah authorities have studied and endorsed carbon trading as a Sharīʿah-compliant mechanism. In 2022, the Shariah Advisory Council (SAC) of the Securities Commission, through the Shariah Committee of Bursa Malaysia, issued a ruling on the proposed Voluntary Carbon Market (VCM). The Committee characterised carbon credits as 'assets recognised by Sharīʿah', given their tangible environmental benefit and defined property rights, and noted that purchasing credits to offset emissions is a legitimate and commendable aim. This contemporary fatwa aligns the carbon market with Islamic law, essentially viewing it as a form of ethical commodity trading in service of the public interest (*maṣlaḥah ʿāmmah*).

Following these scholarly endorsements, Malaysia launched the world's first Sharīʿah-compliant carbon exchange. In December 2022, Bursa Carbon Exchange (BCX) was introduced as a voluntary carbon market adhering to Sharīʿah requirements. The BCX went live in 2023, allowing trading of high-quality carbon credits from verified green projects, under guidelines vetted by Sharīʿah experts. This initiative reflects a practical implementation of *maqāṣid al-Sharīʿah*—it provides a marketplace to channel funds into environmental projects in a Sharīʿah-compliant way. By ensuring the contracts and credits meet Sharīʿah criteria, BCX enables Muslim investors and companies to participate in climate action without compromising their religious principles. Such moves by Malaysian authorities demonstrate how climate change mitigation can be pursued through Sharīʿah-compliant tools, reinforcing the full compatibility of Islam's financial ethics with sustainability. Indeed, the SAC of Bank Negara Malaysia and the SAC of SC Malaysia have continually emphasised that the *maqāṣid* of preserving life and offspring implicitly call for protecting the ecosystems on which life depends.

Following these scholarly endorsements, Malaysia launched the world's first Sharīʿah-compliant carbon exchange. In December 2022, Bursa Carbon Exchange (BCX) was introduced as a voluntary carbon market adhering to Sharīʿah requirements.

One question arises: Who is responsible for screening the nature of 'environmental projects' to determine their Sharīʿah compliance status before they are listed on the Bursa Carbon Exchange (BCX)?

With regard to this question, BCX is of the view that

> The goal of decarbonisation is to deliver substantial environmental benefits for humanity by supporting projects that reduce greenhouse gas emissions, contributing to global climate change mitigation and sustainability. This aligns with the view that environmental projects are inherently Sharīʿah-compliant, regardless of the specific activities involved. Such a holistic approach ensures that the environmental benefits extend beyond individual projects, promoting a healthier planet for future generations.[1]

Carbon credits come with certificates that have unique serial numbers on a carbon registry, each representing one metric ton of CO_2 equivalent that is either prevented from being emitted, reduced, or removed from the atmosphere. The certificate allows us to consider this as an asset recognised by Sharīʿah, which in turn provides the Sharīʿah Committee with the view of buying and selling of carbon credits as Sharīʿah compliant.

The *ijtihādī* approach adopted by the Sharīʿah Committee of Bursa is holistic in nature, emphasising the public or universal benefit (*maṣlaḥah āmmah*) for humanity as a whole, rather than focusing on the interests of a specific community or nation. Consequently, the inclusion of companies in the Bursa Carbon Exchange (BCX) is determined by their environmental impact rather than the Sharīʿah compliance of each specific activity they undertake.

This represents a novel form of comprehensive legal reasoning (*ijtihād kullī*), where Sharīʿah compliance is evaluated through the lens of universal *maqāṣid al-Sharīʿah*, without disregarding the Sharīʿah status of particular cases. To put it simply, while a company engaged in pig farming would render its business non-compliant from a Sharīʿah perspective, its effective efforts in removing or reducing carbon emissions from the atmosphere may still align with the higher objectives of Sharīʿah. This is because the preservation of the environment (*ḥifẓ al-bīʾah*) is one of the core objectives upheld by *maqāṣid al-Sharīʿah*. While BCX is governed by its Shariah committee as Shariah-compliant, it does not mean that it accepts the core business of Shariah non-compliant companies. The Shariah focus of BCX is on the efforts made by any listed company to protect the environment, though it is highly recommended for BCX to move to a phase where only Shariah compliant companies with good record of ESG compliance are accepted.

The following are specific guidelines of notable importance in BCX (Bursa Malaysia, 2023):

1. Retirement of Carbon Credit

   Retiring carbon credits involves permanently removing them from circulation, ensuring they can no longer be sold or traded. This is done through registry systems such as the Gold Standard Impact Registry or Verra Registry. The process includes logging in, selecting the credits, specifying the number and purpose of retirement (e.g.,

[1] Interview conducted with BCX on 10 May 2025

voluntary or compliance), attributing the retirement to an entity, and confirming the action. Retirement is irreversible and often documented publicly with a downloadable certificate.

2. Offset

   Carbon credits are used to offset an entity's unavoidable greenhouse gas (GHG) emissions. This means purchasing carbon credits generated by certified projects that remove, reduce, or avoid emissions. Offset activities allow organisations to claim climate responsibility beyond what internal emission reductions achieve, helping meet corporate sustainability goals or voluntary climate commitments. From a *maqāṣid* perspective, offsetting is a means (*wasīlah*) towards a legitimate objective (*maqṣad*). Sharīʿah scholars such as al-ʿIzz ibn ʿAbd al-Salām ascertain that the means takes the same Sharīʿah ruling as the objective.

   لِلْوَسَائِلِ حُكْمُ الْمَقَاصِدِ

   In this regard, offsetting is in line with *maqāṣid* since it leads to the realisation of a legitimate objective, i.e., the preservation of the environment.

3. Substitution of Carbon Credit

   The term 'substitution' isn't directly used, but the concept is implied under VCU (Verified Carbon Unit) cancellation. Cancellation may occur to substitute VCUs for other forms of GHG credits or to correct over-issuance. This is distinct from retirement and is used when credits are converted into another carbon market instrument or used administratively.

All these operations are deemed Sharīʿah compliant according to the Bursa Malaysia Shariah Committee.

CONCLUSION

This study establishes that carbon credits, despite their intangible nature, can be deemed Sharīʿah-compliant assets when structured and traded within ethical and legal boundaries. By applying rigorous juristic characterisation (*takyīf fiqhī*), the research demonstrates that carbon credits fulfil the essential criteria of financial rights (*ḥaqq mālī*) recognised under Islamic law—namely, that they are definable, identifiable, and transferrable, and they possess economic value. Such rights, though intangible, can be legally owned, assigned, and compensated for, provided they serve a valid interest and are free from Sharīʿah-prohibited elements.

The recognition of carbon credits as legitimate assets is further reinforced by contemporary Islamic legal bodies such as the International Islamic Fiqh Academy of the Organisation of Islamic Cooperation (IIFA-OIC), the Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI), and the Shariah Advisory Council (SAC) of Malaysia's financial regulatory authorities. These bodies have acknowledged that intangible financial rights—when clearly defined and lawfully acquired—are permissible for trade and investment under Sharīʿah principles.

Beyond legal permissibility, the study emphasises the foundation of carbon credit trading within the higher objectives of Islamic law (*maqāṣid al-Sharīʿah*), particularly the objective of environmental stewardship (*ḥifẓ al-bīʾah*). By incentivising emission reductions and supporting environmentally beneficial projects, carbon markets align with the Islamic imperative to prevent harm (*mafsadah*) and promote public welfare (*maṣlaḥah*).

This alignment is not merely theoretical. Real-world implementations such as Malaysia's Bursa Carbon Exchange (BCX)—the world's first Sharīʿah-compliant carbon market—exemplify how Islamic finance can effectively engage with contemporary environmental challenges. While carbon offsetting may appear to indirectly permit a degree of pollution, it is justified under Sharīʿah as a mechanism for mitigating unavoidable emissions when it contributes to a broader societal benefit and supports long-term ecological balance. Therefore, the research has addressed the objectives as follows:

Objective 1: Identify the underlying assets in carbon credit trading.

The research thoroughly examined the components constituting carbon credits, identifying them as intangible assets that represent verified reductions in greenhouse gas emissions. Through analysis of registry systems and Bursa Malaysia's framework, the study shows that these credits are not physical goods but are legally recognised rights (*ḥaqq mālī*) and valid subject matter for trading. This satisfies the first objective by confirming that carbon credits have a defined underlying asset structure that aligns with Sharīʿah principles of ownership, tradability, and value.

Objective 2: Evaluate the fungibility and intangibility of carbon credits in Islamic finance.

The research addresses this by establishing that carbon credits are non-physical, intangible rights with financial value. It draws parallels to accepted intangible assets in Islamic finance, such as intellectual property and usufruct rights, and affirms that contemporary Sharīʿah bodies (e.g., IIFA-OIC, AAOIFI, SAC-BNM) recognise such rights as tradeable under Islamic law. Hence, the research validates that the fungibility and intangibility of carbon credits do not contradict Sharīʿah principles.

Objective 3: Assess the qualification of carbon credits as assets under Sharīʿah law.

This objective is directly achieved through the *takyīf fiqhī* analysis, which shows that carbon credits fulfil the legal and Sharīʿah-based criteria of property (*māl*) and financial rights (*ḥaqq mālī*). The research highlights how carbon credits are definable, transferable, and possess economic benefit—thus qualifying as Sharīʿah-compliant assets when free from prohibited elements such as *gharar* and *maysir*. Their recognition by AAOIFI and other bodies further solidifies their Sharīʿah legitimacy.

Objective 4: Examine the Sharīʿah compliance of carbon emission offsetting mechanisms.

The study explores the ethical and legal implications of carbon offsetting, addressing the question of whether it permits pollution. It concludes that while offsetting may tolerate minimal residual emissions, this is permissible in Sharīʿah due to the overriding public benefit (*maṣlaḥah*) of environmental protection, as per the principle of prioritising greater benefit over lesser harm. The use of carbon credits for offsetting is therefore framed as a practical, Sharīʿah-justifiable means to mitigate climate damage.

Objective 5: Analyse the sustainability aspects of carbon credit trading from a *maqāṣid* perspective.

The *maqāṣid al-Sharīʿah* analysis is central to the research's argument, with environmental preservation (*ḥifẓ al-bīʾah*) positioned as a critical objective aligned with all five essential *maqāṣid* (preservation of religion, life, progeny, intellect, and wealth). Carbon credit trading is shown to promote environmental and societal welfare, justifying its ethical validity. Malaysia's BCX case study further reinforces the *maqāṣid*-based relevance of Sharīʿah-compliant carbon markets.

In conclusion, this study confirms that carbon credit trading, when governed by robust Sharīʿah standards and ethical safeguards, is not only Sharīʿah compliant but also consistent with the Sharīʿah's vision of ecological justice and sustainability. It represents a dynamic intersection of Islamic finance and environmental ethics, contributing meaningfully to both climate action and the advancement of Sharīʿah-compliant innovation.

Recommendations

1. Sharīʿah standardisation: Islamic finance authorities (e.g., AAOIFI, IIFA-OIC, SAC-BNM, SAC-SC) should collaborate to issue harmonised Sharīʿah standards specific to carbon credits and environmental finance.
2. Governance frameworks: Carbon credit exchanges must uphold strong governance, ensuring transparency in verification, issuance, retirement, and substitution of credits.
3. Fatwa awareness and market education: Dissemination of Sharīʿah rulings on carbon trading should be enhanced across OIC countries, facilitating greater Muslim participation in ethical climate markets.
4. Integration into Islamic ESG finance: Carbon credit instruments should be mainstreamed within Islamic green *ṣukūk*, waqf investments, and VBI-based financing to align business practices with *maqāṣid al-Sharīʿah*.
5. *Maqāṣid*-based assessment tools: Develop practical tools and indices to evaluate how carbon offset projects contribute to the five essential *maqāṣid*, enabling Islamic financial institutions to prioritise impactful investments.

REFERENCES

Abd al-Wahhāb (2013), 'Al-Ishrāf ʿalā Masāʾil al-Khilāf', available at: http://www. ahlalhdeeth.com/vb/showthread.php?t=191810 (accessed 9 October 2013).

Abdullah, H.A. (2024), 'Tadāwul Arṣidat al-Iʾtimān al-Karbōnī: Dirāsah Fiqhiyyah Taʾṣīliyyah' (Trading of carbon credit certificates: a fundamental *fiqh* study), *Majallat al-Jamʿiyyah al-Fiqhiyyah al-Saʿūdiyyah*, Vol. 66 No. 606.

Al-Hazza, E.I. (2023), 'Shahādāt Arṣidat al-Karbōn wa Ḥukm Tadāwulihā' (Carbon credit certificates and the Shariah ruling on their trading), *Majallat al-ʿUlūm al-Sharʿiyyah*, Vol. 4 No. 75.

Al-Lahim, A.K. (2008), *Al-Muṭṭaliʿ ʿalā Daqāʾiq Zād al-Mustanqaʿ*, Dār Kunūz Ishbīliyah, Riyadh, Vol. 1, p. 49.

Al-Qaradāghī, M. (2011), *Al-Ḥuqūq al-Māliyyah wa Madā Jawāz al-Iʿtiyād ʿanhā maʿa Taṭbiqātuhā al-Muʿāṣirah*, Dār al-Bashāʾir al-Islāmiyyah, Beirut, p. 70.

Al-Sanhuri, A.R. (n.d.), *Al-Wasīṭ fī Sharḥ al-Qanūn al-Madanī*, Dār al-Nahḍah al-ʿArabiyyah, Cairo.

Al-Sarakhsī, M.A. (1993), *Al-Mabsūṭ*, Dār al-Maʿrifah, Beirut.

Al-Zuḥaylī, M. (2006), *Al-Qawāʿid al-Fiqhiyyah wa Taṭbīqātuhā fī al-Madhāhib al-Arbaʿah*, Dār al-Fikr, Damascus.

Ben McQuhae & Co. (2023), 'The legal nature of carbon credits', available at: https://bmcquhae.com/en/2023/03/15/the-legal-nature-of-carbon-credits/ (accessed 25 March 2025).

BloombergNEF (2025), *Carbon Market Outlook 2025,* Bloomberg New Energy Finance, London.

BNM (Bank Negara Malaysia) (2024), 'Summary of the Shariah Advisory Council (SAC) ruling: issuance of Malaysian Government Investment Issue (MGII) based on wakalah concept', available at: https://www.bnm.gov.my/-/sacbnm-239mtg-ruling

Bouheraoua, S., *et al.* (2015), 'Sharīʿah issues in intangible assets', *Jurnal Syariah*, Vol. 23 No. 2, pp. 287–324.

Bursa Malaysia Islamic Services (2022), 'Pronouncement of the Shariah Committee of Bursa Malaysia Islamic Services Sdn Bhd', available at: https://www.bursamarketplace.com/bcx/sp_cc.pdf (accessed 22 March 2025).

Bursa Malaysia (2023), 'VCM Handbook', available at: https://www.bursamalaysia.com/sites/5d809dcf39fba22790cad230/assets/685cfcc9cd34aaa86530631d/VCM_Handbook_Final_V1.2.1.pdf

Decarb (2024), 'The difference between carbon offsets, credits, and allowances', available at: https://blog.decarb.co/the-difference-between-carbon-offsets-credits-and-allowances/ (accessed on 19 March 2025).

Dunne, D. & Quiroz, Y. (2023), 'Mapped: the impacts of carbon-offset projects around the world', available at: https://interactive.carbonbrief.org/carbon-offsets-2023/mapped.html 2023/mapped.html?utm_source=chatgpt.com (accessed 5 July 2025).

Global Green Institute (2025), 'Forestry, landscape, agriculture and nature based carbon credit solutions, available at: https://globalgreeninstitute.com/carbon-abatement-reality/ggi-nature-based-carbon-credit-solutions/

Gold Standard (2024), 'Gold standard for the global goals', available at: https://globalgoals.goldstandard.org/ (accessed 25 March 2025).

Ḥammād, N. (2012), *Qadāyā Māliyyah Muʿāṣirah fī al-Māl wa al-Iqtiṣād*, Dār al-Qalam, Damascus.

Haniffa, R., & Hudaib, M. (2022), 'Green sukuk and carbon credits: an integrated Islamic climate finance model', *Journal of Islamic Accounting and Business Research*, Vol. 13 No. 4, pp. 789–812.

Hisham bin Abdullah bin Abdullah, 'Tadāwul Arṣidat al-I'timān al-Karbōnī: Dirāsah Fiqhiyyah Taʾṣīliyyah', *Majallat al-Jamʿiyyah al-Fiqhiyyah al-Suʿūdiyyah* (Journal of the Saudi Fiqh Association), No. 66, p. 592.

IASB (International Accounting Standards Board) (2022), 'Intangible assets: International Accounting Standard IAS 38', available at: https://www.aasb.gov.au/admin/file/content105/c9/IAS38_BC_1-22.pdf

Ibn ʿĀbidīn, M.A. (1992), *Radd al-Muḥtār ʿalā al-Durr al-Mukhtār*, Dār al-Fikr, Beirut.

Ibn Ḥanbal, A.M. (2001), *Musnad Aḥmad ibn Ḥanbal*, Arnaʾūṭ, S. & ʿĀdil Murshid *et al*. (Eds.), Muʾassasat al-Risālah, Beirut.

Ibn Mājah, M.Y. (2009), *Sunan Ibn Mājah*, S. Arnaʾūṭ (Ed.), Dār al-Risālah al-ʿĀlamiyyah, Beirut.

Ibn Taymiyyah, A.ʿA.Ḥ. (2004), *Majmūʿ al-Fatāwā*, ʿA.R. Ibn Qāsim (Ed.), Majmaʿ al-Malik Fahd li-Ṭibāʿat al-Muṣḥaf al-Sharīf, Madinah Munawwarah.

ICVCM (Integrity Council for the Voluntary Carbon Market) (2023), 'Core carbon principles and assessment framework', available at: https://icvcm.org

IIFA-OIC (1988), 'Resolution on intangible assets', available at: https://iifa-aifi.org/ar?s=%D8%A7%D9%84%D8%A7%D8%B3%D9%85+%D8%A7%D9%84%D8%AA%D8%AC%D8%A7%D8%B1%D9%8A+&lang=ar

ISDA (2021), Legal implications of voluntary carbon credits, available at: https://www.isda.org/a/38ngE/Legal-Implications-of-Voluntary-Carbon-Credits.pdf (accessed on 21 March 2025).

Jennifer, L. (2025), 'Carbon credits in 2024: what to expect in 2025 and beyond ($250B by 2050)', available at: https://carboncredits.com/carbon-credits-in-2024-what-to-expect-in-2025-and-beyond-250b-by-2050/ (accessed 6 May 2025).

Kenton, W. (2025), 'Carbon credits: what they are, how they work, and who buys them', https://www.investopedia.com/terms/c/carbon_credit.asp (accessed 21 March 2025).

Khan, T. & Ahmed, H. (2018), 'Sustainability and *maqasid al-Shariah*: frameworks for Islamic environmental finance', ISRA International Journal of Islamic Finance, Vol. 10 No. 2, pp. 45–68.

KPMG (2023), 'Carbon offsets and credits under IFRS® Accounting Standards', available at: https://kpmg.com/us/en/articles/2023/carbon-offsets-credits-ifrs-accounting-standards.html

KraneShares (2025), 'Carbon markets in 2025: top 5 developments to watch', available at: https://kraneshares.com/carbon-markets-in-2025-top-5-developments-to-watch/ (accessed 20 March 2025).

Medium (2022), 'How data can enable high-quality carbon credits for sustainability: breaking down to each persona', available at: https://esgpedia.medium.com/how-data-can-enable-high-quality-carbon-credits-for-sustainability-breaking-down-to-each-persona-4b1ac855a0ed

Nazir, N. (2011), 'Carbon trading market: viability for Islamic financial industry', paper presented at 8th International Conference on Islamic Economics and Finance, Center for Islamic Economics and Finance, Qatar Faculty of Islamic Studies, Hamad bin Khalifa University, 19–21 December, Doha, Qatar.

Ngadimon, M.N. (2005), 'A comparative study of intangible assets in Hanafi School with Mālikī, Shafi`i and Hanbali Schools of law and their modern application', unpublished Doctoral dissertation, The University of Birmingham, Birmingham, p. 265.

Obaidullah, M. (2019), 'Managing climate change: role of Islamic finance', *Islamic Economic Studies,* Vol. 26 No. 1, available at: https://doi.org/10.12816/005031031

PAIA Consulting (2021), 'Carbon offsets and credits, explained', available at: https://paiaconsulting.com.sg/carbon-offsets-and-credits-explained/

Rahman, F. (2022), 'Fatwas and contemporary jurisprudence on carbon trading in Islamic markets', *Shariah Review Journal*, Vol. 7 No. 2, pp. 112–136.

SBTi (Science Based Targets initiative) (2023), 'Net-Zero Standard', available at: https://sciencebasedtargets.org

SC (Securities Commission Malaysia) (2018), 'Resolutions of the Shariah Advisory Council of the Securities Commission Malaysia', available at: https://www.sc.com.my/api/documentms/download.ashx?id=5f4ba63b-54c3-48f5-9d02-3ee2a05e9e56

Streck, C. & Von Unger, M. (2016), 'Creating, regulating and allocating rights to offset and pollute: carbon rights in practice', *Carbon & Climate Law Review*, Vol. 10 No. 3, pp. 178–189, available at: https://doi.org/10.21552/cclr/2016/3/4

Sylvera (2023), 'Sylvera carbon credit ratings explained: frameworks & processes white paper', available at: https://www.sylvera.com/blog/carbon-credit-ratings-frameworks-and-processes-white-paper

Trellis (2025), 'Carbon pricing is gaining momentum: what you should know', available at: https://trellis.net/article/carbon-pricing-is-gaining-what-you-should-know/

UNFCCC (n.d.), 'What is the Kyoto Protocol?', available at: https://unfccc.int/kyoto_protocol

UNFCCC (n.d.), 'The Paris Agreement: what is the Paris Agreement', available at: https://unfccc.int/process-and-meetings/the-paris-agreement

Usmani, M.T. (2011), *Buḥūth fī al-Qaḍāyā Fiqhiyyah al-Muʿāṣirah*: *Bayʿ al-Ḥuqūq al-Mujarradah*, Dar al-Qalam, Damascus.

Verra (2024), 'Verified Carbon Standard', available at: https://verra.org/programs/verified-carbon-standard/

VCMI (Voluntary Carbon Markets Integrity Initiative) (2023), 'Claims Code of Practice: building integrity in voluntary carbon markets', available at: https://vcmintegrity.org

Wibowo, A. (2025), 'Carbon credit tokenisation in Islamic finance: integrating Sharia principles into climate action markets', *Journal of Islamic Environmental Finance*, Vol. 12 No. 1, pp. 34–50.

World Bank (2023), *State and Trends of Carbon Pricing 2023*, World Bank, Washington, D.C.

World Bank (2024), *State and Trends of Carbon Pricing 2024*, World Bank, Washington, D.C.

World Bank Group (2024), 'Global carbon pricing revenues top a record $100 billion', available at: https://www.worldbank.org/en/news/press-release/2024/05/21/global-carbon-pricing-revenues-top-a-record-100-billion

Yaakub, S. & Nik Abdullah, N.A.B. (2020), 'Towards *maqasid Shariah* in sustaining the environment through impactful strategies', *International Journal of Islamic Business*, Vol. 5 No. 1, pp. 36–45.

Yusof, M. (2017), 'Islam and the environment: Khalifah, stewardship, and ethical responsibility', *Journal of Islamic Ethics and Environment*, Vol. 5 No. 1, pp. 23–41.

ifikr.my

ISRA Institute
An imprint of INCEIF University
Jalan Tun Ismail
50480 Kuala Lumpur
Malaysia

Tel: +603 7651 4200
Fax: +603 7651 4241