# CHAPTERING A SUSTAINABLE PATH FOR MALAYSIA:

## Unveiling the Nexus of Islamic Finance Development and Climate Change

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**Citation:**
Zhang, H.C. (2024), 'Chaptering a sustainable path for Malaysia: unveiling the nexus of Islamic finance development and climate change', *IF HUB,* Issue 1, January, pp. 3–9.

### INTRODUCTION

A robust financial sector is paramount for a nation's prosperity, especially for developing countries like Malaysia, where efficient investments are the key driver of economic growth. Financial development affects a nation's environment via wealth and technical effects (Khan *et al*., 2022). Specifically, it boosts the availability of funds in the economy, enhancing access to capital for businesses and individuals and stimulating economic growth. This increased business and household incomes often lead to increased purchases of automobiles and mechanical appliances that consume more energy, thereby increasing carbon emissions, referred to as the wealth effect. On the flip side, better access to finance enables businesses to invest in environment-friendly technologies at lower costs. This improved energy efficiency reduces greenhouse gas emissions, ultimately promoting environmental quality, known as the technical effect.

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As nations worldwide passionately strive to achieve the Sustainable Development Goals (SDGs), the interplay between financial development and environmental sustainability becomes increasingly crucial for us. This is particularly true for Malaysia, a dynamic economy that endeavours to attain high-income nation status in 2025 and a net-zero emissions target by 2050. In this context, this article aims to illuminate an intriguing issue: can Malaysia's rapidly growing Islamic finance industry promote economic development while mitigating climate impact?

## MALAYSIA: ISLAMIC FINANCE GROWTH AMIDST ENVIRONMENTAL CHALLENGES

Despite the recent global economic slowdown due to the COVID-19 pandemic, Malaysia has remained the global leader in the Islamic finance industry (Figure 1), based on the Islamic Finance Development Indicator (IFDI) scoreboard (Refinitiv, 2022). Notably, with a total sukuk market turnover value of RM1.87 trillion in 2021, Malaysia remains the largest sukuk market

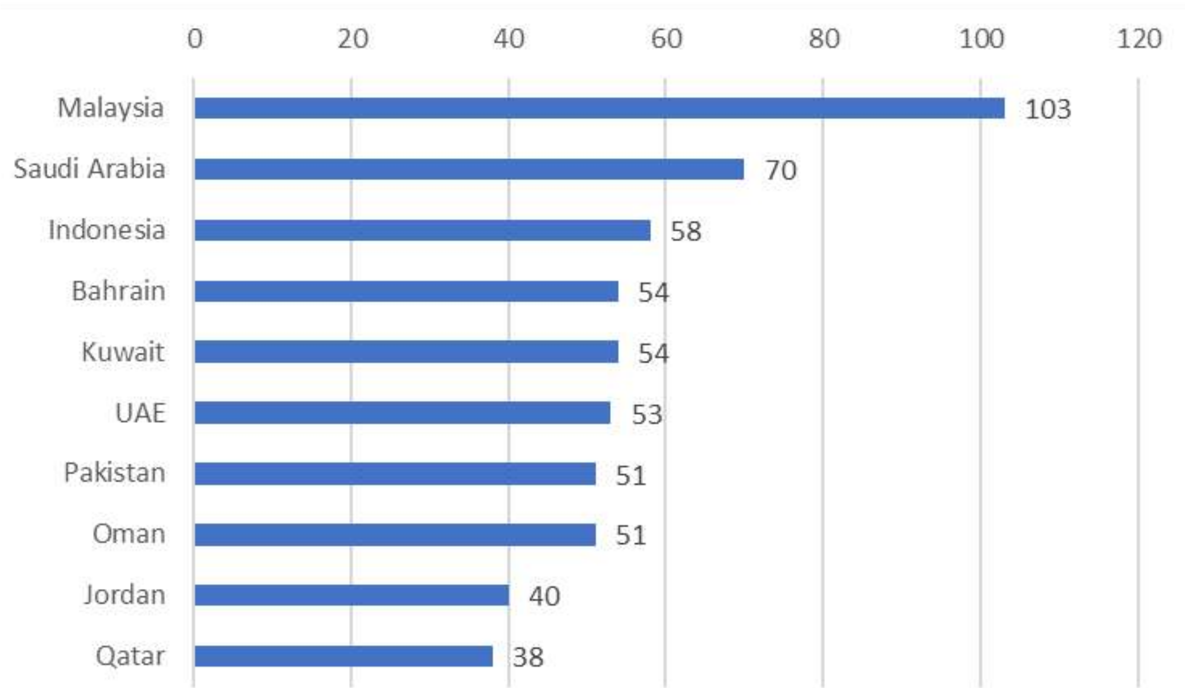


**Figure 1:** Islamic Finance Development Indicator in 2022
*Source: Refinitiv*

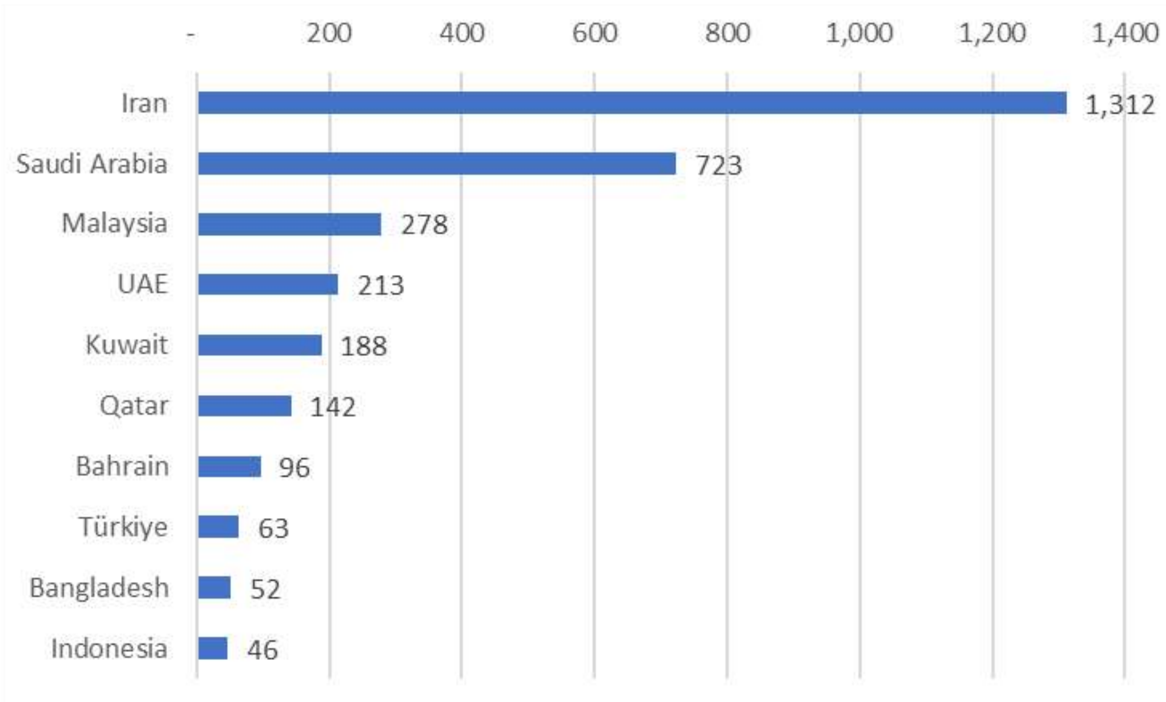


**Figure 2:** Islamic Banking Assets Value in 2022 (in USD Billion)
*Source: Refinitiv*

both in terms of total sukuk outstanding (52 per cent of global outstanding) and sukuk issuance (42 per cent of global issuances) (BNM, 2023). Furthermore, with total Islamic banking assets amounting to USD278 billion in 2022 (Figure 2), Malaysia ranks third globally after Iran and Saudi Arabia (Refinitiv, 2023).

Amid environmental challenges, Malaysia has witnessed rising temperatures, reduced forest cover, and increased CO2 emissions. A 2021 report by the Asian Development Bank reveals that Malaysia's average surface temperature has increased between 0.14°C–0.25°C each decade from 1970 to 2013. Additionally, between 2001 and 2021, the nation has witnessed a substantial reduction in forest area. A total loss of 8.67 million hectares has accounted for a nearly 29 per cent reduction in tree cover since 2000 (Global Forest Watch, 2023). In 2005, Malaysia was ranked Southeast Asia's second-highest per capita CO2 emitter, following Singapore (Zen *et al.*, 2021).

Figure 3 depicts a steady upward trend in Malaysia's CO2 emissions from 1995 to 2020.

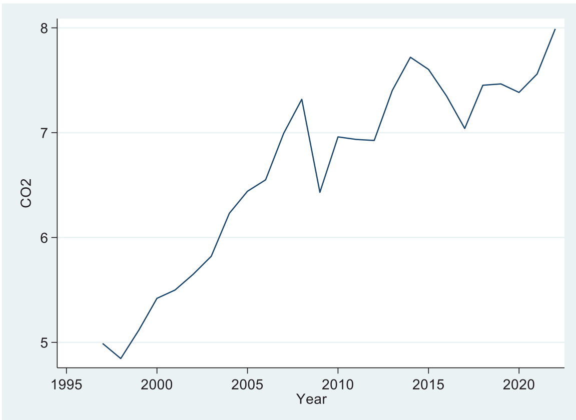


**Figure 3:** Malaysia's CO2 Emissions Over Time
*Source: World Bank*

Having acknowledged the critical nature of these environmental issues, the Malaysian government has underscored the importance of advancing sustainable and environment-friendly growth in its Twelfth Malaysia Plan (12MP) and National

Energy Transition Roadmap (NETR). In particular, the government has expressed a firm commitment to achieve carbon neutrality by 2050. These initiatives not only prioritise socio-economic development that is low-carbon and climate-resilient but also emphasise the preservation of natural resources and ecosystems.

## ISLAMIC FINANCE: A NATURAL CATALYSER FOR ENVIRONMENTAL SUSTAINABILITY

As a value-based financing mechanism, Islamic finance is established on the foundation of upholding *maqasid al-Shariah*, which underscores the promotion of economic and social justice while preserving the society's human rights, dignity, health, and intergenerational wealth. Figure 4 depicts that maintaining the ecological equilibrium on Earth is a significant responsibility of humanity. Thus, preserving environmental quality is integral to the divine objectives outlined in the Shariah. The distinctive attributes of Islamic finance render it well-suited for advancing sustainable economic growth, aligning seamlessly with the broader global mandate of establishing a financial system that prioritises income equity and environmental quality.

While Islamic finance inherently shows great promise, its effectiveness in leveraging sustainable development largely depends on aligning Islamic virtues with Islamic financial institutions' (IFIs) business and operational undertakings. Thus, whether the rapid expansion of the Islamic finance industry will enhance the incorporation of Islamic virtues remains a strongly contested issue. Some idealists maintain that being Shariah-compliant naturally ensures the alignment of Islamic virtues into IFIs' business undertakings. Thus, IFIs are inherently ethical and socially conscious entities. However, the reality is that this integration is a work-in-progress endeavour, and the present IFIs are increasingly directing their efforts towards green financing endeavours, particularly in supporting renewable energy projects in wind, hydropower, and solar energy.

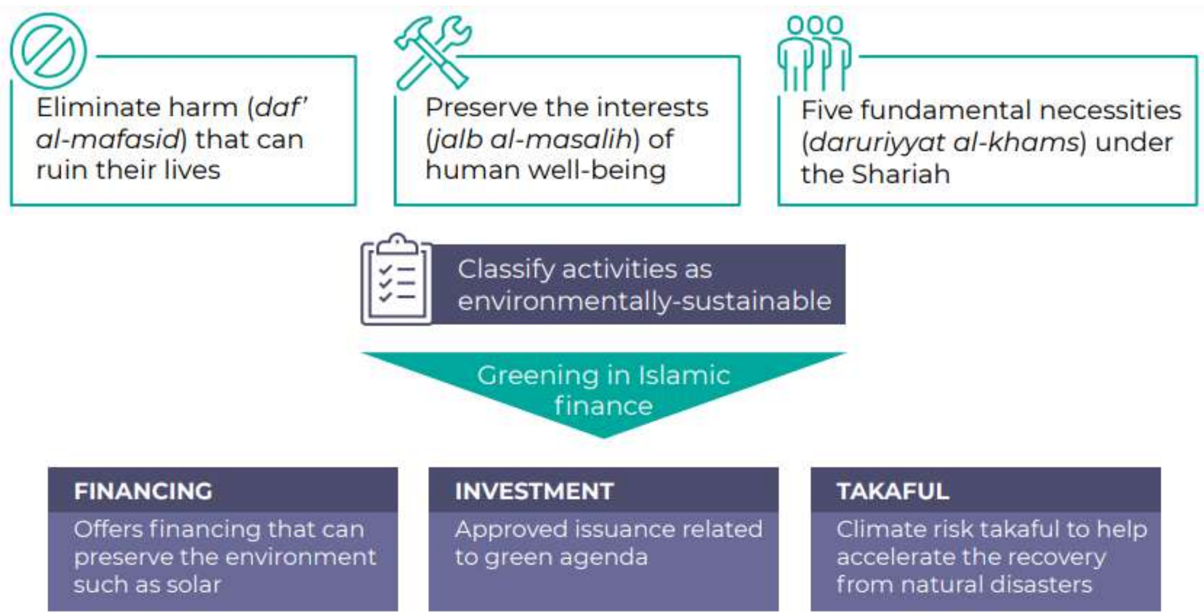


**Figure 4:** *Maqasid al-Shariah* and Islamic Finance
*Source: Adapted from Kasri & Harun (2022)*

In the context of Malaysia, the government has demonstrated exceptional dedication to advancing Islamic green finance via various initiatives. The issuance of sustainability sukuk and the introduction of the Government Green Procurement as part of the Integrated National Financing Framework enable Islamic green financing to become a key national budget measure for attaining the SDGs (BNM, 2023). In this regard, Malaysia has issued the world's first sovereign US dollar-denominated sustainability sukuk worth USD800 million in 2021 (as part of USD1.3 billion trust certificates) to fund social and green projects. Bank Negara Malaysia (BNM) has also launched the Value-Based Intermediation framework to enhance financial inclusion and environmental sustainability. Complementing this, BNM has also provided a Low Carbon Transition Facility (LCTF) with RM2 billion to help small and medium-sized enterprises adopt sustainable practices. In line with these government efforts, key industry players like Maybank, CIMB, AmBank, HSBC, and SME Bank have also implemented SDG frameworks to guide their operational undertakings.

## ISLAMIC FINANCE: REVEALING ITS UNEXPECTED CLIMATE IMPACT

To empirically examine the impact of Islamic finance on climate change in Malaysia, we conducted a simulation analysing the dynamic association between Islamic finance development (IFD) and $CO_2$ emissions, considering several control variables like urban population, income per capita, and institutional quality. Interestingly, our analysis has shown contradictory results on the short-run and long-run effects of IFD on $CO_2$ emission. In the short run, our analysis revealed promising effects of IFD on mitigating $CO_2$ emissions. The result implies that IFD exhibits significant potential in fostering development and concurrently reducing $CO_2$ emissions. The temporary beneficial impacts of Islamic finance on $CO_2$ emissions are primarily due to the inherent inclination of Islamic finance practices towards preserving public interests, which include environmental protection. IFIs are critical elements of a broader financial system, operating under a value-based social framework governed by the concept of sustainable social wellbeing. Malaysia's forthcoming Islamic voluntary carbon market exchange is a notable example of this alignment. This Shariah-compliant platform will facilitate Malaysian businesses to trade carbon credits voluntarily, encouraging energy-efficient companies to invest in projects that mitigate greenhouse gas emissions.

Another rationale for the short-term benefits of IFD lies in the proactive engagement of IFIs in financing environment-friendly projects. An example of such commitment in the renewal energy industry is the introduction of the Sustainable and Responsible Investment (SRI) Sukuk Framework in 2014 and the SRI-Linked Sukuk Framework in 2022. This initiative facilitated the issuance of the world's first green sukuk to finance the solar power plant development in Sabah, Malaysia, in 2017. This affirmative development signifies the expansion of IFIs beyond the traditional corporate finance role to cater to 'green' financing. The implementation of energy-saving initiatives for enhanced energy efficiency in Malaysia should thus continue to be prioritised by the government.

On the flip side, our results show that increments in IFD yield a persistent increase in $CO_2$ emissions. This suggests that the expansion of the Islamic finance industry in Malaysia may exhibit a 'U' shaped effect on climate change. This means that the expansion of Islamic finance industry will initially reduce CO2 emissions. However, these positive effects will vanish with the advancement of IFD. Eventually, further progression in IFD will deteriorate climate change. This finding has diverged from the traditional belief, which advocates the mitigating role of Islamic finance in climate change. Such divergence may arise from the current state of Islamic finance, which has yet to confirm the optimal structure and execution for achieving sustainable development in the long run (Abduh *et al.*, 2022). For instance, Masih *et al.* (2018) asserted that Shariah screening criteria often overlook the explicit considerations of environmental protection, social welfare, and good governance (ESG) practices.

IFIs, guided by *maqasid al-Shariah*, are expected to pursue business activities that strive for a harmony between profit-making and societal wellbeing. This will foster equitable development and contribute to sustainable and inclusive growth (Securities Commission Malaysia, 2023). Despite its promising potential, the current implementation of Islamic finance may need to be transformed to confirm its ideal structure and execution required to optimise the environmental benefits. Notably, the recent roundtable discussion organised by the International Federation of Accountants (IFAC) identified a range of obstacles that constrain Islamic finance from harnessing its potential in supporting sustainable development (IFAC, 2023), as summarised in Figure 5.

| | |
|---|---|
| **Poor Awareness** | ➢ Lack of awareness among Islamic finance practitioners on effectively aligning Islamic finance with the SDGs |
| **Data Deficiency** | ➢ Insufficient data to enable IFIs to measure and track their progress towards SDGs |
| **Lack of Unified Standards** | ➢ International Islamic financial organisations like AAOIFI, IFSB, and IIFM working with different functional objectives, shall synergise to a set of a unified standard and enforce it strictly |
| **Misalignment in Mobling IF for SDGs** | ➢ It is pivotal to design and implement principles-based frameworks, like Malaysia's Value-Based Intermediation, to align mobilisation of Islamic finance funds for the SDGs |
| **Funding Gap** | ➢ It is partially a trust deficit issue, which can be addressed by proper monitoring and evaluation of Islamic finance-funded projects to ensure funds are allocated to the intended SDGs |
| **Incomprehensive Regulatory Framework** | ➢ To build a comprehensive and conducive regulatory framework to facilitate various sectors of Islamic finance, especially Islamic fintech, to unleash its potential to advance the SDGs |

**Figure 5:** Obstacles Facing Islamic Finance in Harnessing Its Potential to Support Sustainable Development
*Source: IFAC (2023)*

## CONCLUSION

Malaysia has emerged as a global leader in the Islamic finance industry in terms of net assets and financial innovations. In recognising the ramifications of environmental degradation the nation is presently facing, this study explored the impact of IFD on climate change. Our simulation-based analysis reveals that IFD only contemporarily mitigated the CO2 emissions. However, over an extended time horizon, further expansion of the Islamic finance industry significantly exacerbated the CO2 emissions in Malaysia.

The favourable yet temporary influence of IFD on CO2 emissions reduction suggests the proactive role of IFIs in supporting the SDGs. However, these benefits have diminished over time. This indicates that the current environmental efforts of IFIs are still shallow and are not structural enough to render lasting impacts. A key contributing factor could be the misaligning of IFIs' business undertakings with *maqasid al-Shariah*, especially in channelling funds towards the intended SDGs projects. To attain sustainable and inclusive economic growth, IFIs must embrace the *maqasid al-Shariah* framework to guide their business decision-making and implement the Value-Based Intermediation (VBI) framework to effectively direct funds into socially responsible and environmentally sustainable projects. This strategy entails the IFIs gradually shifting to become future-benefits-oriented and actively facilitating SDG project financing.

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