

Green Economy in Islam: A Policy Study on Carbon Economic Value from the Perspective of Sharia Economic Law

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Abstract. This article analyzes the concept of the green economy within the context of Islam, focusing on policy analysis of the carbon economic value within the framework of Presidential Regulation (Perpres) of the Republic of Indonesia Number 98 of 2021 concerning the Implementation of Carbon Economic Value to Achieve Nationally Determined Contribution Targets and Control of Greenhouse Gas Emissions in National Development. Additionally, related implementation regulations are governed by the Minister of Environment and Forestry Regulation (Permen) of the Republic of Indonesia Number 21 of 2022 concerning the Implementation of Carbon Economic Value based on the perspective of Sharia Economic Law. The methodology employed is descriptive-analytical, referring to relevant primary and secondary sources. The research results indicate that Islamic principles such as tauhid, amanah, maqasid al-shariah, and taskhir have significant implications for managing the economic value of carbon. In the context of carbon economic value, the perspective of sharia economic law leads to environmental preservation and the use of contract-based instruments in the practice of carbon trade. However, the practical implementation of this concept requires cross-sectoral cooperation and legal regulations aligned with the principles of sharia economic law.

Keywords: Green Economy, Sharia Economic Law, Carbon Economic Value, Carbon Trade

1 Introduction

The concept of a green economy represents a pivotal paradigm shift in addressing the multifaceted environmental challenges that have emerged as some of our time's most pressing global concerns. This transformative approach entails the integration of sustainable practices, circular economies, and environmentally conscious policies into the very fabric of economic systems. It embodies a departure from the conventional growth model, which historically placed little emphasis on ecological repercussions and instead strives to harmonize economic prosperity with ecological integrity. At the heart of the green economy lies an acute awareness of the finite nature of natural resources and the fragile balance of ecosystems that underpin human well-being. As urbanization accelerates, consumption patterns evolve, and climate change casts an increasingly ominous shadow, the green economy offers hope for forging a path

toward a more equitable, resilient, and sustainable world. Its relevance extends beyond merely addressing the symptoms of environmental degradation; rather, it seeks to tackle the root causes by fostering a regenerative relationship between economic activity and the biosphere. [1].

In this pursuit, the green economy champions the optimization of resource utilization, the minimization of waste generation, and the promotion of clean energy adoption. It encompasses a spectrum of initiatives ranging from the conservation of biodiversity and the restoration of ecosystems to the implementation of green technologies and the enhancement of resource efficiency. By aligning economic strategies with ecological principles, this approach not only mitigates environmental risks but also catalyzes new avenues for economic growth, employment generation, and social development [2]. Moreover, the green economy resonates deeply with the principles espoused by numerous cultures and faith traditions, including Islam. The teachings of Islam emphasize stewardship over the Earth, a duty to future generations, and the ethical treatment of all living beings. As such, the green economy encapsulates these values in action, offering a practical blueprint to align human activities with the divine order. The concept of a green economy serves as an indispensable bridge between economic aspirations and environmental imperatives. It presents a vision where prosperity and sustainability coalesce, challenging prevailing norms and fostering innovative solutions that safeguard the planet's resources for present and future generations. As we stand at a critical juncture in history, the green economy beckons us to embark on a transformative journey that harmonizes human progress with environmental preservation, thereby steering us toward a future of shared abundance and well-being.

The significance of Sharia economic law, particularly its foundational Islamic principles such as *tauhid* (monotheism), *amanah* (trustworthiness in managing the Earth), *Maqasid al-shariah* (objectives of Islamic law), and *Taskhir* (utilization of natural resources), holds profound implications for the management of the economic value of carbon emissions within the purview of guiding economic activities for Muslims. These principles, deeply rooted in the teachings of Islam, serve as a moral compass that not only informs economic conduct but also underscores the imperative to harmonize human interactions with the environment in a just and sustainable manner. At the core of Sharia economic law lies the concept of *tauhid*, the belief in the absolute unity and sovereignty of Allah. *Tauhid* underscores the interconnectedness of all creation, emphasizing that everything in the universe is intrinsically linked and interdependent. This principle has direct relevance to the management of carbon economic value, as it underscores the ethical responsibility of Muslims to acknowledge the intricate relationship between human economic pursuits and the delicate ecological balance. *Tauhid* guides Muslims to approach economic endeavors with mindfulness of the broader ecosystem, ensuring that economic activities do not disrupt the harmony of creation [3].

Furthermore, the principle of *amanah*, which emphasizes trustworthiness and stewardship, carries profound implications for the management of the Earth's resources, including carbon. Muslims are entrusted by Allah as stewards of the Earth, tasked with managing its resources responsibly and sustainably. This includes the recognition that carbon emissions and their impact on the environment are a form of trust, and thus, Muslims are morally obligated to minimize their carbon footprint and mitigate the negative consequences of their economic activities. *Amanah* resonates with the notion that economic progress should not come at the expense of environmental degradation but rather should reflect a commitment to safeguarding the Earth's well-being for present and future generations.

Maqasid al-shariah, the objectives of Islamic law, further accentuate the relevance of Sharia economic principles to the carbon economy [4]. These objectives, which encompass preserving faith, life, intellect, progeny, and wealth, provide a comprehensive framework for assessing the ethical dimensions of economic decisions. Carbon emissions and their role in exacerbating climate change and its far-reaching consequences, touch upon multiple *maqasid*. For instance, the preservation of life requires taking measures to mitigate the health risks associated with climate-related events. Likewise, safeguarding wealth extends to protecting natural resources and ecosystems that underpin economic activities. By aligning carbon economic value with *maqasid*, Muslims are guided to prioritize environmentally conscious actions that contribute to the well-being of individuals, societies, and the planet.

Taskhir, or the utilization of natural resources, underscores the ethical dimension of resource management within an Islamic context. Islam promotes the responsible utilization of resources, emphasizing moderation (*wasatiyyah*) and the avoidance of excess [5]. Carbon emissions, as a byproduct of resource utilization, carry with them a responsibility to exercise restraint and moderation in economic activities that contribute to their generation. *Taskhir* encourages Muslims to adopt sustainable practices, favoring those that minimize resource consumption and prioritize renewable alternatives. Thus, the principle of *Taskhir* guides Muslims towards valuing carbon emissions within a broader ethical framework, nurturing a culture of sustainable economic behavior.

The significance of Sharia economic law, anchored in Islamic principles of *tauhid*, *amanah*, *maqasid al-shariah*, and *taskhir*, reverberates profoundly in the context of managing the economic value of carbon emissions. These principles underscore the intrinsic connection between economic activities and environmental stewardship, guiding Muslims to approach economic endeavors with mindfulness, responsibility, and a commitment to safeguarding the planet's well-being. By integrating these principles, Muslims can contribute to the global discourse on environmental sustainability while adhering to the ethical teachings of Islam, thereby forging a harmonious balance between economic aspirations and ecological imperatives.

Nature is a gift from God that we must protect, in Islam it can be referred to Allah's word in surah Al-A'raf verse 85 which states:

...وَلَا تُفْسِدُوا فِي الْأَرْضِ ...

Meaning: "... And you shall not make mischief on the face of the earth..." [6].

The interpretation of this verse, unequivocally delivered by the Islamic scholar Prof. Dr. Quraish Shihab, M.A in his popular interpretation of Al-Misbah, he argued that human beings should maintain harmonious relations in economic and financial interactions, then maintain the system and benefit of the general public [7]. According to the author, this interpretation emphasizes the importance of humans maintaining natural ecosystems because nature provides many benefits to mankind, and if we maintain those ecosystems, a good economic cycle will be created, so humans must reciprocate to nature.

The main objective of this research is to conduct a rigorous and in-depth analysis of the complex relationship between the economic value of carbon and the broad framework of Shariah economic principles. This multi-faceted investigation is driven by the urgent need to bridge the

gap between modern imperatives in environmental sustainability and the timeless ethical principles in Islamic economics. This research seeks to unravel the layers of complexity that surround the valuation and management of the economic significance of carbon emissions based on the Presidential Regulation (Perpres) of the Republic of Indonesia Number 98 of 2021 concerning the Implementation of Carbon Economic Value to Achieve Nationally Determined Contribution Targets and Control Greenhouse Gas Emissions in National Development. In addition, related implementation regulations are governed by the Regulation of the Minister of Environment and Forestry (Permen) of the Republic of Indonesia Number 21 of 2022 regarding the Implementation of Carbon Economic Value based on the perspective of Sharia Economic Law, which is reviewed from sharia economic law presents a comprehensive explanation that is aligned with contemporary ecological concerns and the profound wisdom enshrined in Islamic teachings.

The purpose of this research is to explore Islamic legal thought and government policy to harmonize two seemingly disparate domains: the contemporary conversation on carbon economics and the timeless ethos of Sharia economic principles. By delving into Islamic teachings that advocate stewardship, equity, and ethical behavior in all financial and economic transactions, this research seeks to highlight the compatibility between these guiding principles and the urgent need to address the economic implications of carbon emissions. The ultimate goal is to explore how these seemingly disparate paradigms can intersect and mutually enrich each other, resulting in a holistic perspective that not only addresses the economic dimensions of carbon emissions, but also emphasizes the spiritual and moral obligations mandated to Muslims as responsible stewards of the earth.

Through a rigorous research methodology, including literature reviews, case studies, and comparative analysis, this study seeks to unravel the intricate threads that bring together the economic value of carbon emissions and the ethical guidance of Sharia. By embedding the economic value of carbon within the broader context of Shariah principles, including *tauhid* (monotheism), *amanah* (trust), *maqasid al-shariah* (the purpose of Islamic law), and *taskhir* (utilization of natural resources), the research aims to illuminate the diverse dimensions underlying the assessment of the economic value of carbon emissions. In doing so, it bridges the gap between environmental economics and Islamic law and provides a roadmap for policymakers, economists, and stakeholders to explore the uncharted territory where economic imperatives converge with ethical responsibilities. As the world struggles with the urgent need to address climate change and environmental degradation, this research aspires to be a clarion call to evaluate economic paradigms holistically. By dissecting the concept of carbon economic value through the lens of Shariah economic principles, this research seeks to offer a nuanced understanding that transcends the limitations of conventional economic analysis. In crafting a comprehensive narrative that combines environmental consciousness, economic viability, and Islamic ethics, this research seeks to contribute to the emerging discourse that envisions a harmonious coexistence of economic progress and ecological well-being. Through this exploration, this research seeks to illuminate a path that not only respects the sacred balance of creation but also upholds the ethical mandate of Islam in shaping a sustainable and prosperous future.

2 Literature Review

Research on the green economy within Islam and its relationship to Shariah economic law or Islamic principles has been conducted by Omar Javaid, who conducted a study titled "The Principles of a Circular Economy in the Light of Islamic Values and Beliefs." This research indicates that Islamic values, such as stewardship of the environment, can facilitate the transition to a circular economy and environmental conservation. This reaffirms the findings of research conducted by Nur Hidayah Abdul Jabar, Zul Ilham, Shaikh Mohd Saifuddeen, and Noor Naemah Abdul Rahman in their study titled "Green Energy towards Sustainability from the Islamic Perspective"[8]. The paper discusses green energy and sustainable development from an Islamic perspective but does not specifically delve into the relationship between green economic principles and Islamic economic values. In the paper, it is stated that Islam has outlined several concepts to ensure responsible and sustainable environmental management. However, the challenge lies in the implementation of these concepts and approaches. In essence, they convey that a Muslims should view sustainable development as their responsibility.

One of the efforts to address climate change is the reduction of carbon emissions, which has been integrated into economic models to impact both preserving the environment and maintaining the economy. This has been done in several ways, including carbon trading and assigning a value to carbon. There is research that has addressed this issue, such as the one written by Mingyu Fang, titled "Valuation of Carbon Emission Allowances and Sustainable Investment"[9]. In this article, the author presents an assessment framework and model for allowances and options under both closed and open trading phases for an Emission Trading System (ETS) with specific calculations. In this system, emission allowances are allocated to companies based on regulators' predetermined quotas at the beginning of each year. Companies must then surrender a sufficient amount of allowances by the end of the year to cover their emissions or pay fines. In conclusion, this paper provides an assessment model for carbon emission allowances and options and discusses their implications for sustainable investment portfolios. In this regard, the Presidential Regulation (Perpres) of the Republic of Indonesia Number 98 of 2021 concerning the Implementation of Carbon Economic Value to Achieve Nationally Determined Contribution Targets and Control Greenhouse Gas Emissions in National Development bears similarities to the concepts presented by the author.

Carbon trading initially began in accordance with schemes agreed upon by international countries. In this regard, it was first implemented by European Union countries under what is known as the Greenhouse Gas Emissions Trading Scheme. This is discussed in the paper authored by Peter Clarkson, Yue Li, Matt Pinnuck, and Gordon D. Richardson titled "The Valuation Relevance of Greenhouse Gas Emissions Under the European Union Carbon Emissions Trading Scheme" [10]. In this article, the authors examine the relevance of greenhouse gas emissions assessment under the European Union's Carbon Emissions Trading Scheme (EU ETS) and find that carbon emissions affect a company's assessment only to the extent that a company's emissions exceed its carbon allowances under the cap and trade system and the extent of its inability to pass on carbon-related compliance costs to consumers and end users. Of course, it is interesting to relate this research to the Perpres and Permen LHK, in which there is a question of the company's readiness to use this scheme.

The scheme described in the Perpres Number 98 of 2021 and Permen LHK Number 21 of 2022 certainly has intentions and objectives that are in line with Islamic values, especially Sharia Economic Law. Indonesian sharia economic law thinker Mohammad Nur Yasin, in his article entitled "Perbandingan Green Konstitusi, Green Ekonomi, dan Hukum Ekonomi Syariah di Indonesia" [11]. The article states that the essence of the green constitution, green economy, and sharia economic law is focused on eco-justice. The difference is that environmental justice from a green constitutional perspective means that the natural environment must be utilized for the prosperity of the people, green economics means that the natural environment is part of ethical production, distribution, and consumption, and sharia economic law means giving future generations the right to enjoy the natural environment. Second, the common implementation challenge faced by the three concepts is legal incompatibility. The difference is that the legal incompatibility faced by the green constitution is the incompatibility of the environmental law with the 1945 Constitution, green economy is the loss of the meaning of halal, and sharia economic law is systemic non-compliance by sharia corporations with sharia principles. This article looks at the perspective of the Perpres Number 98 of 2021 and Permen LHK Number 21 of 2022 whether they are in harmony with Islamic values and the essence and legal products of Islamic economics can play a role. This research will strengthen the idea that the values of Sharia's economic law can contribute to the reduction of greenhouse gases or carbon emissions and climate change.

3 Theoretical Basis

3.1 Sharia Economic Law and Environmental Stewardship

The basic principles of sharia economic law are crucial in promoting responsible resource management and ethical conduct. In this context, Sharia economics provides a strong framework encompassing ethical values, justice, and environmental responsibility. In this essay, we will discuss the key principles related to the management of natural resources within the framework of Sharia economic law [12]. *Tauhid* (Monotheism), the principle of *tauhid* is a fundamental concept in Islam that emphasizes the oneness of Allah. In the context of natural resource management, it reminds humans that the universe is the creation of Allah, and we, as humans, are stewards of His creation. This compels us to be responsible for managing and preserving natural resources as an act of worship to Allah. *Amanah* (Trustworthiness in Managing the Earth), the *amanah* in Islam refers to responsibility and trustworthiness in managing assets entrusted to us. Natural resources are among the most valuable assets that Allah has entrusted to humanity. Therefore, sharia economic law encourages individuals to treat natural resources responsibly, avoid wastefulness, and protect the environment for sustainability. *Maqasid al-shariah* (Objectives of Islamic Law), *maqasid al-shariah* is a concept that refers to the primary objectives of Islamic law, which include the preservation of religion, life, intellect, lineage, and property. In the context of natural resource management, *maqasid al-shariah* encourages the sustainable and ethical use of natural resources to protect human life, well-being, and social justice [13]. *Taskhir* (Utilization of Natural Resources), the principle of *taskhir* emphasizes human rights to utilize natural resources, but with responsibility [14]. In sharia economics, these rights are not absolute but are constrained by principles of justice, ethics, and ecological balance. *Taskhir* implies using natural resources for human benefit, maintaining the ecological balance, and avoiding overexploitation [15].

Within the framework of sharia economic law, the management of natural resources is considered a trust from Allah to humanity. Therefore, responsible and ethical behavior in the management of natural resources is strongly emphasized. Some concrete steps that can be taken in this context include: Preservation of Natural Resources, sharia economics demands the preservation of natural resources as a form of trust. This involves actions such as maintaining the sustainability of forests, limiting pollution, and protecting biodiversity. Responsible use of natural resources: humans should use natural resources responsibly, avoiding wastefulness and ensuring that their use benefits society as a whole. Justice in access and use of natural resources: natural resources should be available fairly to all layers of society, and their use should be in line with the needs and rights of the entire community. Environmental education and awareness: the public needs to be educated about the importance of conserving natural resources and the consequences of environmentally damaging behavior. Legal sanctions: sharia economic law includes legal sanctions against actions that unfairly harm the environment or exploit natural resources. This creates incentives for individuals and organizations to behave ethically and responsibly in their use of natural resources. By adhering to the principles of Sharia economic law, we can create a more ethical and responsible framework for managing natural resources. This helps preserve the environment, support human well-being, and fulfill humanity's role as stewards of Allah's creation.

3.2 Carbon Economic Value: Concepts and Frameworks

Carbon economic value is a concept that emerged as a result of efforts to measure and value the economic impacts of carbon dioxide (CO₂) emissions and other greenhouse gases (GHGs) released into the atmosphere as a result of human activities [16]. This concept has become very significant in global efforts to address climate change. In this paper, we will define the economic value of carbon, introduce different valuation methodologies, such as market-based mechanisms and the social cost of carbon, and also discuss the challenges and criticisms associated with carbon valuation within conventional economic frameworks.

Defining the economic value of carbon and its significance in addressing climate change can be seen as a monetary representation of the economic losses caused by carbon emissions into the atmosphere [17]. This value reflects the social and economic costs of climate change impacts, such as natural disasters, reduced agricultural productivity, poor public health and economic disruption. The assessment of the economic value of carbon is important because it drives emissions reduction actions, the basis for policy and regulation, in this case, the assessment of the economic value of carbon is used as a basis for governments to develop climate change policies and regulations. This includes imposing carbon taxes, implementing cap-and-trade systems, and providing incentives for environmentally friendly technologies in accordance with policies issued by the government, namely Perpres Number 98 of 2021 and Permen LHK Number 21 of 2022.

There are several methodologies for assessing the economic value of carbon used globally. The first is market-based mechanisms: the carbon emissions trading system (cap-and-trade) and carbon offset projects [18]. In a cap-and-trade system, companies can buy and sell emissions permits, creating a carbon market. Meanwhile, carbon offset projects allow countries or companies to offset their emissions with investments in emission reduction projects elsewhere. Second is the social cost of carbon; this methodology attempts to assess the long-term economic

costs of carbon emissions. This includes health costs, agricultural productivity losses, and other impacts associated with climate change. Third, macroeconomic impact analysis, some assessments of the economic value of carbon involve macroeconomic impact analysis, which attempts to measure the effect of carbon emissions on economic growth, employment, and specific economic sectors. Several challenges and criticisms are associated with carbon valuation in conventional economic frameworks. First is uncertainty; carbon economic value assessments often face high uncertainty in projecting future climate change impacts. Second, there is controversy regarding the methods used; different carbon valuation methodologies can produce different results. This creates uncertainty in determining the right value. Furthermore, some critics argue that monetary measurement of environmental damage and climate change can oversimplify these complex issues and ignore moral and ethical aspects. Many climate change impacts, such as biodiversity loss, are difficult to measure in rigid economic values [19].

4 Methods

The definition of research method is a step carried out systematically and owned by a researcher to collect valid and relevant information or data needed by a researcher in finding answers to questions from research researchers. This research is included in the type of qualitative research, research that emphasizes the deepening aspect of data in order to obtain the quality of the results of a study. This research uses a qualitative approach to explore data or information related to the green economy, Sharia economic law, and policy papers. The approach used is a library research approach. The library approach is deeply explored through documents, journals, books, and others. The data in this study were obtained from library materials. Then, the data is reduced, presented or presented, and then conclusions are drawn.

5 Result and Discussions

5.1 Integration of Carbon Economic Value and Sharia Economic Principles

Integrating the value of carbon economy with Sharia economic principles is an attempt to combine a sustainable and ethical economic approach to climate change. In this section, we will analyze how the value of carbon economy aligns with Islamic concepts of justice, equity and social responsibility, such as *tauhid*, *amanah*, *maqasid al-sharia* and *takhsir*. In addition, we will explore the potential synergies between carbon pricing mechanisms and sharia finance principles, such as *zakat* and *waqf*. Finally, we will discuss the role of companies and individuals in internalizing the cost of carbon while complying with sharia principles.

The concept of *tauhid* emphasizes the oneness of Allah in Islam. In the context of climate change, it reminds us that the universe is Allah's creation, and we are the caretakers of His creation. Therefore, we have a moral responsibility to maintain and preserve the natural environment as a form of worship to Allah. Carbon economic value assessment recognizes this responsibility by considering the economic costs of carbon emissions. *Amanah*, the concept of *amanah* reflects responsibility and trust in managing the assets entrusted to us. Natural resources are one of the assets that Allah has entrusted to humans. Therefore, carbon economic value assessment reminds us to treat natural resources responsibly, avoid waste, and protect the

environment for sustainability. *Maqasid al-sharia*, this concept encompasses the main objectives of Islamic law, involving the preservation of religion, soul, mind, offspring and property [20]. In the context of the economic value of carbon, *maqasid al-sharia* encourages the sustainable and ethical use of natural resources to protect human life, well-being and justice in society. Takhsir, the principle of takhsir is about the right of humans to utilize natural resources, but with responsibility [21]. In Sharia economics, this right is limited by the principles of justice, ethics, and ecological balance. Carbon economic value assessment takes into account the economic losses from overexploitation of natural resources and encourages sustainable use.

There are several concepts in Islam that can provide solutions such as zakat and waqf. Zakat is an Islamic obligation to give some of one's wealth to those in need. In the context of carbon economics, companies or individuals who earn revenue from emission reduction efforts can donate a portion of their profits as zakat. This is a form of social responsibility and community empowerment. Furthermore, Waqf is the concept of donating a portion of property or assets for the public good. In the context of climate change, waqf funds can be used to support environmentally sustainable projects, such as tree planting or investment in renewable energy.

Practically speaking, companies can play an important role in internalizing carbon costs by implementing sustainable and environmentally friendly business practices. This involves reducing emissions, using clean technologies, and transparently reporting on their environmental impacts. In addition, they can donate a portion of their profits as zakat or invest in environmental waqf projects. Individuals also have a responsibility to reduce their carbon footprint and contribute to climate change mitigation efforts. This can include the use of green transportation, efficient energy use, and participation in tree-planting programs or other environmental projects that comply with shariah principles

5.2 Case Studies: Carbon Economic Value Implementation in Islamic Contexts

The implementation of carbon economics in the context of Muslim-majority economies is a significant challenge, but also an opportunity to achieve environmental and economic goals while upholding Sharia values. One case study example is the experience of the Arabian Gulf countries, particularly the United Arab Emirates (UAE), in their efforts to integrate carbon economics with Islamic economic principles [22].

The United Arab Emirates (UAE) is one of the Arabian Gulf countries that has committed to reducing carbon emissions and improving environmental sustainability. Although the country is rich in natural resources, especially oil and gas, the UAE recognizes the importance of diversifying their economy to face the challenges of climate change and transition to a more sustainable economy. The UAE has taken steps to integrate the economic value of carbon in their economic development. One of the key initiatives is the creation of a regional carbon market referred to as the "Clean Air Emissions Trading System" (Clean Air Market) [23]. Under this system, companies that exceed set emission limits must purchase additional emission permits, while companies that successfully reduce their emissions can sell their permits. The UAE has also developed diverse emission reduction projects, such as renewable energy projects and tree planting, to offset their emissions.

Evaluation of the effectiveness of the implementation of the value of carbon economy in the UAE is seen in several aspects: First, increased environmental awareness, the implementation of the value of carbon economy has increased environmental awareness among companies and individuals in the UAE. Companies are more motivated to adopt clean technologies and invest in sustainable projects. Second, sustainable development, the UAE has successfully developed new sustainable economic sectors, such as renewable energy and green tourism [24]. This helps diversify their economy and reduce dependence on the oil and gas sector. Third, synergy with Shariah principles, Shariah principles such as zakat and waqf, have been used to support environmentally sustainable projects in the UAE. Zakat and waqf funds are used for investments in tree planting, renewable energy projects, and sustainable water management. Finally, International Partnerships, the UAE has established international partnerships for the exchange of knowledge and experience in addressing climate change. This includes participation in the UN Climate Change Conference (COP) and cooperation with other countries in reducing carbon emissions [25].

5.3 Challenges and Recommendations

Integrating carbon economics into the Islamic framework is an important task but also fraught with challenges. What follows is an identification of the challenges and barriers faced and recommendations to overcome them. One of the main challenges is the uncertainty in carbon valuation methodologies. Different methodologies can produce different results, and this can confuse policy makers and companies. Also, conflicts with economic priorities - in some cases, efforts to reduce carbon emissions and implement sustainable practices may conflict with economic and growth priorities. This can be a constraint for countries with economies that are not yet diversified [26].

Furthermore, difficulty measuring environmental impacts, measuring the environmental and economic impacts of carbon emissions can be very complex and expensive. This can be a barrier for countries with limited resources. Some recommendations are the standardization of carbon assessment methodologies, establishing a consistent and internationally acceptable carbon assessment methodology standard is the first step. This will facilitate comparison of results and minimize uncertainty. Furthermore, sustainable resource development, Muslim-majority countries can prioritize the development of sustainable resources such as renewable energy and sustainable agriculture. This will help reduce conflicts between economic and environmental practices including in Indonesia. Then, education and awareness, improving public education and awareness on climate change and the values of carbon economy will help change behavior and support sustainable practices. Equally important are economic incentives, providing economic incentives, such as carbon taxes or fiscal incentives for sustainable practices, can motivate companies and individuals to reduce carbon emissions. Finally, international collaboration, Islamic countries and/or Muslim-majority countries such as Indonesia can work together with other countries to address climate change challenges. International collaboration can include the exchange of technology, resources and knowledge, although there is currently international cooperation but it is not yet optimal [27].

For academics, practitioners and policy makers, further research is needed to develop solutions tailored to Islamic economics. This includes research on the economic and environmental impacts of carbon emissions, the development of clean technologies that comply with sharia principles, and the assessment of the economic impact of sustainable practices. Collaboration

between scholars, governments and the private sector should also be enhanced to produce effective and sustainable solutions.

Conclusion

In conclusion, this article asserts that the green economy can be integrated with Islamic principles in managing the economic value of carbon. The development of a sustainable economic model based on Islamic economic law can positively contribute to environmental protection and effective carbon emission reduction. However, the practical implementation of this concept requires cross-sectoral cooperation and legal regulations that are aligned with the principles of sharia economic law such as *tauhid*, *amanah*, maqasid al-syariah and takhsir. Presidential Regulation Number 98 of 2021 and Minister of Environment and Forestry Regulation Number 21 of 2022 are policies issued by the Indonesian government to emphasize its commitment to the environment and climate change, so the implementation of these regulations needs to be done immediately, given the principles in these regulations that are integrated with the values of sharia economic law and if implemented, contribute to reducing emissions and the 2030 net zero carbon commitment.

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