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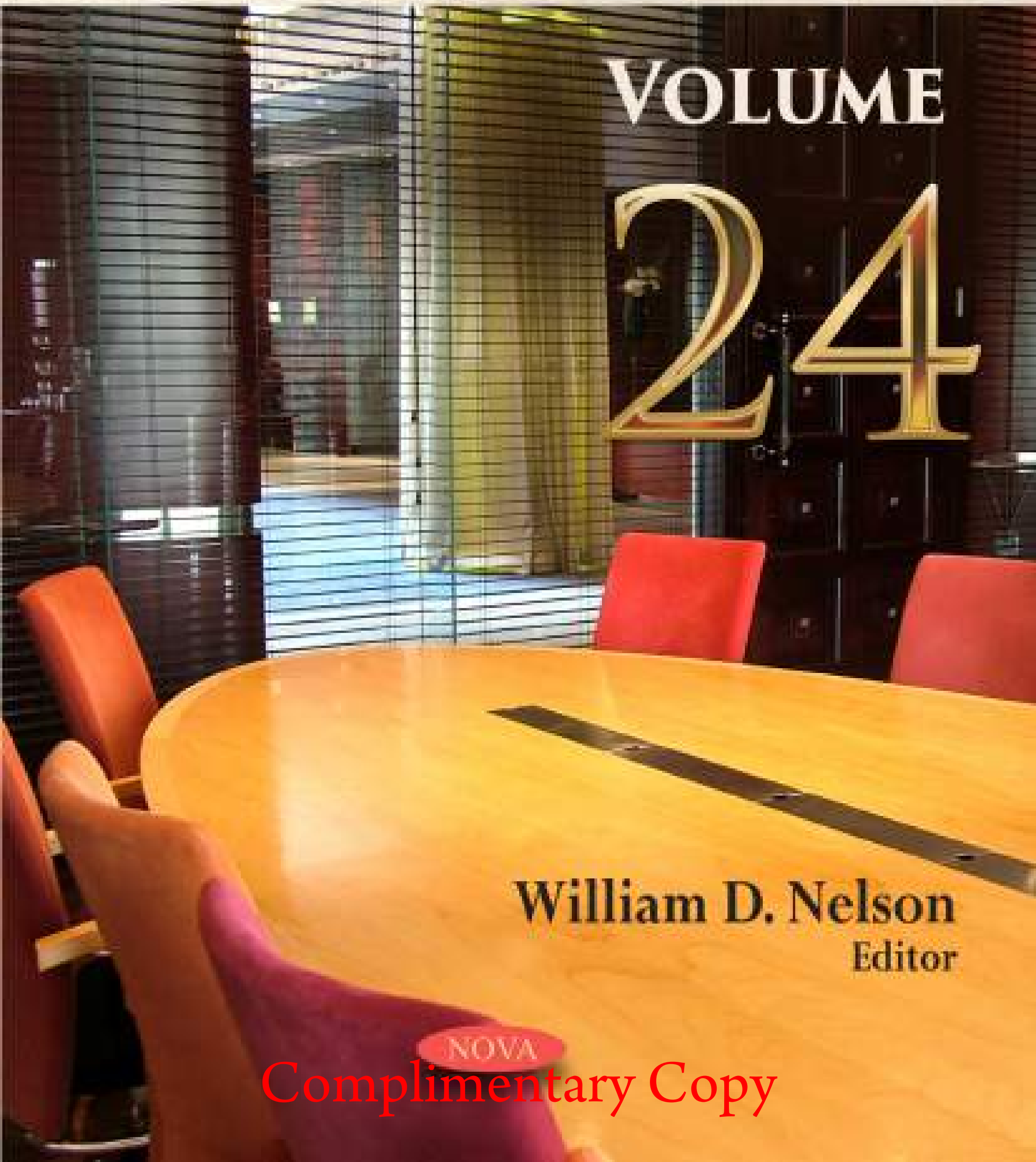

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Contents

Chapter 1

Sustainable Financing for Green Businesses from the Perspective of Islamic Finance

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Abstract

Sustainable financing for green businesses is becoming an increasingly prominent topic among academics, practitioners, and policymakers. Amidst environmental unpredictability and increasing concerns about climate change, green enterprises have a vital function in advancing sustainable economic development while tackling ecological equilibrium. Nevertheless, a significant obstacle encountered by green businesses is obtaining sufficient financial support to maintain their innovation and expansion. From an academic standpoint, the principles of Islamic finance and Islamic spirituality provide a distinct and potentially influential perspective of enhancing sustainable financing for green businesses. This chapter discusses sustainable financing for green businesses, examining it through the lenses of Islamic finance and Islamic spirituality. The chapters explore the origins of sustainable financing and the rise of environment-friendly enterprises. It also evaluates how the principles of Islamic finance and the values of Islamic spirituality can be utilized to bolster green businesses. The research methods utilized in this writing encompassed a thorough examination of the relevant literature, analysis of primary and secondary sources, and

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evaluation of global best practices. Based on this analysis, the principles of Islamic finance, including the prohibition of interest, speculation, and emphasis on justice in wealth distribution, can serve as a robust basis for sustainable financing in the realm of green businesses. In making responsible and sustainable business decisions, one can also draw guidance from the values of Islamic spirituality, such as social responsibility, balance, and sustainability.

This research implies that the integration of Islamic finance, Islamic spirituality, and green businesses can create a more sustainable and resilient business model amid increasingly complex environmental and economic challenges. Moreover, it can contribute to increasing stakeholders' understanding of the significance of sustainable funding for environmentally friendly enterprises, including corporations, investors, governments, and the public.

Keywords: sustainable financing, green business, Islamic finance, Islamic spirituality

Introduction

Sustainable financing is a financial approach that considers environmental, social, and governance (ESG) factors when making investment and financing decisions. The objective is to support projects or companies that not only generate financial returns but also make a positive contribution to the environment and society. Sustainable Financing seeks to tackle global challenges, such as climate change, social inequality, and environmental deterioration, by directing financial resources towards companies that foster sustainable progress (G20, 2022).

Sustainable financing encompasses several instruments and approaches, including green bonds, which are designed to finance projects that yield explicit environmental or social benefits. Furthermore, sustainable financing encompasses the adoption of responsible investment principles that involve assessing companies based on ESG criteria and advocating for improved corporate practices through shareholder involvement. This serves as a driving force for firms to enhance their ESG performance, consequently boosting their competitiveness and reputation in the global market (Akomea-Frimpong et al., 2022).

To successfully implement sustainable financing, well-defined frameworks, and standards for evaluating and recording ESG effects are necessary. Financial institutions and investors require precise and verifiable data to assess the risks and opportunities associated with ESG performance. The Principles for Responsible Investment (PRI) and Task Force on Climate-Related Financial Disclosures (TCFD) play crucial roles in fostering transparency and accountability in this context. Hence, sustainable financing not only aids in the preservation of the environment and the promotion of social well-being but also strengthens the stability and durability of the financial system against long-term risks (D'Orazio & Thole, 2022).

The Importance of Green Business in a Global Context

The significance of sustainable business is escalating globally because of heightened consciousness regarding climate change, environmental deterioration, and the finite supply of natural resources. Furthermore, the ongoing increase in Earth's temperature exerts a profound influence on climate change, among other things. According to the statistics provided, it seems that the global temperature on both the Earth's surface and oceans continues to rise (Statista, 2024). Since the 1980s, the annual temperature change from the average has been consistently positive. In 2023, the global land and ocean surface temperature anomaly exceeded the 20th century average by 1.19 degrees Celsius, making it the highest temperature anomaly observed over the period depicted. The hottest years in recorded history occurred during the last ten years, with the most significant deviation from the average temperature observed in 2023. The primary driver of global warming is predominantly attributed to the escalated release of carbon dioxide and other greenhouse gases into the Earth's atmosphere. The loss of sea-ice cover in the Northern Hemisphere is a clear indication of climate change.

Green business refers to company policies that focus on reducing negative environmental effects by prioritizing energy efficiency, sustainable resource utilization, and carbon emission reduction. Green initiatives are crucial in assisting countries in attaining globally accepted sustainability objectives, such as the Sustainable Development Goals (SDGs) and the Paris Agreement on Climate Change (Taghizadeh-Hesary & Yoshino, 2020).

Furthermore, green financing is crucial for tackling the economic challenges associated with climate change and resource scarcity. Companies that use environment-friendly practices typically exhibit enhanced efficacy in energy and resource utilization, leading to reduced operational expenses and heightened long-term profitability. Furthermore, advancements in environmentally friendly technology can create new opportunities for enterprises and enhance economic growth in sectors such as renewable energy, waste management, and sustainable agriculture (Lamperti et al., 2021). Therefore, the transition to a green economy is crucial not only to preserve the environment but also to ensure global economic stability.

Green finance plays a substantial role in creating job opportunities and enhancing people's standard of living. Green industries, such as renewable energy and waste management, have the capacity to create significant environmentally friendly and sustainable job opportunities (Oboro, 2024). Furthermore, those committed to environmentally friendly methods frequently prioritize social well-being, including enhanced labor circumstances and business social accountability. Green projects not only help preserve the environment but also promote inclusive and sustainable social development (Martinez, 2017).

The significance of green business worldwide is evident in the increasing demand from customers and investors for eco-friendly products and services. Consumers are becoming more cognizant of the environmental impacts of their choices, and are more inclined to select sustainable items (Ming et al., 2015). Likewise, investors increasingly prioritize ESG factors when deciding where to spend their money. Companies that exhibit robust environmental performance typically have a more favorable reputation and possess a greater competitive edge in the global market. Hence, embracing environmentally sustainable business practices is not merely a moral duty but also a tactical method to effectively tackle the challenges and seize the opportunities of the 21st century (Afum et al., 2020).

Sustainable Financing seeks to allocate resources to endeavors to advance ESG sustainability. The primary goals of Sustainable Financing are to facilitate the shift towards a low-carbon economy, mitigate socio-economic inequalities, and enhance business and government governance. Sustainable Financing seeks to create enduring value for investors and society by incorporating ESG considerations into investment and finance decisions. Companies that prioritize and successfully manage ESG risks are typically more resilient to regulatory changes, natural disasters, and social pressures. Companies that commit resources to sustainable technologies and renewable energy sources can decrease their reliance on fossil fuels and alleviate the risks associated with climate change. Likewise, organizations that embrace equitable and inclusive employment policies tend to have a workforce that is more productive and committed (Goel et al., 2022).

Furthermore, Sustainable Financing not only mitigates risk but also fosters opportunities for innovation and growth. Sustainable funding can stimulate financially lucrative innovations that are both environmentally and socially advantageous by providing support for projects that prioritize sustainable solutions, including green technology, renewable energy, and power infrastructure. These technological developments possess the capacity to create fresh markets and economic opportunities while simultaneously enhancing the competitiveness of firms in a sustainability-oriented global economy (Kirikkaleli & Adebayo, 2024).

Other advantages include improved standing and heightened confidence among the stakeholders. Companies that actively engage in Sustainable Financing practices are frequently regarded as more responsible and ethical, thus enhancing their reputations among consumers, investors, and society. Furthermore, it has the potential to enhance connections with stakeholders, including customers, staff, and regulators, ultimately resulting in positive impacts on total corporate prosperity. Hence, Sustainable Financing is crucial not only for attaining worldwide sustainability objectives but also for providing significant advantages to corporations and investors (Liang & Renneboog, 2020).

Sustainable Financing from the Perspective of Islamic and Non-Islamic Finance

When examining the field of Sustainable Financing, it is evident that there are notable disparities in the concepts and methodologies between Islamic and non-Islamic financing. Nevertheless, both possess the capacity to contribute to the shared objectives of sustainable development. Islamic finance strictly follows the tenets of Islamic law, which forbid the practice of charging interest (riba), engaging in transactions with significant uncertainty (gharar), and indulging in gambling (maysir). Furthermore, it prioritizes equity, openness, and societal accountability. Hence, all transactions and investments must comply strictly with Islamic ethical and moral values, which inherently advocate investing in initiatives that uphold environmental and social sustainability. For instance, directing financial resources towards renewable energy, waste management, and green infrastructure initiatives adheres to the principles of Islamic finance.

By contrast, non-Islamic finance operates with the objectives of maximizing profit and achieving market efficiency. This is accomplished by utilizing financial instruments, such as bonds, stocks, and profitable loans, to finance diverse projects. Although non-Islamic finance is not subject to the same ethical constraints as Islamic finance, there is increasing acknowledgment and interest among investors in socially responsible investing (SRI) and green finance. This is seen in the development of financial instruments, such as green bonds, social bonds, and sustainability-related loans, which are expressly crafted to finance projects that provide environmental and social advantages. Nevertheless, in the absence of stringent restrictions, there is a possibility that certain investments may not completely adhere to sustainability objectives (Salman & Nawaz, 2018).

The dominance of Islamic finance in Sustainable Financing arises from its incorporation of ethical and sustainability principles across all transactional dimensions. Green schemes enable the funding of eco-friendly initiatives in compliance with the Shariah principles, thus merging sustainability with religious convictions. Furthermore, the principles of zakat and waqf in Islamic finance can be employed for social objectives such as bolstering local economies and mitigating poverty, thus fostering sustainable development. Islamic finance incorporates an inherent framework that actively advocates the achievement of sustainable objectives (Brescia et al., 2021).

Conversely, traditional finance offers greater adaptability and capability of sustainable funding. Non-Islamic financial instruments, such as green and social bonds, have been developed with clearly defined reporting regulations, enabling investors to assess and monitor the impacts of their investments. Non-Islamic finance integrates ESG factors to provide a clear framework for evaluating and managing risks and possibilities related to sustainability. Although non-Islamic and Islamic finance strategies may exhibit disparities, they can collaborate harmoniously to accomplish sustainable funding objectives. Every strategy possesses unique benefits that can be utilized to foster comprehensive and enduring global development (Cunha et al., 2021).

Sustainable Financing for Green Business Financing; an Islamic View

Principles of Islamic Finance

Islamic finance is a financial system that follows the principles of Islamic law. Islamic finance refers to all financial activities that adhere to Islamic law and ethics, emphasizing ideals, such as justice, equity, and social responsibility. Islamic finance is guided by fundamental principles that involve the prohibition of riba (charging interest), gharar (uncertainty or excessive speculation) and maysir (gambling). Furthermore, when engaging in Islamic finance, it is crucial to allocate money in ways that are considered permissible according to Islamic law and to refrain from participating in expressly forbidden activities such as the use of alcohol, gambling, and other prohibited products (Bertillo & Bertillo, 2022). In this context, the term “price” refers to the fee imposed for borrowing money, which is deemed unjust due to the exploitation of the borrower's financial difficulties. Islamic finance employs contracts that rely on revenue or profit, such as mudharabah (investment partners) and musyarkahah (business partnerships). Within these contractual agreements, the participating parties distribute profits and losses according to the extent of their respective contributions. This fosters a fair allocation of risk and encourages the active engagement of all players in economic endeavors (Ishak & Nasir, 2021).

The second fundamental principle is the prohibition of usury, which entails refraining from engaging in transactions with elements of uncertainty or excessive speculation. Transactions in Islamic finance must demonstrate transparency and precision in terms of conditions, thereby decreasing the danger of fraud and disputes between the parties involved. In a sales agreement, it is crucial that all specifics of the merchandise, cost, and delivery timetable are clear and agreeable to both parties concerned. The objective of this principle is to ensure equity and consistency in economic interactions (Bhatti & Bhatti, 2010).

The third essential principle pertains to the ban on maysir, which encompasses all forms of gambling activities. Islamic finance strictly forbids participation in activities that depend on pure randomness or speculation, as they might lead to substantial financial losses. Instead, monies should be allocated to companies or projects that are efficient and contribute positively to the economy and society. Furthermore, Islamic finance prioritizes social responsibility, as shown by the practice of zakat (the duty to contribute a part of income to the less fortunate) and other social initiatives aimed at diminishing economic disparity and enhancing the general welfare of society. Islamic finance seeks to attain not only financial profits, but also wider social and economic welfare (Ferri & Acosta, 2019).

Shariah-compliant financial instruments encompass a diverse array of products and services that adhere to the Shariah principles. Their objective is to eradicate the inclusion of interest (usury), ambiguity (gharar), and gambling (maysir) in financial transactions (Mukhlisin, 2021). Below are some of the Shariah-compliant financial instruments.

1. Mudharabah

   Mudarabah is a form of partnership where one party, referred to as the rabb al-mal, provides the entire capital, while the other party, known as the mudharib, contributes their talents and efforts to oversee the business operations. The distribution of profits in this business endeavor is determined by a predetermined ratio, while any loss that occurs is the exclusive responsibility of the individual or entity that provides cash. This mechanism, which is commonly employed in project and investment finance, enables funds to earn profits without requiring active engagement in the company's operations.
2. Musyarakah

   Musyarakah is a partnership in which all parties contribute capital and participate actively in managing the firm. Profits and losses are allocated according to the relative proportion of each member. It is important in the domains of investment projects, joint ventures, and partnerships, as it encourages collaboration and sharing of risks among financiers. This technology is frequently used in infrastructure projects, real estate development, and other cooperative commercial operations.
3. Murabahah

   The purchaser is fully aware of the precise charges and profit margins imposed by the seller, guaranteeing seamless transactions without any uncertainty over cost. Builders are extensively utilized in trade finance, encompassing the provision of funding for automobiles, residences, and various other consumer requirements (Marliyah et al., 2021).
4. Sukuk

A financial instrument is a representation of ownership of a certain asset or enterprise that generates money. In contrast to non-Islamic interest-based bonds, Sukuk produces revenue through underlying assets that adhere to Sharia norms, such as rental or income. Sukuk have become a prominent means of financing large-scale infrastructure projects, real estate businesses, and other profitable investments. It offers a Sharia-compliant alternative for investors seeking secure and lucrative investment that aligns with Islamic principles.

5. Ijarah

   A lease is a legally binding contract in which the owner of goods allows another party, called the lessee, to use an item in exchange for an agreed-upon rental payment. A lease can be applied to various types of assets, including real estate, automobiles, and industrial gear. Furthermore, a leash can also function as a muntahiyah bi tamlik loan, in which the leased asset is transferred to the lessee upon completion of the lease term.

6. Istishna'

   Refers to a contractual agreement in which a buyer employs the production of a specific product or project with a manufacturer or contractor. Payments can be made before commencement, throughout the manufacturing process, or upon completion of the project. Typically used in the industrial and construction sectors, this word allows companies to secure funds to produce goods or execute projects in accordance with Sharia principles.

Shariah-compliant financial instruments provide alternative options that adhere to Islamic principles. They allow flexibility and fairness in financial transactions, while also promoting economic sustainability and prosperity for all parties involved.

Spirituality in Sustainable Financing

Spirituality is a crucial element in Islam that entails the pursuit of a profound comprehension of existence through the establishment of a connection with God. In Islam, spirituality focuses on nurturing the inner values that lead Muslims to develop a sincere heart, reverence, and unwavering consciousness of God's existence in every facet of life. The inner journey is the pursuit of cultivating a deeper connection with God, elevating one's moral and ethical principles, and leading a life characterized by compassion, sincerity, and justice (Bonab et al., 2013).

Tasawwufs and Sufism are essential components of Islamic spirituality. This underscores the significance of mystical experiences and profound devotion to the divine. Sufism is a spiritual practice that emphasizes attaining the direct cognition and comprehension of God through activities such as meditation, reciting the divine name, prayer, and embracing a modest way of life. Sufis endeavors to purify their hearts by eliminating negative qualities and nurturing good characteristics such as patience, humility, and thankfulness. They believe that by practicing spiritual disciplines and seeking instruction from a Sufi master (murshid), individuals can achieve an elevated level of understanding (spiritual state) and directly encounter the presence of God. Contemplation and dedication are the primary components of Muslims' spiritual essence. It encompasses the act of recalling the name of Allah, reciting the Qur'an, and contemplating the magnificence of Allah. Prayer, encompassing petitions, fasting, zakat, and hajj, serves as a concrete method of displaying obedience and devotion to God. By participating in these rituals, Muslims strengthen their connection with God, heighten their spiritual consciousness, and attain inner tranquility (Salleh, 2014).

In Islam, spirituality is exemplified by the concept of ihsan, which denotes the practice of performing actions with high proficiency or flawless accuracy (Firdaus & Ahmad, 2023). Ihsan is a belief in the perpetual observation of Allah over all our acts, which inspires Muslims to pursue excellence in every aspect of their lives, whether it pertains to their devotion to God or their dealings with others. Ihsan comprises the moral and ethical aspects that encourage individuals to live with integrity, honesty, and virtue while also contributing positively to the overall welfare of society.

Spirituality in Islam encompasses both internal and outward dimensions, guiding Muslims towards attaining proximity to God, personal growth, and positively impacting their daily lives. Through active participation in Sufism, practicing dhikr, engaging in devotion, and striving for Ihsan, Muslims can develop deep spiritual qualities, attain inner serenity, and lead a purposeful life in alignment with the principles of Islam (Bonab et al., 2013).

Spirituality and Business Ethics

Thus, the link between Islamic faith and corporate ethics is intimate. The inclusion of complete guidelines for ethical behavior in numerous domains, including business, is a result of Islamic teachings, which not only govern the spiritual component and worship, but also regulate other aspects of life. The business ethics principles adhered to by a Muslim are greatly shaped by Islamic spirituality, emphasizing the significance of possessing a sincere heart and being conscious of and reversing towards the presence of God. Islam's spiritual ideals guide Muslims to conduct business with integrity, equity, and a strong sense of social responsibility.

The foundation of business ethics in Islam is derived from the principles outlined in the Qur'an and the Hadith. Honesty, also known as sidq, is a key principle that highlights the significance of integrity and transparency in business transactions. A devout adherent of Islam will abstain from participating in any kind of deceit, manipulation, or unethical conduct in their business dealings while giving utmost importance to spiritual values. Integrity in business fosters confidence among consumers and business partners and is also regarded as a form of dedication that is recognized and rewarded by God.

Another crucial value is the concept of justice ('adl). Islam upholds the principle of egalitarianism, advocating for the impartial and just treatment of all individuals devoid of any kind of prejudice or bias. In the realm of business, this entails offering employees equitable remuneration, establishing reasonable prices for goods and services, and abstaining from exploiting individuals or organizations for personal benefits. The concept of justice aligns with the objective of Islamic theology to establish a harmonious and peaceful society, in which the rights of each individual are safeguarded and upheld (Alshehri et al., 2021).

In Islam, corporate ethics encompasses social responsibility, honesty, and fairness as crucial elements. Islamic ideology encourages followers to actively engage in promoting the well-being of society and environment. These humanitarian actions, including zakat, infaq, and waqf, can be used to accomplish this goal. Companies deeply influenced by the spiritual concepts of Islam tend to have a stronger commitment to social responsibility. They actively adopt sustainable business practices and make concerted efforts to have a beneficial impact on the surrounding communities around them (Ilyas, 2018).

Islamic faith provides a strong basis for establishing ethical business principles. Principles such as honesty, fairness, and social responsibility not only reflect profound spiritual ideals, but also foster ethical and sustainable corporate practices. This correlation implies that engaging in economic activities in line with Islamic principles is not solely driven by financial profit but also strives to attain Allah's blessings and endorsement by adhering to ethical and accountable conduct (Fathallah et al., 2020).

Islamic Values in Natural Resources and Environmental Management

Islamic beliefs regarding natural resources and environmental management are extensive and encompassing. The belief emphasizes that humanity has been entrusted with the responsibility to safeguard and preserve God's creation as the supreme authority of the earth. Islamic theology prioritizes the establishment of a harmonious and equitable connection between humans and the natural world while emphasizing a profound sense of accountability.

This principle highlights the concept that the entire universe is created by a solitary divine being, and that it is the responsibility of humans to preserve and safeguard the natural world as an essential part of their own lives. This principle asserts that any form of exploitation that inflicts damage to the environment and disturbs the equilibrium of the ecosystem is a violation of God's intentions. As a result, Muslims are urged to embrace environmentally conscious behavior and safeguard the long-term preservation of nature.

The notion of khalifah, or leadership, asserts that humanity has been entrusted with the duty to act as a caretaker of the Earth. It is crucial for humans to exercise prudent and mindful control over natural resources as a civilization to avoid harm to future generations (Nasir et al., 2022). The Qur'an has numerous verses that highlight the need for individual accountability. For instance, Surah al-a'raf (7:31) encourages Muslims to exercise moderation in the utilization of natural resources, stating, engage in the consumption of food and drink, but abstain from indulgence'.

Mizan, also referred to as the equilibrium, is important in Islamic doctrines. The universe was brought into existence by celestial entities in a state of impeccable harmony, and humans are obliged to uphold its equilibrium. These principal mandates that Muslims abstain from participating in actions that could potentially cause harm or disturbance to ecology. This includes efforts to preserve biodiversity, safeguard habitats, and employ natural resources in a responsible manner. Allah elevated the celestial realm and established boundaries to prevent any transgression, ensuring that justice is upheld within these confines.

Maslahah, often referred to as general welfare, is a notion that highlights the necessity for all human undertakings, particularly the administration of natural resources, to yield financial gains and advance the overall well-being of society. This principle advocates for the Muslim community to assume the responsibility of effectively overseeing the environment and natural resources in a manner that brings advantages to society, the economy, and the environment. This includes the implementation of ecologically sound agricultural practices, utilization of renewable sources of energy, and adoption of waste management strategies that prioritize environmental preservation (Firdaus, 2021).

By integrating fundamental Islamic principles such as Tawhid (belief in the oneness of God), Khalifah (the idea that humans are caretakers of the Earth), Mizan (the principle of equilibrium and fairness), and Maslahah (the responsibility to protect the environment), Muslims can actively participate in worldwide initiatives to conserve the environment and promote the sustainable utilization of natural resources. This approach, grounded in spiritual and ethical principles, not only advocates for the preservation of the environment, but also strengthens the moral and social responsibility to safeguard the welfare of the earth and its inhabitants (Nasir et al., 2022).

Integration of Islamic Spirituality in Green Business Financing

Islamic spirituality in green business financing combines Islamic ethical principles with dedication to advancing environmentally conscious and sustainable practices. Green business financing in the Islamic setting is rooted in spiritual beliefs that advocate for environmental responsibility and societal well-being while denouncing any form of exploitation that harms the environment.

The concept of the caliphate holds significant importance in Islamic mysticism and is relevant to funding green businesses. According to Islamic beliefs, humans are entrusted with the role of being khalifah, which means they are responsible for being the custodian of the planet (Firdaus, 2021). Muslims are responsible for prudently utilizing natural resources, maintaining the equilibrium of the ecosystem, and saving future generations from harm caused by resource consumption. The khalifah concept advocates investment in programs that promote environmental conservation, renewable energy, and sustainable business operations in the field of green business financing. Tawhid, which denotes the belief in the oneness of Allah, has a profound impact on the Islamic viewpoint of green business funding. Tawhid asserts that the entire universe is the creation of a singular divine being and hence merits reverence and safeguarding. This notion mandates that Muslims endorse endeavors aimed at safeguarding and conserving the environment while abstaining from investing in enterprises that inflict damage upon nature. Financing green enterprises in compliance with the law means providing financial support to projects in line with the divine intention to maintain the equilibrium and harmony of nature.

Maslahah, commonly referred to as collective welfare, is a basic idea that serves as the foundation for green business financing in Islam. Maslahah posited that all human conduct should yield benefits and advance the welfare of a broader society. Financing entails aiding projects that are financially lucrative and have a positive impact on the environment and societal well-being. Green business finance, based on charity, supports investments in projects that seek to decrease carbon emissions, enhance energy efficiency, and foster sustainable development. Moreover, the Islamic principle of fairness ('adl) is relevant to the field of green business finance. Justice necessitates equitable treatment of all individuals and forbids their exploitation. In the realm of business, this entails proactively pursuing equitable and ethical protocols while also ensuring that company practices do not harm the environment or have adverse social impacts on stakeholders. Equitable and moral funding advocates for ecologically conscious behaviors and prioritizes the welfare of all parties involved, including local communities and ecosystems (Hamidi et al., 2023).

Islamic spirituality provides a solid foundation for promoting and enhancing the financing of environmentally sustainable businesses. Muslims are guided by principles such as khalifah, tawhid, maslahah, and justice to endorse sustainable and environment-friendly efforts. They also ensure that their actions are in line with their moral and ethical responsibilities towards God's creation and the welfare of people. Islamic theology-based green business financing not only supports environmental sustainability but also strengthens commitment to social justice and global well-being.

Sustainable Financing for Green Business; Islam's Practice

Islamic Financing Model and Structure for Green Projects

Shariah-compliant financing for green initiatives adheres to Shariah principles, which include the prohibition of usury (riba), uncertainty (gharar), and gambling (maysir). This methodology should be capable of accommodating efforts that provide environmental and social advantages. Below are several financial models and systems linked to Sharia-compliant green initiatives.

1. Green Sukuk
   Sukuk refers to a unique financial instrument specifically meant to provide funding for projects that are ecologically sustainable. Green sukuk are financial securities that adhere to Sharia norms and operate similarly to bonds. It is generated to fund environmentally sensitive activities such as renewable energy, waste management, and other sustainability projects. Projects funded with a green margin typically undergo additional scrutiny to ensure that they meet particular criteria for environmental sustainability (Liu & Lai, 2021).
2. Mudharabah
   Partnership is a form of collaboration in which one party provides cash, known as rabb al-mal, whereas the other party supplies expertise and effort, referred to as mudharib, to oversee a project. Profits are allocated according to a predetermined ratio, with only the capital provider responsible for losses, except for damages resulting from the seller's negligence or contract violation. In the realm of green projects, monies can be allocated to bolster ventures that precede environmentally sensitive technologies, renewable energy sources, and sustainable corporate tactics.
3. Musyarakah
   It refers to a form of collaboration in which all participating parties provide financial resources and actively participate in project management. The distribution of profits and losses was established according to the proportional amount of capital provided by each participant. This paradigm is well suited for green projects as it enables collaboration among different stakeholders, including the government, private sector, and non-governmental organizations, in the creation of sustainability initiatives such as renewable energy projects and the development of green infrastructure.

4. Ijarah
   A lease, also known as an ijarah, is a contractual agreement in which the owner of goods allows another person, called the lessee, to use an item in exchange for a certain amount. Leasing is a viable option for financing environmentally friendly initiatives, such as leasing renewable energy equipment (e.g., solar panels or wind turbines) to the final consumers. Muntahiyah bi tamlik leasing, also known as leasing with the transfer of ownership, can facilitate the transfer of staffing for green assets upon the completion of the leasing period.
5. Istishna'
   Istisna is a contractual agreement in which one party commissions the creation of a particular product or project to another party, and payment is provided based on mutually agreed terms. This is appropriate for green programs that require the construction of specialist infrastructure such as waste treatment facilities, renewable energy generation plants, or sustainable structures. Payments can be made prior to the start, throughout the construction period, or following the conclusion of the project, thus providing flexibility in financing (Rahman & Riyadh, 2016).

When implementing Islamic financing models and structures for green projects, it is of utmost importance to prioritize openness, accountability, and adherence to stringent environmental regulations. Frequently, this entails employing third-party verification to ensure that sponsored projects genuinely contribute to environmental sustainability and adhere to rigorous green criteria. Islamic financing concepts and structures offer an ethical and sustainable approach for funding green initiatives. This is accomplished by combining the principles of Islamic finance with the goals of environmental and social sustainability.

Islamic Financing Instruments

Shariah-compliant finance channels such as green sukuk, waqf, and zakat play a crucial role in aiding environmentally friendly and sustainable projects. Each of these products possesses unique characteristics that are in line with the principles of Islamic finance, and can be effectively utilized to accomplish sustainability objectives.

1. Green Sukuk

   Stocks are a particular category of bonds called Green Sukuk that are utilized to finance environmentally friendly and sustainable enterprises. Green bonds must adhere to Sharia principles and meet the sustainability criteria established by international standards, such as green bond principles. Green sukuk adhere to Sharia norms and incorporate processes such as leasing, partnership, and charity. The revenue generated from the issuance of green stamps is allocated to support environmentally conscious projects such as renewable energy, waste management, and sustainable infrastructure. Investors in green sukuk receive income from cash created by supported initiatives, rather than from interest, in compliance with the Islamic ban of interest. Moreover, green stamps have a positive impact on the environment and facilitate sustainable development (Piratti & Cattelan, 2020).

2. Waqf

   Waqf is a sustainable method of philanthropy that involves donating property and using the income or money created to support public or charitable causes. Waqf can be used to finance a range of initiatives that yield advantageous social and environmental results. Waqf is the practice of permanently transferring assets to use them indefinitely for a specified purpose. Waqf assets encompass several forms, including land, structure, and invested capital. Waqf can be utilized to finance sustainable endeavors such as the creation of educational institutions, healthcare provisions, or eco-friendly infrastructure. It facilitates the long-term utilization of resources and delivers enduring advantages to society (Piratti & Cattelan, 2020).

3. Zakat

   Zakat is an obligatory practice in Islam, whereby Muslims are required to donate a percentage of their wealth, often 2.5%, to aid those who are less fortunate. Zakat is gathered by zakat organizations and allocated to eight qualifying categories, encompassing impoverished, indebted, and communal endeavors such as infrastructure enhancement that serves the community. Zakat monies can be allocated to eco-friendly efforts that yield positive social and environmental results, such as constructing sustainable housing for impoverished individuals, establishing clean water facilities, or executing renewable energy projects that lower energy expenses for underprivileged communities (Faizi et al., 2024).

The primary benefit of utilizing these financial instruments is their adherence to Shariah rules while also being flexible to individual sustainability objectives. For instance, zakat funds can be utilized to address urgent necessities, while waqf and zakat can provide enduring financial support for sustainable infrastructure projects. By harnessing the combined potential of various tools, Muslims can actively contribute to the progress of the SDG and uphold Islamic ethical and moral values in the responsible utilization and conservation of natural resources, as well as in the promotion of community welfare.

Case Study of Green Projects Funded by Islamic Finance

An analysis of green initiatives financed by Islamic finance can provide an accurate depiction of how Sharia principles are utilized to advance environmental and social sustainability. One example is the issuance of green sukuk by the Malaysian government to fund several environmentally friendly projects.

1. Case Study 1: Indonesian Government

   In 2018, the Indonesian government issued a private green bond, known as a green sukuk, with a value of $1.25 billion, making it the first of its kind in the world. This finance was established to support a range of environmentally conscious initiatives, with the goal of mitigating greenhouse gas emissions and enhancing environmental sustainability. The allocation of green money was used to support various projects, including the development of renewable energy infrastructure (such as solar and wind energy), construction of environmentally friendly trains and public transportation for sustainable transportation, waste management initiatives, and forest protection efforts. The structure of the Shariah-compliant green sukuk incorporates the use of leases and partnerships in line with the norms of Islamic finance, which forbid interest and maysir. Verified projects have undergone rigorous assessments to ensure adherence to global environmental standards. Indonesia can attract sustainable-focused international investors by implementing environment-friendly regulations. Furthermore, it showcases Indonesia's dedication to addressing climate change and to advancing sustainable development. Furthermore, the release of this environmentally focused terminology also serves as a model for other nations to develop sustainable financial instruments that adhere to the Shariah principles (Guild, 2020).

2. Case Study 2: Malaysia's green sukuk

   Malaysia has implemented green sukuk to fund a range of environmental projects. Tadau's green energy objectives and projects encompass the utilization of cash to support the advancement of solar power infrastructure. The objective of this initiative was to diminish reliance on fossil fuels and decrease carbon emissions in Malaysia. The structure of this segment was designed in accordance with the Sharia principles. It operates through a lease system, in which investors earn revenue by leasing renewable energy assets. The building of this structure conforms to Sharia precepts while simultaneously advancing environmental sustainability objectives. Solar power projects financed through green funds in Malaysia have a substantial influence not only in producing environmentally friendly electricity but also in generating employment prospects and fostering the development of sustainable technologies. This exemplifies the capacity of Islamic financing to facilitate the transition towards renewable energy (Liu & Lai, 2021).

3. Case study 3: Turkey

   Utilization of waqf for ecologically conscious initiatives in Turkey. Waqf agencies in Turkey have been utilized to fund environmental endeavors such as the establishment of urban parks and water treatment facilities. Objectives and Initiatives: A waqf-supported program in Istanbul involves the building of an urban park. The main goal was to create green spaces for the community and help reduce air pollution. The Sharia and compliance framework of this waqf entails the allocation of specific assets towards environmentally friendly initiatives with the aim of distributing the advantages of these projects to the community. Asset management in the framework of Waqf is carried out in accordance with Sharia principles, guaranteeing long-term viability and continuous advantages for recipients. Projects supported by Waqf have considerable influence, producing important environmental and socioeconomic advantages. Green spaces enhance air quality and provide recreational spaces for the community, whereas water treatment facilities provide access to potable water, which is crucial for health and well-being (Yelkenci & Bulut, 2024).

The case studies illustrate the utilization of Islamic financing methods, including green sukuk and waqf, to offer financial assistance for environmentally friendly projects. By using the principles of Islamic finance, these efforts not only yield financial profits, but also advance environmental sustainability and social welfare. Islamic finance has the capacity to make a meaningful contribution to global efforts aimed at tackling environmental problems and promoting sustainable development.

Challenges and Opportunities in Islamic Financing for Green Businesses

Islamic finance for green businesses faces several unique challenges and opportunities. Below is an explanation of these two aspects:

1. Challenges in Islamic financing for green businesses

   Green Islamic financing faces different obstacles and potentials. among these challenges are.

   a. Ignorance and indifference

      Many market participants, including investors and financial institutions, do not have a thorough understanding of the concepts and benefits of Sharia-compliant financing for environmentally friendly projects. Insufficient knowledge and understanding of Islamic's financial instruments and environmental sustainability have led to minimal involvement and backing for Islamic-funded green projects.

   b. Limitations of financial instruments

      Although financial instruments, such as green currencies, exist, the options for Sharia-compliant financing products specifically designed to support green activities are still restricted in terms of their breadth and variety. This package contains investment and financing tools that adhere to Sharia regulations, while supporting environmentally sustainable businesses.

   c. Regulations and policies that are yet to come

      Regulations pertaining to green finance and Islamic finance are presently in the process of being developed, and have not yet reached a fully developed state. The absence of synchronization between the Islamic finance industry and environmental legislation could impede the development and progress of environmentally friendly Islamic financial products.

d. Complicated verification and reporting

Comprehensive authentication and documentation of green projects are necessary to ensure that money is allocated exclusively to environmental objectives. This process is frequently intricate and requires further resources as well as cooperation with proficient third parties for the objectives of auditing and reporting.

e. Lack of data and risk analysis

An issue that arises is insufficient data and a comprehensive examination of the potential hazards. Insufficient and precise data are available regarding the performance and dangers of green initiatives supported by Shariah compliance. This fosters a feeling of prudence among investors and diminishes their inclination to invest (Ur Rashid & Uddin, 2018).

2. Opportunities in Islamic finance for green businesses

a. Growing market demand

The increasing global recognition of environmental issues and climate change has fueled the need for sustainable investment. Financial instruments that adhere to Shariah principles and support environmentally friendly projects have the capacity to appeal to investors interested in ethical and sustainable investing.

b. Innovation in financial instruments

There is immense potential to develop and utilize novel Shariah-compliant financial instruments that encourage sustainable business practices. Productive vouchers and zakat can be efficiently utilized to fund environmental and sustainability efforts, thus creating novel routes for financing.

c. Government assistance and incentives

Government support in the form of favorable policies, financial incentives, and specific regulations can encourage the adoption and issuance of Shariah-compliant financial instruments for environmentally friendly enterprises.

d. Global collaboration and integration

Nations that develop Islamic finance markets can share expertise, exemplary approaches, and resources to foster the expansion and adoption of sustainable financing. This partnership has the capacity to expedite worldwide adoption of environmentally sustainable financial solutions that adhere to Sharia principles.

e. Islamic finance ecosystem development

Establishing an extensive network of financial institutions, environmental assessors, Sharia auditors, and advisory service providers could improve the efficiency of Sharia-compliant green financing. It also encompasses the development of skills and knowledge acquisition for professionals engaged in Islamic finance and sustainability.

Sharia-compliant funding offers an ethical and sustainable approach to supporting environmental projects. Despite obstacles such as a lack of comprehension, restricted resources, and inadequate rules, there are promising opportunities through advancements in financial tools, endorsements from policies, and international cooperation. By overcoming these obstacles and leveraging existing strengths, Islamic financing can play a substantial role in promoting sustainable development and alleviating the consequences of climate change (Ur Rashid & Uddin, 2018).

Regulatory and Policy Issues in Sustainable Financing

Regulation of Islamic Finance and Green Business in Various Countries

The adoption of Islamic financial regulations and the advancement of green business in many nations exemplifies the dedication of governments and financial institutions to harmonize Shariah principles with the objectives of sustainable development. Presented below is a concise overview of financial legislation based on Shariah principles and environmentally friendly business practices implemented in several countries:

1. Malaysia

   Bank Negara Malaysia (BNM), the Central Bank of Malaysia has a dedicated department responsible for supervising and promoting the growth of Shariah-compliant financial services. The BNM has established rules and regulations to guarantee that Sharia-compliant financial institutions function in complete adherence to Sharia principles. The Sharia governance system guarantees that all Islamic financial products and services are subject to examination by the Sharia Supervisory Board to ensure adherence to the Sharia standards. The Green Technology Financing Program (GTFS) is a government strategy in Malaysia aimed at promoting and supporting green ventures. This involves a financing program that provides guarantees to financial institutions for funding green technology projects. Malaysia has issued Green Sukuk, which are bonds that adhere to Sharia principles and are expressly intended to finance environmentally friendly initiatives such as renewable energy and sustainable infrastructure (Kunhibava et al., 2018).

2. Indonesia

 The Indonesian Financial Services Authority oversees the Islamic financial industry in Indonesia and establishes regulations pertaining to the operations of the Islamic banking, Islamic capital markets, and Islamic insurance. An organization called the National Sharia Council in Indonesia oversees publishing Sharia Fatwas. Fatwas act as a guide for the creation of financial products and services that comply with Sharia law. The Indonesian government has designated green stamps to finance environmentally sustainable programs including renewable energy, water management, and climate change mitigation. Government initiatives and policies, such as presidential regulations and national action plans, offer assistance for investing in sustainable projects with the goal of reducing the impact of climate change (Setyowati, 2023).

3. United Arab Emirates (UAE)

 The Dubai Islamic Economy Development Center (DIEDC) seeks to promote the Islamic economy, with a specific focus on the Islamic financial industry. This is achieved by offering support through the enactment of laws and the implementation of strategic measures to strengthen Dubai's position as a prominent international hub for Islamic financing. The UAE central bank oversees Islamic financial institutions and ensures their adherence to the Shariah principles through regulatory and supervisory actions. The UAE has approved the Green Growth Strategy, which is a comprehensive plan that prioritizes the advancement of renewable energy and other environmental initiatives. The Dubai Green Fund offers financial assistance for environmentally friendly and sustainable projects with a specific emphasis on advancing energy efficiency and renewable energy (Richardson, 2020).

4. Saudi Arabia

   The Saudi Arabian Monetary Authority (SAMA) is the regulatory authority responsible for overseeing the banking and financial industries, including Sharia-compliant financial institutions, to ensure adherence to Sharia principles. Saudi Arabia has become a member of the Islamic Financial Services Board (IFSB), an institution responsible for establishing regulatory principles and standards for the Islamic financial industry. Saudi Arabia is dedicated to advancing its sustainable economy by investing in renewable energy and sustainability initiatives as part of Vision 2030. The objective of the Saudi Green Initiative is to reduce carbon emissions and enhance the utilization of renewable energy sources and energy efficiency measures throughout the nation.

The adoption of Islamic financial legislation and the promotion of green business in different nations signifies a dedication to integrating Islamic principles to attain sustainable development. Malaysia, Indonesia, the United Arab Emirates, and Saudi Arabia have implemented strong legislative frameworks to support the growth of the Islamic finance industry and to finance environmentally friendly projects. These policies not only support the attainment of financial and economic objectives but also encourage environmental preservation and improve social well-being.

Legal and Policy Frameworks in Muslim Majority Countries

Legal and legislative frameworks in nations with a Muslim majority that support environmentally friendly businesses and sharia-compliant finance are established by incorporating both Sharia principles and SDG. Every nation employs distinct approaches to develop legislation and policies tailored to its own conditions. The following is an overview of the primary legal and policy frameworks in the selected countries with a majority population:

1. Malaysia

   Malaysia implemented a thorough structure for Islamic Financial Law, as outlined in the Islamic Banking and Takaful Act of 1983. This legislation governs Islamic banking and Islamic insurance operations in Malaysia. Bank Nasional Malaysia (BNM) oversees and governs sharia-compliant financial products and services, ensuring that they operate within a robust legal structure. BNM has created a dedicated division to oversee and encourage financial activity that adheres to the Shariah principles. The principles and requirements for Sharia compliance set by BNM are obligatory for all Islamic financial institutions to adhere to. Furthermore, there is an implemented green policy that encompasses green technology-financing schemes. GTFS represents the general transit feed specifications. The GTFS provides financial assurance and incentives for initiatives such as green technologies, thus stimulating investments in the renewable energy and energy efficiency sectors. The cited document was the National Green Technology Master Plan. This plan advocates the integration of environmentally friendly technologies in several sectors of the economy and endorses policies that encourage the long-term viability of development (Hyung & Baral, 2019).

2. Indonesia

   Indonesia adopted the Islamic Financial Legal Framework through the enactment of the Islamic Banking Law No. 21 of 2008. This legislation establishes the rules and guidelines that govern the operations of Islamic banking, encompassing the criteria for adhering to Sharia principles and oversight by the Financial Services Authority. OJK also released the Indonesian Islamic Finance Roadmap 2015-2019. The OJK oversees Islamic financial institutions and collaborates closely with the National Sharia Council (DSN-MUI) to guarantee adherence to Sharia principles. The Indonesian government has utilized green bonds to finance endeavors aimed at advancing sustainable development objectives, including the development of renewable energy and green infrastructure. Furthermore, RAN-GRK employs tactics that seek to diminish the release of greenhouse gases by executing a range of ecologically conscious initiatives (Johan, 2022).

3. United Arab Emirates (UAE)

   The Dubai Islamic Economy Development Center (DIEDC) is tasked with building the Islamic Financial Legal Framework in the UAE. The primary goal of DIEDC is to foster the advancement and expansion of the Islamic economy in Dubai, particularly the Sharia-compliant financial sector. This is achieved by implementing laws and regulations that offer assistance and streamline development processes. The primary function of the UAE Central Bank is to oversee Sharia-compliant financial institutions and to ensure their adherence to Sharia laws and principles. The UAE Green Agenda 2030 is a strategic framework that delineates strategies for attaining sustainable, low-carbon economic expansion, with particular emphasis on the advancement of renewable energy sources and the establishment of environmentally friendly infrastructure. The Dubai Green Fund is a financial resource that offers support for funding environmentally friendly projects, specifically targeting programs that promote energy efficiency and the use of renewable energy sources (Akkaş, 2017).

4. Saudi Arabia

   The Sharia finance legal framework was incorporated within the Saudi Arabian Monetary Authority (SAMA). The primary function of the SAMA is to oversee and ensure adherence to Sharia principles in the banking and finance industry, encompassing Sharia-compliant financial organizations. Saudi Arabia is a participant in the International Islamic Financial Services Board (IFSB), a global organization that provides rules and references for the Sharia-compliant financial industry. Vision 2030 is a strategic blueprint that prioritizes the advancement of a sustainable economy through the allocation of resources for the growth of renewable energy and other endeavors that foster environmental sustainability. The primary goal of the Saudi Green Initiative is to diminish carbon emissions and enhance the utilization of renewable energy sources while also advocating for energy efficiency throughout the nation (Akkaş, 2017).

5. Turkey

   The Turkish Participation Banks Association (TKBB) oversees the regulation of participation banks (also known as Sharia banks) in Turkey and collaborates closely with the Central Bank of Turkey to develop favorable legislation. The Shariah Advisory Board is tasked with ensuring that the financial products and services offered by member banks adhere to the Sharia principles. Turkey has formulated a strategic blueprint to reduce greenhouse gas emissions and augment the utilization of renewable energy sources. Turkey initiated a green campaign to finance environmentally friendly projects such as renewable energy and sustainable infrastructure.

Legal and regulatory structures in Muslim-majority countries unequivocally exhibit a resolute dedication to integrating Islamic precepts with the objective of attaining sustainable development. Malaysia, Indonesia, the United Arab Emirates, Saudi Arabia, and Turkey have enacted legislation and established policies to support the growth of the Islamic banking sector and to encourage ecological sustainability. These initiatives encompass a range of strategies such as providing tax incentives and subsidies, distributing green stamps, and fostering research and development in green technology.

Conclusion

The significance of Sustainable Financing for green initiatives is growing, as it plays a crucial role in promoting sustainable economic growth and maintaining ecological equilibrium among the rising complexity of financial difficulties and global ecosystems.

Through an extensive analysis of the literature and global best practices, it becomes evident that incorporating Islamic financial principles can establish a robust framework for sustainable financing in the green sector. These principles include the avoidance of interest and speculation, and the promotion of fairness in wealth distribution. Islamic spiritual values such as balance, social responsibility, and sustainability can serve as valuable guidelines when making business decisions. The convergence of green business, Islamic finance, and Islamic spirituality has had a profound influence on the development of sustainable and enduring business models in the face of growing economic and environmental complexities. Furthermore, it has the potential to enhance stakeholders' understanding of the significance of sustainable funding for environmentally friendly initiatives encompassing investors, governments, corporations, and the wider public.

Therefore, from the perspective of Islamic finance and Islamic spirituality, sustainable green financing is not only a necessity but also an opportunity to create a more just, inclusive, and sustainable economy for future generations. To succeed in building a better future, collaboration among the financial sector, industry, and civil society in applying these principles will be crucial in dealing with increasingly complex global challenges.

Disclaimer

None

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Professional Appointments:

- (16 August 2019 – 6 February 2023), Dean of Faculty of Islamic Economics and Business, Institut Agama Islam Tazkia
- (30 October 2015- 15 August 2019), Head of Magister Ekonomi Syariah Program, Postgraduates Program, Sekolah Tinggi Ekonomi Islam (STEI) Tazkia
- (2005-2009), Strategics Alliances Manager. PT. Asuransi Takaful Keluarga
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Honors:

- Best Paper in the 1st Islamic Economics and Finance Research Forum (ISEFRF) "The New Era of Indonesian Islamic Economics and Finance". Association of Indonesian Islamic Economists, Bank Indonesia, and Sultan Syarif Kasim State Islamic University, Pekanbaru, Indonesia, 21-22 November 2012.
- Outstanding Lecturer in Research for the Academic Year 2018/2019 at the Tazkia Institute of Islamic Religion (IAI).
- Renowned International Book Writer Grant from Litabdimas Ministry of Religion of the Republic of Indonesia in 2021. Book title "Islamic Business and Performance Management; The Maslahah-Based Performance Management System". (2023). Routledge, Taylor & Francis. Authors: Dr Achmad Firdaus and Prof Khaliq Ahmad. https://www.taylorfrancis.com/books/mono/10.4324/9781003390947/islamic-business-performance-management-achmad-firdaus-khaliq-ahmad

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