



**Islamic
Finance
Council**



Innovation in Islamic Finance: Green Sukuk for SDGs

September 2021



Contents

FOREWORD AND KEY MESSAGE	3
EXECUTIVE SUMMARY	6
INTRODUCTION	8
1. THE ROLE FOR ISLAMIC FINANCE IN FINANCING THE SDGS	9
1.1. Introduction to the SDGs	9
1.2. Nationally Determined Contributions (NDCs)	10
1.3. Islamic Finance Principles and the SDGs – Introducing Tayyib	10
2. ANALYSIS OF THE CONVENTIONAL GREEN BOND MARKET	12
2.1. Green Bond Market Size	12
2.2. Green Bond Opportunities and Challenges	12
3. ANALYSIS OF OVERALL SUKUK MARKET	14
3.1. Overview of Sukuk	14
3.2. The Global Sukuk Market	14
4. ANALYSIS OF GREEN SUKUK MARKET	16
4.1. Overview of Green Sukuk	16
4.2. Size of the Global Green Sukuk Market	17
5. INDONESIA AND GREEN SUKUK	19
5.1. Indonesia's Commitment to Addressing Climate Change	20
5.2. Partnership with the UNDP	20
5.3. Enablers for the Issuance of Green Sukuk	21
5.4. Challenges in Issuing Green Sukuk	21
5.5. Focal Points for Countries Seeking to Issue Green Sukuk	22
6. OTHER GREEN SUKUK ISSUANCES – LESSONS LEARNT & INSIGHTS	24
6.1. Islamic Development Bank	24
6.2. Cagamas	25
6.3. HSBC Amanah	25
6.4. Shariah Scholar Perspectives	27
7. CONCLUSION	28
Appendix 1 – An Overview of Green Bond Standards and Frameworks	31
Appendix 2 – Walkthrough of Sovereign Green Sukuk Issuance Process	32
Acknowledgements	36
References	37

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Foreword

UNDP Indonesia

I am honored to present you this report entitled, 'Innovation in Islamic Finance: green gukuk for SDGs' which highlights the potential of Islamic finance, particularly Islamic bonds or sukuk in bridging the financing gap for the Sustainable Development Goals (SDG) and green development.

Packed with best practices and in-depth analysis from the 2018 and 2019 green sukuk issuances in Indonesia and Malaysia, this report presents a compelling case for countries to consider opportunities of Islamic finance—specifically green sukuk—to raise additional funds in meeting their commitments in SDGs and Climate Change. With key input from Islamic scholars, the report also demonstrates strong alignment of the SDGs with the Islamic financing principles of the global sukuk market which grew exponentially from US\$85bn in 2016 to US\$172bn in 2020.

This report, formulated jointly by UNDP and the Islamic Finance Council UK (UKIFC), comes at the critical juncture as the world is embarking in recovery from the COVID-19 pandemic which had forced to re-purpose public financing resources in countries around the world, including in Indonesia, further widening existing financing gap for SDGs and climate change commitments.

UNDP is proud to have been a key partner to the Government of Indonesia in boosting the potential of Islamic finance for SDG and green development. This report is a further testament to UNDP's collaboration with the Government of Indonesia which has been a global pioneer in Islamic Finance, including green sukuk. Through our fruitful partnership, UNDP worked closely with the Government of Indonesia to develop Climate Budget Tagging, an essential component to green sukuk, to identify public expenditures that deliver climate benefits in accordance with the country's priorities.

As the clock ticks towards 2030, it is hoped that this report could encourage other countries to adopt green sukuk as an innovative approach to finance their SDGs and green development. This report would not have been possible without our fruitful partnership with the Government of Indonesia, in particular the Ministry of Finance, and the Islamic Finance Council UK (UKIFC) for their indispensable expertise and knowledge in Islamic financing.

I encourage you to study this report closely as we continue seeking innovations and exploring new mechanism to close the financing gap for our climate as well as sustainable development agenda.



Sophie Kemkhadze
Deputy Resident Representative,
UNDP Indonesia

Foreword

UKIFC

As we approach the 26th UN Climate Change Conference of the Parties (COP) national ministers and heads of state are under increasing pressure to accelerate action towards the goals of the Paris Agreement and the UN Framework Convention on Climate Change (UNFCCC).

As we approach the 26th UN Climate Change Conference of the Parties (COP) national ministers and heads of state are under increasing pressure to accelerate action towards the goals of the Paris Agreement and the UN Framework Convention on Climate Change (UNFCCC).

COP26 is a critical milestone to check progress 6 years after the Paris Agreement - a legally binding international treaty on climate change which was adopted by 196 Parties at COP 21 in Paris in 2015 and came into force the following year. Its goal is to limit global warming to well below 2 degrees Celsius, preferably to 1.5 degrees Celsius, compared to pre-industrial levels. Nationally Determined Contributions (NDC's) are at the heart of the Paris Agreement and the achievement of these long-term goals. NDCs embody efforts by each country to reduce national emissions and adapt to the impacts of climate change. The Paris Agreement requires each Party to prepare, communicate and maintain successive NDCs that it intends to achieve.

One of the key challenges in implementing the Paris Agreement is the funding required to implement projects that contribute positively to NDCs. Whilst three quarters of countries have adaptation plans in place, financing remains an issue. According to UNEP FI "annual adaptation costs in developing countries are estimated at US\$70bn" with his figure "expected to reach US\$140bn to US\$300bn in 2030 and US\$280bn to US\$500bn in 2050"¹.

Islamic finance is not limited to Muslim countries and has the potential to support the delivery of NDCs. This could be particularly attractive to the 57 Organisation of Islamic Cooperation (OIC) member states which collectively represent over 1.82 billion people (24% of the total world population) and include a number of low-income countries that are politically or culturally marginalised.

This report, commissioned by UNDP Indonesia, presents a unique opportunity to explore the role of green sukuk in the context of climate change and the green economy. It highlights the potential of green sukuk to be used effectively by OIC member states and beyond, to finance NDC's by attracting investment at scale to projects that reduce national greenhouse gas emissions in line with the Paris Agreement. Based on the work we have undertaken for this report we estimate an additional US\$30bn to US\$50bn of capital towards the SDGs can be raised by 2025 through green and sustainability sukuk.

To unlock this finance, as a direct follow-up to this report, the UKIFC has committed to coordinating international efforts to develop and position green/sustainability sukuk as a viable financial instrument available that can attract capital at scale for green/support projects that support the achievement of NDC's and the broader SDGs. To that end, along with the Islamic Development Bank, Her Majesty's Treasury and Ministry of Finance Indonesia we will be launching a High Level Working Group on Green Sukuk (HLWG) at COP26.

The HLWG is a very practical global initiative that will help achieve Net Zero by directing investment at scale to projects that reduce national greenhouse gas emissions in some of the world's regions in most need.



Omar Shaikh

Advisory Board Member
UKIFC

Key Message

Ministry of Finance, Republic of Indonesia

In response to the unprecedented impacts of climate change, the Government of Indonesia is committed to strengthening the architecture of public finance for climate action in the effort towards reducing GHG emission.

The Ministry of Finance has enjoyed a longstanding partnership with UNDP, which began with the implementation of the Climate Budget Tagging (CBT)—a system to track and monitor climate-related public expenditures—which led to the successful issuance of Green Sukuk, both at the global and domestic retail market.

The instrument has raised over US\$3.9bn to finance the government's green projects, and at the same time strengthened the country's position in the global Sharia financial market. Despite the tight fiscal capacity due to the COVID-19 pandemic, Green Sukuk serves as an alternative source of financing to ensure Indonesia's climate action pathway towards 2030. With having Indonesia's experience in utilizing innovative finance highlighted, the report titled "Innovation in Islamic Finance: Green Sukuk for SDGs" is timely delivered—showcasing how Islamic finance can contribute towards our collective action in accelerating the achievement of global climate ambitions.

This report can hopefully inspire more countries to take part in leveraging innovative means for the transition towards a greener and more sustainable future.



Luky Alfirman

Director General of Budget Financing
and Risk Management,
Ministry of Finance, Republic of Indonesia

Executive Summary

In 2015, the United Nations (UN) established a blueprint for addressing economic, social, governance, and environmental challenges – the Sustainable Development Goals (SDGs). It is estimated that funds of up to US\$7trn are required on an annual basis for initiatives aligned to the SDGs.

Islamic finance provides an opportunity for countries to raise funds towards SDG initiatives that to date has been tapped only to a limited extent. Islamic bonds (called sukuk) provide an established mechanism for raising funds in both Muslim countries and non-Muslim countries.

Green sukuk are a relatively new development with limited issuances but have a clear alignment with the value system of Islamic law. As Islamic finance evolves, innovative products such as green sukuk represent the potential for a new class of products that consider more than legal permissibility, moving towards a positive impact in line with SDGs.

Green sukuk issuances have followed on from the development of the green bond market with estimates the market has passed US\$1trn since inception and that green bond issuances in 2021 will be near US\$500bn². Whilst growth is expected to continue, green bond issuances face a number of challenges: greenwashing, higher costs relative to non-green bond issuances, and limited liquidity.

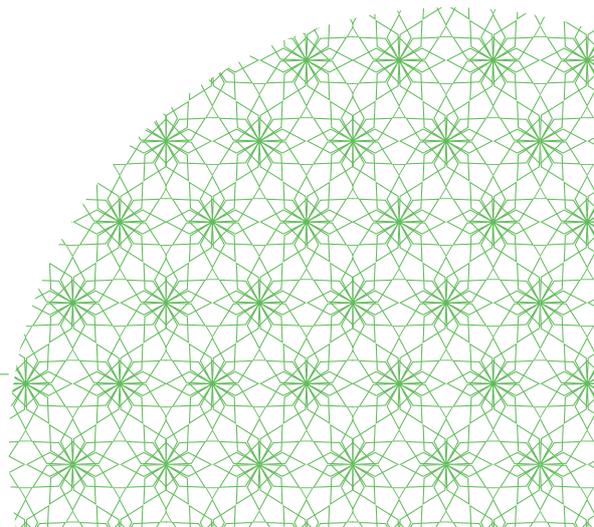
The Islamic Finance Council UK (UKIFC) estimate an additional US\$30-50bn of capital towards the SDGs can be raised by 2025 through green and sustainability sukuk. This will require focused efforts and targeted initiatives by institutions such as UN Development Programme (UNDP), Principles for Responsible Investment (PRI), and Islamic Development Bank (IsDB) along with multiple governments.

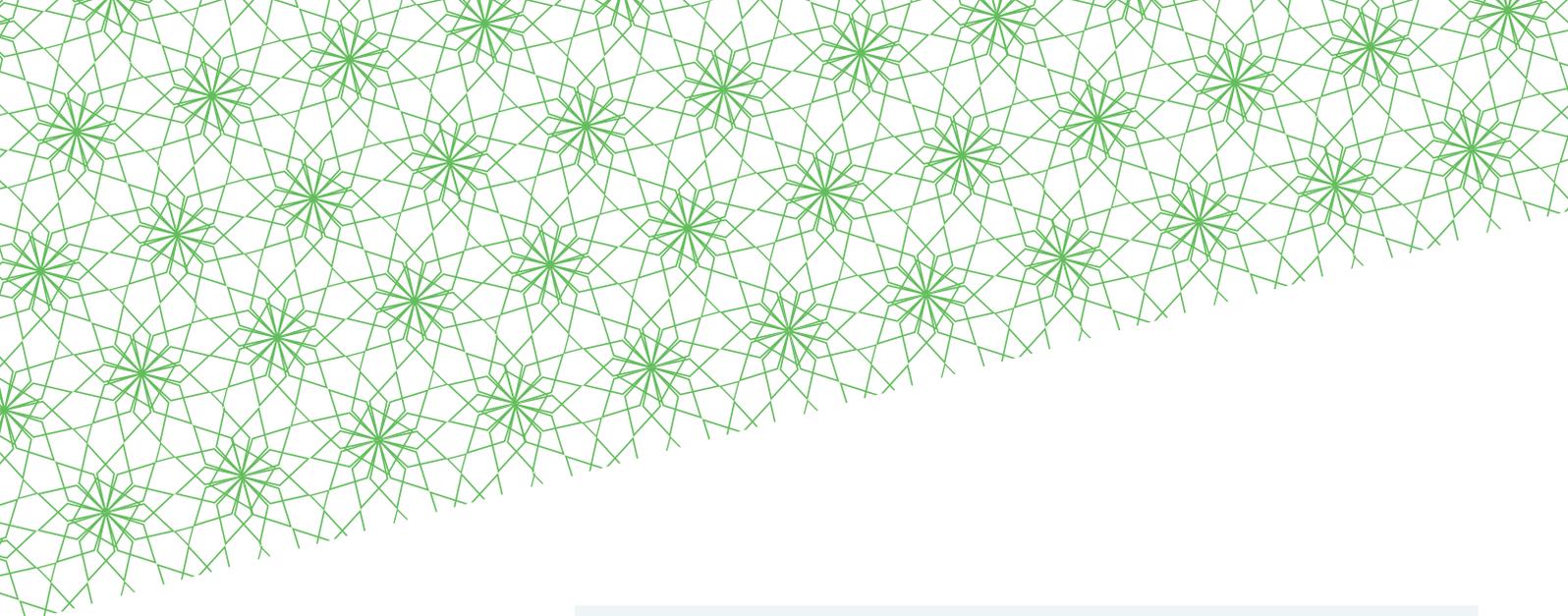
The Islamic Finance Council UK (UKIFC) estimate an additional US\$30-50bn of capital towards the SDGs can be raised by 2025 through green and sustainability sukuk.

The global sukuk market has also grown rapidly, from an estimated US\$85bn of sukuk issuances in 2016 to an estimated US\$172bn in 2020³. Similarly, green sukuk issuances had a growing trend increasing from US\$500m in 2017 to US\$3.5bn in 2019. Industry stakeholders' interviews indicated that addressing a number of challenges would facilitate ongoing growth:

the need for standardisation, establishing frameworks that facilitate green sukuk issuance, and ensuring investor protection. The Republic of Indonesia (ROI) in partnership with the UNDP pioneered issuances of the world's first sovereign green sukuk in March 2018 (raising US\$1.25bn) and the world's first retail green sukuk in November 2019 (raising IDR1.4trn or US\$104.4m).

The UNDP was the key partner in supporting the ROI to enable green sukuk to be issued which included technical support in the preparation of the ROI's green framework, capacity building across Government Ministries, and contributing to the development of annual impact reporting. UNDP's experience with Indonesia has allowed UNDP to start similar exercises in other countries including Uzbekistan, Pakistan, Bangladesh, and Mexico. It also remains open to assist other countries.





Five key elements were identified by ROI in issuing its green sukuk:

- i. **Climate Budget Tagging** - developed in partnership with UNDP to allow identification of public expenditures that deliver climate change benefits in accordance with the country's priorities.
- ii. **Green Framework** – issued in January 2018 to provide guidance on the sectors and types of projects eligible to receive proceeds of a green bond or green sukuk issuance.
- iii. **Project Selection** – a two-step process creating list of eligible projects from the Climate Budget Tagging system and then creating a shortlist of priority projects.
- iv. **Reporting** – the preparation and presentation of an Impact Report on an annual basis.
- v. **Auditing** – annual independent assurance to investors that all processes have followed green principles and that proceeds have been managed in accordance with the Green Framework.

The experience of green sukuk issuances in other regions was analysed through in-depth interviews with IsDB (Multilateral Development Bank issue), Cagamas (Malaysia Corporate issue), select lead arranger banks, and Shariah scholars. This analysis provided various insights:

- » An upfront investment is required to develop a green framework and subsequent independent certification to provide comfort to potential investors that the sukuk is genuinely green.
- » Western global investors are showing a growing appetite for Environmental, Social, and Corporate Governance (ESG) investments providing an opportunity to raise funds via green sukuk with potential to attract investors who otherwise would not have considered sukuk as an investment.
- » Green / sustainability sukuk may provide better pricing. For example, the Cagamas sustainability sukuk achieved a result of 2 basis point lower than Islamic Medium-Term Notes issued by Cagamas at the same time – a key driver for this was considered to be the investor demand for green / social sukuk relative to the low availability.
- » Malaysia has seen the largest volume of sukuk issuances supported and facilitated by a number of Government initiatives including: the issuance of a Sustainable and Responsible Investment (SRI) Sukuk Framework in 2014, introduction of Value-based intermediation guidelines in 2018 and the establishment of a Joint Committee on Climate Change in 2019.
- » Indonesia has a very limited corporate sukuk market and has not seen any corporate green sukuk issuances. There is a need to ensure sukuk have a level playing field with no additional burdens in comparison to conventional bonds; in addition, tax incentives could encourage corporate sukuk issuances.
- » The opportunity is there for Shariah scholars to positively influence ESG aspects as part of their Shariah review of sukuk issuances – where Shariah scholars identify negative or destructive impacts (e.g., deforestation) they have the opportunity to question how the issuer will address or remediate such issues.
- » A challenge within the Islamic finance industry is the general lack of experience and depth of knowledge in relation to ESG matters. In addition, there is a lack of guidance for Shariah scholars when it comes to considering such matters as part of their roles – it is recommended organisations such as the Accounting and Auditing Organization for Islamic Financial Institutions take a lead and develop guidance for Shariah scholars.⁴

Introduction

On 12 December 2015 at the Conference of Parties (COP) 21 in Paris, 197 countries adopted the Paris Agreement. Its implementation is essential for the achievement of the SDGs.

However, financing the SDGs cannot be met by public traditional development finance institutions (DFI) capital alone and thus, leading global private sector financial institutions are increasingly engaging with the SDGs both in relation to impact reporting and the available commercial opportunities. Globally achieving the SDGs requires an estimated US\$5-7trn annual investment. Developing countries require US\$3.3-4.5trn investment but they have a US\$2.5trn funding gap⁵.

For IsDB member countries this translates into an annual funding gap of between US\$700bn and US\$1trn⁶. To finance this gap there is a need for increased public and private investments. In many countries the private financial markets comprising the largest part of the economy and so it is important that the private sector as well as the public sector is accessed to help fund the SDGs.

Conventional finance markets are increasing innovation and alignment to the SDG agenda. Debt capital markets have developed green/sustainability bonds, social impact bonds, etc. Public equities market has increased their

responsible investing requirements (SRI). Within the alternatives asset class the emergence of impact investing and an increase in green lending demonstrate the growing momentum towards financing the SDGs.

For IsDB member countries this translates into an annual funding gap of between US\$700bn and US\$1trn.

Since 2007 green linked bonds specifically have mobilised over US\$1trn of capital⁷. The first green bond was issued in 2007 by the European Investment Bank and the Green Bond Principles issued in 2014 (updated in June 2018) issued by International Capital Markets Association (ICMA) provided a standardised framework for green bonds. The Paris Agreement was a key driver in the growth of green bonds issuance with annual average growth of 60% since 2015⁸.

Another major contemporary development in the international financial system is Islamic finance, with global Islamic assets estimated to reach US\$3.69trn by 2024⁹. Islamic

finance is underpinned by a framework of principles that encourages aspects such as mutual co-operation and avoiding harm, leading to a natural alignment with the SDGs. Green sukuk are the Islamic finance equivalent of green bonds and present an opportunity for Islamic finance to help address the global SDG funding challenge.

As countries seek to implement projects that reduce greenhouse gasses and contribute to their Nationally Determined Contributions (NDCs) there is a need to attract a wider investor base to fund these projects. This requirement aligns with the growing investor demand for environmentally conscious investments. Green bonds and green sukuk provide an opportunity for funds to be raised by countries and corporates for projects that have a positive climate impact.

This report focuses on Islamic finance and in particular green sukuk as an instrument to fund the SDGs by using case studies, including the pioneering Indonesian sovereign green sukuk.

The Role for Islamic Finance in Financing the SDGs

1.1. Introduction to the SDGs

The SDGs are designed to be a blueprint to achieve a better and more sustainable future for all. The 17 quantitative and qualitative SDGs in diagram 1 reflect the aspirations of people around the world. The SDGs were agreed and adopted by the UN in September 2015 as part of the 2030 Agenda for Sustainable Development. They recognise that ending poverty and other global challenges complement strategies that improve health and education, reduce inequality, and spur economic growth – all while tackling climate change and working to preserve our natural environment¹⁰.

As we enter the decade of action, achieving the SDGs has become even more challenging following the COVID-19 pandemic. The estimated drop in external financing to developing countries was estimated at US\$700 bn in 2020 with the SDG financing gap in developing countries increasing by US\$1.7trn¹¹. Nonetheless, the challenge to build back economies following the COVID-19 pandemic presents the opportunity to do so in a manner putting sustainability at its heart. The green sector represents a huge growth area which can help create jobs and address the climate change imperative. More broadly, beyond climate, capital flows are increasingly sensitive to ESG and SRI factors. SDGs have provided the basis for the issuance of bonds and global equity funds. Financial institutions are increasingly using the SDGs as a unifying framework for reporting. As of April 2021, 220 banks are signatories to The UN Principles of Responsible Banking (PRB) and being a signatory requires SDG aligned reporting¹².



Diagram 1: Source – United Nations Department of Economic and Social Affairs Sustainable Development

9 10 <https://www.un.org/sustainabledevelopment/sustainable-development-goals/> (retrieved 10 April 2021)

11 <https://www.oecd-ilibrary.org/sites/6ea613f4-en/index.html?itemId=/content/component/6ea613f4-en> (retrieved 8 June 2021)

12 <https://www.unepfi.org/banking/bankingprinciples/signatories/> (retrieved 10 April 2021)

1.2. Nationally Determined Contributions (NDCs)

The COP convenes national ministers and heads of state annually to accelerate action towards the goals of the Paris Agreement and the UN Framework Convention on Climate Change. The 26th COP meeting is taking place in Glasgow, Scotland in November 2021. It is a critical milestone to check progress 6 years after the Paris Agreement and John Kerry, U.S. Special Presidential Envoy for Climate, stated the meeting as the planet's "last best chance" to address climate change¹³. The Paris Agreement is a legally binding international treaty on climate change which was adopted by 196 Parties at COP 21 in Paris in 2015 and came into force the following year. Its goal is to limit global warming to well below 2 degrees Celsius, preferably to 1.5 degrees Celsius, compared to pre-industrial levels. NDCs are at the heart of the Paris Agreement and the achievement of these long-term goals¹⁴. NDCs embody efforts by each country to reduce national emissions and adapt to the impacts of climate change. The Paris Agreement requires each Party to prepare, communicate and maintain successive NDCs that it intends to achieve.

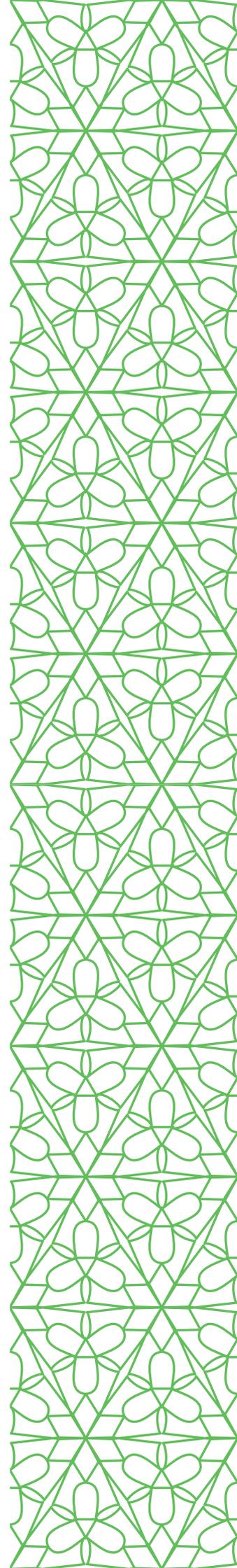
This report provides an introduction to the US\$172bn Islamic bond/sukuk market¹⁵ and the associated US\$6.1bn¹⁶ green sukuk market. In the context of climate change and the green economy, green sukuk are an instrument that, as demonstrated by ROI, has been used effectively to support achieving the NDCs by attracting investment at scale to projects that reduce national greenhouse gas emissions (in line with the Paris Agreement). Whilst this report focuses on green sukuk, it should be noted that green Islamic bank financing and SDG aligned Islamic equity funds also present important financial tools.

In addition, Islamic finance operating modalities are particularly adept at managing ring-fenced use of proceeds and additional governance and assurance requirements due to the need to meet stringent Shariah compliance measures. These features both make Islamic finance at an operational level well aligned with the additional requirements for green certification as noted by the Green Bond Principles (GBP) and other global frameworks for green finance.

1.3. Islamic Finance Principles and the SDGs - Introducing Tayyib

The principles of Islamic finance, that are underpinned by the Maqasid al-Shariah (objective/purpose of Islamic law), strongly overlap with many of the aims and objectives of the SDGs, yet go further by covering the financial instruments used to fund the activities associated with the 17 goals. As an illustration, Islamic commercial and financial ethics incorporates the principle of stewardship of humanity on Earth which drives the use of assets and wealth to be in a fair, just, and transparent manner with equal consideration to public and environmental good. These principles are shared across many of the world's major faith traditions, with a particular alignment amongst the Abrahamic faiths such as stewardship, common good, sustainability, purposefulness, et al¹⁷.

A common observation of contemporary Islamic banking is that development has had a limited focus on creating equivalent alternatives to conventional financing products. These alternatives have been structured using assets and commodity-based sale transactions to avoid interest and ensure they are legally lawful (halal) under Shariah. This approach does not necessarily consider the spirit of Shariah or the Maqasid al-Shariah directly within the specific design intent of contemporary Islamic banking products. Nonetheless, arguably, the avoidance of highly speculative and toxic financial instruments based on derivatives and the avoidance of interest (riba) is, at a systemic level, one that brings better stability and inherent sustainability.



The concept of Tayyib within Islamic law provides a paradigm that can be used by Islamic finance to develop the next generation of Islamic financial products that are both Shariah compliant (halal) as currently practiced and also have a direct intentional social good (SDG aligned) which are an inherent part of the product structure. This marrying of social and financial returns can be considered as halal+ or Tayyib.

Tayyib is mentioned in the Quran over 40 times in several contexts, but the general meaning is based on to goodness and wholesomeness within an action or object. Diagram 2 reflects a selection of elements that Tayyib is associated with. The applicability of the Tayyib concept is vast and the SDGs can be considered as a contemporary development that is aligned to the Tayyib concept. The key legal position is that everything that is Tayyib is halal, but not everything that is halal is Tayyib. This reflects the additional gradation of the Tayyib concept (akin to deeper shades of green as practiced in the green finance sector).

Adopting the concept of Tayyib into Islamic finance would implement an approach that moves beyond simply considering what is permissible and impermissible to seeking to provide something extra and beneficial. Interviews with Shariah scholars showed agreement that an approach where Islamic finance products, such as green sukuk, which are aimed to have positive impact linked to the SDGs, was far more preferable to the purely legalistic approach replicating conventional financial products and which has been the mainstay of contemporary Islamic finance developments to date.

The development of a formal industry framework or kitemark for Tayyib, in the way the Islamic finance industry has successfully done so for Shariah certification, could be a critical inflection point where that kitemark would positively help to direct the growing pool of global Islamic liquidity directly towards the commercial opportunities presented by the SDGs.

Given the alignment in values and modalities, Islamic finance is well positioned to support the achievement of the SDGs. According to the General Council for Islamic Banks and Financial Institutions (CIBAFI), Islamic finance “helps to stimulate economic activity and entrepreneurship towards addressing poverty and inequality, ensuring financial and social stability, and promoting comprehensive human development and fairness – all of which is relevant to the SDGs.”¹⁸ The main principles of Shariah, which aim to reduce poverty and inequality as well as achieve sustainable and inclusive development, directly contribute to SDG focus areas such as the elimination of poverty, economic growth, infrastructure development, education, social inclusion, the protection of the natural world, and sustainable consumption patterns.

The SDGs therefore provide a globally recognised framework that enables Islamic finance providers to directly support projects focused on empowerment, socio-economic development and climate mitigation and adaption. Innovative Islamic financial instruments, such as sukuk (and more recently green sukuk), are particularly well placed to attract finance for infrastructure projects with the developing Islamic capital market providing opportunities for wider engagement and capital raising.

This marrying of social and financial returns can be considered as halal+ or Tayyib.

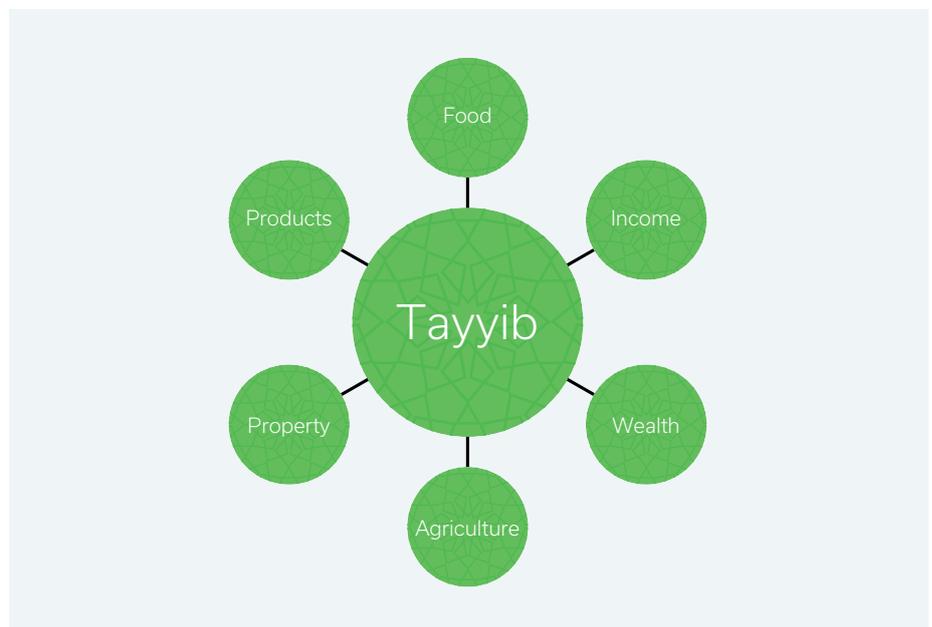


Diagram 2: source – Islamic Finance Council UK

Section 2

Analysis of the Conventional Green Bond market

The inception of the green bond market can be traced back to 2007 when the European Investment Bank issued a AAA-rated €600m transaction labelled a 'Climate Awareness Bond'. In the following year, the World Bank issued a green bond for SEK390m. This can be considered the beginning of a capital market evolution where investors moved from being indifferent to what their investments were supporting, to a pro-active frame of mind where purpose began to matter. Green bonds are well documented, with ICMA providing definitions and the GBP detailing four types. Various standards, frameworks and guidelines exist (detailed in Appendix 1).

2.1 Green Bond Market Size

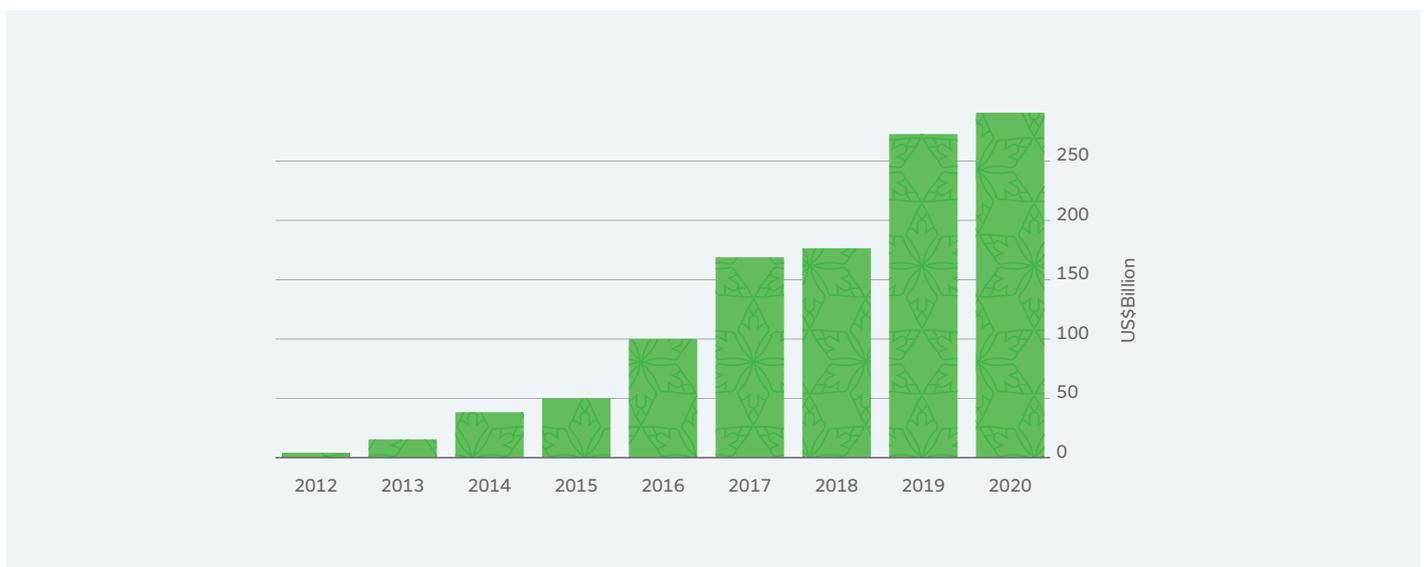


Chart 1: source: Institutional Asset Manager

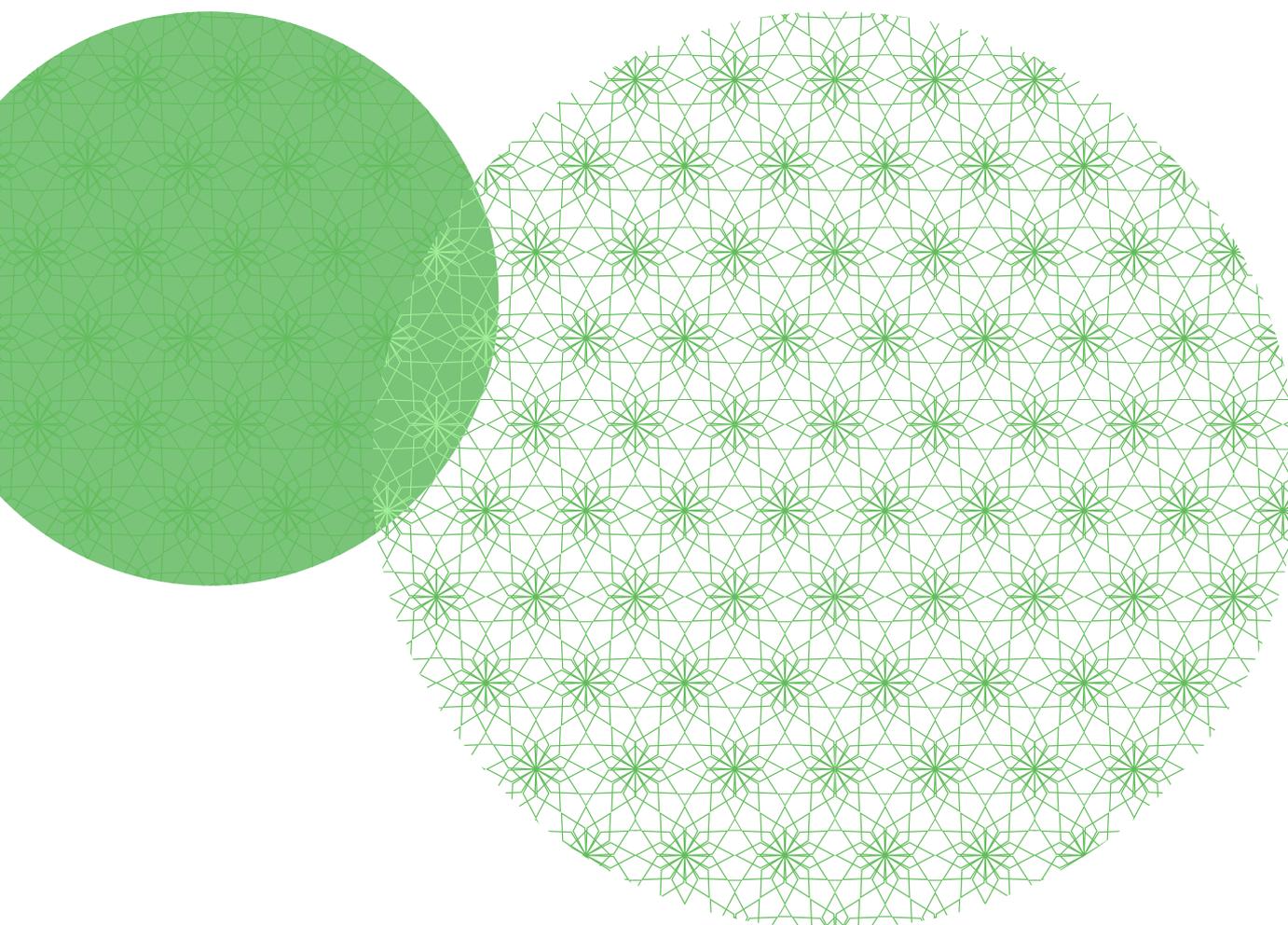
According to Nordic financial services firm SEB, which worked with the World Bank to develop its inaugural green bond, the market has passed US\$1trn since inception and estimates issuances in 2021 will be near US\$500bn¹⁹.

2.2 Green Bond Opportunities and Challenges

The growth in the market reflects the rising interest in ESG investing in recent years as investors increasingly look for ways to mitigate ESG-related risk or effect meaningful change. This provides opportunity for sovereigns and corporates to obtain funds for green projects – for example in 2020, EU leaders agreed to borrow €750bn to provide grants and loans to help member states to recover from the COVID-19 pandemic, part of which will take the form of green bonds. Corporate borrowers are similarly increasing green bond issuance with the Bloomberg Barclays MSCI Global Green Bond Index benchmark initially in 2014 limited to development banks and supranational entities to a large number of corporates - the debt index tracks risen from US\$15bn to approx. US\$600bn²⁰.

Green bond issuances face additional market challenges compared with non-green issuances. Firstly, the limited liquidity of green bonds is an area of concern. The Green Bond Treasurer Survey 2020 identified that issuers observed green bonds were bought mainly by buy and hold investors and thus had limited liquidity. The Climate Bonds Initiative noted that attracting investors is dependent on market liquidity with low liquidity being a barrier to investing²¹.

Secondly, green bonds can be associated with a **reputational issue referred to as “greenwashing”** – where investors are concerned that issuers may not use proceeds that have a positive environmental impact. This can lead to transaction costs that are often higher due to the need for issuers to track, monitor, and report on the use of proceeds, obtain independent certification, and periodic independent audits. However, these actions allow green bond issuers to demonstrate a tangible commitment to sustainability by tackling prominent climate change issues such as energy efficiency, pollution prevention, sustainable agriculture, fishery and forestry, the protection of aquatic and terrestrial ecosystems, clean transportation, clean water, and sustainable water management. They also finance the cultivation of environmentally friendly technologies and the mitigation of climate change.



Analysis of Overall Sukuk market

3.1. Overview of Sukuk

Sukuk, also commonly referred to as “Islamic bonds” or “Shariah compliant bonds”, are issues of Islamic notes that represent an alternative to conventional bonds. Sukuk structures are well document and details of sukuk structures can be found online at the AAOIFI website²². They have similar characteristics to conventional bonds but generate returns to investors in line with principles of Shariah. The first contemporary sukuk was issued by Malaysia Shall MDS Sdn Bhd worth RM125m in 1990²³. This section introduces sukuk and considers development of the global sukuk market.

3.2. The Global Sukuk Market

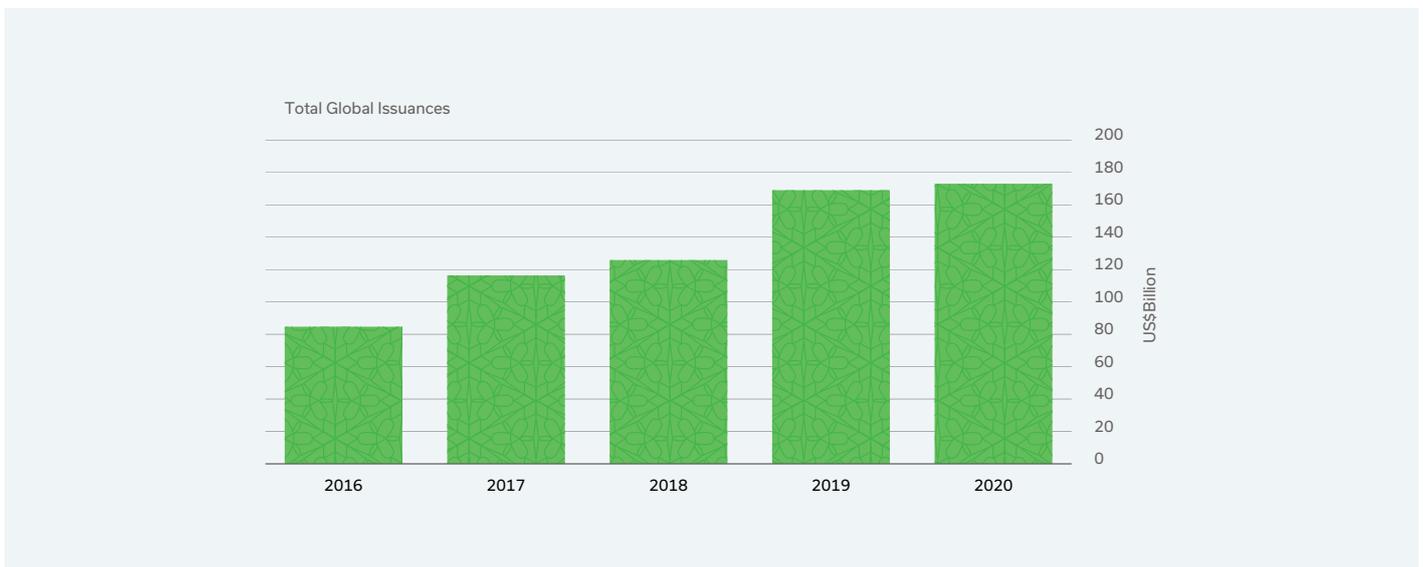


Chart 2: source: Zawya by Refinitiv 21 January 2021

As can be seen from chart 2 the global sukuk market has grown rapidly, from US\$85bn of sukuk issuances in 2016 to US\$172bn in 2020. Sukuk issuances have been a source of capital for companies, sovereigns, and Government Related Entities (GRE’s), typically in Southeast Asia and the Middle East but also from European issuers (including the UK Government). The rapid growth has also seen increasing interest from European and US institutional investors as a way of diversifying portfolios and investing in emerging markets.

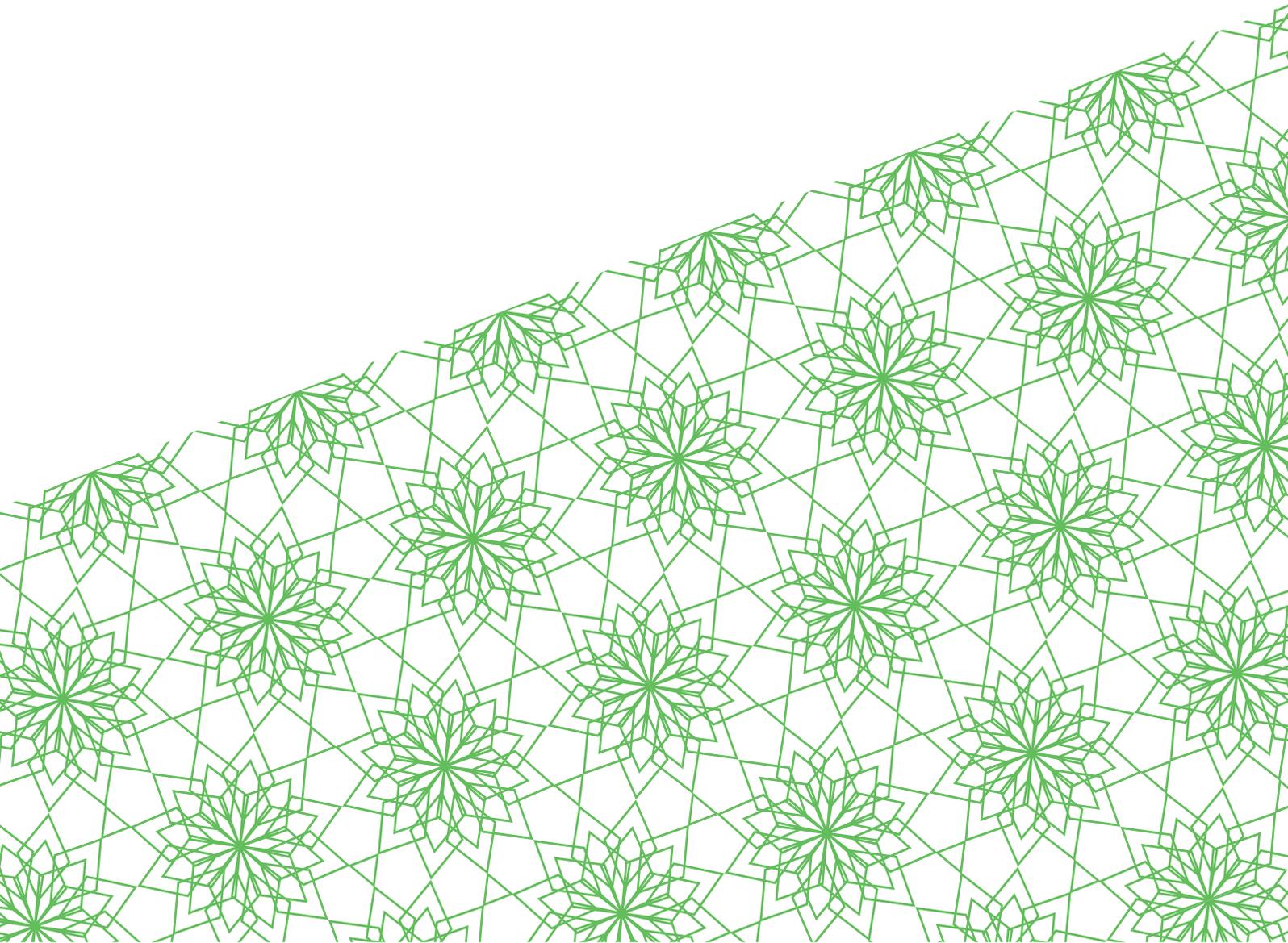


Diagram 3: Sukuk issuances by Governments of developed countries

Sukuk are being considered as alternative sources of funding even outside Islamic regions. As illustrated in diagram 3, sukuk issuances have included Governments of developed countries such as the UK, HKSAR²⁴, and Luxembourg through to Governments of developing countries such as South Africa, Togo, and the Ivory Coast.

Historically the sukuk growth trend has in part been driven by the liquidity in the Islamic investor base (in particular from Islamic Banks) in the Middle East and Asia with high oil prices being a factor. However even with cooling oil prices, sukuk issuances have continued with double digit growth of 30% in issuance value from US\$126bn to US\$169bn in 2019 demonstrating strong demand from Islamic asset owners and with sovereign issuers using sukuk to finance budget deficits and maintain liquidity levels²⁵. With COVID-19 impacting the global economy, 2020 sukuk issuances remained relatively flat.

World Bank research provides a resource for policy makers, identifying approaches in developing domestic sukuk markets and in accessing the international market. The research proposes policy makers use a framework similar to that of the development of conventional bond markets.



Analysis of Green Sukuk Market

Green sukuk are one of the newest financial instruments to come to the market – the first green sukuk issued was in 2017 by renewable energy group Tadau Energy, raising US\$59m to finance a solar power plant in Malaysia. Alongside Malaysia, Indonesia has shown leadership through issuances of the world’s first sovereign green sukuk and the world’s first retail green sukuk. The IsDB was the first multilateral development bank to issue a green sukuk that was also the first euro-denominated green sukuk. This section provides a brief overview of green sukuk, the development of the global green sukuk market, and underpinning green sukuk frameworks.

Indonesia has shown leadership through issuances of the world’s first sovereign green sukuk and the world’s first retail green sukuk.

The World Bank reported that 17 green sukuk had been issued as of July 2020; the majority of these were using the murabaha, al-wakalah structure – 8 issuances, all by issuers in Malaysia. The next most used structure was al wakala al istithmar which was used for 4 issuances, 3 by Indonesian issuers and 1 Malaysian issuer²⁶.

4.1. Overview of Green Sukuk

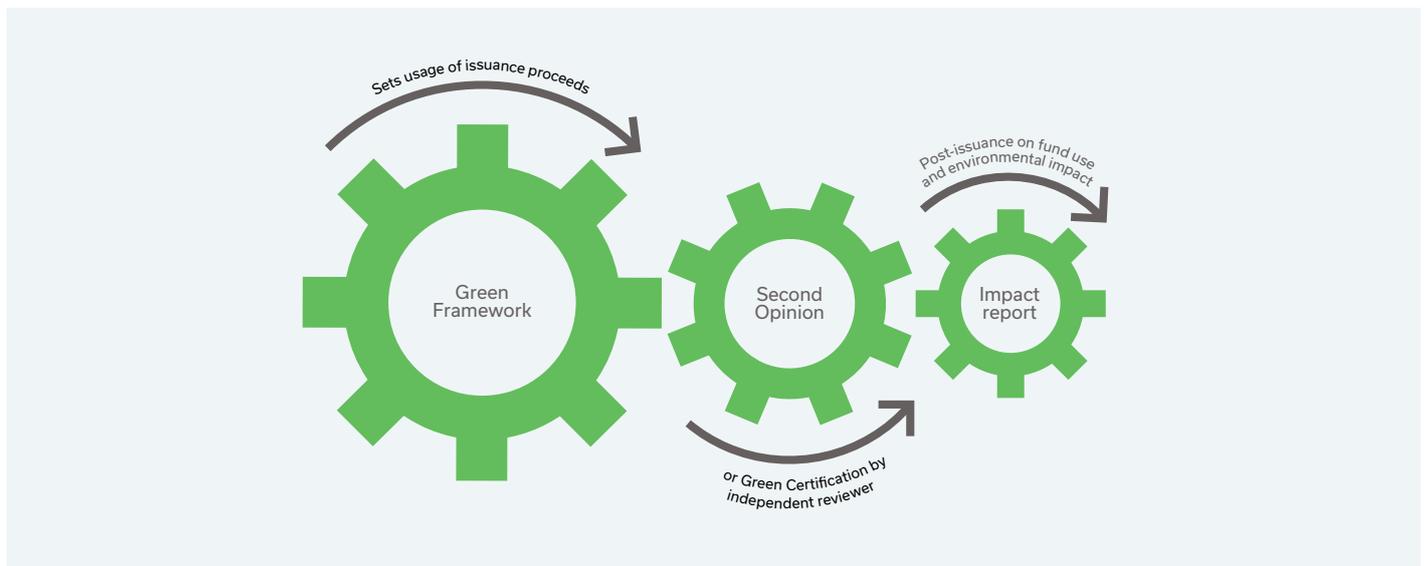


Diagram 4: developed from source - Pioneering the Green Sukuk: Three Years On, World Bank Group, October 2020

Green sukuk complies with the same green principles as a green bond, and are issued in a similar manner as a non-green sukuk but with the additional elements identified in diagram 4:

- » Green framework – green frameworks typically align to the Green Bond Principles and include four components: use of proceeds, process for project evaluation and selection, management of proceeds, and reporting²⁷.
- » Second opinion – typically requirements for an independent review of the green framework of the proposed sukuk issuance to confirm alignment with the components of the GBP.
- » Impact report – seen as a key element reporting on progress of underlying projects and assets.

Green sukuk complies with the same green principles as a green bond but with additional elements.

The green sukuk issuances that have taken place have been underpinned by existing global standards and aligned with a framework established by the issuer and typically had an independent second opinion. These include:

- » 2014 – Sustainable & Responsible Investment sukuk framework issued by the Malaysia Securities Commission.
- » 2018 – Republic of Indonesia Green Bond and Green Sukuk framework implemented by Indonesia and detailed in the section 5 which presents the Indonesia green sukuk issuance case study.
- » 2019 – Sustainable Finance Framework introduced by the Islamic Development Bank, the first AAA institution to issue a green sukuk.

It is important to note that these additional requirements and complexities sit on top of those involved with issuing a sukuk (as noted in section 3) – dual layer requirements. Whilst additional requirements do have cost implications, the market demand for green sukuk indicates there is a material incremental demand for such instruments.

4.2. Size of the Global Green Sukuk Market

Green sukuk appeals to not only Islamic and conventional bond investors, but also to conventional green bond investors and Islamic asset owners looking to increasingly align their portfolios with SRI and sustainable strategies.

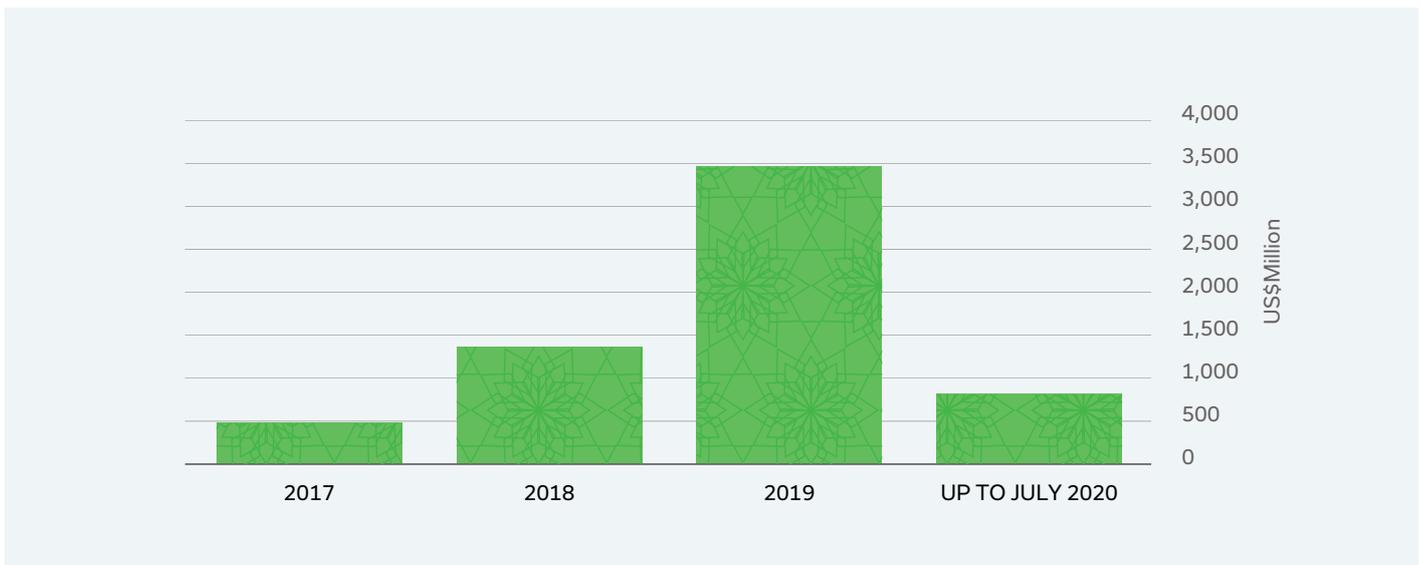


Chart 3: source – Pioneering the Green Sukuk: Three Years On, World Bank Group, October 2020

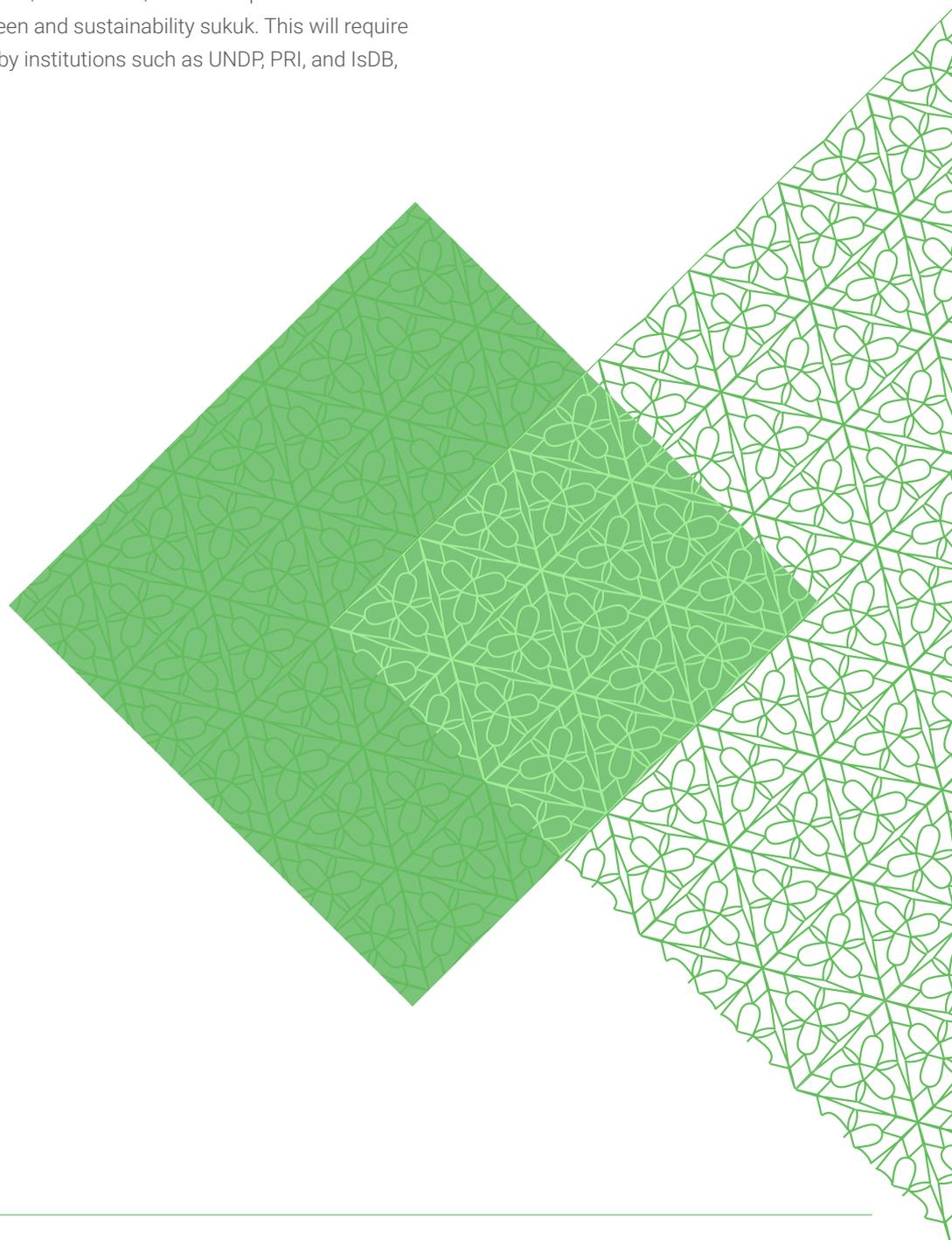
As seen in chart 3, between 2017 and 2019 green sukuk issuances had a growing trend increasing from US\$500m in 2017 to US\$3.5bn in 2019. The COVID-19 pandemic impacted 2020, with issuances down 44% in comparison to the same period in 2019, the World Bank reporting US\$6.1bn of issuances for 2020 up to July 2020, with no further green sukuk issuances reported in the remainder of 2020. Sukuk issuances are expected to see recovery in 2021 and green sukuk issuances are likely to follow suit – IsDB has raised US\$2.5bn in March 2021 via its Sustainability Sukuk. Green sukuk presents two unique propositions:

1. **Supply side** – opportunity for Islamic finance issuers to tap into agnostic western pools of capital increasingly requiring and seeking SRI alignment and demonstrating carbon offsetting techniques as part of their commitments to net-zero. Green sukuk thus enable a strong diversification strategy away from a traditional shariah compliant only investor base.
2. **Demand side** – enables investment strategies for western capital flows increasingly seeking to deploy in emerging markets that demonstrate relative better growth/yield options to their domestic lower growth markets under SRI mandates.

Enhancing familiarity of sukuk amongst western banks, asset managers, and asset owners via astute tactical approaches will be key to successfully realising green sukuk as a global win-win instrument. As an illustration, the UKIFC has convened the Global Islamic Finance SDG Taskforce, and with partners recently issued the Islamic Finance and the Principles for Responsible Investment report as part of a thought leadership series²⁸.

The UKIFC has estimated an additional US\$30bn to US\$50bn of capital towards the SDGs can be raised by 2025 through green and sustainability sukuk. This will require focused efforts and targeted initiatives by institutions such as UNDP, PRI, and IsDB, along with multiple governments.

The UKIFC has estimated an additional US\$30bn to US\$50bn of capital towards the SDGs can be raised by 2025 through green and sustainability sukuk.



Section 5

Indonesia and Green Sukuk

As part of its strategy to address the SDGs and NDCs, the ROI in partnership with the UNDP pioneered issuances of the world's first sovereign green sukuk in March 2018 raising US\$1.25bn and the world's first retail green sukuk in November 2019 raising IDR1.46trn (US\$104.4m). These set the platform for the ROI to finance climate change mitigation and adaptation via Green Sukuk, leading to cumulative Green Sukuk issuance of a value of over US\$3.9bn (consisting Global sukuk - US\$3.5bn and retail sukuk - US\$490.1m²⁹).

Green sukuk proceeds have financed and re-financed projects across five sectors: renewable energy, energy efficiency, sustainable transportation, waste to energy and waste management, as well as climate resilience for vulnerable areas. Proceeds have been invested in projects that contributed towards³⁰:

- » Reducing GHG emissions – projected to be up to 10.3 million tons of CO₂e (carbon dioxide equivalent).
- » The construction of over 690 kilometres of railway tracks; an increase of 7.3 million kWh of electricity capacity.
- » Improving solid waste management for more than 7 million households.

This section covers the key role of the UNDP, the enablers and challenges in issuing the sovereign green sukuk, and setting out what practical developments were required to allow a sovereign green sukuk to be issued.



Diagram 5: source: developed from UNDP Indonesia data

5.1. Indonesia's Commitment to Addressing Climate Change

The ROI is the world's 4th most populous nation facing temperature increases estimated at approximately 0.8°C by 2030 and changing rainfall patterns³¹. The impacts as a result of climate change will be both economic and social³²:

- » US\$9.2trn – the estimated total costs in 2050, as a result of climate change through agriculture, health, and sea level rise.
- » National Disaster Mitigation Agency (BNPB) announced that Indonesia experienced a rising number of hydrometeorological disasters from 2015 to 2020, six of the hottest years on record according to the World Meteorological Organization (WMO)³³.
- » January 2020 – saw an illustration of the social impact, torrential rain triggered widespread floods and landslides, and large-scale evacuation and relief efforts, the lives of 66 people were lost, with more than 36,000 people displaced and more than 1,300 homes severely damaged³⁴.

Recognising the impact of climate change, the ROI climate pledge under the global Paris Agreement (NDC), makes an unconditional commitment to reducing greenhouse gas (GHG) emissions by 29 percent by 2030 compared to business-as-usual (with a conditional commitment of up to 41 percent with international support) and emphasises the importance of adaptation and improving resilience across all sectors of development.

To meet these pledges the ROI was required to implement green projects which needed funding from beyond the national budget, searching for untapped resources and new means of financing. Green Sukuk were identified as a potential new innovative means of raising finance and the UNDP were key in supporting the Indonesian Ministry of Finance (MoF) to tap Green Sukuk.

5.2. Partnership with the UNDP

The MoF emphasized the importance of working in partnership with UNDP, especially in strengthening public climate finance management and developing green financing instruments.

In this regard, UNDP was able to leverage its value proposition and service offer tailored to meet country's demand, where:

1. UNDP has proven to be a trusted partner for the Government of Indonesia, given its partnership with the Ministry of Finance which has been long-established since 2014 through the work on Climate-Related Fiscal Reforms, as well as with several key line ministries that are involved in the green sukuk process.
2. UNDP's global network of technical experts continues to support the deployment of assistance to the Government.
3. UNDP adopted a hands-on technical assistance, and were able to collaborate with line ministries to improve project management and develop systems for reporting on the use of proceeds.
4. Lastly, UNDP has been able to form effective partnerships with key stakeholders, both local and international, such as with the World Bank and HSBC to deliver high quality work and optimize its support towards Indonesia's green financing initiative.

US\$9.2trn – the estimated total costs in 2050, as a result of climate change through agriculture, health and sea level rise.



³¹ The Impact of Global Climate Change on the Indonesian Economy, Rina Oktaviani, Syarifah Amaliah, Claudia Rringler, Mark W. Rosegrant, Timothy B. Sulser, 2011, (<https://www.ifpri.org/publication/impact-global-climate-change-indonesian-economy>) (retrieved 9 June 2021)

³² Footing the bill: Innovative financing for climate action in Indonesia and the pioneering of Green Sukuk UNDP in Asia and the Pacific Nov 8, 2020 (<https://undpasiapac.medium.com/footing-the-bill-innovative-financing-for-climate-action-in-indonesia-and-the-pioneering-of-green-bbee3262047>) (retrieved 9 June 2021)

³³ "Indonesia's climate crisis" The Jakarta Post, April 8 2021, (<https://www.thejakartapost.com/academia/2021/04/07/indonesias-climate-crisis.html>) (retrieved 9 June 2021)

³⁴ AHA Situation Updates No 2 Greater Jakarta Floods, The AHA Centre – Emergency Operations Centre (EOC) 6 January 2020 (https://ahacentre.org/wp-content/uploads/2020/01/AHA_Situation_Updates_No2_Greater_Jakarta_Floods-2.pdf) (retrieved 9 June 2021)

Practically, UNDP provided support to the Government of Indonesia in the following key areas:

1. Technical Assistance, during the:
 - » Pre-issuance Phase: UNDP support the Green Bond/Sukuk Framework development, the project selection process, and the coordination with technical line ministries.
 - » Post-issuance Phase: UNDP support the data collection process, impact measurement and reporting, and assurance process.
2. Institutional Strengthening and Capacity Building, where UNDP:
 - » conduct capacity assessment, training, and workshop;
 - » develop knowledge products i.e., standard operating procedure for data collection and impact reporting; as well as impact measurement and reporting manual.
3. Campaign and Advocacy efforts through a succession of global and national events as well as media coverage to increase visibility and raise awareness of the green sukuk initiatives.

The experience with Indonesia has allowed UNDP to start similar endeavours in other countries including Uzbekistan, Pakistan, Bangladesh, and Mexico - and similarly remains open to assisting other countries.

5.3. Enablers for the Issuance of Green Sukuk

In addition to the partnership with UNDP, the MoF identified the following key elements were the prerequisites prior to the issuance of the green sukuk:

- » Establishment of “Republic of Indonesia (ROI) Green Bond and Green Sukuk Framework” (Framework).
- » State Law – legal basis providing issuance authority, investor assurance, transparency, and accountability.
- » Sharia Compliance – Shariah opinion and Shariah compliance.
- » Regulation from the Ministry of Finance – technical guidelines.

5.4. Challenges in Issuing Green Sukuk

Key challenges faced in issuing green sukuk were in project selection and reporting.

Project selection

A process by which to identify and tag relevant green projects is key to ensure the use of sukuk proceeds are deployed genuinely on green projects. To do this the ROI developed and implemented the Climate Budget Tagging system, with the support from UNDP. It identifies public expenditures that deliver climate change benefits in accordance with the country's priorities³⁵. The starting point was to focus on debt management and public financial management ensuring sufficiently robust systems and infrastructure that allows green bonds / sukuk to be issued. Key parts of the implementation included capacity building across Government Ministries and integrating budget tagging with existing systems.

To ensure genuine green projects, the ROI developed and implemented the Climate Budget Tagging system.

ROI Ministry identified a number of aspects where improvement in co-ordination could enhance the project selection process and improve future efficiency for those starting a new on this journey. These included being able to have a system that can accommodate the appropriate level of impact detail for projects and improved co-ordination between stakeholders³⁶.

Reporting

A second key challenge identified was the reporting requirement that accompanies green bond and green sukuk issuances. The best practice adopted by the ROI Green Bond and Green Sukuk Framework is for annual impact reporting with an independent audit. In partnership with UNDP Indonesia an appropriate report template was developed. Whilst there has been reporting by other green bond issuers (e.g., Poland's sovereign green bond issuance and corporate issuers), it was determined a new impact table template should be developed. The impact report developed introduced SDG indicators incorporating the national agenda in achieving SDGs – the first green impact report to do so.

Annual impact reporting is required for the tenor of the green sukuk and leads to a resource requirement from Government Ministries to contribute to the preparation of the impact report. Line Ministries and green sukuk funded project owners are regularly involved in the Green Sukuk Impact Reporting Task Force. In addition, Line Ministries may be required to provide detailed information about selected projects / transactions, for example: the project background, location, and objectives—both during the impact report assurance process and at the later stages if there are technical questions from investors.

5.5. Focal Points for Countries Seeking to Issue Green Sukuk

In summary 5 key steps were identified by ROI in issuing its green sukuk: 1) climate budget tagging; 2) green framework; 3) project selection; 4) reporting; and 5) auditing. A detailed walk through of each component is provided in appendix 2 of this report. Table 2 below highlights the key focal points specific to Green Sukuk³⁷ across the 5 components which potential issuers need to consider across the pre-issuance and post-issuance phases.

PRE-ISSUANCE	
Climate Budget Tagging	<ul style="list-style-type: none"> » Climate budget tagging should have an ex-ante mechanism which allows: <ul style="list-style-type: none"> i) creation of a portfolio strategy in climate finance aligned with national priorities ii) incentive for new project owners that want their projects to receive green sukuk funds and earmark projects in budget process
Development of a Framework	<ul style="list-style-type: none"> » Developing a framework requires extensive consultation with active involvement of stakeholders to ensure the framework aligns with national priorities on climate change and the Government plan » Third party involvement in the form of a second opinion on the framework and / or green bond rating / pre-issuance verification can address green investor concerns on greenwashing
Project Selection	<ul style="list-style-type: none"> » A framework can support project selection with guidance: <ul style="list-style-type: none"> i. to clarify additional considerations when prioritising projects ii. specify eligible projects and impact indicators » Ideally, project selection takes place prior to sukuk issuance to allow materials on potential projects to investors
POST-ISSUANCE	
Impact Measurement and Monitoring	<ul style="list-style-type: none"> » Successful on time reporting requires having committed and experienced stakeholders directly involved with projects and have background knowledge on green sukuk » An impact template can incorporate the national agenda in achieving SDGs
Data Collection	<ul style="list-style-type: none"> » Early project finalisation is important to develop a reliable communication strategy for coordination of stakeholders to allow reporting and capacity building » Formal standard operating procedures will help manage the flow of data and reporting
Impact Reporting	<ul style="list-style-type: none"> » Key to have capacity building and a manual which will provide guidance on impact reporting for green sukuk » A spot check process enhances transparency and accountability and supports the annual audit of the annual Allocation and Impact Report
Annual Impact Audit and Report	<ul style="list-style-type: none"> » Independent third-party audit of the annual impact report provides assurance to investors » Processes required to be in place to retain documentation over the reporting process and compliance with the Framework

Table 2: Focal Points for Countries Seeking to Issue Green Sukuk

Other Green Sukuk Issuances – Lessons Learnt & Insights

This section provides a brief overview of green sukuk issuances that have taken place in other regions. In-depth interviews with IsDB (Multilateral Development Bank issuer), Cagamas (Malaysia Corporate issuer), and select lead arranger banks and Shariah scholars were undertaken to provide augmenting insights for this report.

6.1. Islamic Development Bank

In November 2019, IsDB was the first AAA-rated institution in the world to issue a green sukuk, raising €1bn, and followed this with a sustainability sukuk issuance in June 2020 of US\$1.5bn. These issuances are in line with the IsDB's commitment to the SDGs with IsDB recognising there is a huge financing gap to achieve the SDGs and the potential for Islamic finance to help bridge this gap. More recently IsDB raised US\$2.5bn – its biggest US dollar public issuance to date with its sustainability sukuk in March 2021³⁸.

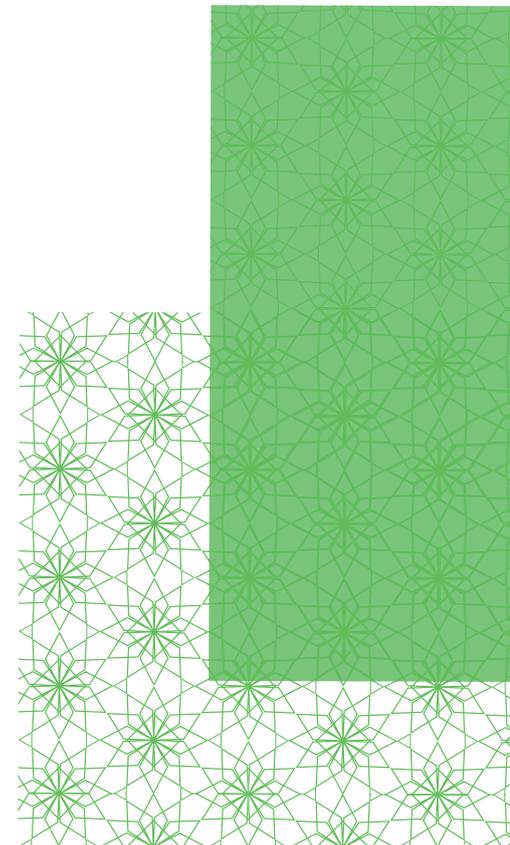
Collectively, IsDB's sukuk issuance programme has illustrated how Islamic finance can be successfully used to help finance the SDGs and has attracted considerable non-Islamic investors. The IsDB identified that it is best positioned to support Member Countries in the achievement of SDGs 1 to 11, 13, and 16. They created their Sustainable Finance Framework in November 2019, with Sustainalytics providing the ESG risk rating and the Center for International Climate and Environmental Research - Oslo (CICERO) providing a second party opinion.

The IsDB Sustainable Finance Framework was developed in accordance with the four pillars of Green Bond Principles 2018, Social Bond Principles 2018, and Sustainability Bond Guidelines 2018. IsDB obtained an independent second opinion on their Framework from CICERO, and CICERO also provide the independent external review for the first annual report of the debut green sukuk issuance of November 2019.

IsDB provided insight into two areas of the green sukuk issuance process that are notable for potential issuers. Firstly, whilst IsDB was experienced in sukuk issuance and familiar with the Shariah governance, compliance and assurance requirements, the development of a green framework and subsequent certification from CICERO was the main incremental challenge. Key elements of this included establishing appropriate criteria to identify eligible projects and associated indicators to measure project impacts for subsequent data collection. This is an upfront investment that is important as independent certification provides comfort to potential investors that the sukuk is genuinely green.

The second aspect reflected upon was the outcome of the issuance in terms of investor subscription. One of the IsDB objectives in issuing the green sukuk was to expand their investor base, diversifying from Central Banks to institutions. With western global investors showing a growing appetite for ESG investments, IsDB saw an opportunity to make use of their existing pool of assets to raise funds. IsDB took this opportunity forward by issuing a Euro denominated green sukuk and held investor roadshows in Europe. The fact that it was branded green and a globally recognised body had certified the IsDB framework, meant that IsDB was able to capture the attention of investors who otherwise would not have considered sukuk as an investment.

IsDB was the first AAA-rated institution in the world to issue a green sukuk, raising €1bn, and followed this with a sustainability sukuk issuance in June 2020 of US\$1.5bn.



6.2. Cagamas

In October 2020 Cagamas Berhad (“Cagamas”) the National Mortgage Corporation of Malaysia, issued Malaysia’s first ASEAN sustainability SRI sukuk for affordable housing of RM100m. Cagamas issued the sukuk under its Sustainability Bond / Sukuk Framework (“Sukuk Framework”) in June 2020. Cagamas’ mission statement includes to “Embrace a culture of deploying sustainable initiatives” and the Sukuk Framework was a reflection of Cagamas support of the SDGs and Malaysian Government initiatives³⁹. The Sukuk Framework aligns with the transparency and disclosure requirements of local and international frameworks including the SC Malaysia SRI Sukuk Framework along with ASEAN and ICMA principles and standards.

The Cagamas Chief Executive Officer provided insight on their first sustainability sukuk issuance sharing the following key points:

- » The final pricing for the sustainability sukuk achieved a result of 2 basis point lower than Islamic Medium-Term Notes issued by Cagamas at the same time – a key driver for this was considered to be the investor demand for green / social sukuk relative to the low availability.
- » Whilst corporates can issue green or social sukuk based on the framework developed by the Securities Commission Malaysia’s Sustainable & Responsible Investment Sukuk Framework, the development of the Cagamas Sukuk Framework provided a framework that was tailored for Cagamas. This allowed indication of how proceeds were to be used and allowed mapping to SDGs specific to Cagamas activities.
- » The aspiration for Cagamas is to issue further sustainable sukuk but potentially limited as there need to be underlying assets and requires banking institutions to have more relevant assets, which may involve a strategy to develop a green taxonomy and development of green mortgages.

6.3. HSBC Amanah

HSBC Amanah Malaysia (HSBC Amanah) has been heavily involved in green sukuk and the parent HSBC Group in green bonds in the roles of an adviser and arranger but also as an issuer. In addition, HSBC Amanah has a strong ESG focus with the bank winning the Islamic ESG Bank of the Year award 2020 and the HSBC CEO stating the bank is “committed to transforming into a sustainable banking entity”⁴⁰.

In November 2017, HSBC Group issued a US\$1bn bond aligned with the SDGs, in a deal that was three times oversubscribed. It was the first time that a private sector entity had issued a benchmark-size bond of this type. This was followed in September 2018 by HSBC Amanah launching the World’s first SDG sukuk of RM500m in the Malaysian Ringgit market.

The SDG sukuk was issued in accordance with the HSBC Group Sustainable Development Goals Bond Framework (HSBC Framework) and the Sustainable and Responsible Investment Sukuk Framework of Malaysia (SRI Framework). The HSBC Framework is in alignment with the 2017 Green Bond Principles and 2017 Social Bond Principles and the Sustainability Bond Guidelines. It sets out proceeds will be used to support projects contributing towards the SDGs 3, 4, 6, 9, 11 and 13.

Discussions with representatives from HSBC Amanah provided insight into some pertinent points in relation to green / SRI sukuk issuance across Malaysia and Indonesia as follows.

HSBC Amanah
launching the World’s
first SDG sukuk of
RM500m.

Malaysia

Malaysia has the most developed Islamic Finance market with a framework that has been developing from the 1970's with Government support and has continued to pioneer Islamic finance instruments with the first green sukuk, Tadau Energy Sdn Bhd, issued in July 2017. The majority of green sukuk issuances have been from Malaysia – the World Bank identified as of July 2020 there had been a total of 17 green sukuk issuances, 10 were from Malaysia, 4 were from Indonesia, 2 from UAE, and 1 from Saudi Arabia.

The aspects that have supported and facilitated green sukuk issuances in Malaysia include:

- » The Securities Commission Malaysia introducing the Sustainable and Responsible Investment (SRI) Sukuk Framework in 2014.
- » In October 2018, Bank Negara Malaysia, the Malaysian Central Bank, introduced Value-based intermediation: a set of guidelines to promote real economic activities leading to positive social and environmental benefits.
- » Malaysia's Joint Committee on Climate Change was established in 2019 to focus on collaborative actions within Malaysia's financial sector to build climate resilience.

Indonesia

Indonesia has shown leadership through the issue of the World's first sovereign green sukuk and the World's first sovereign retail green sukuk (as discussed in sections 5 and 6). Notably Indonesia has a very limited corporate sukuk market and has not seen any corporate green sukuk issuances. A key factor noted causing this is the tax framework in Indonesia. It was considered that there was a need to ensure sukuk had a level playing field with no additional burdens in comparison to conventional bonds. A further step would be to promote sukuk issuances over bond issuance by providing tax incentives.

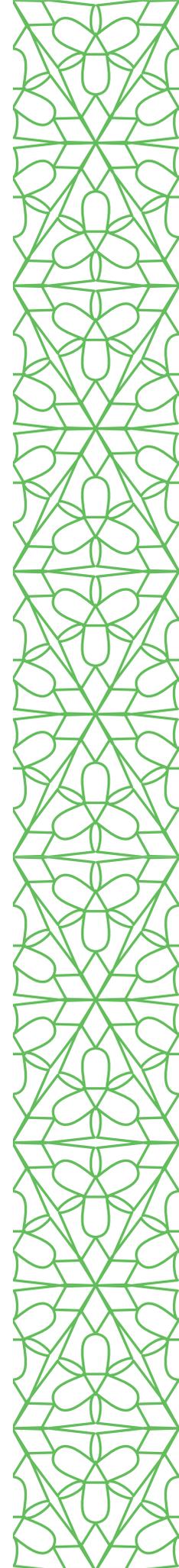
General

Several points were noted that were considered applicable across regions from the perspectives of issuers and investors.

From an issuer perspective, it was noted that:

- » Green sukuk require appropriate green projects that proceeds can be utilised for, companies without such projects will not be able access funds using green sukuk.
- » Green sukuk have a cost factor that is additional when compared to non-green sukuk or conventional bonds that arises for example as a result of annual reporting.

There is concern only issuers willing to bear additional costs of green sukuk issuance would be those that typically have a need to enhance their image, for example where the businesses core activities are perceived as having a negative impact on the environment or society. However, in practice green sukuk issuers have varied from renewable energy companies, retail groups to national mortgage companies. This would indicate the reasons for using green sukuk is beyond simply improving company image.



Investors considered there to be a growing demand for green investment opportunities and that currently demand outstripped availability. Investors are increasingly taking into consideration ESG as part of their investment criteria with differing levels of scrutiny. Whilst market practice is for green bonds and green sukuk to be certified and this would be acceptable for the majority of investors, some investors delve deeper. An investor may look research all the activities of the company raising the funds before making an investment decision. For example, a company seeking funds for a solar power plant may be certified green, but if the company has existing coal power plants an investor may not want to invest with that company.

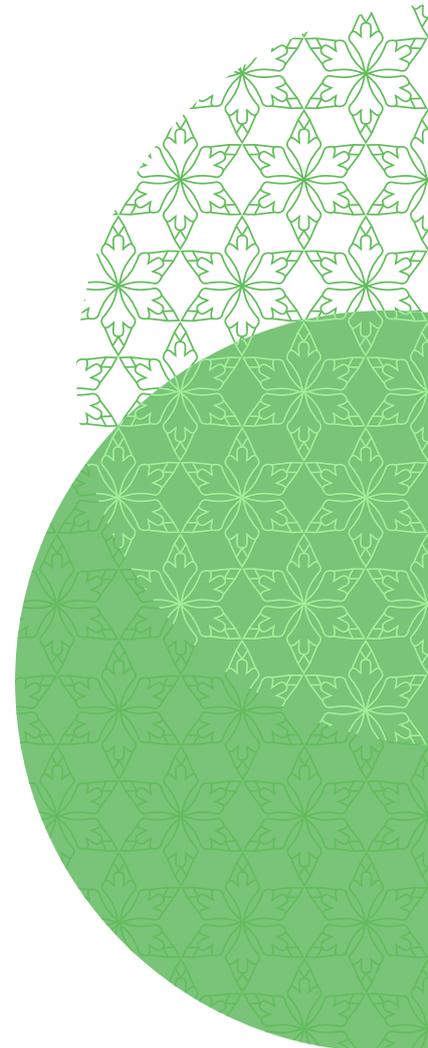
Their role does not differ whether or not a sukuk is green.

6.4. Shariah Scholar Perspectives

Interviews with Shariah scholars who were involved in sukuk issuance has identified that their role does not differ whether or not a sukuk is green. However, green sukuk are recognised as aligned with the Maqasid (objectives) of Shariah. Discussions with Shariah scholars provided the following main insights on green sukuk:

Green sukuk are recognised as aligned with the Maqasid (objectives) of Shariah.

- i. Islamic Financial Institutions are well placed to be involved in green sukuk issuance – frameworks and governance are already in place to ensure use of proceeds are compliant with certain requirements and are thus comfortable with such restrictions.
- ii. Historically, whilst scholars have always considered the use of proceeds from a sukuk issuance, the use of proceeds would only be restricted where that use was clearly non Shariah compliant. Interviews indicated the role of the scholar could be pro-active, for example including within fatwa terms requiring an issuer to address sustainability concerns.
- iii. The opportunity is there for Shariah scholars to positively influence ESG aspects when opinions are sought for sukuk issuances – where Shariah scholar identify negative or destructive impacts (e.g., deforestation) they have the opportunity to ask how the issuer will address or remediate these issues.
- iv. In considering the structures used for green sukuk, there is a peculiarity with the use of ijara structures where an existing asset is used to generate funds for new projects – the asset used in the Special Purpose Vehicle would not be checked for green credentials under a framework based solely on the ICMA Green Bond Principles. Only use of proceeds would be considered and not the underlying structure of the sukuk in terms of assets used and this for example could lead to the underlying asset being for example an oil platform – when giving second opinions on frameworks and on annual reporting, independent certifiers such as Sustainalytics should take this into consideration.
- v. There is a potential compliance role for Shariah scholars in relation to ESG matters. Scholars could play a compliance role in considering and encouraging social benefits such as poverty reduction or wage inequality. However, scholars are unlikely to be able to do so when considering environmental matters as assessing the impact of a project would require technical expertise.
- vi. Challenge within the industry include Shariah scholars general lack of experience and depth of knowledge of ESG matters. In addition, there is a lack of guidance for Shariah scholars to be considering such matters as part of their roles – it is recommended regulators such as the Accounting and Auditing Organization for Islamic Financial Institutions take a lead and develop guidance for Shariah scholars.



Conclusion

The limited global pool of development capital will not suffice to achieve the SDGs. All parts of private capital markets, both banking and asset management, need to be reorientated to either directly finance or consider their impact on the SDGs, which has fast become the primary global framework for addressing the challenges of the planet.

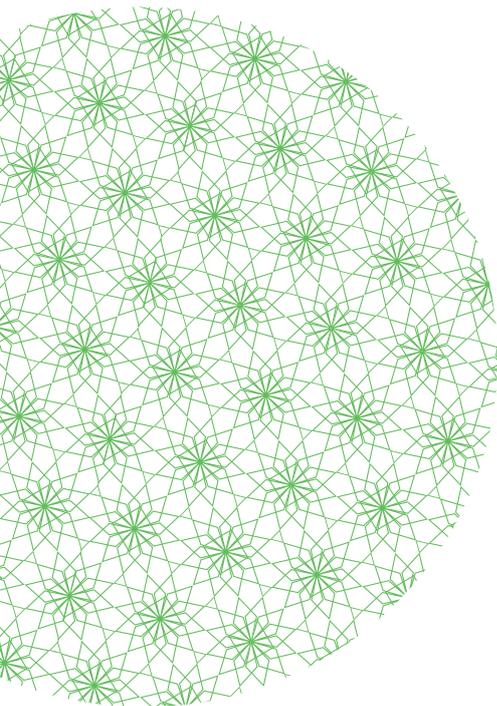
This report has demonstrated the potential for countries to use Islamic finance—specifically green sukuk—to raise additional funds to help achieve their respective NDCs, and more broadly the SDGs. The principles of Islamic finance are underpinned by the objectives of Islamic law and overlap with many of the aims and objectives of the SDGs. Due to this alignment, Islamic finance is ontologically well positioned to support the achievement of the SDGs and can be a critical additional source of private sector finance that are currently not fully leveraged.

The UKIFC estimates an additional US\$30bn to US\$50bn of capital towards the SDGs can be raised by 2025 through green and sustainability sukuk. This will require focused efforts and targeted initiatives by institutions such as UNDP, PRI, and IsDB, along with multiple governments. Sustainability-focused Islamic finance products (tayyib) presents the opportunity for the industry to grow, better engage with a wider agnostic customer base and access global liquidity pools increasingly seeking social good alongside financial returns. Tayyib products arguably present the next big opportunity for the Islamic finance sector, anchored by green sukuk.

Market analysis has shown the growth trend in green bond issuances is also occurring with green sukuk issuances. Malaysia and Indonesia are the countries with the largest volume of issuances. The pioneering ROI and UNDP partnership presents a case study on the issuances of the world's first sovereign green sukuk and the world's first retail green sukuk.

Potential for countries to use Islamic finance—specifically green sukuk—to raise additional funds to help achieve their respective NDCs, and more broadly the SDGs.

Tayyib products arguably present the next big opportunity for the Islamic finance sector, anchored by green sukuk.



This report has highlighted practical considerations other countries can take into account when embarking on their own journey towards issuing green sukuk. Successful issuances require experienced partners that can provide technical assistance to address the challenges in establishing a green framework, project identification and developing annual impact reporting.

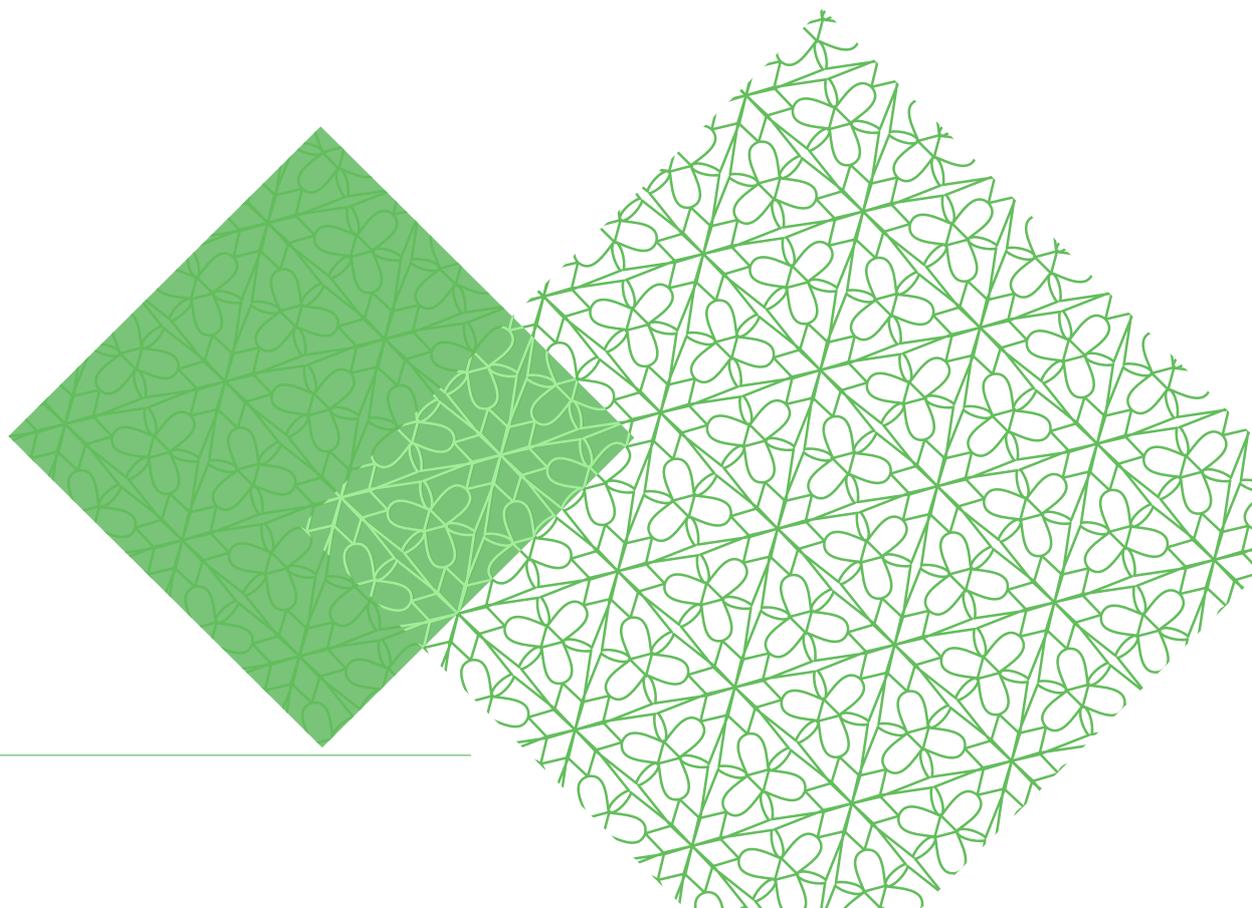
Insights from green sukuk issuances in other regions highlighted various other key aspects. Issuers have noted the ability of green sukuk to diversify their investor base as they are attracting investors that may not have previously considered sukuk. With demand for green investing opportunities outstripping supply, issuers also noted a small pricing benefit in green sukuk, although this may be tempered with the additional costs involved with such issuances.

The role of the Shariah scholars has been critical to the development of Islamic finance and green and sustainable sukuk may result in their role evolving. Scholars are already experienced in having a compliance role but there is an argument that their role should be expanded to inquire into the social and environmental impact of the use of funds raised through Islamic financing structures. Scholars are less equipped on the technical side of green finance and thus should be cautious in taking any role that would place an unrealistic expectation on them. Nevertheless, on the broader non-green sustainability elements, these carry an inherent social good interpretation and scholars would be able to contribute well to this considering their training.

Collectively these factors demonstrate that Islamic finance is capable to and indeed should be more actively involved in the global green and sustainability investment movement. With the SDGs 2030 deadline fast approaching and the urgent need to decarbonise and limit global warming per the Paris Climate Accord, orientating Islamic finance to join this global movement is critical. This is for both the incremental capital it presents but also for the communities it serves, particularly as OIC countries are amongst those most highly impacted by the negative consequences of climate change.

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Appendices



An Overview of Green Bond Standards and Frameworks

	GLOBAL		REGIONAL	NATIONAL
Product Developer	International Capital Markets Association (ICMA)	Climate Bond Initiative (CBI)	ASEAN Capital Markets Forum (ACMF)	Securities Commission Malaysia (SCM)
Overview	ICMA is a not-for-profit membership association with around 600 members in 62 countries. Among its members are private and public sector issuers, banks and securities houses, asset managers and other investors, capital market infrastructure providers, central banks, law firms and others.	CBI is an investor-focused not-for-profit working solely to mobilise the largest capital market of all, the US\$100trn bond market, for climate change solutions	ACMF is a high-level grouping of capital market regulators from all 10 ASEAN jurisdictions. Established in 2004 ACMF's primary responsibility is to develop a deep, liquid and integrated regional capital market.	SCM is a self-funded statutory body entrusted with the responsibility to regulate and develop the Malaysian capital market. Established in 1993 SCM's mission is "to promote and maintain fair, efficient, secure and transparent securities and derivatives markets; and facilitate the orderly development of an innovative and competitive capital market".
Frameworks / Standards	 <p>Voluntary process guidelines intended for broad use by the market: they provide issuers with guidance on the key components involved in launching a credible Green Bond; they aid investors by promoting availability of information necessary to evaluate the environmental impact of their Green Bond investments; and they assist underwriters by moving the market towards expected disclosures that will facilitate transactions.</p>	 <p>A labelling scheme for bonds and loans. Rigorous scientific criteria ensure that bonds and loans with Certification, are consistent with the 2 degrees Celsius warming limit in the Paris Agreement. The Scheme is used globally by bond issuers, governments, investors and the financial markets to prioritise investments which genuinely contribute to addressing climate change.</p>	 <p>Developed in collaboration with the ICMA using its internationally accepted Green Bonds Principles (GBP). Whilst the GBP provided broad principles on green bonds, the ASEAN Green Bond Standards aim to provide more specific guidance on how the GBP are to be applied across ASEAN in order for green bonds to be labelled as ASEAN Green Bonds. In these respect, Issuers who wish to issue and label the green bonds as ASEAN Green Bonds must demonstrate compliance with the ASEAN Green Bond Standards.</p>	The Sustainable and Responsible Investment (SRI) Sukuk framework is to facilitate the creation of an ecosystem that promotes sustainable and responsible investing for SRI investors and issuers. The Framework is in accordance with international standards and best practices which emphasise the importance of transparency in respect of disclosure requirements.
Key Components	<p>Use of Proceeds</p> <p>Process for Project Evaluation and Selection</p> <p>Management of Proceeds</p> <p>Reporting</p>	<p>Use of Proceeds</p> <p>Selection of Projects & Assets</p> <p>Management of Proceeds</p> <p>Reporting</p> <p>External Review</p>	<p>Use of Proceeds*</p> <p>Process for Project Evaluation and</p> <p>Selection*</p> <p>Management of Proceeds*</p> <p>Reporting*</p>	<p>Utilisation of Proceeds</p> <p>Process of Project Evaluation &</p> <p>Selection</p> <p>Management of Proceeds</p> <p>Reporting</p>
Allocation Reporting	Mandatory	Mandatory	Mandatory	Mandatory
Impact Reporting	Encouraged	Mandatory	Encouraged	-
Eligibility Reporting	-	Mandatory	-	-
Pre & Post External Review	Encouraged	Mandatory	Encouraged	Encouraged

*Elements are similar with ICMA's standards with minor variations as it is intended for ASEAN issuers (ie. Geographical restrictions, fossil fuel power generation excluded)

Table A1: source – Pioneering the Green Sukuk: Three Years On, World Bank Group, October 2020

Walkthrough of Sovereign Green Sukuk Issuance Process

Building on its experience of previous sukuk issuances (the first corporate sukuk was issued in 2002 and first sovereign sukuk in August 2008) the Government of Indonesia partnered with UNDP to develop the components noted in Diagram A1 for the issuance of the sovereign green sukuk.

Issuing a Green Sukuk

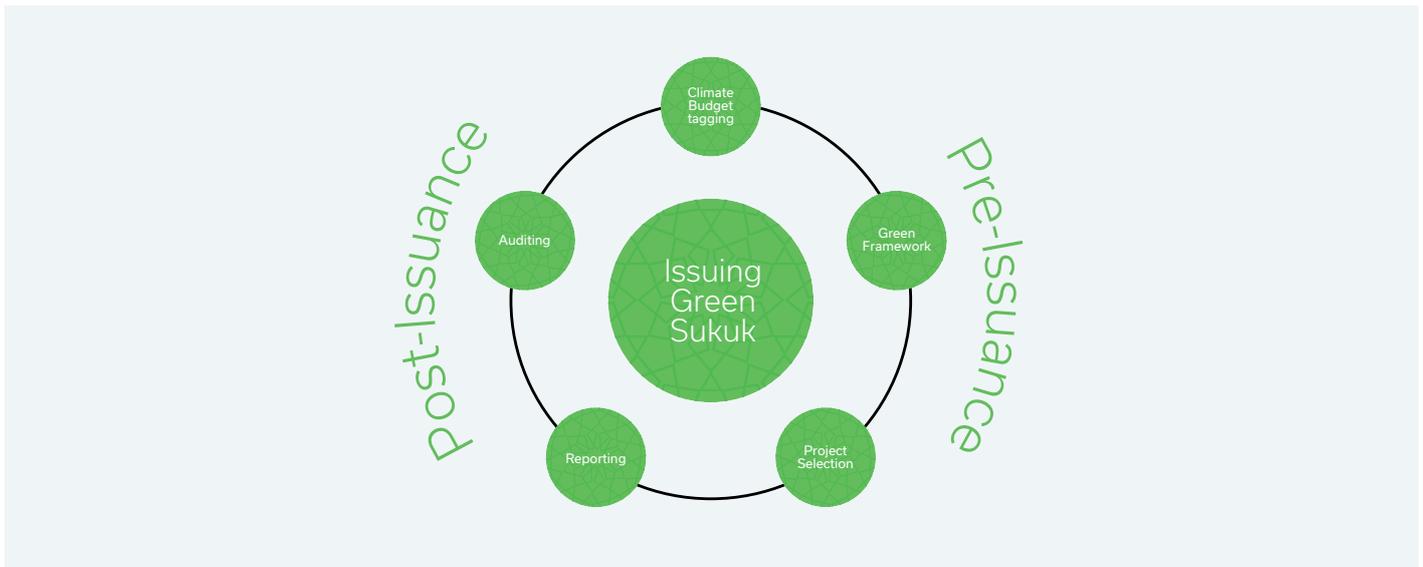


Diagram A1: source: UNDP Indonesia

Whilst the Framework establishes what will be eligible for funding, a key precursor to issuing Green Sukuk and green bonds is the identification of eligible projects.

Climate Budget Tagging

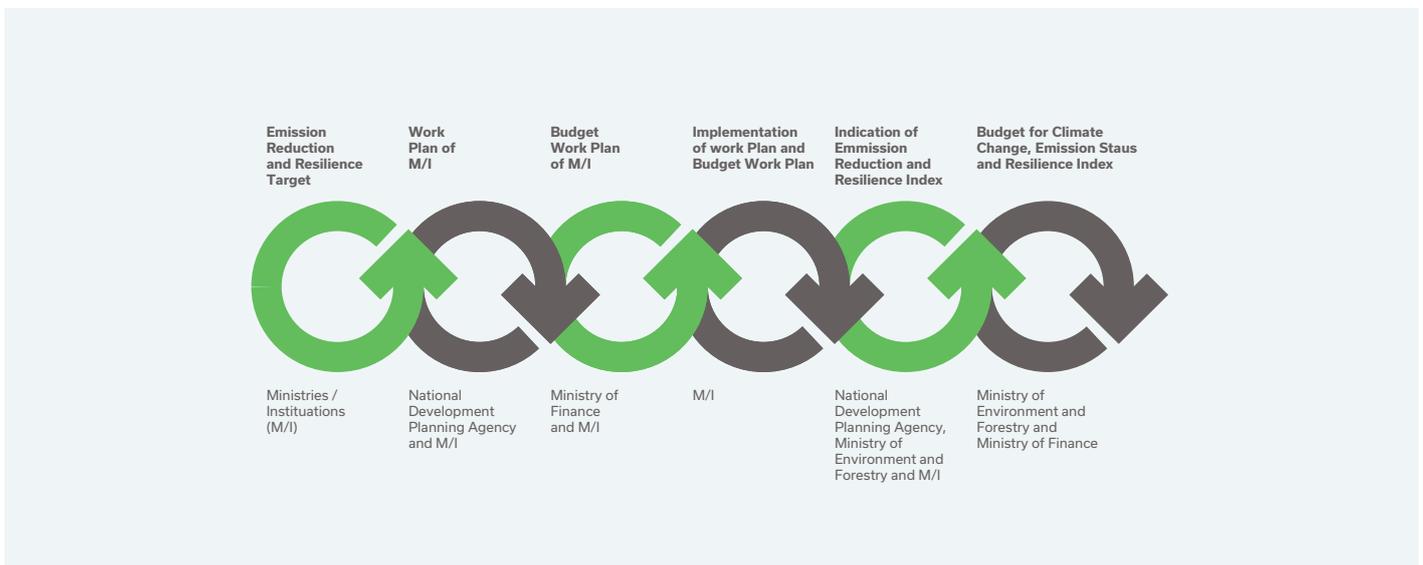


Diagram A2: source – Republic of Indonesia Green Bond and Green Sukuk Framework

The Indonesian Climate Budget Tagging system was developed in partnership with UNDP. It identifies public expenditures that deliver climate change benefits in accordance with the country's priorities. Sectoral Ministries tag activities and outputs with positive climate change impacts.

The tagging is the result of an integrated process, as represented in diagram A2, where the climate benefits of each project are assessed by the Line Ministries and National Development Planning Agency before being validated by the Ministry of Environment and Forestry to ensure alignment with Indonesia's NDCs and then finally endorsed by the Ministry of Finance.

The Ministry of Finance will select tagged projects eligible for potential funding from the Green Sukuk proceeds. These projects will:

- » fall into one or more of the Eligible Sectors under this Framework; and
- » have a project development timeline consistent with the tenor of the applicable Green Bond or Green Sukuk.

Republic of Indonesia (ROI) Green Bond and Green Sukuk Framework (Framework)

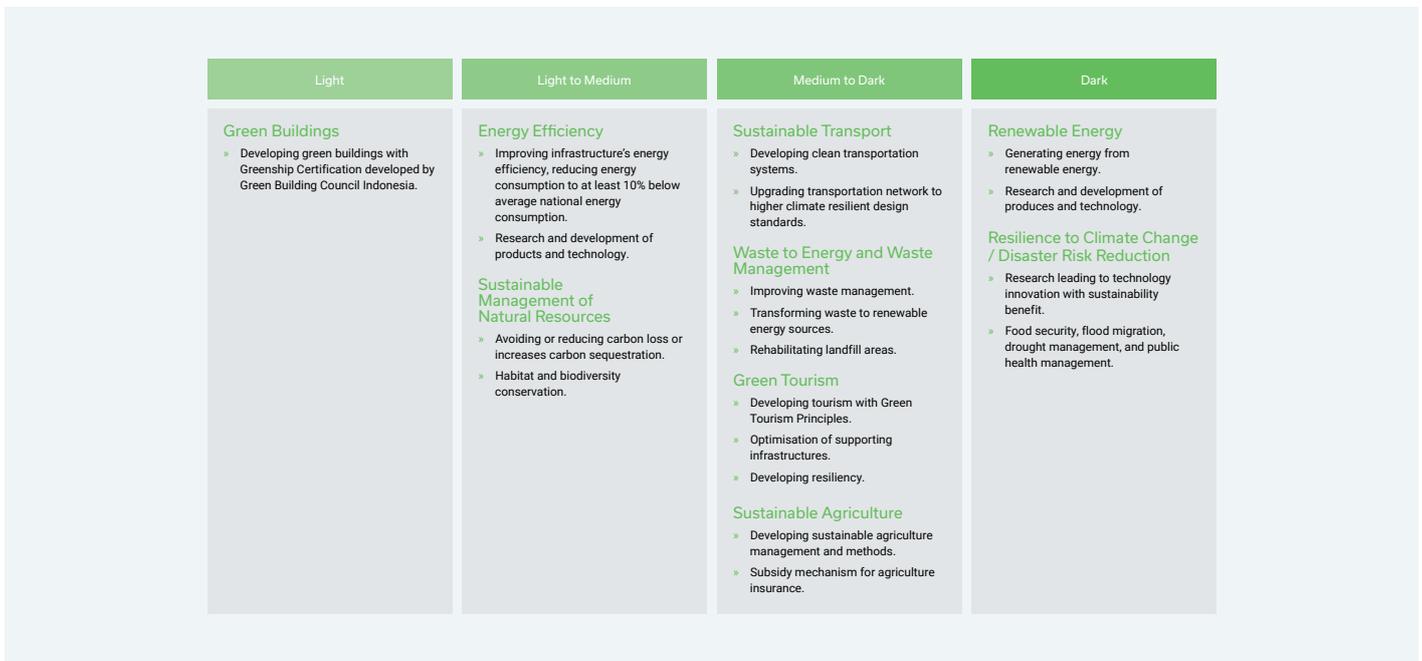


Diagram A3: source: UNDP Indonesia

The Government of Indonesia issued the Framework in January 2018 to provide guidance on the sectors and types of projects eligible to receive proceeds of a green bond or green sukuk issuance, as summarised in Diagram A3.

The framework was developed in line with the International Capital Market Association (ICMA) Green Bond Principles and the Association of Southeast Asian (ASEAN) Green Bond Standards.

Assurance in the robustness of the Framework in allowing Indonesia to meet its environmental objectives was provided through the independent "Second Opinion" received from CICERO. CICERO stated: "There are no obvious weaknesses in the Green Bond and Green Sukuk Framework," and provided an overall "Medium Green" classification for the Framework.

The Framework sets out four pillars:

Pillar 1 Use of Proceeds	Pillar 2 Process for Project Evaluation and Selection	Pillar 3 Management of Proceeds	Pillar 4 Reporting
Sets out the 9 eligible sectors which green sukuk proceeds can be used for financing or re-financing.	Project evaluation and selection is driven by the Climate Budget Tagging system as outlined above and below.	<p>A Green Sukuk allocation register (the "Register") is established to record the allocation of the proceeds.</p> <p>The Register reports: (a) the details of the green sukuk, i.e., International Securities Identification Number (ISIN), pricing date, maturity date, etc.; and (b) the list of eligible projects.</p> <p>The financial allocation of proceeds will be audited by an independent party.</p>	An annual report provides details of the allocation of proceeds to investors. Please see below for further detail.

In comparison to typical green frameworks, the Framework covers the additional element of the Islamic aspects when issuing a Green Sukuk, in particular the Ministry of Finance has stipulated all proceeds must be tied to underlying assets.

Within the Framework Green Sukuk are considered to have a unique characteristic from regular Sukuk - the proceeds require to be invested in projects that generate measurable and verifiable environmental benefits.

Project Selection

Project selection is a two-step process :

1. Creation of a list of potentially eligible projects generated as a result of the Climate Budget Tagging system – subsequently sorted in accordance with the Framework
2. Creation of a shortlist of priority projects with five additional considerations:
 - i. Compliance with the Islamic requirement for underlying assets.
 - ii. Distribution of sectors – aiming for diverse sectors.
 - iii. Level of green classification – the preference for projects qualifying for a darker shade of green.
 - iv. Capacity to calculate its impact measurement.
 - v. Co-ordination with line ministries (or project owners).

Reporting



Diagram A4: source – UNDP Indonesia Lessons Learned and Evaluation Report Green Sukuk Issuance and Impact Reporting

The Framework commits to the preparation and presentation of an Impact Report on an annual basis. An Impact and Reporting Manual was developed to provide guidance to line ministries / project managers on the reporting process.

Interviews with staff from Indonesian Ministries and UNDP Indonesia identified this phase was one of the most challenging. The reporting phase was one found to require significant development to ensure annual reporting of an acceptable standard could be achieved. The following key components should be included to ensure successful annual impact reporting⁴¹:

- » **Stakeholder Co-ordination:** a working group was set up with effectiveness requiring the correct membership – i.e., those with direct involvement in project.
- » **Data Collection:** this part of the reporting process was the most time consuming with access to the right kind of impact data - difficult with the lack of centralised recording or reporting. Directly linked to impact measurement there was a need to build capacity, develop standard operating procedures and finalise the project listing at an early stage.
- » **Impact Measurement:** an impact manual was developed that provides options for identifying performance indicators and managing impact reporting for green bonds and green sukuk.
- » **Reporting Template:** Market guidelines require that use-of-proceeds reporting is disclosed at least annually, which is also the case for Indonesia with the first report released in February 2019. As suggested by the Green Bond Principles, an impact table containing all the relevant information for projects was developed for inclusion in the Annual Impact Report – this was adapted to include SDG indicators.
- » **Annual Impact Report:** the annual impact report was developed following an analysis of a) International Finance Corporation (IFC) guidance⁴³ and b) existing reporting by sovereign issuer (Poland) and corporate issuers (HSBC, World Bank, and IFC).

Auditing

The auditing process provides assurance to investors that all processes have followed green principles and that proceeds have been managed in accordance with the Framework. The Government of Indonesia procured the services of international professional services firms to audit the annual impact reports – the 2019 report received an opinion from KPMG, the 2020 report received an opinion from PwC, and the 2021 report received an opinion from EY.

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