

4TH IFSB

INNOVATION FORUM

Innovation for Sustainability
and Regulations of Financial
Services



PROCEEDINGS

DOHA • QATAR
14 SEPTEMBER 2022

Organised by:



Co-hosted by:



مركز قطر للمال
Qatar Financial Centre



بنك قطر المركزي
QATAR CENTRAL BANK

CONTENTS

OPENING REMARKS	4
Dr. Bello Lawal Danbatta <i>The Secretary-General, Islamic Financial Services Board (IFSB)</i>	
KEYNOTE SPEECH	7
H.E. Sheikh Bandar bin Mohammed bin Saoud Al-Thani <i>Governor, Qatar Central Bank</i>	
WELCOME REMARKS	10
Yousuf Mohamed Al-Jaida <i>Chief Executive Officer, Qatar Financial Centre</i>	
FINTECH SESSION:	13
The Future of Fintech and Its Role in the Wider ESG Ecosystem	
ESG SESSION:	19
Innovation in Sustainable and Green Digital Technologies in the Islamic Financial Services Industry	
REGULATORS' SESSION:	25
Regulatory Considerations in Facilitating Innovation to Integrate Climate-financing, ESG and Sustainable Development Goals (SDGs) into the development of the IFSI	
PRESENTATION BY BIS INNOVATION HUB ON PROJECT RIO:	36
A Prototype of a Central Bank-specific, Real-time Market Monitoring Platform	
CLOSING SPEECH	39
Dr. Recep Şentürk <i>Dean of the College of Islamic Studies, Hamad bin Khalifa University</i>	
SUMMARY AND CONCLUSIONS	42

INTRODUCTION

The 4th IFSB Innovation Forum was held in Doha, Qatar, on 14 September 2022, co-hosted by Qatar Financial Centre (QFC) and Qatar Central Bank (QCB). The Forum, one of a regular annual series, aims to bring together Islamic finance stakeholders to focus on the promotion and development of innovative Islamic finance solutions. The series targets regulators, policymakers, Islamic financial services institutions, academic and research institutions, legal practitioners, Sharī'ah advisors and other interested stakeholders to enable an enriched discussion on enhancing the culture of innovative thinking and development in the Islamic financial services industry (IFSI).

This year the focus of the forum was on sustainability. The speakers and panellists who spoke at the Forum addressed the issues from different standpoints including technical, business, and regulatory perspectives. The speakers while acknowledging increased emphasis on the issue of sustainability in financial services globally, recognised the unique position of Islamic finance as a principle-driven financial system. In addition, they noted that recently, there had been substantial development in international standards in this area.

These proceedings summarise the main contributions and discussions and attempt to draw out some significant themes.

Opening Remarks

4TH INNOVATION FORUM
INNOVATIONS IN SUSTAINABILITY
AND REGULATION OF FINANCIAL
SERVICES
14 SEPTEMBER 2022

Dr. Bello Lawal Danbatta
Secretary-General,
Islamic Financial Services Board



OPENING REMARKS

Dr. Bello Lawal Danbatta

*The Secretary-General
Islamic Financial Services Board (IFSB)*

Dr. Danbatta began by welcoming the participants and delegates and thanking them for attending the event. He expressed his highest appreciation to the QCB and QFC for graciously co-hosting the event.

He noted that the Innovation Forum is an annual event organised by the IFSB that aims to cultivate innovative thinking and dialogue in the IFSI, to foster the development of an efficient,

competitive, sound, and innovative IFSI in a rapidly changing global environment. The focus of this forum is on innovation in the IFSI that creates a competitive edge for IIFS and contributes to furthering the growth of Islamic finance. This forum aims to facilitate discussion and sharing of insights and experiences by the regulators and market players on the potential risks and opportunities arising from these developments. Furthermore, the forum seeks to identify potential regulatory and supervisory considerations, as well as to promote greater cooperation and contribution toward the future development of the IFSI.

According to the most recent issue of the IFSB's flagship annual Stability Report 2022, the global IFSI assets grew by 11.3% year-on-year with a total worth estimated at USD3.1 trillion in 2021. The growth of the IFSI, against the backdrop of the challenges posed by the COVID-19 pandemic, is a testament to the growing interest in Islamic finance products and services among the wider financial sector stakeholders, including non-Muslim majority countries. The digital innovations in the IFSI triggered at the advent of the pandemic have not only helped the IIFS to overcome the challenges of the pandemic but also provided opportunities for IIFS to popularise and broaden the scope of Islamic finance beyond the traditional boundaries. There has also been increasing attention on the potential of Islamic finance in developing sustainability-linked products and services, which are well-suited to address the United Nations sustainable development goals (SDGs) and beyond.

In recent years, there has been a rising demand for sustainability-related products and services in the IFSI. Environmental, social and governance (ESG) factors are also gaining more interest among global investors due to the manifestation of unprecedented climate changes and subsequent risks posed to financing and investments made by financial institutions. In 2021, sustainability-related sukuk issuances amounted to USD5.3 billion, of which USD1.6 billion or 29% were classed as green sukuk. This growing interest was reflected by substantial issuances of sustainability- and ESG-related sukuk from both sovereign and private issuers.

This trend is likely to continue in the future, considering a strong commitment by global leaders and industry players towards sustainability and climate-related initiatives as well as the increasing appetite of investors for ethical and sustainable investments. Additionally, the need to fund green and sustainability transition projects is expected to spur the increasing issuance of sustainability-related sukuk in the near future. Islamic Fintechs also have the potential to contribute significantly to address sustainability and ESG factors through their innovative financing and investment ideas. Examples include sadaqah, zakāh and waqf funds raised through crowdfunding platforms to be utilised for activities eligible for climate finance, remittances through Islamic Fintech that support households in acquiring low-cost clean energy, etc.

Like innovations in other fields, innovations in sustainability-linked Islamic finance may present both opportunities and risks to the industry. So, a conducive ecosystem is required to assess and utilise the opportunities while mitigating the risk factors to achieve an optimal outcome. However, innovations must not compromise the Shari'ah principles on which the IFSI is built

on. In this regard, regulatory and supervisory authorities (RSAs) would play a very important role in guiding and nurturing innovation as well as in supervising any deviations detrimental to the stability and credibility of the IFSI.

The IFSB is also currently working on developing and providing guidance to RSAs on sustainability and climate-related regulatory and supervisory issues as well related disclosures, addressing the specificities of Islamic finance, that complement and contribute to the work already being done by conventional standard-setters, particularly the International Sustainability Standards Board (ISSB).

Against this backdrop, the **4th Innovation Forum** was designed to bring forth synergy among market players and RSAs to promote innovative ideas and initiatives to facilitate the growth of sustainability-related products and services in the IFSI. Moreover, the Forum was intended to discuss factors to be considered by the RSAs as well as the market players in facilitating and adopting innovative solutions that address climate change, ESG and SDG priorities. It also provided an opportunity for interaction and dialogue between policymakers and industry players in the IFSI, who are leading the pathway on sustainability-related innovation, and its outcomes will support the endeavour to forge a more resilient and sustainable IFSI.

Dr. Danbatta wished all the delegates very productive deliberations and discussions and once again thanked them for their participation.



KEYNOTE SPEECH

H.E. Sheikh Bandar bin Mohammed bin Saoud Al-Thani

*Governor
Qatar Central Bank*

His Excellency welcomed participants to Qatar and thanked the IFSB Secretary-General, Dr. Bello Lawal Danbatta, for organising this forum. He also expressed his appreciation to the IFSB and his colleagues at the QCB and QFC for their efforts in ensuring the success of the forum. Having been a Full Member of the IFSB and a member of its Council, the QCB has long recognised the importance of the work conducted by the IFSB in adapting prudential

standards to Islamic finance. He noted that IFSB membership was currently held by all of Qatar's Islamic banks and RSAs.

Over the last two decades, the global financial system has undergone unprecedented developments. There is a continuous challenge for financial regulators to deal with a wide range of evolving and emerging issues in the financial system, from unconventional monetary policies following the global financial crisis to unprecedented pandemic scenarios.

In recent years, digital transformation, as well as climate change, have captured the attention of the real economy, the financial sector, and the private sector. These two trends are transforming the role of central banks in the financial services industry into one where they enable market facilitation, digital acceleration, and innovation. As a general principle, these two policy areas fall under the Qatar National Vision 2030, which focuses on achieving a secure cashless society with enhanced financial inclusion as well as cultivating a sustainable green economy. A primary objective of the QCB is to develop a regulatory framework that promotes growth and innovation within the financial industry.

An important aspect of Qatar's financial system is its banking centrality, which contributes significantly and positively to economic growth. With sufficient depth and sophistication, the banking sector continues to play an important role in Qatar's economic growth, as well as in the fulfilment of infrastructure funding requirements for the FIFA World Cup. Having four decades of experience in Islamic banking, Qatar operates a dual banking system, has four Islamic banks, and has 28% of its bank assets held by Islamic banks with Islamic banking assets reaching D154 bn as of June 2022. Qatar is one of the 15 jurisdictions where Islamic banking is categorised by the IFSB Stability Report as systemically important, with 15% or more market share. With 6.5% of worldwide Islamic banking assets, Qatar is one of the top five jurisdictions in the Islamic finance industry. By establishing prudent regulatory and supervisory policies consistent with relevant international standards, the QCB ensures a level playing field for both types of banks in Qatar.

It is the QCB's commitment to play a prominent role in the development of Qatar's financial technology ecosystem. With no "one size fits all" approach to digital transformation, the QCB takes a systematic and gradual approach. In Qatar, national banks have started their digitalization transformation strategies, showing the importance of financial digitalization as the future of the banking industry.

With the FIFA World Cup in view, the QCB took multiple initiatives to enable safe, quick, and affordable digital payments by fostering an ecosystem. On the regulatory front, it published several guidelines, including the e-KYC Security Controls Principles and the Payment Service Regulation, which regulates and licenses various payment activities in the country. Non-bank Fintech providers are also permitted to offer payment services under this regulation. The QCB has issued the first licence in the country for providing digital payment services. The digitalization journey has also included launching Google Pay in Qatar in August, which

enables our consumers to add credit cards to Google Wallet securely. Additionally, the QCB has begun a multiyear strategic initiative to modernise the prudential architecture for digitalisation and Fintech.

With the growing importance of environmental sustainability and social responsibility, the need to rebuild the world with sustainable and environmentally friendly investments is becoming more urgent. In light of the unique ecosystem and implications of every jurisdiction, ESG has been discussed as a critical component of the governance process. Qatari banks have already begun the journey toward green banking by issuing green bonds, implementing green loans, and standardising ESG disclosures. Increasingly, banks are voluntarily integrating ESG risk analysis into their credit assessment and approval processes for corporate clients. His Excellency believes this to be important turning points toward developing a more cohesive and sustainable framework.

It is necessary to work collectively and benefit from the collective wisdom of the regulators in different jurisdictions for supervisory challenges. His Excellency believed the Forum to be a good platform for all industry stakeholders to collectively address industry challenges on digital transformation and green finance. To make progress, the world needs more than words, resolutions, and recommendations; it needs real actions on the ground.

His Excellency concluded by wishing success on the IFSB Innovation Forum 2022.

In light of the unique ecosystem and implications of every jurisdiction, ESG has been discussed as a critical component of the governance process.



WELCOME REMARKS

Yousuf Mohamed Al-Jaida

*Chief Executive Officer
Qatar Financial Centre*

Mr. Al-Jaida welcomed the guests to the IFSB Innovation Forum 2022. He thanked the speakers and distinguished guests for their participation and for providing invaluable insights on critical topics of global interest concerning Islamic and sustainable finance. He congratulated IFSB on the success of this year's Innovation Forum, which since its launch in 2019, has become one of the most important events in the calendar of the international Islamic finance community. This annual event has been instrumental in facilitating the exchange of

views, building stronger alliances and broader interlinkages, and identifying market gaps and opportunities that lead to the development of the Islamic financial services industry globally. He acknowledged the patronage of the QCB, which made possible the hosting of this year's edition of the Forum in Qatar.

Mr. Al-Jaida noted that the 4th IFSB Innovation Forum, which focused on sustainability and regulation of financial services, compelled us to look more deeply into Islamic finance and how we can leverage on its ethical and equitable qualities to address the challenges of achieving the sustainable development goals. He believed it was appropriate for Qatar to host this edition, as having one of the most developed Islamic finance industries and a leadership that has made sustainability central to its growth and its international agenda.

He said that Qatar has a long-standing commitment to addressing global environmental challenges and promoting sustainable development. The state was one of the first countries to ratify the United Nations Framework Convention on Climate Change in 1996 and signed the Kyoto Protocol in 2005. In addition, Qatar is a proud signatory of the Paris climate agreement and, in 2012, hosted the United Nations Climate Change Conference. At that Conference one of the many points raised was the need to establish financial and technology support to enable clean energy investments and sustainable growth and development, thus supporting the global community's effort towards sustainable development and environmental preservation.

Is integral to Qatar's sustainability strategy, which was put forward during the UN Climate Action Summit in 2019, where His Highness the Emir, Sheikh Tamim bin Hamad Al Thani, announced that Qatar would contribute USD100 million for the support of small developing island states and least developed states in their fight against the impact of climate change and natural disasters.

Internally, regulatory reforms and national initiatives reflect the state's ambition to mitigate the impact of climate change and promote sustainability. At the core of the Qatar National Vision, 2030 lies the will to transform the country into an advanced society capable of achieving sustainable development. In 2021, Qatar launched the national Climate Change Action Plan, a strategic framework developed in coordination with more than 50 entities to address climate change and including over 35 mitigation measures and more than 300 adaptation initiatives. One of the ambitious national targets under the climate plan is to cut greenhouse gas emissions by 25% in 2000 by 2030.

While sustainability efforts are government led, environmental preservation and social developments are shared responsibilities of the public and private sectors, as companies increasingly recognise the importance of improving the world and build their sustainability approach. They are looking to transform to triple bottom line institutions, that is profit, people, and planet. Likewise, a growing number of investors are opting to fund companies and projects that are as committed to a better world as they are to their financial profit and are increasingly demanding clear strategies from companies on how they plan to address the material issues in their relevant authorities and industries.

Looking globally, capital markets are rapidly developing and adopting relevant sustainability standards and green taxonomy. This reality demands adopting innovative forms of sustainable financing instruments which are convergent with Islamic finance principles. In fact, industry experts project that Shari'ah compliant ESG investment will grow significantly in the coming years as demand for ethical financing increases and awareness of climate change and social justice broadens. One asset class expected to contribute to the growth of ESG assets is sustainable and green sukuk.

The outlook of Islamic finance points towards a strong future growth. It performed exceedingly well in the last decade, exhibiting an increasing number of products and asset classes and a widening geographic presence. Today, the global Islamic finance industry is worth over USD2 trillion and is projected to grow to nearly USD5 trillion by 2025. That said, it is still confronted with challenges and remains teeming with the opportunity to further its development and maximise its potential, particularly in the sustainability sphere.

Leveraging innovation or technological advances can expand access to Islamic and ethical financing tools and services. A lot can be done to scale Islamic finance and enhance financial inclusiveness, embracing innovation, technological advances and financing instruments which can provide untapped market access to Islamic finance. At the same time, working on policies and regulations remains a main building block to take the industry to the next level of growth.

The Forum would explore topics critical to the growth and development of the Islamic financial industry, Fintech, ESG and regulatory structures. It would hear from distinguished speakers from various international institutions, financial practitioners, regulatory bodies, and prominent thought leaders in Islamic finance. Mr. Al-Jaida hoped that this collective wisdom we acquire from the Forum discussions would move us further in expanding the market for Islamic financial services and take us a step closer to maximising its benefits. He wished all concerned a great success.

Fintech Session: The future of Fintech and its role in the wider ESG ecosystem

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Moderator

Henk Hoogendorn
Chief Financial Sector Officer,
QFC

Speakers

Abdulrahman Al-Sowaidi
Chief Executive Officer,
QDB

Mohammed Al-Sehli
Chief Executive Officer,
Wethaq Capital

Abdul Haseeb Basit
Principal,
Elipses

Nizam Uddin Obe
Chief Strategy Officer
ALGBR

Dr. Dalal Assouli
Associate Professor
HBKU



FINTECH SESSION:

The Future of Fintech and Its Role in the Wider ESG Ecosystem

Moderator:

Henk Jan Hoogendoorn, Chief Financial Sector Officer, Qatar Financial Centre (QFC)

Speakers:

1. Abdulrahman Hesham Al-Sowaidi, Acting Chief Executive Officer, Qatar Development Bank (QDB)
2. Mohammed Alsehli, Chief Executive Officer, Wethaq Group
3. Abdul Haseeb Basit, Co-Founder and Principal, Elipses
4. Nizam Uddin, OBE, Chief Strategy Officer, Algebra
5. Dr. Dalal Assouli, Associate Professor, Hamad Bin Khalifa University

The questions this session was invited to address were:

1. How does a collaboration between Fintechs and IFSIs impact the future of the financial services industry?
2. Between opportunities and challenges, what are the Fintechs' needs for resilient growth
3. How are digital technology and Fintech integrated into the sustainable or green finance agenda by various market players?

Mr. Al-Sowaidi first spoke about the role of QDB in establishing Qatar's Fintech hub, based on a strategy developed by the QCB, with the support of QDB and the QFC. The approach was to bring all the relevant ecosystem into the hub, including the regulator, the licensing authority, and the sector developer. To date, the Fintech hub had received more than 2300 applications across more than 70 countries and had incubated more than 60 companies, the valuation of which had reached more than USD 400 million. This strategy has demonstrated the success of the Fintech pillar within Qatar, and Mr. Al-Sowaidi considered that the Fintech hub had been recognised within the global map of the Fintech industry.

ESG had been cultivated and embedded organically, even before the term was widely known. Banks had voluntarily adopted ESG principles, especially the environmental aspects. For example, QDB had started what it believed to be the first green deposit with Masraf Al Rayan and hoped soon to announce the first green financing product for small and medium-sized enterprises (SMEs). QDB were also providing SMEs with advice on a number of environmentally friendly projects, including both greenfield and brownfield projects. The social and governance aspects of ESG were perhaps less developed in Qatar than the environmental ones, however.

Mr. Basit spoke mainly about Islamic Fintech, and about the global Islamic Fintech survey that his company had recently conducted. He considered that Islamic Fintech was not only a developing and exciting element of the Fintech sector, but also a very developing and exciting part of the Islamic finance sector.

The Global Islamic Fintech Report found that the market size for Islamic Fintech globally in 2021 was USD79 billion in terms of transaction volume and the figure was expected to grow at about 18% to 2026 to reach a size of USD179 billion. This would represent an accelerated growth rate compared to both conventional Fintech and to Islamic finance generally. He believed that we were seeing a groundswell of activity in every market of the Organisation of Islamic Cooperation (OIC) and indeed in some non-OIC markets like the UK and the US where Islamic Fintechs are developing mainly because those markets have a Fintech specialism more generally as well as, in the case of the UK, an Islamic finance specialism.

From an ESG perspective, an interesting feature is that the platforms that are developing are providing consumers with access to options that they may not previously have had in Islamic

finance or sometimes even in conventional finance. So, for example, in the environmental area there are platforms that provide access to investment asset classes such as forestry or agriculture that would not have been available in a traditional finance setting.

At present, this extended access tends to be provided by alternative digital platforms. However, we are beginning to see these niche services broadening out into other areas and providing holistic services. This is similar to what we saw in conventional Fintech, where specialised investment platforms branched out and added on more standard accounts until they became neo-banks. Mr Basit believed that we were starting to see similar developments in the Islamic Fintech space, where there are developments that are not happening, or not happening fast enough, in Islamic banks or not having fast enough in Islamic banks.

The key area for action in Islamic Fintech is to provide access to underserved segments, and technology makes this possible.

Mr. Alsehli began by explaining the need for an emerging markets investment bank like Wethaq. While Islamic finance had developed rapidly, and continued to evolve, its focus had been dominantly towards commercial and retail banking. The capital market side had not evolved as fully as it should, and there remained a loss of gaps, fragmentation, and high costs, making these markets difficult for smaller players.

Wethaq decided to fill gaps by building a proper market infrastructure in place, including regulation, legal and technology aspects, and to start with private placements of sukuk, by providing a place where these papers can be structured and offered. They can be both distributed and subscribed for through the platform, but there is also a substantial back office and servicing function which the group is trying to automate and digitise. It is also dealing with the interesting areas of custody and depository, depending on local rules and regulations, across the GCC and then hopefully to emerging markets in general.

Once appropriate infrastructure is in place it becomes possible to focus on more on ESG as well. Emerging markets do not need to go through all the stages of evolution when it comes to technology and infrastructure and new technology offers the hope of giving them proper access to global markets relatively quickly.

Dr. Assouli began her consideration of ESG, and especially sustainable, investment by looking at the demand side. Key challenges globally are the mobilization for climate change, and then

The Global Islamic Fintech Report found that the market size for Islamic Fintech globally in 2021 was USD79 billion in terms of transaction volume and the figure was expected to grow at about 18% to 2026 to reach a size of USD179 billion.

MR. BASIT

meeting the SDG agenda by 2030. For the latter there is an investment gap of about USD2.5 trillion by that deadline; indeed, some reports mention figures going up to USD4 trillion. The role of the private sector, and particularly the financial sector, is critical in meeting that funding gap. As a result, we see more and more pressure or incentives to for financial institutions to innovate more and contribute more to sustainable finance.

Looking at ESG specifically, a few years back the starting point was corporate social responsibility (CSR). A lot of institutions would have their CSR reports to show their social impact on the community. That trend has changed to ESG integration and we are now talking about broader sustainability integration, which starts from the mission and the vision of the institutions and feeds down to their operational activities.

Some countries have worked on redirecting financial flows towards sustainability and have created regulations and conducive environments for that. For financial institutions this requires a paradigm shift in how they conduct financial intermediation. It also means that a lot of ESG data is needed for decision making for these institutions. Some big institutions have developed their own departments for that purpose, but smaller sized institutions may prefer to rely on other providers. There is a role for Fintechs here in providing ESG data for decision making and to facilitate sustainable finance products innovation.

Another challenge which has been added following the pandemic, and which is also relevant for regulators aiming to promote financial stability, is the resilience issue. We have also seen that some very vulnerable groups have suffered during the pandemic since they lacked access to alternative financing to meet their funding obligations. These include SMEs, farmers, women entrepreneurs, and so on.



There is thus a huge potential for Fintechs in facilitating ESG integration for financial institutions, both through the quality of the data that they can provide to support financial institutions' decision making and in offering the alternative financing mechanisms that can address the specific needs of these vulnerable groups.

Mr. Uddin explained that Algebra is a sustainable and ethical Fintech that helps connect consumers with their values. It chooses those words because it fundamentally believes the role of Islamic finance to be an enabler for ESG and the two must be completely connected.

Algebra is the first Shariah compliant Fintech to be granted a full licence from the UK Financial Conduct Authority (FCA) as an Electronic Money Institution. In the context of the UK, a retail customer consuming an Islamic finance product is unfortunately likely to associate that with having a higher premium and sometimes a lower quality product. To be revolutionary, Algebra aims first and foremost to do the basic things right. It has therefore built its own proprietary platform from scratch. That has enabled it to wrap Shari'ah compliance with ESG from the very beginning. That has been done by creating a values and ethics policy which its Shari'ah Board has said is fully Shari'ah compliant.

It is possible to buy in technology, white label it and build a digital bank. But in that situation the customer does not have full control of the funds flow. Money held in custody may, without the customer's knowledge, be borrowed or lent and exposed to money markets that may in turn be exposed to non-compliant for example. What Algebra aims to do is to give consumers the ability to decide. Algebra also worked to build a team that is really focused on compliance and understands what the consumers want. It has therefore established a strong outreach with the community in the United Kingdom in particular. In 2021 it authored a report with MasterCard called the Values and Lifestyles report, helping understand the overlooked communities in the UK.

Globally, there are some 1.7 billion people that are unbanked in the world. Those practically addressable, especially through technology, number some 1.3 billion, of whom 800 million are Muslim. It is very important to address their needs. But also, there are 4.5 million Muslims in the UK and 30 million Muslims in Europe, who may not be unbanked but all of whom have faith-based needs that are currently unmet. More broadly, there is a young generation which has high expectations of their consumption. They expect products, not just finance, to speak to their values. This raises the expectations for financial services, for example the ability for an individual to track the carbon footprint of a single journey and to offset it. Mr. Uddin believed that in the future ESG – including functions like this - will be fully embedded into what we expect from a financial institution.

The discussion initially focused on what steps could be taken to facilitate Fintech and ESG developments in a jurisdiction. Panellists saw the issues as broadly similar, but the discussion focused mainly on Islamic Fintechs. Panellists were strongly supportive of incubators/innovation hubs to allow capability development at an early stage, especially for new technologies. Access to funding would also be important. In this context, it was noted that Fintechs are not

generally in direct competition with banks, and there is room for both within a financial services ecosystem.

A range of funding sources would be appropriate at different stages in a business's development. A business typically starts with funding from family and friends, perhaps with some "angel" investors. At a later stage venture capital is likely to be important. This will be risk capital and to make a return overall a risk capital provider will need to think in terms of global scale. In this context, it was interesting that, while prospective Islamic Fintech hubs are to some extent in competition with each other, they also have a grasp of the business realities and are beginning to reach out to each other and to take a more collaborative approach.

The UK offered some interesting lessons, especially around the role of regulation. The UK FCA is possibly the only regulator that has a mandate to promote competition in financial services, and this means that it cannot simply take a negative approach to innovation. It therefore engages actively with Fintechs to understand what they do and what regulatory framework they fall into. If they do not fall within an existing regulatory framework, the FCA will then try to understand whether they should be brought within some regulatory framework, and how best that is achievable, or whether they should be allowed to operate unregulated (except possibly for AML/CFT) until they become systemically important.

Regulation is seen as an enabler by many Fintechs, and what they are looking for primarily is regulatory clarity and consistency across jurisdictions. In addition, while some regulators in other Islamic finance jurisdictions do indeed engage cooperatively with Fintech startups, in a similar way to the FSA, this is by no means universal.

As regards access to capital, some conventional investors are now looking at Islamic Fintechs, driven primarily by the growth of the sector. There is a momentum and a trajectory, and firms originating in one jurisdiction are now beginning to grow into others and to demonstrate the type of scale that investors are looking for. However, there is still a massive opportunity for an Islamic Fintech specific fund. At present there is a lot of angel activity and a lot of sovereign capital but a gap in between. This strongly suggests the desirability of building platforms that can invest in early-stage startups, something in which the OIC jurisdictions are generally weak.

Talent was recognised as a key driver of any ecosystem. In the context of the Gulf Cooperation Council (GCC) in particular, the issues are first developing home-grown talent, by giving opportunity to local graduates and other workers to join early-stage companies where they can learn, grow, and hopefully develop their own entrepreneurial journeys. The second issue is to attract companies to the region now. Early-stage companies tend to be small, so will not usually be able to put many people on the ground outside their home jurisdiction. However, there are larger companies within the technology ecosystem that can do so. Encouraging such firms to a jurisdiction can encourage more technology enablement as a foundation for later entrepreneurship.

ESG Session: Innovation in Sustainable and Green Digital Technologies in the Islamic Financial Services Industry

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Moderator

Aymane Doukali
Head - Islamic & Structured
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Speakers

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Co- Chief Executive
Officer,
Q-Invest

Hussam Sultan
Regional Head of ESG
Solutions
S&P ESG

Alexander Stevens
Chief Executive Officer,
Greenomy

Haithem Katerji
Chief Executive Officer
Al Rayan Investment

Diako Makhmalbaf
Director ESG Solutions
MENAT, HSBC



ESG SESSION:

Innovation in Sustainable and Green Digital Technologies in the Islamic Financial Services Industry

Moderator:

Aymane Doukali, Head of Islamic and Structured Finance, Qatar Financial Centre (QFC)

Speakers:

1. Hussain Abdalla, Co-Chief Executive Officer, Q Invest
2. Alexander Stevens, Chief Executive Officer, Greenomy
3. Diako Akhmalbaf, Director of ESG Solutions in Global Banking, HSBC
4. Hussam Sultan, Regional Head of ESG Solutions, S&P
5. Haithem Katerji, Chief Executive Officer, Al Rayan Investment

The questions this session was invited to address were:

1. What are the new developments and innovative solutions in sustainable and/or green financing that are being employed by leading players in the IFSI?
2. What are the measures taken by IFSIs to reduce carbon footprint in their financing books, as they move towards achieving net-zero commitment?
3. What are the limitations within the current sustainable finance landscape?

In addressing the first question, Mr. Akhmalbaf drew attention to the rise of green bonds and green loans and sustainability linked financial products globally. The rise of ESG investments, with multiple strategies being developed by investors, had led to a big regulatory push by the European Union and indeed globally, with a particular eye to preventing greenwashing.

The next big thing for the financial sector would be the net zero alliances that were convened in 2021 around the COP 26 meeting held in Glasgow. 115 banks globally have signed up to these and HSBC were one of the signatories and founding members, both Net Zero Banking Alliance and of the Net Zero Asset Managers Alliance. But in addition, there are the Net Zero Asset Owners Alliance and the Net Zero Insurers Alliance. So, there are hundreds of trillions of dollars of assets under management which are committed to net zero and in the next few years investors and banks will be looking at their portfolios, and the associated emissions, and trying to reduce these emissions towards 2030 and 2050.

Mr. Sultan said that “net zero” was one of several terms which had recently become prominent in the financial services industry, “ESG” and “sustainability” being among the others. But they tend to mean different things to different people. A term like “net zero” will be understood differently even by people within the same bank, and what it means for a risk manager is likely to be different to what it means to an investor.

A major issue is to identify what terms really mean, what the standards are in the market, and what are the agreed-upon practices? How do we measure those initiatives and terms and how do we report them in a transparent way? Otherwise, there is a very real risk of greenwashing of one kind or another. Terms will be coined, but not backed up with the right approaches, tools and understanding of what those terms mean.

There are plenty of commitments in the market, from financial institutions and governments, and while some of them have relatively long timescales, initiatives to meet them need to start now. We need to consider how we implement those commitments. What is the role of the rich countries versus the poorer countries, developed nations versus developing nations? What is the role of banks and financial institutions? Mr. Sultan believed there was a lot of misunderstanding that banks have the solutions to all these financial requirements and will develop products that will help everyone to move to net zero and become more sustainable. He believed this represented an over-reliance on banks, which are fundamentally risk

assessors taking carefully measured steps. He believed there was a need for specialised “green” banks, whether established by governments or by private investors, which would focus specifically on sustainability.

The right tools also need to be developed. How do you measure performance, or claims, or conduct scenario analysis? Do you have enough data and enough disclosures? To understand and assess the data it is necessary to agree on data standards and reporting standards for all these initiatives. Hence, there is a lot of work to be done, but there is a great deal of political and institutional will behind the process.

Mr. Abdalla discussed initiatives in Qatar for the development of the sector. A law for public-private partnerships (PPP) was passed in 2020. The first project under it was a PPP for schools, but the law did not consider the bankability of these projects. This had resulted in projects with no minimum guarantee and with no way for the banks to take security, notably over land. The law needs to consider the commercial aspects of PPP to ensure the development of such projects. Since many possible PPP projects would be aligned with the SDGs making these into bankable projects would be good for the development of the sector.

Mr. Katerji noted that in Qatar there was increasing awareness of ESG and sustainability especially in government and among the largest institutions, and this was being reflected in their deployment of capital. The Masraf Al Rayan group had established a Sustainable Financing Framework and was currently working on implementing that in detail in order to encourage the financing of ESG or sustainable projects that will give back to society.

However, the bank had previously made progress on such initiatives, though not within an overall framework or under the same terminology. The assets derived from such financings have supported the bank’s new initiative, the green deposit. It was possible to launch this product precisely because the assets were already available to back it. This shows how initiatives in this sector are interdependent. In addition, the bank was currently in the process of introducing an ESG investment. This would definitely be able to cover social and governance aspects, though the environmental aspect might still be work in progress, reflecting the fact that the bank is serving a community where not everything may be environmentally positive. Nevertheless, there is investor demand for ESG products, despite competition and the fact that high demand for such products means that yields will be lower for investors.

Mr. Stevens commented on international standards, and taxonomies. The EU taxonomy, though prominent, may not be entirely appropriate for all countries. 27 countries across the globe are working towards adopting their individual framework. And it is important that each country also includes their respective specificities and potentially principles of Islamic finance. But because capital markets are international, it is important that taxonomies adopted by one country should to a certain extent be able to connect with other countries’ taxonomies, so that financial flows can go across financial markets.

So, there is generally a common taxonomy with underlying principles that apply to all these countries, and national specificities. But having a national taxonomy represents only the

first step. because it creates several challenges for the corporates and asset management institutions that need to use these taxonomies to measure their sustainability levels. For instance, the EU taxonomy covers 2500 data points and so it is quite complex to implement.

The role of Greenomy as a Regtech firm is to codify this legislation and help all the different economic players to have the digital tools to collect the data, generate the reporting and share it among all the different financial players. The firm has support from financial market infrastructures, has worked with major banks and is now getting to the 49,000 corporates in Europe that have to do this type of reporting. But it is now targeting other countries that have taxonomies, to assist them in adopting their taxonomies, creating their own specificities, and creating interoperability with all the other frameworks around the world. Once these taxonomies are adopted and codified, it provides the nations with all the digital tools for corporate asset management institutions to perform the reporting and then merge the data with all the data generated in other jurisdictions. This flow of information will enable green financing to operate across borders to the benefit of both investors and investees.

Asked about investor demands and what a client institution of his bank would need to consider when coming to market, Mr. Akhmalbaf noted that over the past 18 months, investors in the equity market had been focusing on ESG issues for companies. During that period, UAE and Saudi Arabia had been some of the biggest IPO markets in the world, hence, the issues of ESG were not just coming from global investors, but also from regional investors. This is partly due to the fact that over time, investors have integrated ESG into their investment decision process and into their fundamental analysis of a company's value.



The United Nations' Principles for Responsible Investment have been in existence for over a decade with thousands of signatories responsible for over USD120 trillion in assets under management. By becoming signatories, these investors had essentially promised that they will integrate ESG into their investment decisions. Another significant but the major change

over the past 12 to 18 months is the number of investors who have signed net zero ambitions. Having done so, they will need to examine their financed or invested emissions (“scope 3 emissions”). This process is not straightforward even for banks and major investors. HSBC, for instance, committed to net zero in October 2020. It took until January/February 2022 to measure its scope 3 emissions for just two sectors namely, oil and gas and power utilities. It will take a couple more years to measure the financed emissions for all other sectors, working on a sector-by-sector basis.

A lot of private sector companies have not done any ESG reporting, let alone measuring their carbon emissions. But, particularly during initial public offering processes, investors are raising questions such as,

- (i) what is your decarbonisation plan for certain sectors?
- (ii) what is your health and safety management system?
- (iii) what is the lost time to injury and the frequency rate for your employees?
- (iv) what are you doing for your contractors and subcontractors?

Companies that are planning to come to the market for the first time must be able to answer such questions. As they illustrate, it is not just decarbonisation, but other ESG issues which are being raised and on which a bank needs to support its clients in meeting the expectations of investors.

Mr. Stevens noted that sustainability reporting is becoming mainstream, and will soon become unavoidable, like financial reporting. Every business, regardless of size, will have to prepare for it. Large corporates already have instruments to measure their emissions which report into their IT systems and hence into their reporting software. For SMEs, it is expensive to put this in place, and proxies have to take the place of direct measurement. So, an industrial firm will estimate based on its products and services what are its greenhouse gas (GHG) emissions and will report the best estimate. However, technology is becoming cheaper and we can expect that in 5-10 years SMEs will also be able to report their exact GHG emissions and any other ESG data required to be reported.

On the financial sector side, where the scope 3 emissions are dominant, the key problem is having access to the data. Therefore, a bank or credit institution needs to interact with its counterparties over thousands or even millions of loans. Greenomy will provide proxies to the banks but will also help them interact with the counterparties, enabling a counterparty to report its data once and have that data available to multiple banks, reducing costs on both sides. The same logic applies to asset managers, which need to screen their portfolios. There are data providers that cover listed companies, but not private companies or SMEs, which may be important parts of the portfolios of private equity or venture capital firms. But again, digital tools can democratise the process and ensure that all the data flows to the right places, and the present focus on a single taxonomy will in time be broadened to cover those of other reporting frameworks.

Mr. Sultan was asked to comment on the challenges that financial institutions face in trying to integrate and implement their ESG or sustainability strategies? He acknowledged that banks and financial institutions are probably the most influential players after governments and

regulators because they finance essentially every project. They put a price to risk, they discuss with decision-makers in companies and can influence how companies behave. But in order to exert influence they need clarity and disclosure. SMEs in particular are focused mainly on running their core businesses. Financial institutions can assist them to understand their impact, whether carbon footprint or ESG scoring, but a major challenge in doing so is data availability. This is an area where financial institutions can innovate, and introduce better products. The availability of data will also circumvent some of the arguments around greenwashing, which are often about the use of labels rather than about hard data.

Other panellists considered that progress would ultimately be dependent on regulation. While voluntary initiatives can be helpful, there will be many firms, especially SMEs, that are unwilling to pay the costs of compliance. They will do so only if they have a regulatory obligation or a regulatory incentive (for example, in terms of capital requirements). However, others noted that compliance can be driven from outside a firm's own jurisdiction, for example if the firm's customers in other jurisdictions conclude that the firm is not complying with behavioural expectations. This can be especially difficult for SMEs, which may not understand exactly what those expectations are and how to meet them. This argues for at least a degree of shared responsibility and communication between the public and private sectors. In addition, in many places it is likely to be only the government and major state-owned institutions that will be willing to provide the capital needed to help the private sector to improve its ESG performance.

Regulators Session: Regulatory Considerations in Facilitating Innovation to Integrate Climate-financing, ESG and Sustainable Development Goals (SDGs) into the development of the IFSI

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14 SEPTEMBER 2022

Moderator

Dr Bello Lawal Danbatta
Secretary General,
IFSB

Speakers

H.E. Dr Khaled Al-Daher
Vice Governor of
Supervision & Technology,
QDB

Peter Casey
Consultant
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H.E. Suhaimi Ali
Assistant Governor
Bank Negara Malaysia

Dr Pranab Jyoti Baruah
Head of Mission
Global Green Growth Institute

Sahba Sobhani
Director,
UNDP



REGULATORS' SESSION:

Regulatory Considerations in Facilitating Innovation to Integrate Climate-financing, ESG and Sustainable Development Goals (SDGs) into the development of the IFSI

Moderator:

Dr. Bello Lawal Danbatta, Secretary-General, IFSB

Speakers:

1. H.E. Dr. Khalid Al-Dhafer, Vice Governor of Supervision & Technology, Saudi Central Bank (SAMA)
2. H.E. Suhaimi Ali, Assistant Governor, Bank Negara Malaysia (BNM)
3. Sahba Sobhani, Director, United Nations Development Programme (UNDP)
4. Peter Casey, IFSB Consultant
5. Dr. Pranab Jyoti Baruah, Global Green Growth Institute, Qatar

The questions this session was invited to address were:

1. What are the ongoing initiatives currently being undertaken by regulators in ensuring a facilitative regulatory framework for innovations in sustainable finance in the IFSI?
2. Between the need to ramp up investments to achieve net-zero commitments and the risk of greenwashing, what are the challenges faced by regulators to strike a balance?
3. What are the key regulatory and financial stability considerations in relation to new developments in this area and what is the way forward for policymakers?

H.E. Dr. Al-Daher emphasised the importance that innovation in sustainable finance held for SAMA. SAMA had launched a regulatory sandbox to encourage this type of innovation which has now hosted more than 40 Fintechs in different cohorts and it had recently been announced that it would be continuously open for business. Saudi Arabia is the world's largest Islamic finance market and the banking sector's Islamic assets amount to more than USD640 billion, almost 80% of the sector's overall asset base. It was also the largest issuer of sovereign sukuk in 2021 and the largest Islamic Fintech market.

It has good examples of sustainability in Islamic finance. In 2020 the Saudi Electricity Company issued USD1.3 billion in green sukuk, the proceeds of which were used to fund energy efficiency through the installation of smart meters. Riyad Bank issued the world's first Additional Tier 1 sustainability sukuk for USD750 million. So, there is a lot of movement and SAMA looks for further collaboration on relevant issues.

H.E. Mr. Ali set the context for sustainability in Malaysia. Malaysia is one of the countries in Asia that is rich in tropical forest biodiversity. 55% of its land area is forested, which plays a crucial role in the national carbon balance. While its contribution to global CO₂ emissions stands currently at below 0.8%, it needs to preserve its right to development and to make its transition to a low carbon economy within an equitable and reasonable time frame in accordance with its national circumstances.

The central bank journey with regard to dealing with climate change and ESG began with Islamic finance institutions through the Value Based Intermediation (VBI) framework launched in 2017. Two years later the bank tried to mainstream VBI and its effort to deal with climate change and ESG issues through the broader financial ecosystem.

This has been done mainly to ensure that BNM can fulfil its mandate for financial and monetary stability. In a bank-centric financial system, transmission of climate risk to the economy and the financial system can have wide repercussions for this mandate if not managed well. The bank has tried to position the financial system to facilitate an orderly and just transition to a greener economy in several ways. A regulator/industry joint committee called the Joint Committee on Climate Change (J3C) works to create a conducive, sustainable finance ecosystem. This committee helps to ensure that the financial sector initiatives are aligned with broader government

policies and focuses on developing practical toolkits and ensuring consistent implementation of climate related initiatives. There are five key focus areas, namely risk management, governance and disclosure, products, and solutions, bridging data gaps and capacity building.

In addition, there are dedicated green funds and Malaysia facilitates the issuance of green sukuk to promote the adoption of sustainable practices. Efforts to mainstream VBI continue, aiming to achieve the goal of financial inclusion and ensuring finance for transformation as well as finance for sustainability.

In its latest financial sector blueprint for the period 2021-25, BNM has reoriented its regulatory posture to one basically trying to promote innovation and encourage greater market dynamism. Whereas in the past initiatives tended to be very much driven by the central bank, BNM will now aim to help the industry be faster and more agile and to remove barriers to innovation and competition. This will be done partly through injection of new digital licenses in the banking sector as well as the insurance sector.

Mr. Sobhani addressed the initiatives being taken to deliver the SDGs, including current collaborations. The UNDP is working closely with the G20 Sustainable Finance Working Group, co-chaired by China and the USA, and with the OECD. In terms of Islamic finance specifically, it has a collaboration with the Islamic Development Bank (IsDB) through which it launched a global platform on impact investing and Islamic finance. In that context, it has a green sukuk initiative and worked on a green sukuk framework that was first used in Indonesia's first pioneering green sukuk bond in 2018.

The activities supported by the UNDP fall into three main categories. The first is the framework support for impact reporting. Mr Sobhani said that at this stage, jurisdictions need to innovate and build their respective frameworks, later, these frameworks will need to be brought together. The second is pre-assessment and analysis, which is quite critical for the capital markets and on which the UNDP has worked in Uzbekistan, together with IsDB. The third is capacity development and awareness, where the UNDP has just launched, with Durham University and a number of elements of the IsDB Group, a massive open online course on Islamic finance for sustainable development. The UNDP welcomes stakeholders from around the world and is particularly keen to build capacity in linkages between Islamic finance and the SDGs.

Mr. Casey addressed the issue of standards development, particularly in the regulatory sphere and with a focus on the financial sector. In the area of sustainability there had been a period where there were a large number of standards initiatives, from both private and public sectors, and the whole environment was very confused. More recently, and driven largely by the G20, there had been the creation of the ISSB. That development has had sufficient backing from highly influential bodies that it is likely to become the key international standards-setter, at least for sustainability disclosures, though it has a huge agenda in front of it.

As regards Islamic finance, and partly because the IFSB tries to work only where there are Islamic specificities, an important question is in what respect such specificities exist the area

of sustainability. One difference is that, because of its principled basis, and because of the theology that at least some Islamic scholars would articulate, Islamic finance has even stronger reasons than conventional to be concerned about the environment and about the whole of creation.

However, when it comes to exactly what those concerns are in terms of outputs, there is little, if any, difference between the two financial systems. A kiloton of CO₂ released into the atmosphere has the same effect independent of how it was financed. So does, say, river pollution leading to the death of a species. And there is no well-articulated basis for weighing those consequences differently depending on how they were financed.

The third area for consideration is the approach to reporting and managing sustainability issues. A number of technical questions need to be considered. An example is the integration between ESG governance and Shariah governance in an Islamic financial institution. Another example is how to examine a particular instrument of Islamic finance. For example, a sukuk may be based on one set of assets, but financing the creation of a different set, with different sustainability characteristics.

Dr. Danbatta noted the work that the IFSB was already doing in the area of sustainability in Islamic finance. A guidance note on sustainability in Islamic capital markets was at an advanced stage of drafting, and the IFSB would be working on a similar standard for the banking sector.

As regards innovation more generally, it was planning a new digitalisation platform which would have detailed work on digital innovations and digital initiatives accessible to all members.

The IFSB was also engaged with other bodies on some of the more difficult issues of sustainability. Even the ISSB drafts did not have a clear definition of sustainability and a specific taxonomy of what is regarded as sustainable. These are very challenging and become more so when broader ESG considerations are to be covered. The Basel Committee for Banking Supervision (BCBS) and other international standard-setters have a forum through which they hope to support the industry with clear guidance, and the IFSB is part of that.

Dr. Baruah explained that the Global Green Growth Institute (GGGI) is a relatively small intergovernmental organization with around 43 member countries and with offices in 37 countries around the world. Its main mandate is to support the governments on green economy and climate science policy and planning. That brings it naturally into the agenda of sustainable finance. Its main activity until very recently has been to support governments in the development of green economy strategies or nationally determined contributions (NDCs) and implementation policies. Now the agenda has moved very firmly towards implementation and this has increased GGGI's involvement in the sustainable finance area.

In regard to ESG regulation, four areas can be distinguished. One is government policy and the regulations with regards to national targets or sectoral targets, including NDC's. The second is the issue of taxonomy which has been discussed and the third relates to disclosures for the financial sector. The fourth is about reporting standards, which are linked to taxonomies and disclosures.

GGGI works mainly with government policy and regulations. In Qatar it is working with the Ministry of Environment and Climate Change to develop suitable policies and implementation frameworks for the national climate change action plan and for the national environment and climate science strategy. In terms of taxonomies, it has been supporting several countries, a good example being Mexico. The work there has been going on almost for 1½ years because this is difficult work with a limited base of international experience to draw upon, especially given the diversity between jurisdictions. One necessary policy step is to bring together all the stakeholders into some kind of interagency commission. That has been a key focus of GGGI's work in Mexico and in other jurisdictions. Taxonomy is a very important area because it drives innovation. It brings out the leaders and the laggards and once these have been identified it becomes possible to draw lessons from the leaders to support the laggards in reaching the same level.

In response to a question about striking the balance between encouraging investment to achieve net-zero commitments and the risks of greenwashing, H.E. Dr. Al-Dhaher acknowledged that this needed to be done carefully and founded in an understanding of the activities necessary for real impact, while also protecting financial stability. This goes back to understanding the taxonomy and what it really means. This gives the ability to focus on what is crucial, which is the impact. While there will inevitably be greenwashing, it tends to focus on claims about the activities being undertaken and a focus on impacts will reduce its power.



Another requirement is having good governance. The role of central banks is to make sure that there is the right governance and proper execution according to that governance. This involves proper supervision, to confirm that the different stakeholders and entities are following through on the commitments that they are making. Saudi Arabia has a lot of relevant experience in supervision, for example in relation to Shari'ah compliance, which can inform it in ensuring that there are the right programmes with the right outcomes.

H.E. Mr. Ali added that most Bank Negara initiatives on climate related issues and ESG are done in collaboration and in consultation with the stakeholders. He emphasised the challenges facing emerging economies like Malaysia, which include recovering from the pandemic, while avoiding the pitfall of high carbon choices like those made by the advanced economies in the past. There is a need to consider the balance between transitioning to a green economy, without doing it in a way that may have repercussions to the financial inclusion agenda or other social fallouts. Another dimension to the issue for emerging economies ecosystem is the spill over impact of actions by the advanced economies, for example the carbon border adjustment mechanism by the EU. Malaysia has developed what it calls the climate change and principle-based taxonomy, led by BNM and takes into account the state of the economy with the aim of ensuring a smooth transition and avoiding any outright exclusion of certain economic activities or vulnerable segments of society that are deemed not to be green or sustainable. This taxonomy is now being implemented but needs to be supported by capacity building to educate and empower businesses and even financial institutions to be able to implement it effectively.

On the issue of greenwashing in relation to the taxonomy, several mitigation actions have been undertaken. One is to develop use cases as guides for actors to operationalise the taxonomy. Another is a platform where industry players share knowledge, experience, and progress in the implementation of the taxonomy. Several sectoral guides have been issued to guide implementation, with metrics that are relevant to the specific sectors. Where applicable it is also possible to leverage on relevant and recognized certifications as well as third party assurance to support compliance.

Mr. Sobhani recognised the need for some difficult balancing, and for a deliberate and cautious approach. The UNDP began with a product centric approach in terms of standards. It started with bonds, where there was a track record and the stakeholder consultation on how to build the SDG into green bond and green sukuk concepts went well. But in private equity, for example, it has still not been possible to come to consensus among these various stakeholders because there is a deeper question about how private equity operates and what it means. Therefore, in order to achieve a balanced approach, we have to examine the macro policy dimensions, to use the product approach and to allow sandboxes for innovation. At the same time, it is necessary to be cognisant of the fact that the risks involved and the nature of the stakeholders make a difference. In practice, bringing the right stakeholders together is more important than having the ultimate technology.

The investor protection issues around greenwashing are important and do need to be addressed in every jurisdiction especially for Islamic finance with its largely retail focus. Mr.

Casey noted that greenwashing was becoming something to which the general public was becoming sensitised, and while that is encouraging there is also a risk that greenwashing creates cynicism about the entire sustainability field.

Regulators are generally good at acting against outright lies about investment products, but action against selective use of terms or choice of standards is more difficult. The number of different standards in the market has not helped in the past and it has been fairly easy for product providers to pick one with which to claim compliance, or indeed to use a claim unattached to any standard. However, an investor might expect that if a claim is made, for example, that a particular fund is “sustainable” then there is some reasonable basis on which that claim is being made. There are two ways in which this may be approached. First, regulators, particularly where they are dealing with products for retail investors, may be tighter on claims not being misleading. It is not uncommon for capital markets regulators at least to have concepts in their regime like “true, fair and not misleading” and to have experience of enforcing these. The other is that we move gradually into the development of more precise standards against which claims can be judged. However, we must not let the best be the enemy of the good and as others have said, we must not wait until every detail has been settled before we get on with producing better outcomes.

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Dr. Baruah stated that while the GGGI had not addressed greenwashing, it did focus very much on impact, and at the national scale, on the real impact of policies on GHG emissions or other objectives such as jobs, access to energy or access to waste management. It is similarly trying to evaluate the impact of its own actions. Data is a key to assessing impact not only at the entity level but at the country level. The GGGI is trying to develop and support development of measurement, reporting and verification systems for countries to report their emissions and climate actions to the UN Framework Convention on Climate Change. But these could also be the basis for the entity level initiatives that regulators or companies are developing.

In terms of challenges, the proliferation of standards has not been helpful, though it may have been inevitable given the surge in sustainability-related reporting. However, there were now many good developments, including from the ISSB and the EU. A process of consolidation was likely over the next few years.

However, one phenomenon that GGGI had observed is that sometimes countries will have all the frameworks in place but not enough good projects to invest in. Hence, consideration needs to be given to creating bankable projects and capacity development in terms of sustainability professionals, which requires all stakeholders to work together.

Turning to the way forward for the Islamic financial services industry, H.E. Dr. Al-Dhaheer emphasised the need for collaboration. But for this to happen in the right way it would be necessary to understand what outcomes were sought, and to establish the governance to deliver them, with proper visibility. The right technologies need to be in place to collect data to establish how far the intended outcomes are being delivered at all levels. The right people will also be essential and this involves defining the necessary skill sets and developing capacity. Technology alone would not be sufficient. Central banks are generally keen to collaborate and to establish frameworks giving visibility of both the intended outcomes and progress towards them.

Asked specifically about passporting, he said that in that context too, it is important to have a common platform, with a common language about the intended outcomes and how far these are being achieved.

H.E. Mr. Ali said that a resilient and progressive financial sector remained an important pursuit for economic well-being. A few years back, in Malaysia, there were uneven levels of awareness, understanding and maturity of climate risk management within the industry and even within the central bank. Given that practices and understanding are still evolving, BNM decided to step back from issuing any hardcoded regulation and allow discussion to take place, to reach a degree of convergence so that any actions taken would be comfortable and practicable to be implemented by the industry. He added that the Bank had now begun to set regulatory expectations. It recently issued an exposure draft on climate risk management and scenario analysis. There are plans for mandatory adoption of disclosure requirements and for industrywide stress testing in 2024.

As financial institutions start to have their internal targets, BNM needs to have its own internal capability to supervise and understand those targets and their implications on safety and

soundness. BNM is also trying to ensure coherence in the regulatory framework, for example bringing together its work on VBI to be in sync with the work on climate change. BNM did not see a need for specialised institutions in relation to climate risk. It expected this risk to be managed in an integrated manner with other financial risks, so that each institution would need to embed it within their financial risk management, towards which the central bank would adopt a risk focused approach. To then develop the necessary building blocks within the ASEAN ecosystem, there is an ASEAN Taxonomy Board working on harmonizing the taxonomy classification. Malaysia leads on the Foundation Framework which is applicable to all ASEAN members, whereas Singapore leads on the Plus Standard which is applicable to countries that are more advanced in their climate risk management.

Mr. Sobhani commented on the pressing need for resilient infrastructure, illustrated by the floods in Pakistan, exacerbated by climate change and threatening not only day-to-day lives but also infrastructure such as power plants. The need for resilient infrastructure is an issue in many other places, and the UNDP was, for example, working with a municipality in Turkey to structure the first municipal green sukuk. One of the issues in that work has been the lack of a standardised Shari'ah-compliant project financing template which can be used. There are many transactions which try to bring together green and Islamic financing elements and too much is having to be done anew in each. Tax considerations as compared with conventional finance can also be problematic. He therefore believed that the IFSB and other stakeholders should look to standardisation of some appropriate templates.

Mr. Casey argued that, while financial services standard-setters such as the BCBS had made good progress in looking at the effects of climate change on banks, in both physical and financial terms, and hence the effects on financial stability, there is a still bigger question concerning the impact in the other direction, that is the impact of the banks on climate change through their financings (the scope 3 impact). That is more difficult, and although the ISSB is making some progress, it is slow work.

Even slower work is understanding the impacts of banks, and other financial services firms, on sustainability and the SDGs more generally. One reason for that is that climate change impacts can readily be reduced to a common language of GHG emissions, expressed in CO₂ equivalent tonnes. This common language does not exist in the same way for other aspects of the SDGs; there is no obvious way of weighing progress on health against progress in education or in the preservation of biodiversity, for example. But it is nevertheless important to understand better all the impacts of the financial system on the SDGs. This is a difficult problem, and its difficulty should not inhibit taking such actions as are possible now.

Dr. Baruah said that while GGGI did not have any current mandate in relation to Islamic finance specifically, it was working with institutions like the Islamic development bank on how Islamic financial resources might be mobilised. In terms of stability, there were links between national actions on climate change and the financial sector, both nationally and internationally. Greater interagency coordination would therefore lead to greater policy coherence.

Dr. Baruah also emphasised the necessity of focussing on scenarios. In an area where not everything can be predicted precisely, the emphasis should be on the risks that banks and other entities face, and also how their activities could impact the goals. He drew attention to the scenarios produced by the Network for Greening the Financial System and would be helpful to jurisdictions in defining their pathways to a green economy.

Another important area is transparency and disclosure. Focusing on this will reduce risk and encourage innovation.

In response to questions from the floor, there was acknowledgment of the role of securities commissions, as the entities best placed to enforce regulations, and especially disclosure requirements, on listed companies in the area of sustainability and ESG. This includes ensuring both that disclosures are made and, in the areas where there is some subjectivity, they do not mislead investors. The role of securities regulators includes not only equities but also collective investment schemes and, in the Islamic capital market, sukuk. They have an important role in the product disclosures for all of these, especially those which may be bought by retail investors.

However, the importance of securities regulators in relation to other financial services regulators in promoting sustainable development will depend on the structure of financial markets in different jurisdictions, and how savings are mobilised for investment. In some countries this is dominantly through banks; in others it is through securities markets; in others intermediaries like pension funds may be key players. Therefore, the point of emphasis in ensuring sustainability may vary.

The suggestion was also made that it was easier for developed economies to develop guidelines and processes for sustainability, whereas for developing economies there are more difficult tensions between sustainability and economic development. However, panellists noted that much work had already been done in developing countries on sustainable business models. In fact, climate change would inevitably impact some existing business models, for example in agriculture, while the attempts to mitigate that change would impact on other business models, for example in the energy industry. Investors and investment managers were already making investment decisions based on these factors.

For governments in the developing and emerging economies, it is important to identify the positive opportunities for greening where most jobs can be created and growth achieved. For example, climate-smart agriculture is an area where the agricultural sector can become more resilient and increase productivity while also contributing to climate mitigation and adaptation. Another example is transport, where an emphasis on public transport, rather than the models followed by developed countries in the past, can give poorer sections of society not only better physical mobility but also greater social mobility. Analysis will identify similar examples for most countries. Countries in the fossil fuel industry in particular will need to transition over a period measured in decades and will need to consider, as many are doing, they can use the current resources to achieve the diversification. In all of this it is important to consider different

scenarios to work out which pathways can be most beneficial for the country and create the maximum benefits. It would be wrong to assume that the necessary investments would not be commercially viable, though there may be some scope for developing platforms that will facilitate encouraging investment in relevant and sustainable projects.

As part of this, a clear taxonomy is essential for most countries because the taxonomy that is applicable for an undeveloped economy is very different from that for a developing economy or an emerging economy and, for all countries, the appropriate taxonomy will be heavily influenced by geography and demographics.

Collaboration is key to successful progress and does not mean that every jurisdiction has to do the same thing. What is appropriate to each country will depend on a range of factors of the kinds already mentioned and including the available talent. In some cases, it may be appropriate to agree on a division of labour, or for groups to come together to address particular projects. But it will remain critical to be clear on the intended outcomes and to have proper measurement of how far they are being achieved.



PRESENTATION BY BIS INNOVATION HUB ON PROJECT RIO:

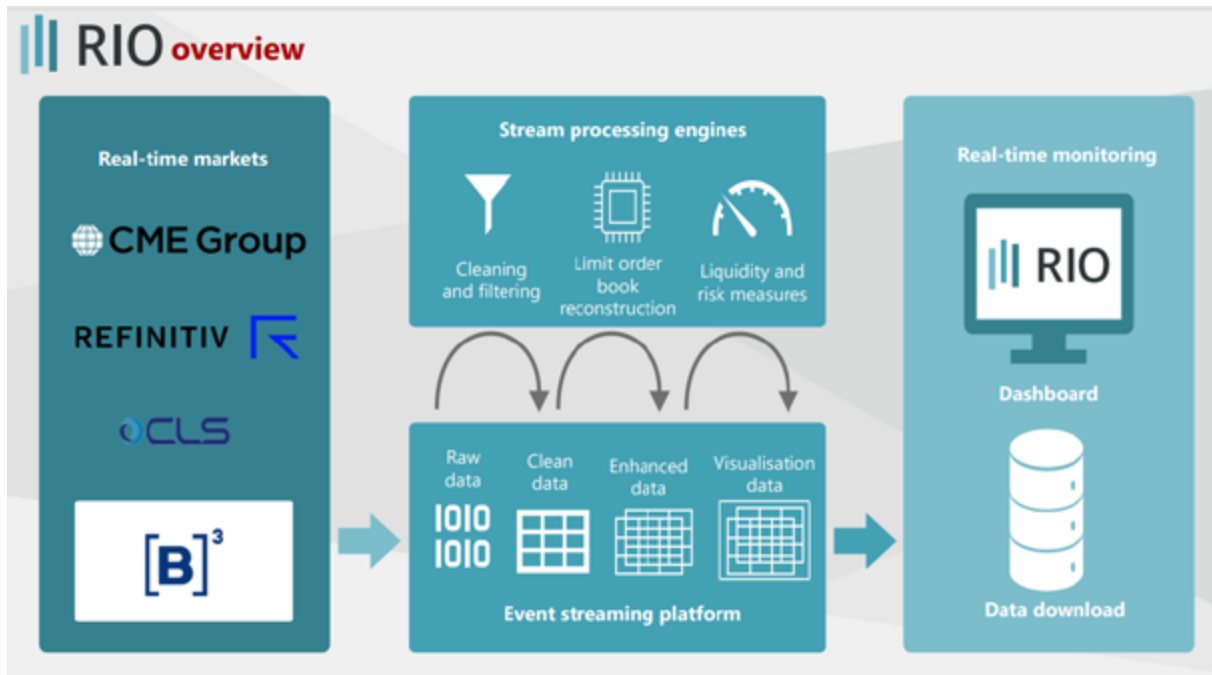
A Prototype of a Central Bank-specific, Real-time Market Monitoring Platform

The Forum received a presentation from Mr. Henry Holden and Mr. Salih Gonullu of the BIS Innovation Hub on Project Rio. Rio is a central bank-specific, real-time capable market monitoring platform developed at the Swiss centre of the BIS Innovation Hub. Central banks need to monitor fast markets dominated by traders using algorithms. Traditional ways of gaining market intelligence are becoming ever less relevant. Yet existing commercial offers all focus on making money rather than market health – Rio is designed for central banks, by central banks.

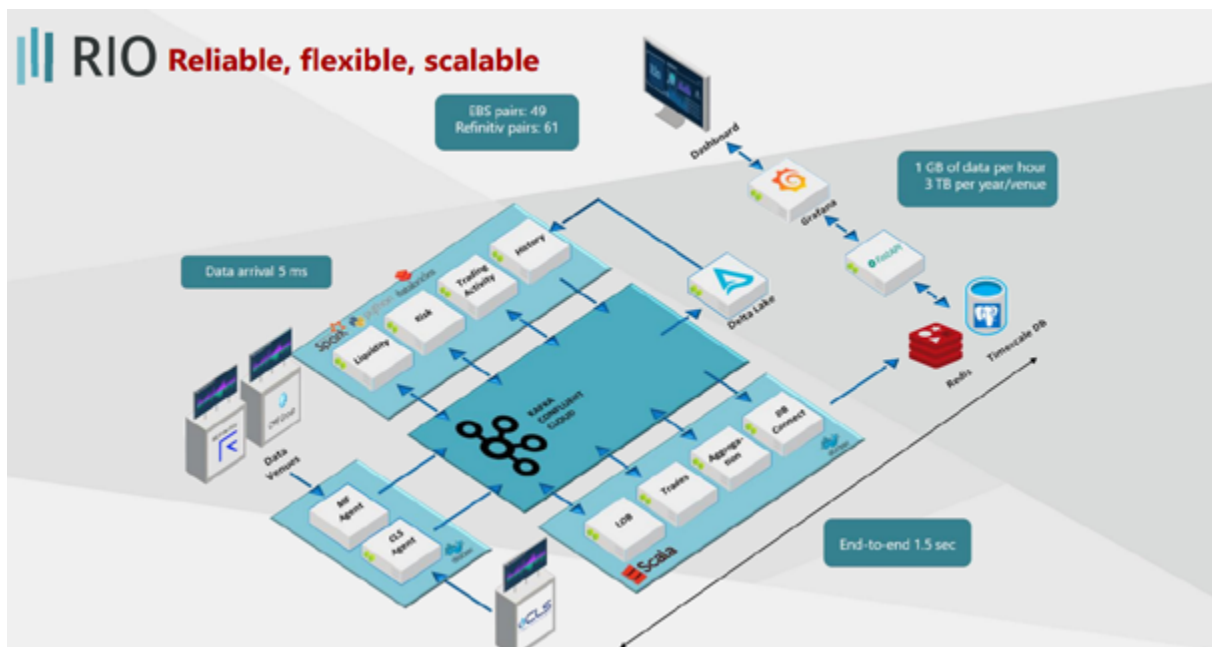
The cloud-based stream processing platform processes real-time financial data feeds and computes relevant liquidity and market risk measures. It is based on open-source software and modular architecture. All information is displayed in a dashboard for central bank traders and analysts.

Initially, Project Rio has focused on foreign exchange markets. The first phase built a prototype that collects and processes vast amounts of foreign exchange data in real time, taking less than 2 seconds to reconstruct the order book and make it ready for display. The second phase, included a production-ready, user dashboard. The final phase will be to make the dashboard available to central banks.

An overview of what Project Rio aims to do is set out in the diagram below.

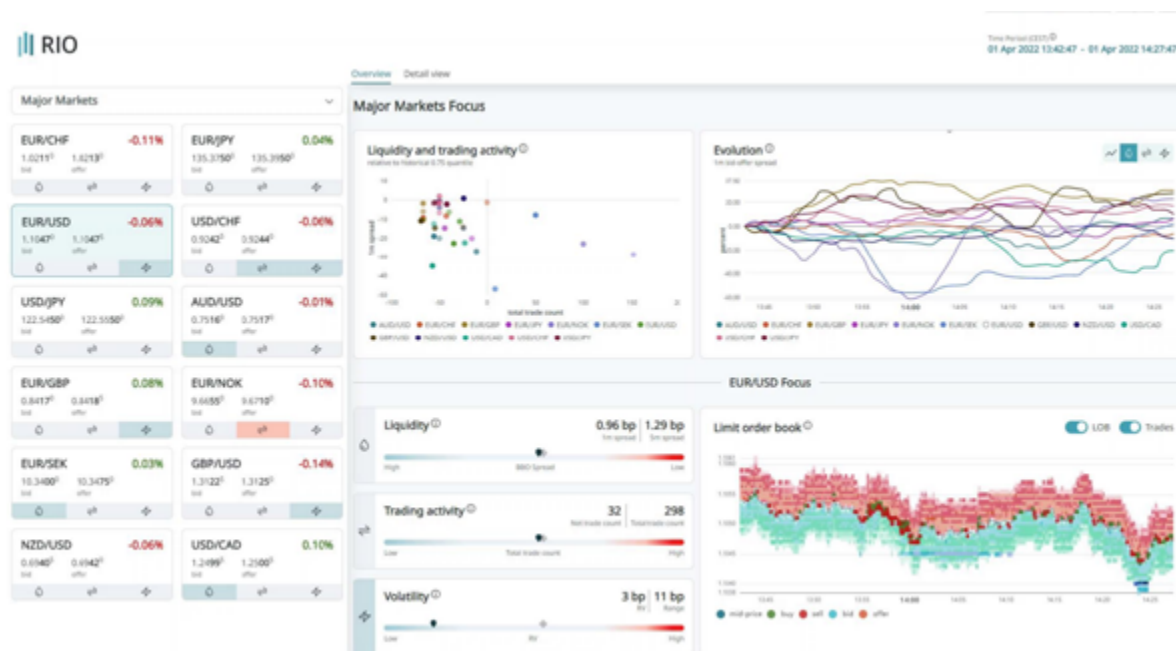


A more detailed view of the architecture is below.



The prototype dashboard was demonstrated as part of the presentation. The principle behind the dashboard is to make visual, intuitive data accessible to human analysts, and the design benefits from a set of iterative interactions with a consultative group of central bank experts.

One view of the dashboard is as follows.



It shows only a selection of currency pairs, and the technology allows central banks freedom in the way they group currency pairs into different baskets. For any chosen currency pair, the indicator gauges at bottom centre show the current level of liquidity, trading activity and volatility relative to the same time of day over the last 28 days in a “droplet”. The grey “diamond” shows the average of the basket of currency pairs displayed. In this way, central banks can customise their views to show what is idiosyncratic to a particular currency and what reflects general market conditions. More information and analysis is available in a “detail view” for every currency pair. At the bottom right, the reconstructed limit order book shows bid and offer volumes with a display that can be toggled between different formats. The evolution chart, at top right, can show a choice of parameters and time horizons, for all the currency pairs in the particular basket or for a bespoke set. Further information is available behind the immediate display, including a set of more detailed granular views, with a particular eye to what central banks may need when analysing particular market events or considering market interventions.

Mr Henry Holden and Mr Salih Gonullu can be contacted at henry.holden@bisih.org and salih.gonullu@bisih.org.

CLOSING SPEECH

Dr. Recep Şentürk

*Dean of the College of Islamic Studies,
Hamad bin Khalifa University*

Dr. Şentürk drew attention to the role of innovation in making the conceptual, theoretical, and philosophical foundations of the SDG, ESG, and Islamic finance sustainable, because there is a theoretical philosophical foundation for everything discussed in the Forum. He emphasised epistemic and moral sustainability, in referring to innovation, had in mind not *bid'a* (novelty) but *tajdid* (renewal). *Tajdid* is always rooted in Islamic tradition, and hence can be seen as meaning “rooted revival.” This form of innovation is principled and methodological, not haphazard or without any guidelines and is needed for the resilience of our societies and for their stability and sustainability.

He discussed the implications in education, where the time demands more flexible curricula for colleges and universities. The terms under which teachers and professors are recruited need to be reviewed in order to help develop synergies between academics and field experts to offer a blend of classroom teaching and real-world experience sharing. The College of Islamic Studies (CIS) aimed to do this, so that its students can keep pace with the changes and trends in the world that they will face as graduates and will be able to contribute to it soon after they complete the formal phase of their education. He thanked those involved in organising this Forum for designating the CIS as an academic partner and for the opportunity that it offered to students and faculty to interact with international speakers from around the globe. He drew attention to other conferences and events which could also further such interactions and help to bridge theory and practice as part of the CIS’s service to Islamic finance.



The CIS offers MSc and PhD programs in Islamic finance and has recently restructured these to include dedicated specialisations on sustainable finance and Fintech thus keeping in touch with changing reality. Dr. Sentürk invited participants to be partners in the Foresight Centre which the CIS was proposing to establish. The centre is intended to be a multidisciplinary centre exploring the future of the *ummah*, the future of Islamic civilization, the future of money, finance, banking, the world order, and so on, all from an interdisciplinary perspective. Such research was needed in an age of uncertainty, ambiguity, and fast change.

Dr. Sentürk noted that everyone amongst the Islamic finance leaders, regulators, governments, supervisory authorities, and academics agree that the climate and sustainability related risk factors are also the prime source of financial risks for the future generations. In addition to regulators devising the policies, other market participants need to play their due role. The education institutions are vital in promoting awareness and capacity building, while the financial institutions play a crucial role in promoting innovation for the sustainability of Islamic knowledge, ethics, and morality, and this is needed for green finance.

But green finance is only one part of Maqasid al Shari'ah, the purpose of the Moslem religion. For this reason, the Qatar Foundation has sustainability as one of its thematic areas of research. More than 50 entities now work in education, research, and community development under the auspices of the foundation. It has undertaken many initiatives including to foster the ambitions of Arab and international youth in decent work, to offer education to the children of low-income families, green buildings that use solar energy, the project to generate solar energy, the creation of Education City and many other projects.

On the regulatory side, regulators may use technology for price correction purposes to include and reflect the negative externalities that transactions may have on society. Regulators can also help improve the situation of information asymmetry between providers and users of funds, a very crucial issue in the current age, by introducing improved templates for the disclosure of resource utilization and climate impact indicators. However, in line with the 17th SDG, referring to partnership for achieving the SDG goals, cross-border collaboration among the regulators is highly desirable for addressing the growing concerns of climate change. Such partnership is very necessary for the realization of the Paris Agreement target of below 1.5 degrees of warming, and to achieve net zero carbon emissions by 2050.

Furthermore, the financial setup across the globe is in the phase of transition and reformation due to the enormous enhancements in data storage and data transfer capabilities. This is what is called the digital transformation of the whole life of society. Data has become cheaper, geographical boundaries are blurred and financial dealings have become more time efficient and more cost effective. Nonetheless, there is now a trade-off between financial cost and social costs. Hence, there is the need to keep a balance between them. Today people are paying the cost in terms of compromised privacy, by sharing data, while data has become the soft power of today's world. Several social media platforms and freeware are implicitly gathering personal data and processing it through artificial intelligence and machine learning techniques to extract value from the data. They then either utilise it for their own business or

sell it for monetary benefits. Herein the question of ethical values becomes prominent for each one of the governing authorities, capacity building institutions and educational institutions.

Policymakers must seriously reconsider ethical and moral sustainability. According to Ibn Khaldun, ethical and moral sustainability is the foundation of all other types of sustainability. If you lose this, you lose everything else. Thus epistemic, moral, social, and cultural sustainability should be our top priority. This would be possible through rooted revival. Everything we do in the field of Islamic finance is grounded on the Islamic, epistemic, and ethical foundations. We need to be innovative in protecting the sustainability of our society, Islamic knowledge, ethics, and law. The sustainability of Islamic ethics depends on serving Maqasid al Shariah, which is the SDG in our tradition, and we may also think about coming up with a new theoretical framework for these goals.

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SUMMARY AND CONCLUSIONS

Technology is transforming the whole of financial services and, after at least a decade of ferment, some features of that transformation are becoming clearer, so are the responses from industry, regulators, and customers. At the same time, the industry is also being transformed by a new emphasis on its responsibilities to society and indeed to creation more generally. Although the climate crisis has been the most prominent driver of this, broader concerns have played a part. These broader concerns are commonly discussed in terms of sustainability, or ESG. All of them should, arguably, be more important to Islamic than conventional finance, given Islamic finance's principled basis.



The Forum brought out two strong linkages between these themes.

The first is the importance of data. While this is obvious in the context of digitalisation, which is founded on data and its handling, it is also true in the area of sustainability. In particular, understanding and quantifying the impact of financial services on the wider world is, and will be, dependent on large volumes of data from multiple sources which are only beginning to be brought together in usable ways. A closely-related point is the ability of technology to give consumers access to a wider variety of products and investments and the ability to choose between them based on their own values.

The second strong linkage concerns the way societies, and perhaps especially regulators manage innovation, deal with new business models, and create conditions for growth. The lessons learned from approaches developed for Fintech may well be generalised to the sustainability field.

In the Fintech area, many jurisdictions have created regulatory sandpits, in which innovations can be developed and tested at small scale and in a tailored regulatory environment. While at one stage these sandpits were highly competitive, with jurisdictions vying to gain advantage over their neighbours, there are now moves towards cooperation, recognising that to be successful new businesses or business models are likely to need to scale up rapidly. Critical to success, however, is regulatory engagement. This implies engaging with new businesses, understanding their proposed technology and business model, and being prepared to tailor regulation to the risks and opportunities it faces.

There is also a need for start-ups to have access to capital. Their needs and the natural suppliers of capital will change at different stages in their growth, typically starting with family and friends, then working through angel investors to venture capital, all supplemented as appropriate by bank finance. A jurisdiction with ambitions in this area will need a full ecosystem of capital providers and may have work to do to develop this.

Start-ups also need access to talent. This implies relevant business experience as well as technical knowledge. It is not realistic to expect early-stage companies to bring substantial amounts of high-level talent to a jurisdiction other than their original home. There may therefore be a need to encourage larger businesses to locate there to bring people also jobs in which local talent can acquire the business experience it needs.

Turning to ESG/sustainability/green investments there has been a huge surge in interest by customers and investors and a corresponding surge in product offerings. There has also been huge interest among governments and policymakers both national and international in the role that the financial sector can play in achieving objectives, especially those concerned with climate change. In this area there was strong emphasis on the need, at national level, to define objectives and pathways to achieve those objectives, supported by reporting and, especially, measurement. Collaboration between the public and private sectors is likely to be critical both to defining objectives and pathways and to achieving them.

As to measurement, not only are data required at national level; international standards and voluntary agreements are increasingly requiring institutions to report quantitatively, and especially to report their GHG emissions. For financial services institutions, these are dominated by the scope 3 emissions, which are in turn dominated by the institution's financing/investment activities. Measurement here requires a wide spread of data covering large areas of the economy, and providing this may offer business opportunities. However, where data are incomplete there are alternative approaches available, including the use of proxies, and one of the key messages was that, as a range of entities begin reporting under standards like those of the ISSB, data availability will grow. It is better to report best estimates based on the data available than none.

Greenwashing has been a prominent concern in the whole ESG field. It is to some extent an inevitable consequence of a greater concern for the ESG credentials of businesses and investments. There was general acknowledgment that better disclosure standards, supported by objective measurement, would limit the scope for greenwashing. There was, however, some divergence as to how far regulators should become directly involved in preventing greenwashing. This perhaps reflects divergences in existing practices, with capital markets regulators more inclined to be concerned with potentially misleading claims made about investments, especially investments aimed at the retail market, than regulators in other sectors. There may even be a role for insurance regulators, at least for investment-linked products.

In the standards area, the major development has been the creation of the ISSB and the publication of its first two draft Standards. Due to the international impetus behind the ISSB, especially from the G20, this institution appears likely to become the dominant standards-setter for sustainability disclosures. However, its standards need to be applied, which implies a need to develop climate scenarios and taxonomies.

In Islamic finance in particular, an argument was made for a standard template for green sukuk, though it is worth noting that, in other areas of the sukuk market, such templates as have been developed and published have achieved very limited market traction.





