CREATING GREEN BOND MARKETS
- INSIGHTS, INNOVATIONS, AND TOOLS FROM EMERGING MARKETS
OCTOBER 2018

Case Studies

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Case Studies

The following case studies have been developed through interviews with SBN members and other key regulatory and industry institutions in emerging markets.

These direct testimonies indicate that there are several drivers that prompt institutions to embark on the green bond journey. These include

i) Serious environmental concerns and the need to finance assets with a positive environmental impact.

ii) Gaining a competitive advantage and providing market diversification.

iii) Opportunity in markets with large portfolios of nature-based assets or undergoing a transition.

Most interviewees report carrying out careful studies of international best practice and extensive consultation within their institutions and with market participants to develop the guidance. External advice has also been sought to leapfrog on others’ experiences. A balance between delivering quality products and allowing flexibility for issuers has been one of the main challenges. To this end, close collaboration between departments focused on capital markets and sustainability have proved very effective.

Overall, the release and implementation of guidance around green bonds has been received positively by market participants. Respondents have helped raise visibility and awareness of this instrument and have supported issuers to come to market. Areas of growth are identified in all the countries interviewed, supported by capacity building for issuers, especially banks, investors, verifiers and policymakers.
ASEAN (Association of Southeast Asian Nations)

“Developing regional guidance first can create a more attractive label for investors and inform a better design of national guidelines. National uptake is important to provide guidance to domestic market participants” - Mr. Ephyro Luis B. Amatong, Commissioner, Securities and Exchange Commission, Philippines

Type of guidance: The ASEAN (Association of Southeast Asian Nations) Capital Markets Forum (ACMF), comprising the capital markets regulators from the 10 ASEAN countries\(^{18}\), released the ASEAN Green Bond Standards (ASEAN GBS) in November 2017.

Key driver: The group’s interest was spurred by the regional impetus to move toward supporting sustainable growth within and among the member countries of ASEAN. This was demonstrated by several initiatives, including a green bond issuance in the Philippines and the introduction of the Sustainable and Responsible Investment (SRI) Framework in Malaysia. Recognizing the importance of green finance in supporting this goal, the ACMF, following its 25th ACMF Meeting in Jakarta on 8 September 2016, announced that it would take a leadership role in identifying green finance standards that can be applied for the ASEAN region. With the support of the Asian Development Bank, United Kingdom Foreign and Commonwealth Office (UK FCO), International Capital Market Association (ICMA), and World Bank, the ASEAN GBS were developed. They aim to enhance transparency, consistency and uniformity of ASEAN green bonds, which will reduce due diligence costs and help investors make informed investment decisions. Issuers in the region are encouraged to issue green bonds under the internationally-aligned ASEAN GBS.

Highlights: The standards are built on the Green Bond Principles (GBP) and developed with support from ICMA. Notably, the ASEAN GBS explicitly exclude fossil fuel power generation projects in order to mitigate greenwashing and protect the ASEAN Green Bonds label. Additional requirements for external reviewers are also introduced, as well as mandatory disclosure in issuance documentation of information on the use of proceeds, project evaluation and selection, and management of proceeds. Such information should also be publicly accessible from a website designated by the issuer throughout the tenure of the ASEAN Green Bonds.

Process of development: The standards were developed following a decision by the Chairs of the ACMF in September 2016. Consensus within the ACMF was achieved relatively quickly, as infrastructure needs and climate change are high on the agenda of all the regulators. The UK FCO, ACMF’s dialogue partner, facilitated preliminary discussions with ICMA. The ASEAN GBS were drafted leveraging ICMA’s GBP. All ACMF member countries are expected to adopt the ASEAN GBS in their own jurisdictions based on their market readiness. During the development of the ASEAN GBS, a survey was undertaken by the World Bank jointly with the ACMF to identify

\(^{18}\) Brunei, Cambodia, Indonesia, Laos PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Vietnam.
member countries’ capacity building needs as well as key issues affecting green bond market development in each country in the region.

**Market impacts:** Six green bonds were issued in the region after the release of the Standards, three of which were issued under the ASEAN green bond label. Malaysia is leading on green sukuk issuance, followed by Indonesia, which issued the first sovereign green sukuk.

**Future expectations:** As the Standards are rolled out in each country, market awareness and issuance are expected to grow. Renewable energy, green buildings, and mass transport are expected to be the main sectors to seek green funding. Banks will have an important role to play as issuers by aggregating small loans, for example for renewable energy. Development banks will be important in providing anchor investment and risk mitigation measures (e.g. partial guarantee) to crowd in other investors.

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**Brazil**

**Type of guidance:** FEBRABAN (Federação Brasileira de Bancos), the Brazilian Federation of Banks, developed voluntary guidelines for green bond issuers in Brazil in 2016.

**Key driver:** Two main drivers prompted FEBRABAN to undergo the process of developing guidelines: i) the opportunity to increase the resources mobilized by the financial sector for projects with environmental benefits, helping banks better manage social and environmental risks in their portfolios, and ii) the vast opportunities to develop green projects held by the country’s natural capital base.

**Highlights:** The guidelines were developed in partnership with the Brazilian Business Council for Sustainable Development (CEBDS), and with technical support from the sustainable finance NGO SITAWI and the FGV Centre for Sustainability. They include pre- and post-issuance requirements and guidance around external reviews and reporting.

Issuers, banks, and verifiers were involved in the process. Challenges included the limited number of external reviewers and investor demand – due to lack of ESG/sustainability mandates – and stringent requirements for investable products.

**Process of development:** With a membership of private and public banks, and given the already cumbersome regulatory landscape of capital markets in Brazil and the uncertain political environment, the Federation decided to develop guidance that market players could take as a reference without the need to amend existing regulation. The existing regulation for fixed-income products was deemed sufficient to create a “green” product that could grow, driven by investor demand and benefits for issuers, without the need for further incentives.

Working groups with interested member banks from FEBRABAN and potential issuers from the corporate sector members of CEBDS were formed and worked for one year. The working groups
investigated the essentials of what green bonds are, international references (Green Bond Principles, Climate Bonds Standard, IFC/World Bank green bonds), and requirements for local and offshore issuances. The Brazilian Financial and Capital Markets Association (ANBIMA), the Brazilian Stock Exchange, the Securities Regulator CVM, and other companies were consulted as well. Workshops were held before and after the guidelines were published to increase awareness around green bonds and promote the instrument.

Market impacts: Once published, the guidelines were recognised by market players as an important source of information and had a positive market impact. Several issuances mention the guidelines in their official documentation. Prior to the guidelines, only two bonds had been issued. Twelve additional issuances have followed since.

Future expectations: The pulp and paper and renewable energy sectors hold the greatest potential for future issuances, as well as agribusiness. More issuance from private banks is envisaged. To date there has been only one issuance from a bank, namely from the giant national development bank BNDES.

China

“China’s experience shows the powerful effect of providing clear definitions and disclosure requirements to industry and the financial sector for the design and issuance of green bonds. Having done so in 2015, China rapidly took a lead position in global green bond issuance. Our approach addresses local priorities for creating a green economy. In addition, by building alignment with the international green bond market, we aim to unlock the full potential of cross-border investment and issuance” - Dr. Ma Jun, Member of the PBOC Monetary Policy Committee, Director of the Tsinghua Center for Finance and Development, Chairman of Green Finance Committee of China Society for Finance and Banking, Co-Chair of the G20 Sustainable Finance Study Group.
**Type of guidance:** In 2016, the People’s Bank of China (PBOC), China’s central bank, issued the Guidelines for Establishing the Green Financial System and stipulated to promote green bond market development amid a wide range of plans to green the entire financial markets. This is among the first of its kind globally as a central bank guidance.

A series of regulations covering different green bond issuer types have been established over the past few years by PBOC for financial intermediary issuers, China Securities Regulatory Commission (CSRC) for exchange-traded corporate green bonds, National Development and Reform Commission (NDRC) for public-sector issuers, and the National Association of Financial Market Institutional Investors (NAFMII). These include guidance on, and requirements for, green definitions, management and use of bond proceeds, reporting, and incentive measures.

**Key drivers:** The development of Green Bond Regulation inserts itself in a wider context of green finance reforms. The push for green finance reforms came firstly from grave environmental concerns, namely pollution of air, water and soil, that were seriously compromising the growth of the Chinese economy. It started with the launch of the Green Credit Policy in 2007 by PBOC, China Banking Regulatory Commission (CBRC), and the Ministry of Environmental Protection (MEP), with a focus on promoting green lending by banks. CBRC subsequently developed operational guidance for banks as well as definitions and reporting templates to track banks’ performance. In 2015, China announced its Integrated Plan for Promoting Ecological Progress, which confirmed the national strategy on sustainable development and led to PBOC’s 2016 guidelines for greening the financial system.

**Highlights:** The regulations provide clear criteria for use and management of proceeds and reporting. Eligible green projects are identified by the Green Bond Endorsed Project Catalogue published by PBOC in 2015. Guidelines for green bonds verification and post-issuance disclosure have also been released by PBOC and CSRC.

In 2018, PBOC further introduced a series of support measures for green credit and green bond market development. The green credit performance of banks is now included in PBOC’s macro-prudential assessment (MPA). PBOC will now accept green bonds as collateral in its liquidity operations, such as Mid-term Lending Facility (MLF), as an effort to promote the green bond market development.

**Process of development:** In 2015, PBOC established the Green Finance Committee (GFC), following the landmark report from the Green Finance Task Force. The GFC has set up several working groups to undertake research on how to implement PBOC’s vision for a green financial system in China and to support China’s work for the G20 Green Finance Study Group (now the G20 Sustainable Finance Study Group).

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19 In 2014, the PBOC established a Green Finance Task Force in conjunction with the United Nations Environment Programme Inquiry into the Design of a Sustainable Financial System (UNEP Inquiry). The Green Finance Task Force spans regulators, government departments, financial market actors, and local and international experts working on the establishment of a green financial system in China.
In August 2016, the Guidelines for Establishing the Green Financial System were jointly released by seven ministries in China. The following year, the State Council, China’s cabinet, announced its decision to set up pilot zones for green finance.

**Market impact:** The launch of official guidelines in 2015 led to China being a major driver of global growth in green bond issuance in 2016, accounting for 39% of global issuance in the year, with proceeds going to clean energy (21%), clean transport (18%), energy saving (18%), pollution prevention and control (17%), resource conservation and recycling (17%), and ecological protection and climate change adaptation (8%)\(^2\). Total green bond issuance from China reached US$37.1 billion (RMB248.6 billion) in 2017 – a 4.5% increase year-on-year.\(^2\) China is now the second largest green bond issuer following the United States. A combination of policy developments, growing momentum at the local level, and a diversification of issuer types and use of proceeds has led to this rapid growth in the market.

**Figure 10: Global growth in green bond issuance was driven by China in 2016**

![Figure 10: Global growth in green bond issuance was driven by China in 2016](image)

*China domiciled*

**Source:** Climate Bonds Initiative and China Central Depository & Clearing Co. Ltd. (CCDC), (2016), China Green Bond Market 2016

**Future expectations:** China has been working on the harmonization of green definitions. In March 2017, PBOC and the European Investment Bank (EIB) established a joint green finance initiative to harmonize the green definitions between Chinese and European markets.\(^2\) In November 2017,
the initiative released a White Paper that compares different green definitions in European Union (EU) markets and China, providing a basis for harmonization of green definitions and standards.\textsuperscript{24}

In addition, China is also actively involved in global dialogues on green finance. During China’s presidency for G20 in 2016, PBOC and the Bank of England jointly introduced green finance into the G20 agenda and have played a leading role for the G20 Green Finance Study Group since then (now renamed the Sustainable Finance Study Group). China also partners with initiatives such as SBN and the UNEP Finance Initiative in sharing its experience and lessons learnt on green finance and green bond market development.

Figure 11: Timeline of green finance reforms in China

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>Launch of the Green Credit Policy by PBOC, CBRC and MEP</td>
</tr>
<tr>
<td>2012</td>
<td>Launch of CBRC’s Notice for Green Credit Statistics</td>
</tr>
<tr>
<td>2013</td>
<td>Release of CBRC’s Notice for Green Credit Statistics</td>
</tr>
<tr>
<td>2015</td>
<td>• Integrated Plan for Promoting Ecological Progress</td>
</tr>
<tr>
<td>2016</td>
<td>• Release of green bond guidelines from PBOC and NDRC, and the Green Bond Endorsed Project Catalogue</td>
</tr>
<tr>
<td>2017</td>
<td>• Kick-off of China’s green bond market</td>
</tr>
<tr>
<td>2018</td>
<td>• Launch of the Green Bond Pilot Scheme at stock exchanges</td>
</tr>
<tr>
<td>2019</td>
<td>• Release of the Guidelines for Establishing the Green Financial System by seven ministries</td>
</tr>
<tr>
<td>2020</td>
<td>• Release of CSRC’s green bond guidelines</td>
</tr>
<tr>
<td>2021</td>
<td>• Release of NAFMII’s guidelines for green debt financing instruments</td>
</tr>
<tr>
<td>2022</td>
<td>• Establishment of five Green Finance Pilot Zones</td>
</tr>
<tr>
<td>2023</td>
<td>• Release of PBoC and CSRC’s guidance on green bond external review and verification</td>
</tr>
<tr>
<td>2024</td>
<td>• Release of PBoC’s guidance on post-issuance disclosure of green bond</td>
</tr>
</tbody>
</table>

Indonesia

**Type of guidance:** The Indonesia Financial Services Authority (OJK) issued Requirements for Green Bonds in December 2017. These are aligned with the Green Bond Principles (GBP) and ASEAN Green Bond Standards.

**Key driver:** The guidance on green bond issuance responds to the need for long-term financing for climate-related projects, building on OJK’s Roadmap for Sustainable Finance 2015-2019 and other green finance measures to support sustainable development. These include the 2017 OJK regulation on Sustainable Finance for Financial Services Institutions, Issuers and Public Companies; the financing guidelines for renewable energy, energy efficiency, green buildings, organic farming and palm oil; and the launch of the Bali Center for Sustainable Finance.

Highlights: The requirements build on the 4 pillars of the GBP and identify 11 green sectors. They include a mandatory expert review, an annual report after the bond is issued and until the full allocation of proceeds, and mandatory correction action.

Process of development: Throughout 2016, OJK conducted an analysis of green bonds in Indonesia to serve as the main reference for its green bond policy. Public and stakeholder consultations were held as part of the policy draft developments, including through workshops. Technical experts from international organisations, such as IFC, the World Bank, and others, provided examples of international best practices and lessons learned from other countries. The policy was issued in December 2017.

Market impacts: Following the release of the green bond policy, the first sovereign green sukuk (Islamic green bond) was issued by the Government of Indonesia in February 2018 for US$1.25 billion. The first Asian corporate sustainability bond was also issued in February 2018 for sustainable rubber plantations in Indonesia, followed by a US$580 million corporate bond financing geothermal energy from Star Energy. Two more bonds have since been issued: PT SMI (a state-owned non-bank financial institution) issued a green bond with support from the World Bank in July 2018 for IDR 3 trillion (US$ 200 million) with a maximum emission value of IDR 1 trillion (US$ 60 million) in the first phase of 2018; and OCBC NISP issued a US$150 million green bond to IFC as sole investor.

Future expectations: More Indonesian financial institutions are expected to issue green bonds/sukuk to raise capital to finance more sustainable projects and support the implementation of SDGs and climate change targets. More technical guidance on definitions of sustainable projects and procedures for third-party verification is needed to scale up issuance. Development and dissemination of best practices and lessons learned from green bond issuances so far will also support new issuers to come to market. OJK is committed to developing a monitoring and reporting system on green bonds development in Indonesia to keep track of progress.

Malaysia

“The deal [world’s first green sukuk issuance in 2017] marks another milestone in product innovation that enhances Malaysia’s position as a leading Islamic finance marketplace as well as its value proposition as a centre for sustainable finance. This also illustrates how Malaysia leads in advocating convergence between Islamic and green financing.” – Datuk Zainal Izlan Zainal Abidin, Deputy Chief Executive, Securities Commission, Malaysia

Type of guidance: The Sustainable and Responsible Investment Sukuk Framework was released in 2014 by the Securities Commission Malaysia (SC) to facilitate financing of projects that benefit the environment and society. Given this experience, and its role as chair of the ASEAN Capital Markets Forum, the SC also took a leadership role in developing green bond standards for the ASEAN region.
**Key driver:** In 2017, Malaysia remained the largest sukuk market globally, with 38% of total issuances during the year and 47% of sukuk outstanding as at end-2017 issued out of Malaysia. Malaysia was well positioned to drive the development of sustainable finance in the region, given the similarities of Islamic finance and sustainable finance. As a regulator, the SC is committed to creating a facilitative ecosystem to develop Malaysia as a regional centre for Sustainable and Responsible Investments (SRI). The Capital Market Masterplan 2, which is a 10-year strategy blueprint for the Malaysian capital market, recognizes the importance of sustainability and that the role of the capital market can be expanded to support this agenda by creating market-based solutions.

**Highlights:** The SRI Sukuk Framework was developed with reference to international standards, such as the Green Bond Principles and Social Impact Bond Framework. The Framework is designed to be versatile, as it provides guidance for the issuance of green, social and sustainability sukuk, providing greater financing options for issuers. Given this wide coverage, Malaysian authorities did not develop a dedicated standard for green bond and sukuk. However, the ASEAN Green Bond Standards can also be used as a reference point. Issuances that comply with both sets of guidance can carry both labels, such as in the case of Malaysia’s Permodalan Nasional Berhad (PNB) first green SRI sukuk.

**Process of development:** The SC has formulated the 5i strategies to develop the SRI ecosystem in the Malaysian capital market. In January 2017, SC and the Central Bank of Malaysia formed a Technical Working Group with the participation of the World Bank to explore options to encourage investments in green or sustainable projects through the development of green Islamic finance markets. The Technical Working Group promoted the concept of the green sukuk and shared international experience of green bond issuance with various stakeholders in the green economy, including the Ministry of Energy, Green Technology and Water (KeTTHA), Green Tech Malaysia Sdn Bhd, Ministry of Finance, financial institutions and potential issuers.

**Market impact:** Following the release of the Framework, the inaugural SRI sukuk programme of RM1 billion was established in 2015 to fund education programs. This was the first social impact sukuk issued under the SRI Sukuk Framework. In July 2017, Tadau Energy Sdn Bhd, issued the first green sukuk in the world, raising RM250 million (US$59 million) to finance a 50MW solar photovoltaic power plant in Sabah, Malaysia. The sukuk was issued under SRI Sukuk Framework, endorsed by the Shari’ah Advisory Council, and received the highest rating by the Center for International Climate and Environmental Research Oslo (CICERO). Four other green SRI sukuk have since been issued, bringing the total issuance size to RM2.4 billion to date.

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26 Sukuk and green bonds are similar in that i) both raise funds for a specific purpose, ii) the values of both are deeply rooted upon ethical and socially responsible principles, iii) the notion of environmental stewardship, the protection of air, water and land, and the ecosystems that depend on them, are intrinsic to Shari’ah principles. Source: World Bank Case study – Helping Malaysia Develop the Green Sukuk Market, http://pubdocs.worldbank.org/en/5148015235454208216case-study-financial-products-malaysia-2018-GreenSukukMarketDevelopment.pdf (Accessed on 4 September 2018).
27 The 5i strategies comprise: i) widening the range of SRI instruments; ii) increasing SRI investor base; iii) building a strong SRI issuer base, iv) instilling internal culture and governance, and v) designing information architecture in the SRI ecosystem.
Future expectations: Incentives have been introduced to encourage more issuances of SRI sukuk. For example, an income tax deduction on issuance costs of SRI sukuk is provided for five years from 2016 to 2020. In addition, the Securities Commission has recently established a RM6 million Green SRI Sukuk Grant Scheme, which is administered by Capital Markets Malaysia, to incentivise the issuance of green sukuk in Malaysia by reimbursing issuers for the external review costs incurred. The grant is tax-exempt for the recipient issuers.

While there is increasing awareness amongst the market participants, on-going initiatives to promote green sukuk and bonds are still required and efforts need to be intensified to encourage corporates to identify eligible green projects. Currently, only two domestic service providers are capable of providing external review services to support the issuance of green sukuk and bonds. The SC will continue to collaborate with relevant stakeholders to further develop the green finance ecosystem.

Mexico

Type of guidance: The Green Bond Principles MX, released by Mexico’s Climate Finance Advisory Group (CCFC) (Consejo Consultivo de Finanzas Climaticas) in January 2018, are the official reference point for listing green bonds on the Mexican Stock Exchange.

Key driver: Green bonds represent an important diversification opportunity for the Mexican market. Market players demanded new instruments and the stock exchange, through its sustainability arm MEXICO2, met these needs. The ambition is also to reaffirm Mexico’s regional leadership in climate change through financial innovation and sharing best practices with Latin American exchanges.

Highlights: The Principles reflect international best practice. The process of developing the principles resulted in the establishment of the CCFC, an initiative led by Bolsa Mexicana de Valores (BMV Group) and CBI, headed by three of the largest pension funds in Mexico (Afore Sura, Afore Citibanamex, and Afore XXI Banorte). It gathered the Mexican finance sector together to channel the discussion on climate finance and influence market development and public policy.

Process of development: The process was mostly driven by MEXICO2, with support from the Mexican Stock Exchange and the UK government through the Foreign and Commonwealth Office. An extensive consultation process was carried out, with institutions such as AMAFORE (Pension Funds Association), AMIS (Insurance Companies Association), ABM (Banking Association), AMIB (Capital Markets Associations), HSBC (global branch) and NAFIN (most important local development bank). As in most markets, the biggest challenge was the knowledge gap within key financial institutions on climate and green finance, and therefore also coordinating an agenda and active discussions.

Market impact: The initiative has been successful in positioning the green bond market in the public agenda. Visibility was also achieved thanks to the active cooperation of the most important market players: issuers, investment banks, associations, multilateral banks, and other relevant stakeholders.
Future expectations: Further steps are needed to grow the market. These include i) development of a green project pipeline, ii) strengthening of the market offer of green finance instruments beyond the debt market, and iii) building capacity within the demand side, corporations, and investment bankers on ESG risk management.

Morocco

“We tried to balance between market security – rules to protect investors and prevent greenwashing – and at the same time allow some flexibility to issuers to come to market” – Mr. Yasser Mounsif, Head of Corporate Finance, Moroccan Capital Market Authority (AMMC)

Type of guidance: AMMC (Autorité Marocaine du Marché des Capitaux), the Moroccan Capital Markets Authority, issued its Green Bonds Guidelines in 2016. The guidelines set out requirements and guidelines for issuers as well as raising awareness among investors and the public around green bonds. After being tested on a few issuances, the guidelines are now being transformed into regulation and incorporated into the Capital Markets Rulebook.

In July 2018, the Green Bonds Guidelines were amended, and AMMC, with IFC support, launched the Green, Social and Sustainability Bond Guidelines. The guidelines outline the principles and the steps to follow in issuing these types of bonds. Investors can also find useful information allowing them to better understand this segment of the debt market.

Key driver: There were two main strategies behind the development of the AMMC’s Green Bond Guidelines: i) Morocco’s national ambitions in terms of renewable energy development, and ii) making Morocco a green financial hub to bridge the gap between northern investors and southern projects. During the 2016 United Nations Climate Change Conference of the Parties (COP 22) held in Marrakech, the AMMC also committed to fostering green finance in Morocco and in Africa.

Highlights: The Green Bond Guidelines include mandatory disclosure for the four pillars of the Green Bond Principles (GBP), as well as a mandatory external review and minimum requirements for verifiers (they must be independent and qualified). The guidelines have been developed with a focus on a balance between market integrity to safeguard investors and avoiding greenwashing, while at the same time leaving enough flexibility for issuers to come to market.

Process of development: The green bond journey started in 2016, on the occasion of COP 22 organised in Morocco. Several initiatives were undertaken as part of the COP 22, including the Marrakech Pledge a commitment by African capital markets regulators to foster Green Capital Markets in Africa.

The Green Bond Guidelines were developed in partnership with the IFC, which allowed a rapid turnaround and the opportunity to build on the experience already acquired by the IFC in this field. This avoided adopting a trial and error approach. The AMMC decided to start from a
principle-based approach, with the focus point being the second-party opinion, rather than requesting burdensome documentation from issuers.

*Market impacts:* Issuers have come to market following the release of the guidelines. The regulator has played an active role in supporting issuers by providing advice on the external review process. *Future expectations:* The main market growth is expected to come from the financing of renewable energy and energy efficient buildings. Smaller initiatives that cannot attract finance individually are to be aggregated, either through a public platform or within banks. Banks are expected to drive issuance, although the eligibility of portfolios may be challenging for some. More external review providers need to be trained locally and local investors further educated.

**Examples of Green Bond issuances in Morocco**

<table>
<thead>
<tr>
<th>Issuer name</th>
<th>Issuer sector</th>
<th>Size</th>
<th>Date</th>
<th>Proceeds</th>
<th>External review</th>
</tr>
</thead>
<tbody>
<tr>
<td>MASEN</td>
<td>State development bank</td>
<td>MAD 1.15bn (USD 117m)</td>
<td>Nov 2016</td>
<td>Renewable energy</td>
<td>Climate bonds certified (Vigeo Eiris)</td>
</tr>
<tr>
<td>BMCE Bank</td>
<td>Commercial bank</td>
<td>MAD 500m (USD 50m)</td>
<td>Nov 2016</td>
<td>50% renewable energy, 50% low-carbon buildings (energy efficiency)</td>
<td>Second Party Opinion (Vigeo Eiris)</td>
</tr>
<tr>
<td>Banque Central Populaire</td>
<td>Commercial bank</td>
<td>EUR 135m</td>
<td>Jun 2017</td>
<td>Renewable energy</td>
<td>Second Party Opinion (Green Investment Group)</td>
</tr>
</tbody>
</table>

**Nigeria**

*Type of guidance:* The Securities and Exchange Commission (SEC) of Nigeria is developing green bond regulation to provide guidance to its market following the Nigerian government’s sovereign green bond issuance in December 2017, the first African sovereign green bond.

*Key driver:* A set of rules was regarded as the first step to develop a domestic green bond market in Nigeria. The main driver was the need to develop a tool to finance the huge infrastructure gap in a manner that is sustainable, and being aware of climate risks.

*Key highlights:* The regulation will follow international best practice and require disclosure on behalf of the issuer of the bond’s use of proceeds, selection of projects, management of proceeds, and reporting. A segregated account for the bond’s proceeds and a mandatory external review, in the form of a second party opinion or Climate Bonds certification, are expected.

*Process of development:* The Rules Committee of the SEC started developing the rules based on
international practices and in collaboration with CBI. Consultation was carried out with the Capital Markets Committee and the Ministry of Finance.

An initial challenge was education and general awareness, as well as lack of capacity within the regulatory agency. Collaborating with external experts and leveraging existing guidelines and adapting them to the local context was an important part of the process for the SEC. Through engagement with international bodies like IFC, the UN Environment Programme (UNEP), and CBI, existing resources were leveraged to develop new rules.

**Market impacts:** The SEC rules are expected to have significant impact as market players will have confidence there is transparency in the market and the regulator will provide monitoring.

**Future expectations:** Issuers are expected to follow the first few successful issuances, so market awareness and capacity building are key activities to get the first few issuances off the ground. Current market conditions are unfavourable towards corporate issuance, but sovereign rates are expected to further decrease. Further policy support may be needed for corporate green bonds to take off.

**South Africa**

“Green bonds are a tool that give issuers the opportunity to monetise their sustainability effort and at the very least diversify their investor demand” – Ms. Shameela Soobramoney, Senior Manager: Group Strategy and Sustainability, Johannesburg Stock Exchange (JSE)

**Type of guidance:** The Johannesburg Stock Exchange (JSE) has developed listing requirements for its Green Bond Segment, which was formally launched in October 2017. The requirements for green bonds are integrated into the JSE’s listing regulation. The Financial Services Conduct Authority (FSCA), the South African regulator in terms of the Financial Markets Act No. 19 of 2012, published the listing requirements for public comment, and assessed and approved the proposed listing requirements of the JSE.

**Key drivers:** The main drivers of the development of the green bond segment have been i) the JSE’s sustainability goal of promoting ESG integration and responsible investment by issuers and investors, and ii) the need for South Africa to change its energy pathway and for this shift to be financed.

**Highlights:** Based on the international Green Bond Principles, the JSE rules go a step further and require a mandatory external review to access the segment. Requirements for verifiers are also spelled out, indicating that independence from the issuer and expertise must be demonstrated. A verifier may be selected from the pool of verifiers approved under the Climate Bonds Standard or any other acceptable industry body.
Process of development: The capital markets team of the JSE, including an expert on group strategy and sustainability, and one on bond markets, carried out desktop research and consultations with other market players better understand what investors need and what issuers are able to do. The Climate Bonds Standard framework was selected as the most robust, and was included as the gold standard, something to aspire to; but on its own there was worry it could choke the market and exclude projects that could help South Africa down a decarbonisation pathway. Therefore, the Green Bond Principles were considered. The requirements of other stock exchanges, such as London Stock Exchange and Luxembourg Stock Exchange, will also be reviewed.

Two consultative workshops were held, one with issuers and one with investors. From these, the need to deliver quality products for investors, without overburdening the issuers, became evident. A mandatory external review was seen as essential to ensure positive environmental impacts and maintain credibility, while allowing flexibility. An initial draft was shared with the Issuers and Investors team at the JSE and finally passed onto the regulation team, where, once the draft was turned into regulation, it underwent a public consultation process and was then finalised.

Market impacts: A wide market consultation effort ensured the guidelines were positively accepted, and the first corporate bond was issued. The combined sustainability and market expertise ensured there was a balance between credibility and workable propositions for the market. Issuers that have sustainable assets appreciate they can monetise on their sustainability efforts by diversifying the investor base and tapping into some additional liquidity in the responsible investment domain. In South Africa, green bonds can also help raise the profile of corporate issues from a governance point of view, providing transparency over assets and management processes thanks to the external review.

Future expectations: Further growth is expected to be seen in the property and energy sectors. Independent Power Producers in particular could access refinancing through the capital markets with a green project bond. The sovereign is also a likely candidate, which would be very important for further market development given its signalling power and benchmarking role. Banks are currently showing less interest as they mostly manage their liquidity and have less interest in refinancing portfolios of loans. South Africa is also currently finalizing its national policy paper on sustainable and green finance, which will be published in the near future.
CREATING GREEN BOND MARKETS – INSIGHTS, INNOVATIONS, AND TOOLS FROM EMERGING MARKETS

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